

**STATE OF OREGON**  
**JAPAN TSUNAMI MARINE DEBRIS (JTMD)**  
**PLAN**



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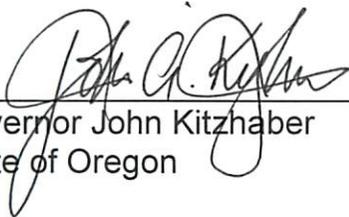
## Executive Signature Page

I am pleased to officially promulgate the 2012 State of Oregon *Japan Tsunami Marine Debris (JTMD) Plan*. This plan is published by the State of Oregon Office of Emergency Management.

The Japan Tsunami Marine Debris (JTMD) Plan began as a conceptual document intended to solidify the response to an unprecedented event affecting Oregon's coastal region. It is a living document and is subject to routine revisions which will be necessary as this marine debris event continues to impact Oregon's shoreline.

This document is collaborative and has been written in partnership with local, state, federal, tribal and nongovernmental organizations.

Oregon's primary mission in emergency management is to support our local jurisdictions through the State Emergency Coordination Center (ECC) while maintaining a comprehensive internal process for conducting daily business before, during and after any emergency or disaster event.



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Governor John Kitzhaber  
State of Oregon

12/18/2012

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Date



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# **1. Introduction**

## **A. Purpose**

This plan addresses the State of Oregon's method to coordinate a timely, comprehensive, effective and well-managed response to the Japan Tsunami Marine Debris (JTMD) incident that is impacting the Oregon coastline. The plan will achieve this purpose by coordinating local, state, federal, and tribal entities, and non-governmental organizations' (NGOs) activities relating to the debris monitoring, assessment, and response.

## **B. Scope**

This plan applies to local, state, federal, tribes, and NGOs (private and nonprofit) who have a role in the JTMD activities. It is a living document, therefore, updates will be made as required or necessary to improve its effectiveness. This plan is effective from the date of signature and promulgation, and is subject to annual review for modification, application, and cessation.

## **C. Situation**

On March 11, 2011, the nation of Japan was struck by an earthquake and a resulting tsunami. This incident created an estimated 25 million tons of debris, and approximately 5 million tons were swept offshore. The majority (an estimated 3.5 million tons) sank. However, 1.5 tons was buoyant enough to be dispersed into the Pacific Ocean. Some of this remaining debris was carried east via oceanic currents and winds.

Communities and organizations based on the Oregon Coast have reported an increase in the amount and types of marine debris on their shorelines. A section of concrete dock landed on the Oregon shoreline at Agate Beach State Park on June 5, 2012. This is consistent with NOAA modeling which suggests that high windage debris arrived on the West Coast shorelines over the winter of 2011-2012. The model also suggests that the main volume of tsunami debris is still at sea (approximately northeast of the Hawaiian Islands). Precise modeling is not currently possible due to the wide range of variables that exist (nature, debris size, wind, ocean currents, etc.).

## **D. Planning Assumptions**

1. Presently, state and federal funding is not assured to address the length of this incident and complexities of this issue.
2. Local, state, federal, tribal and NGO support being utilized in response to this issue will remain at its current level.
3. No one agency is staffed, equipped, or funded at a level to solely address this problem. Hence, this effort will rely on the whole of community approach for success (integrated NGO, local, state, federal and tribal partnerships).
4. The amount, duration of event, and type of debris which will be deposited ashore is unknown.

## 2. Coordination of Federal, Tribal, State, Local & NGOs

### A. Japan Tsunami Marine Debris Coordinating Agencies

OREGON JAPAN TSUNAMI MARINE DEBRIS  
Coordination Group

Governor

Governor's  
Tsunami Debris  
Task Force

JTMD  
Coordination  
Group

**Federal Agencies:**

- NOAA (Federal Lead)
- USCG
- US Army Corps of Engineers
- Federal Emergency Management Administration Region X
- Environmental Protection Agency
- US Fish and Wildlife Service
- US Forest Service
- Bureau of Land Management

**Tribal Governments**

- Confederated Tribes of Siletz Indians
- Confederated Tribes of the Coos, Lower Umpqua, Siuslaw Indians
- Coquille Indian Tribe

**State Agencies:**

- Parks and Recreation Department (**Co-Lead**)
- Department of Environmental Quality (**Co-Lead**)
- Office of Emergency Management (**Coordinating**)
- Department of Administrative Services
- Department of Agriculture
- Department of Aviation
- Business Oregon
- Travel Oregon
- Department of Consumer Business Services (OR – OSHA)
- Office of State Fire Marshal
- Department of Fish and Wildlife
- Department of Forestry
- Oregon Health Authority
- Department of Human Services
- Department of State Lands
- Oregon Marine Board
- Oregon Military Department
- Oregon State Police
- Department of Transportation
- Oregon Sea Grant (Oregon State University)
- Oregon Invasive Species Council

**County Jurisdictions:**

- Clatsop
- Columbia
- Coos
- Curry
- Douglas
- Lane
- Lincoln
- Tillamook

**Non-Governmental Organizations (NGO):**

- Oregon Refuse and Recycling Association
- Coastal Waste Haulers
- Oregon Shores Coalition
- SOLVE
- Surfrider Foundation

## **B. Governor's Tsunami Debris Task Force**

The Governor's Tsunami Debris Task Force acts as the Senior Level Steering Committee for the JTMD Coordination Group. It is comprised of lead officials appointed by the Governor's Office with a role in the response, monitoring, or assessment of JTMD and its impacts upon Oregon. This Task Force provides the overall policy direction for the State's response to the JTMD issue. The Task Force is comprised of the following stakeholder organizations. This initial listing is not an inclusive list, and may include future partners as determined by the Task Force. Currently the committee is comprised of:

- Oregon Military Department (**Chair**)
- Oregon North Coast - Legislature Representation - Oregon Senate
- Oregon South Coast - Legislature Representation - Oregon House
- Oregon Tribal Representative
- Oregon Parks and Recreation Department
- Oregon Department of Environmental Quality
- Oregon State Public Health Director
- Oregon Marine Board Director
- Oregon Department of Fish and Wildlife
- Oregon State Police
- SOLVE
- Oregon Department of Transportation
- Oregon Coastal Zone Management Association
- United States Coast Guard
- National Oceanic and Atmospheric Administration (Federal Lead Agency)

## **C. JTMD Coordination Group**

The JTMD Coordination Group is comprised of local, state, federal, tribal and NGOs (private and nonprofit) that are responsible for leveraging the combined stakeholder resources and assets to facilitate a coordinated and timely response to Japan Tsunami Marine Debris and its effect upon the State of Oregon.

The Coordination Group is comprised of two members from each of the Organizations listed below (Point of Contact and Public Information Officer). This initial listing is not an inclusive list, and may include future partners as determined by the Group. Presently, the Coordination Group is comprised of the following stakeholders:

- **Federal Agencies:**
  - National Oceanic and Atmospheric Administration (Lead Federal Agency)
  - United States Army Corps of Engineers
  - United States Coast Guard
  - The Environmental Protection Agency
  - United States Fish and Wildlife Service
  - The Bureau of Land Management

- United States Forest Service
- Federal Emergency Management Administration - Region X
- **Tribal Governments**
  - Confederated Tribes of Siletz Indians
  - Confederated Tribes of the Coos, Lower Umpqua, Siuslaw Indians
  - Coquille Indian Tribe
- **State Agencies:**
  - Oregon Parks and Recreation Department (Co-Lead)
  - Oregon Department of Environmental Quality (Co-Lead)
  - Office of Emergency Management (Coordinating Agency)
  - Oregon Department of Agriculture
  - Oregon Department of Aviation
  - Oregon Department of Forestry
  - Oregon Department of Fish and Wildlife
  - Oregon Department of Human Services
  - Oregon Department of Consumer Business Services - OR-OSHA
  - Oregon Military Department
  - Oregon State Police
  - Oregon Department of Administrative Services
  - Oregon Department of State Lands
  - Oregon Office of State Fire Marshal
  - Oregon Health Authority
  - Oregon Marine Board
  - Oregon Department of Transportation
  - Oregon Sea Grant (Oregon State University)
  - Business Oregon
  - Travel Oregon
- **County Jurisdictions:**
  - Columbia County Emergency Management
  - Clatsop County Emergency Management
  - Coos County Emergency Management
  - Curry County Emergency Management
  - Douglas County Emergency Management
  - Lane County Emergency Management
  - Lincoln County Emergency Management
  - Tillamook County Emergency Management
- **Non-Governmental Organizations:**
  - Oregon Shores Coalition
  - SOLVE
  - Surfrider Foundation
  - Coastal Waste Haulers
  - Oregon Refuse and Recycling Association
  - Oregon Coast Visitor's Association
- **Legislative Liaisons:**
  - Congresswoman Bonamici's Office
  - Congressman Schrader's Office
  - Senator Merkley's Office
  - Senator Wyden's Office

## D. Federal Agency Responsibilities

### **National Oceanic and Atmospheric Administration (NOAA):**

- Federal lead for coordination of marine debris related activities, including JTMD
- Funds marine debris assessment and removal projects, mostly through grants
- Provides modeling information and trajectory analysis for JTMD movement at sea
- Coordinates, funds, and manages the shoreline survey effort
- Collects sighting reports at [disasterdebris@noaa.gov](mailto:disasterdebris@noaa.gov) , logs, and processes this information
- Coordinates Satellite detection of JTMD at sea
- Provides Scientific Support Coordination to the United States Coast Guard
- Collaborates with state, tribal, local, and Non-governmental Organizations to provide outreach and address concerns
- Supports the planning process in all states potentially impacted by JTMD

### **United States Coast Guard (USCG):**

- Works as a supporting agency to NOAA, state and local agencies (government and non-government), with a focus centered on notification and reporting of navigational hazards
- Develops and issues, when appropriate, Broadcast Notice to mariners or mark obstructions to advise vessel traffic of potential hazards to navigation
- Serves as the Federal On Scene Coordinator (FOSC) for the coastal zone to coordinate removal actions in accordance with the National Contingency Plan (NCP) with other federal, state, local and tribal agencies in accordance with existing plans in cases where debris poses a potential oil or hazardous substance threat to the environment
- Maintains a 365-day/24-hours per day telephone watch through the National Response Center
- Enters telephonic reports into the Incident Reporting Information System (IRIS) and relays each report to the FOSC and other appropriate federal and state agencies
- Destroys or sinks hazards to navigation at sea under certain circumstances

### **United States Environmental Protection Agency (EPA):**

- Responds to oil and hazardous material releases or threats of release if they are on the inland side of the high tide line, to include tribal lands
- Administers the ocean dumping program pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA). All options for disposal of JTMD must be exhausted before considering ocean disposal
- Under the MPRSA, ensures compliance with the general permit for transporting and disposal of vessels in the ocean, providing certain specific conditions are met. See 40 CFR 229.3 for a list of the specific conditions
- Supports the United States Coast Guard and states for response to potentially hazardous material on the beach by providing air monitoring and sampling, including radiation monitoring and support
- Provides technical support to tribes
- Supports outreach efforts, including sharing of hazard assessment protocols

**The United States Forest Service (USFS):**

- Coordinates and manages marine debris assessment and cleanup within USFS lands
- Issues permits and guidance for park shorelines and lands where applicable
- Reports to NOAA on quantities and location of marine debris surveyed and removed where applicable
- Advises NOAA and the State if marine debris is beyond their current capacity to remove as applicable
- Supports outreach efforts

**The United States Fish and Wildlife Service (USFWS):**

- Coordinates and manages marine debris assessment and cleanup in National Wildlife refuges
- Issues permits for National Wildlife refuge shorelines where applicable
- Reports to NOAA on the quantities and locations of marine debris surveyed and removed as applicable
- Advises NOAA and the State if marine debris is beyond their current capabilities to remove as applicable
- Provides subject matter expertise as it applies to JTMD impacts and concerns for federal trust species under USFWS jurisdiction (e.g., migratory birds, threatened and endangered species, and other sensitive species and habitats)
- Provides subject matter expertise in the monitoring, assessment, and response to invasive aquatic species caused by JTMD
- Serves as primary Fish and Wildlife responder and investigator in the event of a contaminant (e.g., oil, toxin, hazardous waste, etc.) spill
- Supports outreach efforts

**The United States Army Corps of Engineers (USACE):**

- Responds to debris at sea and navigable waterways when the debris interferes with port or shipping activities

**The Federal Emergency Management Agency (FEMA):**

- Provides funding and support during a declaration of emergency
- Supports volunteer management

**E. Tribal Responsibilities****Confederated Tribes of Siletz Indians:**

- Works in conjunction with partner stakeholders to ensure a timely and effective response to the JTMD incident, as appropriate
- Advises the State of Oregon and local partners regarding ancestral lands and/or sacred sites that may be affected by debris coming onshore

**Confederated Tribes of the Coos, Lower Umpqua, Siuslaw Indians:**

- Works in partnership with partner stakeholders to ensure a timely and effective response to the JTMD incident, as appropriate
- Advises the State of Oregon and local partners regarding ancestral lands and/or sacred sites that may be affected by debris coming onshore

**Coquille Indian Tribe:**

- Works in partnership with partner stakeholders to ensure a timely and effective response to the JTMD incident, as appropriate
- Advises the State of Oregon and local partners regarding ancestral lands and/or sacred sites that may be affected by debris coming onshore

**F. State Agency Responsibilities****Oregon Parks and Recreation Department (Co-Lead Agency):**

- Has statutory authority of the Oregon Coastline from the extreme low tide line to the vegetation line, unless otherwise excluded
- Monitors, assess, and as necessary responds to reports of marine debris on the Oregon ocean shore
- Coordinates with coastal waste haulers (haulers place marine debris containers and dispose of waste)
- Provides information and outreach associated with the ocean shore to the general public
- Coordinates with State in the event current capacity to remove and dispose of debris on the ocean shore is exceeded
- May provide initial mitigation in response to marine debris on the Oregon ocean shore
- Provide leadership to the State's JTMD response effort that has exceeded the local jurisdiction's ability to respond
- Supports outreach efforts

**Oregon Department of Environmental Quality (Co-Lead Agency):**

- Provides expertise on the Northwest Area Contingency Plan
- Lead agency for solid and hazardous waste
- Supports debris removal activities when local capacity is exceeded
- Can serve as the conduit for federal funding, and provide limited state funding for cleanup operations as applicable
- Provide leadership to the State's JTMD response effort that has exceeded the local jurisdiction's ability to respond
- Facilitate emergency permitting as required
- Supports outreach efforts

**Office of Emergency Management (Coordinating Agency):**

- Provide the Chair for the Governor's Tsunami Debris Task Force
- Ensure PIO and Operational Synchronization between Governor's Tsunami Debris Task Force and the JTMD Coordination Group
- Facilitate the JTMD Coordination Group Process
- Provide liaison with federal agencies as dictated by the situation, or as requested by the lead organizations
- Facilitate the planning process with stakeholder organizations to develop a state level plan to address JTMD
- Provides outreach to the general public

- Coordinate the State's JTMD response effort that has exceeded the local jurisdiction's ability to respond
- Supports outreach efforts

**Oregon Department of Agriculture:**

- Member of the JTMD Coordination Group
- Responsible for oversight of seafood and shellfish safety
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to agriculture related impacts and concerns resulting from JTMD
- Maintain regulations for weeds, including seaweeds
- Provide subject matter expertise in plant and invertebrate identification
- Supports outreach efforts

**Oregon Department of Aviation:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Aviation related impacts and concerns resulting from JTMD
- Act as a liaison to the Aviation community which flies the Oregon Coast in order to provide increased situational awareness, and ensure pilots and the aviation community have the information needed to report JTMD sightings observed from the air
- Support outreach efforts

**Business Oregon:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to business and economic related impacts and concerns resulting from JTMD
- Act as a liaison to the Business community ensuring economic concerns and impacts related to JTMD are addressed with state leadership to ensure situational awareness on economic concerns and issues
- Support outreach efforts

**Travel Oregon:**

- Member of the JTMD Coordination Group
- Provide updated information as it relates to beach safety and conditions for tourists
- Support outreach efforts

**Oregon Department of Forestry:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Forestry related impacts and concerns resulting from JTMD
- Support outreach efforts

**Oregon Department of Fish and Wildlife:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Fish and Wildlife related impacts and concerns resulting from JTMD
- Provide subject matter expertise in the monitoring, assessment, and response to invasive aquatic species caused by JTMD
- May provide first responder capabilities, as required, for conducting the initial assessment of risk status of debris as well as addressing public safety concerns
- Support outreach efforts

**Oregon Department of Human Services:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Human Services related impacts and concerns resulting from JTMD
- Support outreach efforts

**Oregon Department of Consumer Business Services (OR-OSHA):**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to personnel and organizational health safety related impacts and concerns resulting from JTMD
- Advise response and recovery organizations and personnel, as required, in regards to regulations and precautions necessary to facilitate safe response and recovery operation
- Support outreach efforts

**Oregon Military Department:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it relates to the situational awareness development
- Provide the State with a continuity of operations contingency for single point of information dissemination in the event of a failure in the established information dissemination method
- Support outreach efforts

**Oregon State Police:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Law Enforcement centric impacts and concerns resulting from JTMD
- May provide first responder capabilities, as required, for conducting the initial assessment of JTMD related items as well as addressing public safety concerns
- Support outreach efforts

**Oregon Department of Administrative Services:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to procurement, state asset allocation, and resource protection resulting from JTMD
- Support outreach efforts

**Oregon Department of State Lands:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to impacts and concerns resulting from JTMD on state lands
- Provide assistance in environmental waivers and clearances as required in relation to the State's navigable waterways and state lands
- Support outreach efforts

**Oregon Office of State Fire Marshal:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Fire and Hazardous Material (HAZMAT) centric impacts and concerns resulting from JTMD
- May provide first responder capabilities, as required, for conducting the initial assessment of JTMD related items as well as addressing public safety concerns
- Support outreach efforts

**Oregon Health Authority:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to Public Health concerns and impacts resulting from JTMD
- Serves as the subject matter expert, as is the radiation technical agency that supports local radiation detection, assessment, and monitoring efforts
- Actively monitors the Oregon Coast for any higher than normal radiation due to JTMD
- Collaborates with state and federal agencies concerning Public Health and Environmental Health concerns and impacts
- Support outreach efforts

**Oregon Marine Board:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to recreational boating and marine safety related impacts and concerns resulting from JTMD
- Support outreach efforts

**Oregon Department of Transportation:**

- Member of the JTMD Coordination Group
- Act as a supporting agency to the state level response; facilitate subject matter expertise as it applies to transportation and public works related impacts and concerns resulting from JTMD
- Support outreach efforts

**Oregon Sea Grant (Oregon State University):**

- Member of the JTMD Coordination Group
- Provides public outreach and education, monitoring and volunteer engagement regarding marine debris and other coastal related issues
- Participates in the West Coast Governor's Alliance Marine Debris action coordination team
- Supports removal of derelict fishing gear
- Working on invasive species issues related to JTMD
- Working on research proposals on the taxonomy, life history and habitat of the organisms that are arriving on Oregon's beaches as a result of the JTMD incident

**Oregon Invasive Species Council:**

- May be members of the JTMD Coordination Group
- Coordinate activities between agencies related to invasive species
- Provide connections to invasive species experts in state agencies, universities, et cetera
- Maintain the 1-866-INVADER hotline
- Support outreach efforts

## **G. Local Jurisdiction Responsibilities**

**County Emergency Management:**

- May be members of the JTMD Coordination Group.
- Coordinate and facilitate the timely response to marine debris incidents which impact your jurisdiction
- May act as first responders to reports of marine debris incidents impacting their jurisdictions
- Provide information and outreach
- All jurisdictions are encouraged to communicate, coordinate, and collaborate with the JTMD Coordination Group

## **H. Non-Governmental Organizations (NGOs)**

**Public / Private Profit and Non-Profit Organizations:**

- May be members of the JTMD Coordination Group
- May support Coastal Cleanup efforts
- May facilitate volunteer engagement in regard to JTMD activities and events
- May participate in shoreline monitoring and assessment
- May act as the point of contact for their community of interest for JTMD outreach
- Encouraged to communicate, coordinate, and collaborate with the JTMD Coordination Group in order to better inform the process on communities of interest participation and engagement

### **3. Concept of Operations**

#### **A. Plan Development and Maintenance**

This plan is a living document and is not intended to impede or hamper response efforts, nor is it a step by step instructional guide. Arrival of marine debris from the Japan tsunami is an unprecedented incident. As incidents are dynamic in nature, plans must allow for change and adaptation to suit the situation presented. This plan will be maintained by the Office of Emergency Management. The following is the process for suggested plan revisions / updates:

- **Urgent Updates:** Changes to the plan that need to be implemented quickly may be done verbally through the JTMD Coordination Group with final approval resting with the Governor's Tsunami Debris Task Force. If changes are made verbally they will be documented to record authority and date time of change. Verbal additions, modifications, and updates will be written into the plan within 30 days from the time of change
- **Routine Updates:** Changes to the plan where time and circumstance permit. These suggested changes will be forwarded to the Office of Emergency Management. The Office of Emergency Management will log these suggested changes. These suggested changes will be discussed by the JTMD Coordination Group, and confirmed or denied by the Governor's Tsunami Debris Task Force
- **Annual Update:** This plan will undergo annual review by the Office of Emergency Management until it is no longer in effect

#### **B. Interagency Communications**

##### **Governor's Tsunami Debris Task Force:**

- Meets monthly
- Each Member Organization reports on their current activities
- Receives updates from the JTMD Coordination Group
- Reviews, approves / denies request for Changes to the Oregon JTMD Plan

##### **JTMD Coordination Group:**

- Meets monthly
- Coordination Group Leadership and Focus groups meet as needed, by phone or email to coordinate and discuss issues
- Discusses recommendations for changes to the Oregon JTMD Plan
- Reports monthly to the Governor's Tsunami Debris Task Force on current actions and activities

## 4. Response Activities

### A. Communications: Public Messaging and Outreach

**Policy and Oversight:**

Governor's Tsunami Debris Task Force

**Lead Agencies:**

Oregon Department of Environmental Quality (JTMD Coordination Group)

Oregon Parks and Recreation Department (JTMD Coordination Group)

**Coordinating Agency:**

Office of Emergency Management (JTMD Coordination Group)

**Supporting Agencies:**

- Oregon Department of Administrative Services
- Oregon Department of Agriculture
- Oregon Department of Aviation
- Business Oregon
- Oregon Department of Consumer Business Services (OR-OSHA)
- Oregon Office of State Fire Marshal
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Health Authority
- Oregon Department of Human Services
- Oregon Marine Board
- Oregon Military Department
- Oregon State Police
- Oregon Department of State Lands
- Oregon Department of Transportation
- Travel Oregon
- County Jurisdictions
- Non-Governmental Organizations

**Outcome:**

Provide expedient access to information in order to be Oregon's first source on JTMD information and impacts. This includes but is not limited to: risk management communications, citizen / visitor / stakeholder education and outreach, public health risk information, and invasive species information and education.

**Specific Tasks:**

1. Establish and maintain an effective public and stakeholder communication network based on an integrated and coordinated approach, using all messaging methods for disseminating information to ensure it is accessible and standardized regardless of format.

2. Establish and maintain a single point of contact affording all parties the ability to report concerns and JTMD related information through a single telephone number.
3. Create a communications plan based on events and times of high public uses for potentially impacted jurisdictions.
4. Establish and maintain a coordinated outreach effort. To include, but not limited to: JTMD talking points; integrated FAQ system; best practices; and Tsunami Marine Debris handling.
5. Coordinate Media communications to include, but not limited to: develop and establish a media contact list; coordinated information release process; misinformation / rumor response process; media monitoring process; and ensuring an integrated and coordinated response to all media inquiries.
6. Ensure communications and outreach to other states and federal stakeholders through the development of approved state speakers.
7. Establishment of a core contacts distribution list.
8. Establish and maintain a method to send urgent, time sensitive messages concerning JTMD to all, especially in areas of concern, in a manner that is redundant in delivery method, effective and consistent.
9. Establish and develop an integrated single source approach to social media engagement through various prevalent social media outlets.
10. Maintain a thorough and organized history of events including photos, videos, tweets, and printed collateral.

## **B. Routine and Small Onshore Debris**

### **Policy and Oversight:**

Governor's Tsunami Debris Task Force

### **Lead Agencies:**

Oregon Department of Environmental Quality (JTMD Coordination Group)

Oregon Parks and Recreation Department (JTMD Coordination Group)

### **Coordinating Agency:**

Office of Emergency Management (JTMD Coordination Group)

### **Supporting Agencies:**

- United States Fish and Wildlife Service
- Oregon Department of Administrative Services
- Oregon Department of Agriculture
- Oregon Department of Aviation
- Business Oregon
- Oregon Department of Consumer Business Services (OR-OSHA)
- Oregon Office of State Fire Marshal
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Health Authority
- Oregon Department of Human Services
- Oregon Marine Board

- Oregon Military Department
- Oregon State Police
- Oregon Department of State Lands
- Oregon Department of Transportation
- Non-Governmental Organizations

**Outcome:**

Remove routine and small debris items to eliminate environmental and safety risks and economic impacts to Oregon’s Coastal jurisdictions.

**Specific Tasks:**

1. Assess the level of risk as it applies to invasive marine species.
2. If the initial assessment for invasive marine species is found to be elevated for the debris in question, ensure debris removal plans address collection and disposal techniques which minimize the exposure risk.
3. Continue to assist and educate Oregon stakeholders in the refinement of existing and development of new marine debris plans to account for invasive marine species potential.
4. Continue to support existing efforts to remove marine debris from Oregon’s shores where feasible and appropriate.
5. Continue to monitor, assess, and respond, as appropriate, to routine marine debris to eliminate potential hazards.
6. Use when available, marine debris data and trajectory information to improve planning to facilitate a timely and coordinated mitigation (if applicable), response, and recovery effort.
7. Continue to seek funding opportunities to off-set cost and provide assistance when circumstances exceed current funding levels allocated for assistance.
8. Collaborate with all Oregon and federal stakeholders to support coastal cleanup efforts to the limit of their abilities.

## **C. Large Onshore Debris**

**Policy and Oversight:**

Governor’s Tsunami Debris Task Force

**Lead Agencies:**

Oregon Department of Environmental Quality (JTMD Coordination Group)

Oregon Parks and Recreation Department (JTMD Coordination Group)

**Coordinating Agency:**

Office of Emergency Management (JTMD Coordination Group)

**Supporting Agencies:**

- National Oceanic and Atmospheric Administration
- United States Coast Guard
- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- Oregon Department of Administrative Services

- Oregon Department of Agriculture
- Oregon Department of Aviation
- Business Oregon
- Oregon Department of Consumer Business Services (OR-OSHA)
- Oregon Office of State Fire Marshal
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Health Authority
- Oregon Department of Human Services
- Oregon Marine Board
- Oregon Military Department
- Oregon State Police
- Oregon Department of State Lands
- Oregon Department of Transportation
- Non-Governmental Organizations

**Outcome:**

Address large marine debris items to eliminate environmental and safety risks, economic impacts, and impediments to coastal access.

**Specific Tasks:**

1. Notify the lead federal JTMD (NOAA) and state agency.
2. On non-federal and non-tribal land, local government or state agency, as applicable, will lead the response effort; if the debris exceeds the capability of the responding agency or government, additional state assistance may be sought through the Office of Emergency Management (Coordinating Agency).
3. On tribal or federal land, the land owner is encouraged to inform the State for situational awareness purposes, but the land owner will coordinate the assistance required for removal and disposal.
4. Assess the level of risk as it applies to invasive marine species.
5. If the initial assessment for invasive marine species is found to be elevated for the debris in question, ensure debris removal plans address collection and disposal techniques which minimize the exposure risk.
6. Evaluate and respond to 2X background elevated radiation levels, as needed.
7. Special attention should be paid to large items of marine debris. These items can draw increased public attention. Efforts should be taken to keep the public safe from these debris items until they have come to rest / been stabilized, inspected for potential risks, and cleared for persons to safely approach, if applicable.

## **D. Hazardous Onshore Debris**

**Policy and Oversight:**

Governor's Tsunami Debris Task Force

**Lead Agencies (Situational Dependent):**

Oregon Department of Environmental Quality (JTMD Coordination Group)  
Oregon Parks and Recreation Department (JTMD Coordination Group)  
United States Coast Guard

**Coordinating Agency:**

Office of Emergency Management (JTMD Coordination Group)

**Supporting Agencies (Situational Dependent):**

- United States Environmental Protection Agency
- United States Fish and Wildlife Service
- Oregon Department of Administrative Services
- Oregon Department of Agriculture
- Oregon Department of Aviation
- Business Oregon
- Oregon Department of Consumer Business Services (OR-OSHA)
- Oregon Office of State Fire Marshal
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Health Authority
- Oregon Department of Human Services
- Oregon Marine Board
- Oregon Military Department
- Oregon State Police
- Oregon Department of State Lands
- Oregon Department of Transportation
- Non-Governmental Organizations

**Outcome:**

Remove marine debris that may be potentially hazardous or confirmed to be hazardous to life / health / safety or to the environment.

**Specific Tasks:**

1. All persons should be safeguarded from any marine debris that is thought to be or confirmed as hazardous, and no attempt should be made to remove or disturb this debris. All response to this type of debris will be facilitated by trained and equipped responders capable of addressing the hazards presented.
2. Report these types of marine debris items immediately to 2-1-1. In the event 2-1-1 is not operational or available call 1-800-OILS-911 or the US Coast Guard National Response Center: 1-800-424-8802. If all of these numbers fail contact 9-1-1.
3. Ensure trained emergency responders at all levels are prepared to implement existing protocols and have existing response protocols to address the various types of hazardous marine debris.
4. In the event that the capabilities of the agency, local government or tribe are exceeded in the response to these events additional assistance may be sought through the Office of Emergency Management (Coordinating agency).

## **E. Hazardous Offshore Debris**

### **Policy and Oversight:**

National Response Team

### **Lead Agencies:**

United States Coast Guard

### **Coordinating Agency:**

NOAA

Regional Response Team

### **Supporting Agencies (Situational Dependent):**

- United States Army Corps of Engineers
- United States Environmental Protection Agency
- United States Coast Guard
- Oregon Department of Environmental Quality

### **Outcome:**

Address and respond to marine debris items at sea that may pose a pollution or hazardous material threat to navigation (life / health / safety), or the environment.

### **Specific Tasks:**

1. Marine Debris or derelict vessels at sea can pose a threat to navigation, the environment or both. In the United States, the U.S. Coast Guard is the primary agency assigned to address this threat.
2. The United States Coast Guard, in collaboration with federal and state stakeholders, may investigate floating marine debris or derelict vessels that may pose a hazard to navigation (e.g. potentially impact shipping lanes or navigation channels) found or reported at sea.
3. The United States Coast Guard may notify or activate Regional Response Teams as necessary.
4. A multi-agency Incident Management Team may be established under the Incident Command System to address marine debris that may cause a hazard to navigation, pollution event, or wash ashore to facilitate communications and/or response operations.
5. NOAA's Scientific Support Center (SSC) may be activated to track marine debris and provide trajectories to partner agencies.
6. In the event of a derelict vessel, attempts will be made to contact the owner of the vessel. In the event the vessel originates from a foreign country NOAA will contact the country of origin and/or the country where the vessel is registered.
7. Each situation is addressed on a case-by-case issue, with several variables contributing to the disposition of this type of debris (life / health / safety, salvaging options, environmental concerns, and the immediate threat to navigation).
8. In the event that large debris is in a navigation channel, the United States Army Corps of Engineers has the jurisdiction and responsibility to provide assistance.
9. Funding for the removal will be determined on a case by case basis depending on type of debris and hazard and is based on state and federal authorities and funding mechanisms.

## **F. Volunteer Coordination Management**

### **Policy and Oversight:**

Governor's Tsunami Debris Task Force

### **Lead Agency:**

Oregon Parks and Recreation Department (JTMD Coordination Group)

### **Coordinating Agency:**

Office of Emergency Management (JTMD Coordination Group)

### **Supporting Agencies (Situational Dependent):**

- Non-Governmental Organizations
- Volunteer Organizations

### **Outcome:**

Facilitate and coordinate individuals and organizations who are volunteering in the JTMD incidents.

### **Specific Tasks:**

1. Document existing volunteer organizations and networks currently conducting beach cleanup on the Oregon Coast. Information will include, but not be limited to: name, organization, volunteer information, hours worked, and funds expended directly related to JTMD events.
2. Establish a method for organizations and individuals that wish to contribute financially (financial donation management) to the State effort concerning JTMD.
3. Activate the National Donation Management Network (NDMN), when or if appropriate. Network is sponsored by the Federal Emergency Management Agency which focuses on matching humanitarian needs with assistance resources as a contingency to enable rapid volunteer involvement in the event they are needed.

## **G. Response Information**

### **Policy and Oversight:**

Governor's Tsunami Debris Task Force

### **Lead Agencies:**

National Oceanic and Atmospheric Administration (NOAA)

### **Coordinating Agency:**

Office of Emergency Management (JTMD Coordination Group)

### **Supporting Agencies (Situational Dependent):**

- United States Coast Guard
- Department of the Interior
- Department of Defense

- Department of State
- United States Environmental Protection Agency
- SOLVE
- Sea Grant
- Oregon State University
- Surfrider Foundation

**Outcome:**

Provide accurate, timely and useful information in order to support effective marine debris response operations.

**Specific Tasks:**

1. **Shoreline monitoring:** Marine debris monitoring programs are necessary to compare debris sources, amounts, locations, movement, and impacts. NOAA has developed standardized marine debris shoreline survey protocols to facilitate regional and site-specific comparisons. To evaluate deposition of the Japan tsunami marine debris, NOAA collaborates with a number of partners, and supports survey of over 30 sites along the West Coast. Information collected from shoreline monitoring will be shared on NOAA's website and during team updates.
2. **Modeling:** Modeling predicts the movement of the Japan tsunami marine debris over space and time, and provides this information to decision makers and the public to inform planning efforts for debris management and response as well as minimization of economic and environmental impacts. NOAA runs its GNOME model as needed (currently every month) and posts it on its website.
3. **Trajectory Analysis:** Using its GNOME model and available ocean currents and wind information, NOAA could run trajectories (both forecast and hindcast) on floating large marine debris objects sighted offshore. The trajectories and accompanying analysis, provided by seasoned oceanographers, are valuable (within their uncertainty and limitations) in predicting the location of previously sighted objects.
4. **Satellite detection:** NOAA collaborates with its partners to analyze satellite data to detect large floating debris items. This information will be shared with state agencies during regularly scheduled update meetings, or, if urgent, via email and phone.
5. **Sightings:** NOAA logs reports of tsunami debris sightings, and will share these with the Marine Debris Response Workgroup during the update meetings.
6. **International Coordination:** NOAA coordinates with the Japanese Consulate on tsunami-related debris identification, and items that may have monetary or sentimental value.

## **5. Attachments**

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## **Attachment A**

### **Definitions and Abbreviations**

**Marine Debris – Hazardous:** Marine debris that is contaminated by, or contains hazardous materials to include radiological hazards.

**Marine Debris – Large:** Items found onshore that are too big to be carried by one person.

**Marine Debris – Offshore:** Floating items or derelict vessels that create a hazard to navigation (life / health / safety) or the environment.

**Marine Debris – Small and Routine:** Items typically removed during beach cleanup, which are small enough to be carried by one person.

**Modeling:** Use of data or software to estimate the movement of marine debris over time.

## Attachment B

### Governor's Tsunami Debris Task Force Contact List

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Representative Wayne Krieger	House (R) – South Coast	<a href="mailto:Rep.waynekrieger@state.or.us">Rep.waynekrieger@state.or.us</a>
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Co-Speaker Bruce Hanna	R-Roseburg District 7	<a href="mailto:Rep.brucehanna@state.or.us">Rep.brucehanna@state.or.us</a>
Senate President Peter Courtney	D-Salem	<a href="mailto:Sen.petercourtney@state.or.us">Sen.petercourtney@state.or.us</a>
Senator Jeff Kruse	R-Roseburg District 7	<a href="mailto:Sen.jeffkruse@state.or.us">Sen.jeffkruse@state.or.us</a>
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## Attachment C

### JTMD Coordination Group Contact List

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Confederated Tribes of the Coos, Lower Umpqua, Siuslaw Indians	Tribal Representative	
Coquille Indian Tribe	Tribal Representative	
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## Non-Governmental Organizations

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## **Attachment D**

### **Overview of NOAA Shoreline Monitoring Program**

Marine debris monitoring programs are necessary to compare debris sources, amounts, locations, movements, and impacts. The NOAA has developed standardized marine debris shoreline survey protocols to facilitate regional and site-specific comparisons. To evaluate deposition of the Japan Tsunami Marine Debris, NOAA collaborates with a number of partners, and supports survey over 30 sites along the West Coast.

There are two main types of shoreline surveys: accumulation and standing-stock surveys.

**Accumulation Surveys:** Accumulation studies provide information on the rate of deposition (flux) of debris onto the shoreline. These studies are more suited to areas that have beach cleanups, as debris is removed from the entire length of shoreline during each site visit. This type of survey is more labor-intensive and is used to determine the rate of deposition (number of items per unit area, per unit time). Accumulation studies can also provide information about debris type and weight. These surveys cannot be used to measure the density of debris on the shoreline because removal of debris biases the amount of debris present during subsequent surveys.

**Standing-stock Surveys:** Standing-stock surveys provide information on the amount and types of debris on the shoreline. Debris within discrete transects at the shoreline site is tallied during standing-stock surveys. This is a quick assessment of the total load of debris and is used to determine the density (number of items per unit area) of debris present. Debris density reflects the long-term balance between debris inputs and removal and is important to understanding the overall impact of debris.

#### **Shoreline Survey Data**

Marine debris monitoring groups will collaborate with NOAA to compile their survey results. The NOAA will collect all the survey data, store it in a database, analyze the data, and share it with its partners and the public. If you would like to know more information on shoreline monitoring program, please email:

[MDmonitoring@noaa.gov](mailto:MDmonitoring@noaa.gov).

# **Attachment E**

## **NOAA Japan Tsunami Marine Debris Modeling**

### **Policy and Oversight:**

Governor's Tsunami Debris Task Force

### **Lead Agencies (Situational Dependent):**

National Oceanic and Atmospheric Administration (NOAA)

### **Supporting Agencies (Situational Dependent):**

- NOAA
  - Office of Response and Restoration
    - Marine Debris Program
    - Emergency Response Division
  - National Center for Environmental Prediction
  - Office of Oceanic and Atmospheric Research
  - National Environmental Satellite, Data and Information Service
  - National Marine Fisheries Service
- United States Coast Guard
- United States Navy
- Oregon State University
- University of Washington
- University of Hawaii
- University of Kyoto

### **Desired Outcome:**

Predict the movement of the Japan Tsunami Marine Debris over space and time, and provide this information to decision makers and the public to increase situational awareness and better inform the planning effort for debris management and response as well as the minimization of environmental and economic impacts.

### **Objectives:**

- Use state-of-the-art technology and knowledge to provide modeling output
- Communicate results to stakeholders
- Update modeling output regularly
- Inform modeling results and efforts at-sea observations
- Encourage reporting of major / significant debris sightings
- Present model outputs and efforts to the public to effectively increase understanding of marine debris movement

### **Specific Tasks:**

1. Communicate and coordinate with monitoring and removal groups to clarify their needs from modeling outputs in terms of frequency and accuracy in time and space.

2. Assemble, synthesize, and prioritize potential modeling actions, including clear information on what could be done (deliverables) when (timeline) and what would be needed (resources).
3. Work with regional modelers to identify information they need to receive from monitoring and removal activities fields, format, and frequency of data receipt.
4. Communicate modeling capabilities, limitations, and outputs to stakeholders, the public and operational groups. These outputs will better inform operational planning, and also build public understanding of the process.

**Attachment F**  
Japan Tsunami Marine Debris Action Plan  
For Western Snowy Plovers in Oregon

**US Fish & Wildlife Service Will Complete and Submit to OEM**

## **Attachment G**

### References, Additional Information and Resources

#### **References:**

##### GNOME

- Tsunami Debris Modeling\_GNOME\_20120320.pdf – Description of GNOME modeling effort approach.
- JTMD GNOME Model Graphic 04-18-12.pdf – Example GNOME visualization

##### SCUD

- SCUD\_Manual.pdf – Paper description of the University of Hawaii international Pacific Research Center SCUD model

##### OSCURS

- Getting to know OSCURS.pdf – Introduction to OSCURS model technique and applications.

##### DETECTION

- JTMD\_ERMA\_20120421.pdf – Output of voluntary sightings to date, along with confirmed monitoring sites and satellite detection areas, centralized in the Emergency Response Management Application (ERMA).

#### **Additional Information and resources:**

State of Oregon

[http://www.oregon.gov/OPRD/PARKS/tsunami\\_debris.shtml](http://www.oregon.gov/OPRD/PARKS/tsunami_debris.shtml)

State of Washington

[http://www.ecy.wa.gov/news/2012/itn01\\_debris.html](http://www.ecy.wa.gov/news/2012/itn01_debris.html)

NOAA Marine Debris Program Japan Tsunami Marine Debris website

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

Joint Information Center Website

<http://disasterdebris.wordpress.com/about>

Maritime Advisory

[http://www.marad.dot.gov/news\\_room\\_landing\\_page/maritime\\_advisories/advisory/advisory2012-01.htm](http://www.marad.dot.gov/news_room_landing_page/maritime_advisories/advisory/advisory2012-01.htm)

Invasive Species

<http://www.anstaskforce.gov/Tsunami.html>

Tsunami Debris Modeling

<http://response.restoration.noaa.gov/about/media/new-noaa-model-improves-understanding-potential-paths-japan-tsunami-debris.html>

Government of Japan FAQ:

[http://www.kantei.go.jp/jp/singi/kaiyou/hyouryuu/qanda\\_eng.html](http://www.kantei.go.jp/jp/singi/kaiyou/hyouryuu/qanda_eng.html)

# Response Annexes

Placeholder for:

1. State Agency Response Annexes
  - a. Oregon Parks & Recreation Department
  - b.
2. Local Response Annexes
  - a. Clatsop County Japan Tsunami Debris Removal Annex