

# Washington Department of Fish and Wildlife



## Marine Debris Response Annex To Washington State Response Plan



WASHINGTON DEPARTMENT OF FISH & WILDLIFE  
Washington State Marine Debris Response Plan Annex

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**TASKED AGENCY:** Washington Department of Fish & Wildlife (WDFW)

**SUPPORTING PROGRAMS:** Enforcement, Fish, Habitat, Public Affairs, and Wildlife.

## **I. INTRODUCTION**

A. **Purpose:** The March 2011 tsunami event that struck Japan resulted in an estimated release of 5 million tons of marine debris, forcibly pushed into the Pacific Ocean. The National Oceanographic and Atmospheric Administration (NOAA) estimates the majority of this material sank, but predicts that approximately 1.25 million tons of debris remained afloat, generally drifting toward the coastal environments of the North American continent. The leading edge of this tsunami generated marine debris is believed to have begun making landfall in both the coastal and straits regions of Washington, bringing with it new concerns about potential environmental impacts. In addition to being a bulk pollutant, tsunami marine debris may also act as a vector for aquatic invasive species (AIS) and unknown hazardous materials (HAZMAT). As the lead State agency chartered to protect and conserve natural resources, WDFW has an obligation to design protocols to mitigate emergent threats to supporting ecosystems. The tsunami marine debris represents an emergent and considerable threat.

B. **Scope:** This plan is applicable to WDFW employees and WDFW volunteers. The activities and procedures prescribed within it are for application in public access areas. These protocols may be extended to support Federal partners and upon private lands when appropriate permissions and agreements have been granted in accordance with law. The duration of these activities is considered long term (ten years).

## **II. SITUATION.**

### **A. Emergency Conditions and Hazards.**

1. Tsunami materials may be carrying AIS or other HAZMAT such as oils, fuels, or chemicals. All of these have the potential to cause physical or biological damage to Washington beaches and public resources.
2. Bulk debris is hazardous to fish and wildlife stocks and their habitats. It destroys shelter, nesting, spawning, and rearing areas and increases species mortality rates.
3. Tsunami debris creates navigation and driving hazards as well as public health and safety situations.

### **B. Assumptions.**

1. Tsunami material will wash-up on coastal and inland beaches and require removal and AIS containment and decontamination efforts. Private landowners are not expected to assume responsibilities associated with securing, decontaminating and removing large onshore or hazardous debris.

2. Removal of the material that requires the use of heavy equipment will require Hydraulic Project Approvals (HPAs).

3. Oil or other hazardous materials present in tsunami debris pose risks to fish and wildlife in near-shore and intertidal habitats.

4. HAZMAT and tsunami debris may result in wildlife injury and entanglement.

5. Invasive species will likely be associated with large marine debris that in part or whole, were located in Japanese coastal waters prior to the tsunami. These would include human-made infrastructure such as docks, pilings, coastal navigational aids, and vessels such as barges, boats, and ships. There is no known threshold size at this time, but in general, risk increases with size. In addition, smaller pieces of such objects will be encountered in advance of larger debris, and may be an indication that a larger piece of material is nearby and breaking up.

6. Management of AIS associated with large marine debris, especially of the magnitude expected as a result of the tsunami, appears unprecedented. There is no scientific or anecdotal information currently available that indicates management of invasive species was considered for historic tsunami events. Therefore, invasive species management by this pathway, and under offshore and open ocean shoreline conditions, will require an interdisciplinary approach with a strong element of testing and refining tools and techniques.

7. WDFW implementation of full objectives and specific tasks assumes additional funding to conduct activities.

8. Some of the debris may represent items of personal importance, necessitating a secure custody process that safeguards eventual return to the Government and people of Japan.

9. High value debris that has a potential for salvage will generate public interest, requiring crowd control and resources protection until an assessment by the competent government authority. Law enforcement agents will be needed to ensure the debris does not pose a threat to public safety and security.

10. Identification of marine debris at sea is most advantageous. To be effective, surveillance activities must include every stakeholder: Federal, State, and local governments, but more importantly, the support and assistance of the public. Engagement with public constituencies will be crucial to ensuring the viability of the strategy within this Annex.

### **III. CONCEPT OF THE OPERATION**

#### **A. General.**

##### **1. Preparedness.**

a. Habitat Program has developed an emergency Hydraulics Project Activity (HPA) template for distribution prior to July 10, 2012. We will continue to respond to

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emergency debris removal requests received over the course of the event.

b. The Oil Spill Team maintains an ongoing program of oil spill planning and preparedness activities in coordination with Ecology Spills Program and other state and federal agencies.

c. The Fish Program, AIS Unit, will ensure that decontamination units are positioned to facilitate rapid response to suspected threats. A listing of potential invasive organisms accompanied by pictures will be posted on the agency Internet/Intranet web sites along with general reporting and containment instructions. In addition, the AIS unit will establish actions designed to meet the following objectives:

- ✓ Education/outreach: Provide information to task force members and the public on how to recognize debris types that pose the highest invasive species risk. Provide information to task force members and the public on how to recognize known or suspected invasive species, and what species are commonly associated with any marine debris (not invasive).
- ✓ Offshore-infested debris: Prevent debris with known or suspected invasive species from reaching the shoreline. Contain or eradicate attached invasive species prior to debris removal from water.
- ✓ Shoreline infested debris: Contain invasive species to prevent spread by debris breakup, dislodgement of attached invasive species; release of invasive species reproductive materials; and escape of secondary (e.g., crabs, limpets, worms, etc.) invasive species. Control invasive species by reducing population numbers <sup>[jvp1]</sup>as quickly as possible. Eradicate (kill) all debris-associated invasive species.
- ✓ Removal and sampling of debris: Arrange debris removal to an on-shore site above the ordinary high water line when necessary to contain, control and eradicate tsunami-related invasive species. Collect samples and/or photograph known or suspected invasive species on debris meeting assumptions noted above. This information shall be used to assess general tsunami debris and specific incident invasive species risks; including associated diseases and parasites of concern to state shellfish and finfish aquaculture industry.
- ✓ Monitoring: Comprehensive shoreline monitoring plan for detecting newly established invasive species related to tsunami debris. Record observations and removals of invasive species from beaches and rocky habitats in agency databases and monitor to assess threat of re-infestation. Where large debris structures are removed from beaches and rocky habitats, assess damage to physical characteristics of near-shore habitats.

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d. Enforcement Program staff will coordinate surveillance and monitoring with local peers. They will respond to reports of debris and conduct initial assessments for AIS/HAZMAT/Public Safety impacts. Collect items that require property custody for eventual return to the Government of Japan via established property custody policies.

e. Programs that engage in marine patrol and boat operations will include procedures to watch for suspected tsunami marine debris.

f. WDFW may employ aviation assets to support efforts in the identification of suspected tsunami marine debris.

g. Marine Resource Committees (MRCs) will be asked to “surf watch” and report suspected tsunami marine debris landings. They will also be asked to report activities that affect wildlife habitats shoreward.

**2. Response.**

a. The Habitat Program will process Emergency HPA requests received for the removal of larger tsunami debris from beaches.

b. The Oil Spill Team will respond to oil spills and threats of spills associated with tsunami debris following established notification and response procedures with the Ecology Spills Program and in accordance with the Northwest Area Contingency Plan (<http://www.rtt10nwac.com/NWACP/Default.aspx>).

c. The AIS unit will respond to assess and decontaminate confirmed AIS-laden debris.

d. The Enforcement program will identify, provide coordinates, and report large marine debris at sea. Field officers will protect and secure personal items and provide public safety and resource protection functions for large debris encounters.

e. Specific Program activities are detailed in Section IV.

**IV. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES.**

**A. The Director/Deputy Director will:**

1. Promulgate and enforce the procedures detailed in this Annex.
2. Prescribe a process for procedural review to ensure this Annex remains accurate.
3. Appoint agency representatives to work collaboratively in relevant working groups and task forces formed for tsunami marine debris response.

4. Ensure appropriate resources and personnel allocations to meet the requirements of this plan.

**B. Assistant/Regional Directors will:** Provide resources to support the protocols and directives described in this Annex.

**C. The Fish Program, Aquatic Invasive Species Unit will:**

1. Education/outreach: develop invasive species identification protocols for task force and public, and provide identification training to select responders.

2. Offshore infested debris:

a. Where invasive species are known or suspected to be associated with large offshore debris, invasive species management objectives will be included in specific tasks for the *Communications, Outreach and Education* and *Shoreline and Offshore: Large and Hazardous Debris Items* sections of this plan.

b. Debris that is a navigation hazard or may be considered hazardous material, and poses an imminent threat to human health and safety are higher priority than invasive species, but opportunities to address all risk factors at the same time will be incorporated into management decisions.

c. Securing the debris and preventing it from reaching the shoreline is priority objective. Once cleared as a navigational or hazardous material risk and in situations where transfer of debris responsibility is not clear or will take time, the debris may be securely anchored or otherwise held offshore to allow invasive species management prior to bringing the debris to shore.

d. Large offshore debris that is claimed for salvage must include invasive species management conditions suitable to WDFW.

e. If scuttling the item (vessel or other large item) is the preferred option, WDFW must be notified and will assist in determining potential risks and optimal disposal locations.

f. WDFW will assist the communications lead agency with outreach to recreational and commercial vessel and aircraft operators to assist in large offshore debris monitoring and reporting.

g. WDFW Enforcement may provide watercraft assistance to secure manageable large debris that is close to being washed up on shoreline.

h. Where practical and appropriate, WDFW may provide training to select responders on invasive species management procedures.

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3. Shoreline infested debris:

a. WDFW will lead invasive species debris inspection and management on state and public lands.

b. Responsible federal or tribal leads may request that WDFW lead invasive species debris inspection and management.

c. WDFW will prioritize staff safety for any invasive species management incident.

d. WDFW Enforcement or other state, local, or Tribal enforcement are encouraged to provide site management services to prevent the public from coming into close contact with any large debris until the incident can be properly assessed and public safety hazards are resolved.

e. Untrained responders, whether paid or volunteer, associated with this plan shall be prevented from coming into close contact with any large debris until the incident can be properly assessed and safety hazards are resolved.

f. WDFW may request emergency assistance in the form of personnel, equipment, and materials from other task force members for invasive species management actions.

4. Removal and sampling of debris.

a. WDFW will utilize existing knowledge and experience in invasive species management (e.g., Puget Sound marine tunicates and freshwater zebra/quagga mussels) for debris incidents until tools that are more specific and techniques are identified or developed.

b. WDFW will work with state, regional, national, and international invasive species colleagues to identify existing debris management protocols for offshore and shoreline conditions.

c. Depending on funding and resources, WDFW will lead the development and testing of new techniques and protocols for management of invasive species in offshore and shoreline conditions.

d. WDFW will strive to collect samples and/or take photographs of all organisms found on known or suspected debris.

e. WDFW, in coordination with RCO and its Invasive Species Council, will identify experts that can positively identify debris-associated organisms down to species taxonomic classification where possible.

5. Monitoring. WDFW will co-develop monitoring plans with state and federal

agencies and tribes for comprehensive shoreline invasive species assessment and monitoring.

**D. The Enforcement Program will:**

1. Provide surveillance and monitoring of coastal seas for the presence of marine debris. Upon detection, Enforcement personnel will interdict small debris items and report large items to the respective USCG authorities as hazards to navigation and the State Emergency Operations Center at Camp Murray as environmental threats.
2. Record debris encounters in officer logbooks, in CODY IRF, on chart plotters, and using photography. Boat crews will calculate drift and speed of large debris to approximate landfall if the item cannot be interdicted at sea.
3. Take custody of debris that may have personal/sentimental value. These items will be protected as Found Property and arrangements will be made for turn-in to appropriate Japanese Consulate representatives.
4. Work with local law enforcement agencies to provide protection for debris items that pose a public safety risk or require enhanced security protocols such as crowd control.
5. Respond to reports of marine debris as needed and conduct initial AIS and HAZMAT assessments. This includes screening debris with RAD/NUC devices for the presence of radioactive particles if necessary. These assessments will be reported to the DNDO governing office according to established protocols.

**E. The Habitat Program will:**

1. Develop emergency Hydraulic Project Approvals (HPAs) template(s) for removal of large tsunami debris (Appendix 1).
2. Provide on call assistance and issue emergency HPAs as needed.
3. Send local governments notice of the declared emergency as per statutory requirement.
4. Respond to oil spills and threats of spills associated with tsunami debris following established incident notification and response procedures with the Ecology Spills Program and in accordance with the Northwest Area Contingency Plan (<http://www.rtt10nwac.com/NWACP/Default.aspx>).
5. Lead or Co-lead (in coordination with US Fish and Wildlife Service) oiled wildlife rescue and rehabilitation efforts for oil spills associated with Tsunami debris as necessary.
6. Coordinate with WDFW Enforcement and Wildlife Programs, US Fish and Wildlife Service and National Oceanographic and Atmospheric Administration to respond to

reports of entangled wildlife associated with marine debris.

7. Perform coastal beach assessments for potential impacts to native species and evaluate/monitor how these species are responding to debris removal actions.

8. Coordinate with Coastal Marine Resource Committees (MRCs) ([http://wdfw.wa.gov/about/volunteer/mrc/coastal\\_mrcs.html](http://wdfw.wa.gov/about/volunteer/mrc/coastal_mrcs.html)) and their potential sub-contractors to organize, train, and mobilize volunteer groups to locate tsunami debris and assist in clean up of smaller debris or notify appropriate entities for larger debris, pieces holding invasive species, or suspected toxic containers.

9. Provide staff, as directed, to support agency AIS response and monitoring efforts and conduct fish, wildlife and habitat impact assessments in coordination with Enforcement, Fish, and Wildlife Programs.

**E. The Wildlife Program will:**

1. Assess impacts of marine debris on wildlife and associated habitats in near-shore areas.
2. Provide mitigation for any threats from tsunami marine debris in toward wildlife and associated habitats.
3. Administer Snowy Plover beach closures.

**F. The Safety Office will:**

1. Ensure compliance with all safety aspects associated with implementation of this Annex.
2. Identify safety related issues to ensure employees and volunteers are not placed at risk.
3. Provide guidance on safety equipment designed to protect the health and welfare of employees and volunteers.

**V. DIRECTION CONTROL & COORDINATION**

**A. Responsibility.** The WDFW Director is responsible for all activities associated with this contingency, whether or not they are identified and maintains overall direction and authority.

**B. Execution.** WDFW ensures execution and compliance with this Annex.

**C. Coordination.** Assistant Directors are responsible for ensuring their programs are poised to respond effectively upon receipt of an emergency declaration. Governor's requests for assistance take priority over WDFW requirements and will be answered immediately upon receipt. Each Assistant Director shall establish methods to capture data specific to this contingency to include expenditures for POL, maintenance, destruction of property, facility

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renovation, etc. Assistant Directors are encouraged to collaborate with peers at all levels of government as part of their regimen of response planning activities.

## VI. COMMUNICATIONS

### A. Responsibilities

1. The Outreach & Public Affairs manager will serve on the Communications Work Group of the state Marine Debris Response Task Force and will participate in work group and task force activities as needed. The manager also will serve as the communications lead for the WDFW response plan.

2. WDFW communications will be coordinated with the activities department's staff members who participate in (a) other state Marine Debris Response Task Force work groups, and (b) the WDFW tsunami debris response team.

3. WDFW public information and outreach will be designed to contribute to the overall state communication and outreach effort. WDFW-specific activity will focus primarily on the agency's tsunami debris-related program responsibilities, such as aquatic invasive species and permitting.

### B. Specific activities

**1. Media relations.** Staff from the Outreach & Public Affairs office will field inquiries from the news media as partners in the Marine Debris Response Communications Work Group and in collaboration with staff from WDFW programs involved in the tsunami debris response effort.

**2. Website content.** The Outreach & Public Affairs office will establish and maintain WDFW website content related to tsunami-related marine debris. The department's website will include links to tsunami marine debris information on other agencies' websites as appropriate.

**3. Boater outreach.** WDFW will reach out to recreational boaters and commercial fishers and shippers to encourage them to report large marine debris while it remains offshore. Early reporting of floating debris will provide the state more options for responding and will help minimize risks to public safety and health.

**4. Information clearinghouse.** The Outreach & Public Affairs office will serve as a clearinghouse to provide relevant information from other local, state and federal agencies to the members of the WDFW agency tsunami debris response team.

## VII. ADMINISTRATION, FINANCE AND LOGISTICS

**A. Administration.** This Annex serves as the WDFW portion of the Washington State Marine Debris Response Plan.

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**B. Finance:**

1. In order to track the expenditures associated with the tsunami debris, a project code shall be established by the agency to track all associated expenditures.
2. Each program and/or division will set up master indexes, which reflect the current coding, with the exception of the project code.
3. Proportional administrative costs for the dedicated and restricted accounts shall also be recorded.

**C. Logistics.**

1. Equipment allocated to support operations will be recorded by the user.
2. Petroleum, Oil, and Lubricant (POL) purchases and usages will be documented and receipts maintained for potential reimbursements. COMDATA receipts will be submitted to Financial Services with TSUNAMI printed on the COMDATA receipt form.
3. Any equipment purchases that are specific to tsunami marine debris response must be approved by the Assistant Director.
4. Heavy equipment items may be needed to support securing, collecting, moving, and disposing of large debris items. If WDFW engineering resources are employed for this purpose, HPA provisions (if any) must be complied with, and the hours of use must be documented.

**VIII. PLAN DEVELOPMENT AND MAINTENANCE**

This Annex is anticipated to undergo significant revisions as the tsunami marine debris contingency unfolds. During the first year, the Annex shall be revised as needed. Following the first year, the review cycle will revert to the agency policy for document/policy review.

**IX. REFERENCES.**

National Oceanic and Atmospheric Administration. *2008 Interagency Report on Marine Debris Sources, Impacts, Strategies & Recommendations*. Silver Spring, MD. 62pp.

By Order of the Director.

**APPENDICES:**

Appendix 1. Emergency Declaration Cover Letter

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Appendix 2. Hydraulics Project Activity (HPA) Permit