GOVERNOR’S TSUNAMI DEBRIS

TASK FORCE BRIEF

Brigadier General J. Michael Caldwell
Chair of Governor’s Task Force on Japanese Tsunami Marine Debris
Oregon Military Department
Interim Director
Office of Emergency Management
Japanese Tsunami Debris Arrives on Oregon Coast

- On March 11, 2011, a tsunami struck the east coast of Japan and washed a large amount of debris into the Pacific Ocean – 70% sank.

- Communities and organizations based on the Oregon Coast have reported an increase in the amount and types of marine debris encountered on their shorelines.

- All of you living on the Oregon Coast are on the frontlines.

- On June 5, 2012 a concrete dock landed on the Oregon Shoreline at Agate Beach State Park. However NOAA modeling suggests that the main portion of this tsunami debris is still at sea (approximately North East of the Hawaiian Islands). Precise modeling is not possible due to the wide range of variables that exist (nature, debris size, wind, ocean currents, etc.).

- On June 25, 2012 the Governor’s Task Force on Japanese Tsunami Marine Debris was formed.

- On August 1, 2012 removal of the Dock began at Agate Beach. It took five days to remove the dock and cost $85,000. The dock was covered in invasive species, which were removed by the Oregon Department of Fish and Wildlife to protect native marine wildlife.
TASK ORGANIZATION

Non-Governmental Organizations (NGO):
- Oregon Refuse and Recycling Association
- Oregon Shores Coalition
- Sea Grant
- SOLVe
- Surf Rider

County Jurisdictions:
- Clatsop
- Columbia
- Coos
- Curry
- Douglas
- Lane
- Lincoln

State Agencies:
- Department of Parks and Recreation (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
- 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

Federal Agencies:
- NOAA (Federal Lead)
- USCG
- US Army Corps of Engineers
- Federal Emergency Management Administration Region X
- Environmental Protection Agency
- US Fish and Wildlife
- US Forest Service
- Bureau of Land Management
THE JAPAN TSUNAMI MARINE DEBRIS (JTMD) COORDINATION GROUP

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
- The Bureau of Land Management
- Federal Emergency Management Administration - Region X

State Agencies:
- Oregon Department of Parks and Recreation (Co-Lead)
- Oregon Department of Environmental Quality (Co-Lead)
- Office of Emergency Management (Coordinating)

NOTE: THE JTMD COORDINATION GROUP IS REPRESENTED BY TWO MEMBERS FROM EACH AGENCY (1 Public Information Officer and 1 Point of Contact – Operations)
FUNDING

• Currently State and Federal funding **is not** assured to address the length of this incident and complexities of this issue.

• Already existing state budgets are being strained

• There is no single Agency is staffed, equipped, or funded at a level to singlehandedly address this potential problem. This effort will rely on a whole of community approach for success (Integrated NGO, Local, County, State, and Federal Partnerships).

• We are relying on NGO, Local, County, State, and Federal partnerships to address clean up

• The amount, duration of event, and types (Large v. Small – Hazardous v. Nonhazardous) of debris received is currently unknown.
CURRENT CRITICAL TASKS

• Communications:
  – Public Outreach:
    • Continue existing Joint Information System (JTMD).
    • Developing a Public Service Announcement.
    • Coordinated and Consistent message delivery using the full compliment of media outlets (Print, Radio, TV, and social media).
  • Key Stakeholders:
    – Governor’s Press Office Point of Contact (PIO).
    – Oregon Parks and Recreation Department (PIO).
    – Oregon Department of Environmental Equality (PIO).
    – Oregon Department of Fish and Wildlife (PIO)
    – JTMD Coordination Group PIO Membership as required.
CURRENT CRITICAL TASKS

• Japan Tsunami Marine Debris:
  – Deliver the state of Oregon a collaborative whole of community (NGO, Local, County, State, and Federal) based plan that is integrated and informed.
  – Provide a timely and coordinated response to and recover from marine debris incidents that impact the state of Oregon.

• Federal Funding:
  – ORPD applied for NOAA Grant and is awaiting approval process
  – Continue to identify potential Federal Assistance through both traditional and non-traditional routes to assist the State of Oregon offset or mitigate the fiscal impacts incurred as a result of the impacts of JTMD (Governor Tsunami Debris Task Force / JTMD Coordination Group).
  – Work with Federal Elected Officials to ensure the needs of Oregon are known at the Nation’s Capital (Governor Tsunami Debris Task Force).
AGENCY ACTIVITIES TO DATE

• Oregon Parks and Recreation Department
• Oregon Department of Fish and Wildlife
• Oregon Department of Environmental Quality
• SOLVE
• SURFRIDER
• ADDITIONAL
On the beach

- Agate Beach dock removed.
  - 200+ tons.
  - A week to cut up and haul off.
  - Cost ~$85,000.
  - Important to attack large debris immediately to preserve beach.
  - Popular in the short run, leaving debris would eventually drive visitors away.
On the beach: the dock
On the beach

• Volunteer efforts.
  – More than a 20 small cleanups so far this summer ... triple normal.
  – Average people per work party has doubled (from 17 to 34).
  – Removed 20 tons of debris, versus 5 in a normal year (not just due to more debris).
  – Organized by the nonprofit Oregon Marine Debris Team.
  – Oregon Chapter of the Surfrider Foundation, Oregon Shores Conservation Coalition, SOLVE, Sea Grant, Washed Away.
  – Cost ~$10,000 so far for sturdy cleanup bags.
On the beach: volunteers cleaned it
Off the beach

• Debris containers.
  – Now at 15 locations in state park campgrounds.
  – 17 municipal transfer stations shut down for now due to low demand.
  – Costs $10,000+ so far.
  – Will continue to adjust locations where the need isn’t immediate.
Off the beach: drop-off sites
Off the beach

• **211 phone system**
  - Callers on the coast can make debris reports of all kinds by calling 211 (800-SAFENET).
  - System has taken more than 300 calls since July.
  - Half the calls are about normal debris, a quarter get forwarded to the Coast Guard and the rest are information requests.
  - Costs $12-24,000 a year depending on call volume.
Off the beach

- **First grant**
  - Receiving $50,000 in aid from NOAA.
  - Applying for more.
  - Expecting another $1 million from the national government of Japan.
  - About $234,000 in costs so far (materials and labor), and expecting more than a million based on current projections.

- Couldn’t do this without volunteers.
- Winter will be very challenging.
Invasive Species

• What are invasive species?
  – Organisms that evolved in one location, are moved by humans to another *and* reproduce successfully in the new location
  – There are species that are *known* to be invasive outside of OR and are high risk

• Why invasive species are a concern:
  – Invasive species would have a significant impact on region
    • Ecosystem impact (competition, predation with native species)
    • Economic impact (fisheries, maintenance, etc.)
The Dock

• Agate Beach, Newport, June 5, 2012
• ODFW removed the invasive species
  – Goal:
    • Prevent invasive species from establishing
  – Authority:
    • Protect native species in terrestrial, freshwater, and marine ecosystems;
    • Prevent introduced and invasive species from establishing
• OPRD removed the dock
OSU: Taxonomic ID of Invasives

1 species of urchin
Northern Pacific seastar
Asterias amurensis

Japanese shore crab
Hemigrapsus sanguineus

Granular claw crab
Oedignathus inermis

Solitary tunicate
Oyster

Mytilus galloprovincialis

Undaria pinnatifida

Sponge on mussel
8+ species of mollusk
Anemone

4+ species of barnacle

3+ species of amphipod

Bryozoans

4+ species of worm
ODFW Sterilized Dock Surface

- 13 staff
- 3 days
- ~$3,000
- 2+ tons of material removed
OPRD & ODFW
Buried Organisms

- Above high tide line
- Buried in 10’ of sand
- Lethal disposal of organisms
OPRD Removed Dock

- ODFW recommended removal rather than re-use
- During removal, found more invasive organisms
ODFW’s on-going role

• Director:
  – JTMD Task Force

• Staff:
  – JTMD Coordination Group
  – Invasive species coordination
  – Review reports of marine debris
  – Respond to debris when there is high risk of invasive species
  – Provide information on invasive species (ODFW’s JTMD website)
More information

• Google:
  – ODFW Tsunami Debris (news, fact sheet)

• Contacts:
  – Beach.debris@state.or.us
  – Meg Kenagy 503-947-6021
  – Caren Braby 541-867-4741
  – Roy Elicker 503-947-6044
DEQ Responds under these authorities:

ORS 468B.300-500, ORS 465, 466
Oregon Emergency Management Plan
Northwest Area Contingency Plan
CERCLA

Release or Threat of Release
Hazardous Substances
Pollutants and Contaminants
“Imminent and substantial endangerment to human health or the environment”

Oil Pollution Act-Clean Water Act
Oil impacts or threatens to impact waters of the United States
DEQDEQ's Role in JTMDs

• Coordination with USCG for removal of large containers of oil or other hazardous materials
• Coordination for collection/disposal options for items similar to household hazardous waste.
• Coordinate with state and local partners on managing tsunami debris for reuse, recycle and disposal.
about 15～30cm

about 30cm

about 15cm
Dick Pedersen-Director
Oregon Department of Environmental Quality

Phone: 503-229-5300
E-mail: Pedersen.Dick@deq.state.or.us

Mike Zollitsch-Emergency Response Unit
Land Quality Division
Phone: 503-229-6931
E-mail: Zollitsch.michael@deq.state.or.us
Oregon Marine Debris Team
Keeping Oregon’s Shore Free From Debris
Sign up to volunteer by visiting http://bit.ly/MvxUI4
QUESTIONS ?