



# JTMD Task Force Meeting

## March 15, 2013



*Justin Ainsworth, ODFW biologist examines boat that washed up on Gleneden Beach on Feb. 5. The boat is presumed to be Japanese tsunami marine debris*



## Two years after the Japanese Tsunami debris continues to arrive on the Oregon Coast

- Oregon has multijurisdictional approach
- Quick response
- Coordinated effort
- Build relationships to raise public awareness



*Brig. Gen. Mike Caldwell, Chair of the JTMD Task Force, addresses coastal residents about tsunami debris*



# JTMD Task Force Agenda

**INTRODUCTIONS – Brigadier General Mike Caldwell (Chair, Governor’s Task Force on JTMD)**

- 1. Oregon Parks and Recreation Dept. –Chris Havel (Spokesperson, OPRD)**
  - 2. Oregon Dept. of Fish and Wildlife – Caren Braby (Marine Resources Program Manager, ODFW)**
  - 3. Oregon Marine Board – Scott Brewen (Director, Oregon Marine Board)**
  - 4. Oregon Emergency Management – Martin Plotner (Director, OEM)**
    - Public Affairs Update – Kim Lippert (Public Information Office, OEM)**
  - 5. GOVERNOR’S OFFICE – Gabriela Goldfarb (Natural Resources Advisor)**
    - Japanese Funding**
  - 6. NOAA Weather Patterns – Nir Barnea (Marine Debris Coordinator, NOAA)**
  - 7. NGO Update– Gus Gates (Surfrider Foundation)**
  - 8. Japanese Delegation Update – Miyiki Yoshida**
- Closing Comments – Brig. Gen. Mike Caldwell**



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## On the beach

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- **State park beach rangers and Oregon Marine Debris Partnership supporting steady stream of small cleanups.**
- **Mostly usual debris: consumer plastic, rigid foam, fishing equipment.**
- **Not all is from the tsunami, but some beaches seeing more than twice as much debris as normal.**
- **Some large items flowing in, especially small fiberglass boats ...**



# On the beach: tsunami boats

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## **On the beach: Spring Beach Cleanup**

- **March 30: Joint effort with SOLVE, ODFW, OPRD and other partners.**
- **Thousands of volunteers organized into more than two dozen zones covering every mile of the coast.**
- **Will produce more data about areas most affected by new debris.**



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## Off the beach

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- **Debris containers still at 15 state parks.**
- **211 call volume picking up as weather slowly improves. 150+ calls so far this year.**
- **Most calls get transferred to park staff for debris removal.**
- **Automated email system loops in ODFW for invasive species response.**



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## Off the beach: costs

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- **Total state spending to date in range of \$300,000.**
- **Since January:**
  - **\$7,000 in dumpster services**
  - **\$6,000 to restock debris bags**
- **In next month, expecting another \$3,000 for 211 and \$7,000 for final bag order.**



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## Off the beach: funding

- **Received \$50,000 NOAA grant in 2012. Used \$20,000 for debris disposal.**
- **Agate Beach dock cost \$84,000, with \$30,000 covered by NOAA grant. OPRD paid remaining \$54,000.**
- **NOAA passing through \$250,000 gift from Japan for upcoming expenses.**



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## Coming up next

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- **Workshops: Oregon Marine Debris Partnership and state cooperating to hold 15 public workshops on removing debris (8 already held as of today).**
- **Continue drop-off program, small cleanups, stockpile of bags, and ready response teams.**
- **Act on newly-signed federal agreement.**



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## Coming up next

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- **Federal agreement:**
  - **Memorandum signed Feb. 6**
  - **Scope of Work submitted March 7. In final review by feds.**
  - **Gives Oregon access to \$250,000 gift from Japan to defray tsunami cleanup expenses.**
- **OPRD will manage the fund.**



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## Coming up next

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- **OPRD will manage the fund.**
  - State agencies request either in advance or for reimbursement.
  - Steering committee reviews. OPRD, DEQ, ODFW, OSMB, OEM.
  - Makes recommendation to OEM director, who makes final decision.
- **Five categories covered:**
  - Hazmat.
  - Debris response (off-shore interception & on-shore removal).
  - Debris disposal.
  - Invasive species response.
  - Monitoring debris incidence and impact.



# ODFW is Lead Agency for Marine Invasive Species Issues in Oregon's JTMD Response



**Roy Elicker, Director**  
**Caren Braby, Marine Resources Program Manager**  
Oregon Department of Fish & Wildlife  
March 15, 2013



# 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
  - Numerous species are known to be invasive outside of OR and pose a 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.)



## JTMD Definition: Official vs. Biological

- Official (NOAA, Japan)
  - Item is confirmed (by serial number or other indisputable marking) as JTMD
  - Database maintained by NOAA
- Biological (ODFW, Academics)
  - Item bears species native to coastal Japan
  - Database maintained by academics
- Oregon beach debris (OPRD, Public)
  - Anything that lands in OR
  - Multiple data sets maintained by OPRD



## MARINE DEBRIS ON WHICH JAPANESE BIOFOULING SPECIES HAVE BEEN IDENTIFIED

Record as of: February 1, 2013

### NATIONAL SCIENCE FOUNDATION RESEARCH GRANT: *REGISTER OF BIOFOULED DEBRIS*

(other than material bearing solely pelagic species, such as the gooseneck barnacle *Lepas*)

#### SUMMARY

| Register Number | Type   | Photo-Archive ?<br>(Y / N) | Code Name       | Location              | Date         | Origin in Japan |
|-----------------|--------|----------------------------|-----------------|-----------------------|--------------|-----------------|
| JTMD-BF-1       | dock   | Y                          | Misawa 1 (M1)   | OR: Agate Beach       | 2012 June 4  | Misawa          |
| JTMD-BF-2       | vessel | Y                          | Ilwaco Boat     | WA: Ilwaco            | 2012 June 15 | Tohoku          |
| JTMD-BF-3       | float  | Y                          |                 | OR: off Lincoln City  | 2012 June    |                 |
| JTMD-BF-4       | float  | Y                          |                 | OR: off Alsea Bay     | 2012 June    |                 |
| JTMD-BF-5       | float  | Y                          |                 | CA: Bodega Bay        | 2012 June 19 |                 |
| JTMD-BF-6       | vessel | Y                          | Kahana Bay Boat | HI: Oahu: Kahana Bay  | 2012 Nov 29  | Ofunato         |
| JTMD-BF-7       | float  | Y                          |                 | OR: offshore          | 2012 June 12 |                 |
| JTMD-BF-8       | dock   | Y                          | Misawa 3 (M3)   | WA: Olympic Natl Park | 2012 Dec 14  | Misawa          |
| JTMD-BF-9       | float  | Y                          |                 | WA: Olympic Natl Park | 2012 Dec 20  |                 |
| JTMD-BF-10      | float  | Y                          |                 | WA: Olympic Natl Park | 2012 Dec 20  |                 |
| JTMD-BF-11      | vessel | Y                          | Punaluu Boat    | HI: Oahu: Punaluu     | 2012 Dec 24  |                 |



## Why is JTMD such an invasion threat?

- Coastal Japan is just like coastal Oregon
  - Climate and types of organisms VERY similar
- Types of debris
  - Terrestrial origin debris (TOD) - not a threat
    - No time to accumulate coastal species
    - Harbors “pelagic” species
  - Marine origin debris (MOD) – is a threat
    - Accumulates abundant coastal community species
    - Has not been recorded arriving in OR prior to this event
      - People who own things in the coastal area try to keep them there...
    - JTMD event has been followed by high rate of arrival of MOD



# Docks Set Adrift from Misawa Harbor

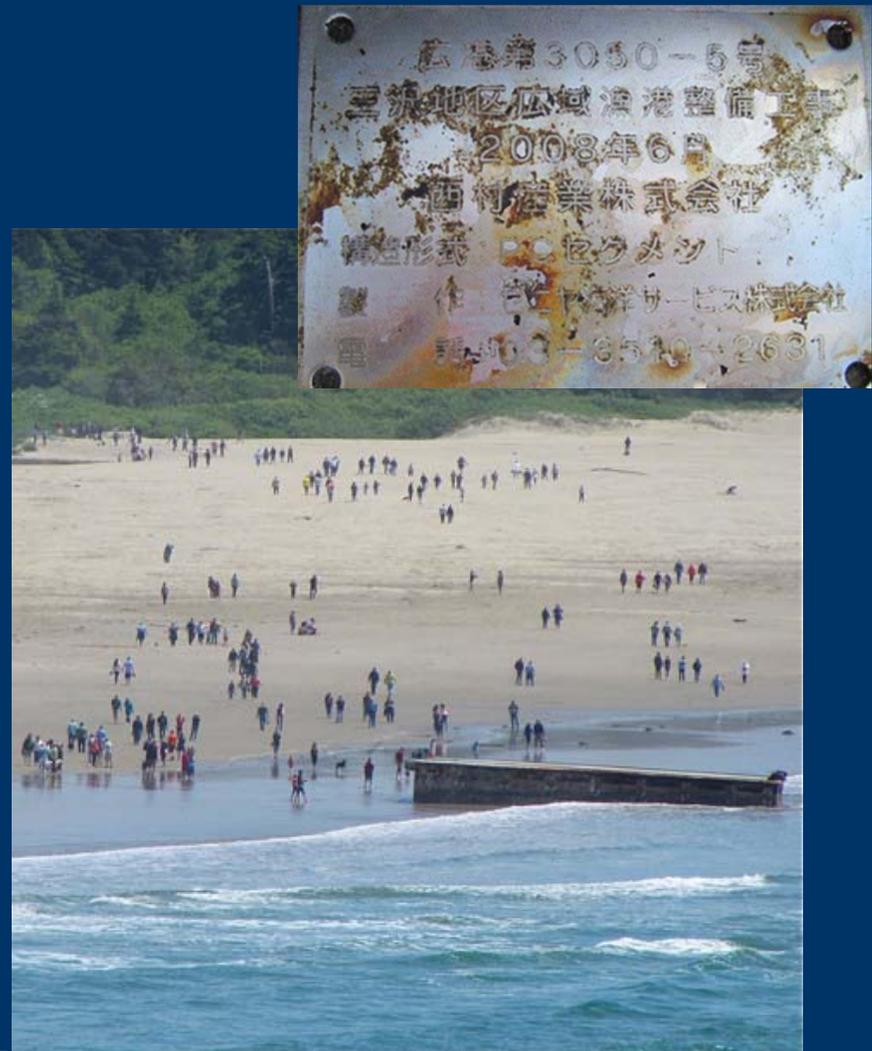
- Constructed in 2008
- In place for 2.75 yrs.





## Misawa Docks: Agate Beach (2 of 4)

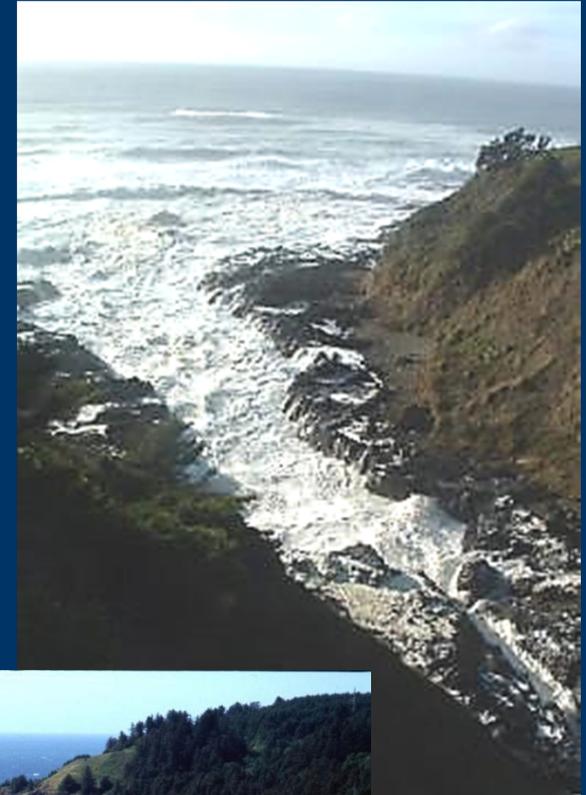
- Agate Beach, Newport
  - June 3, 2012
- ODFW removed living matter
  - Goal: Prevent invasive species from establishing
  - Authority: Protect native species in terrestrial, freshwater, and marine ecosystems; prevent introduced and invasive species from establishing
- OSU sampled species
  - JTMD-BF-01
- OPRD removed the dock





# Lesson: Situation could have been worse

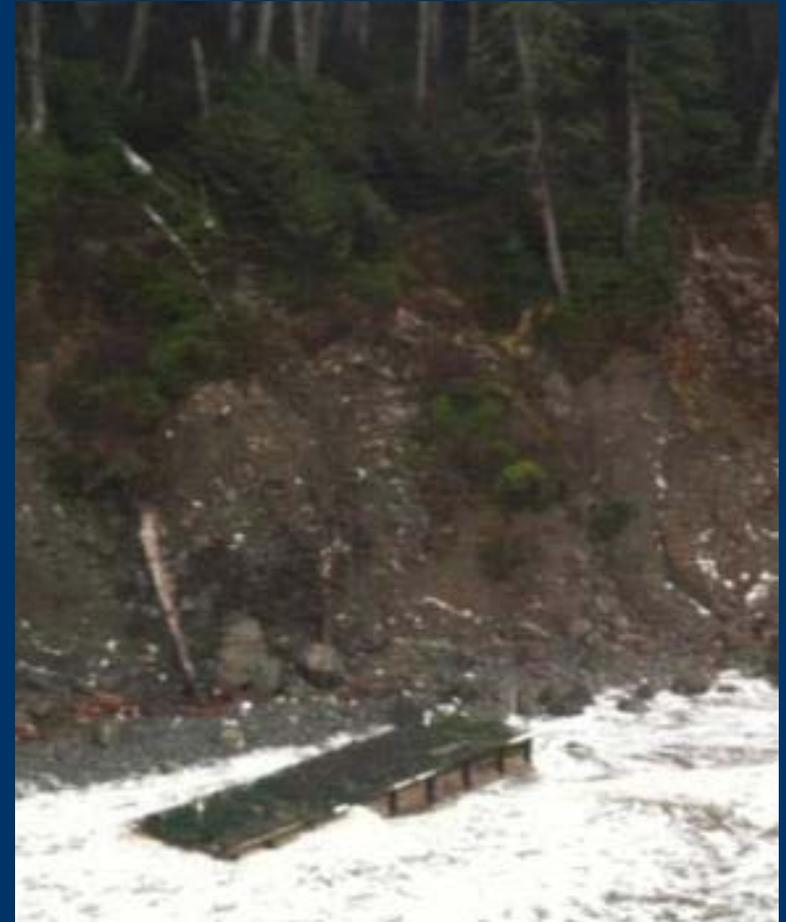
- Habitat type
  - Along offshore islands, cliffs, or rocky headlands (unstable landing)
  - Lodged in rocky intertidal or shallow subtidal
- Access
  - Isolated location along OR coast
  - Far from marine scientists & agency responders





## Misawa Docks: Olympic coast (3 of 4)

- Olympic Coast
  - Dec 19, 2012
  - Worst case scenario for resources, access, \$\$\$
- Team assessed dock
  - Federal and state representatives from WA
  - OSU biological sampling team
    - JTMD-BF-08
- Where is it now?
  - Dock is still in place
  - Contract is in place to begin removal by heavy-lift helicopter
  - Removal cost ~\$500,000





# Misawa Docks: Olympic coast Olympic National Park, Washington



Sterilization of dock surfaces to reduce risk of non-indigenous species



## Misawa Docks: Hawai'i (4 of 4)

- Spotted offshore of Maui & Molokai
  - Sep 19-21, 2012
- Misawa Dock?
  - Suspected but still unconfirmed



- Where is it now?
  - USCG unable to relocate
  - Lost and presumably still adrift at sea



## ODFW's on-going role

- Participate in JTMD Task Force, Coordination Group
  - *At-sea Plan, public events, communications*
- Coordinate on JTMD invasive species issues
  - *Website, academics, state and federal agencies*
- Monitor reports of marine debris
  - *Inspect debris when there is high risk of invasive species*

*The Japanese Coast Guard reported that 506 vessels were washed out to sea by the tsunami*





# Recent Vessel Landings in Oregon: Gleneden Beach (Feb 5, 2013)

- Successfully sampled (JTMD-BF-27)
- Taken to landfill

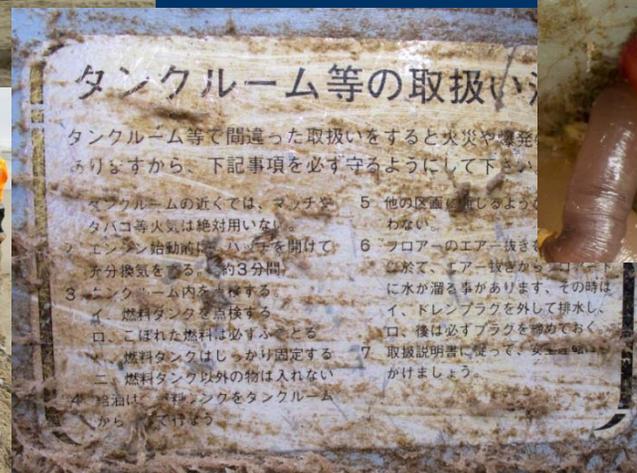




# Recent Vessel Landings in Oregon: Horsfall Beach (Feb 21, 2013)



- Successfully sampled (invasive species) and removed to landfill
- JTMD-BF-28





## Recent Vessel Landings in Oregon: Clatsop Beach #1 (Feb 27, 2013)

- Sighted by public
- Reported to agencies indirectly
- Vessel salvaged by public before daylight prior to involvement by agencies

???

20 ft vessel (no photo available)



## Recent Vessel Landings in Oregon: Clatsop Beach/Gearhart #2 (Feb 27, 2013)

- Successfully sampled (invasive species – mussels, pink barnacles)
- Vessel lost (either at sea or salvaged by public)
- JTMD-BF-29





## Recent Vessel Landings in Oregon: Road's End, Lincoln City (Feb 27, 2013)

- Sighted but inaccessible on Day 1
- Day 2, only fragments remained, including invasive mussels (successfully sampled JTMD-BF-30)
- Sampled fragment, fragments still at sea





# JTMD Exhibit Opening and Dedication, Hatfield Marine Science Center

- March 10, 2013
  - 2 year anniversary
- Invasive species
- Wave Tanks
- Misawa Dock #1 fragment
  - Starts Tsunami Evacuation Route





# Recent Vessel Landings in Oregon: Muriel Ponsler Beach, Lane County (Mar 14, 2013)

- 20-30' vessel, similar to the other landings in Feb
- Putative “invasive” mussels collected for analysis
- OPRD removed vessel from beach same day



# Japanese Tsunami Marine Debris

*At-Sea Subcommittee*



# Action Items

- Identify contractors for towing/removing debris
- Identify particularly hazardous zones for large debris to land
- Identify preferable areas for large debris to land
- Identify ports to bring netted debris





# Current Status

- EPA and USCG working through jurisdictional issues with respect to sinking boats or debris. Once completed, information will be added to appendix.
- Preparing Request for Information for at-sea response.
- Sensitive and Resilient Areas (SARA) decision-making document will be incorporated with appendix.
- At-Sea appendix is a communication document, not a response matrix.

# Questions?



NOAA Marine Debris Program | Office of Response and Restoration | NOAA National Ocean Service





## Martin Plotner, Director, Oregon Emergency Management

- Governor John Kitzhaber signed JTMD state plan in December
- Monthly Coordination Group meetings
- Meetings will take place by phone





# Public Affairs Update: Kim Lippert, Public Information Officer Oregon Emergency Management

- Just 21 items from among the more than 1,500 reports of possible tsunami debris have been firmly traced back to the tsunami, according to the National Oceanic and Atmospheric Administration.
- News coverage is steady
- Consistent message
- Respond promptly to media requests



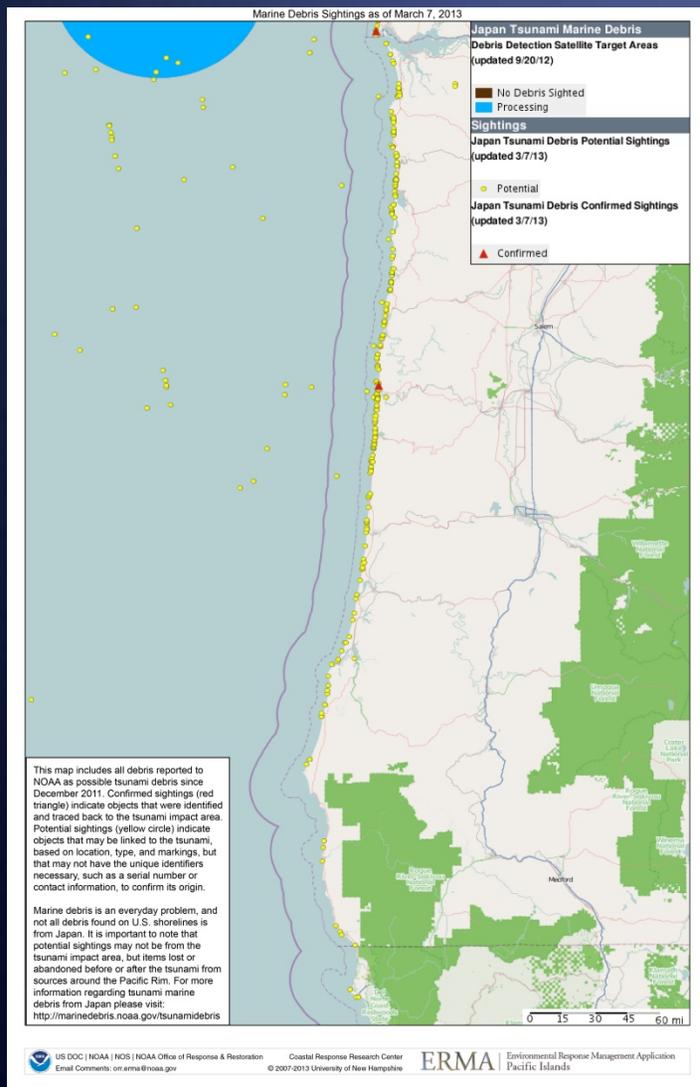


# **Gabriela Goldfarb, Natural Resources Advisor Governor's Office**

- **Japanese Funding**

# Marine Debris

NOAA Marine Debris Program | Office of Response and Restoration | NOAA National Ocean Service

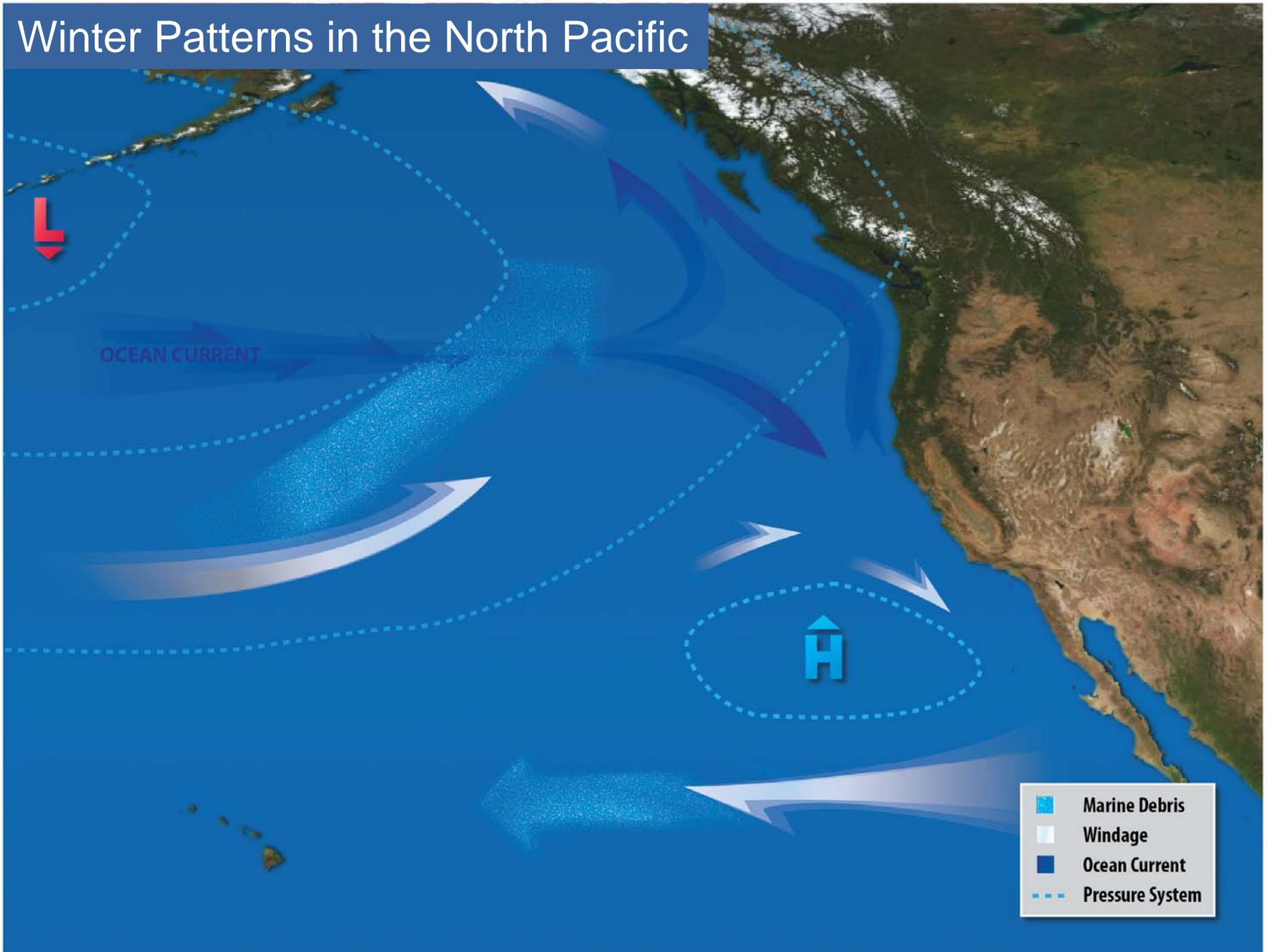


## NOAA Update to Oregon JTMD Task Force

March 15, 2013

NOAA Marine Debris Program

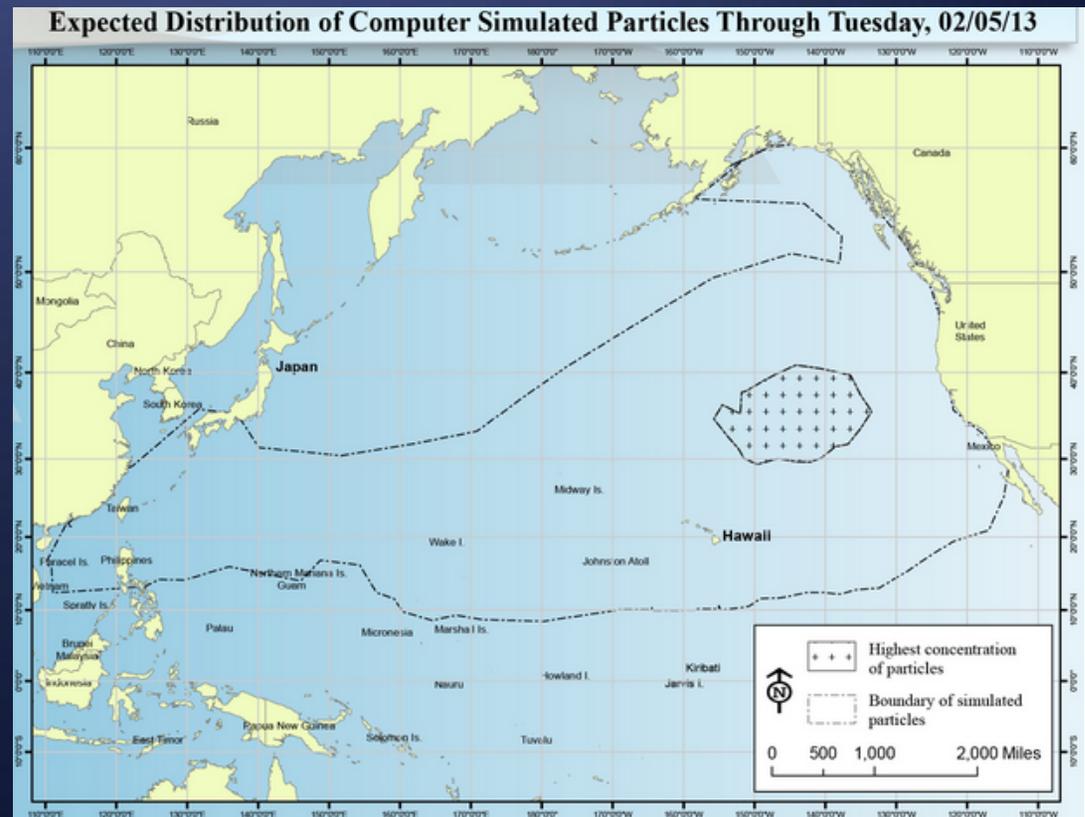
# Winter Patterns in the North Pacific





## Modeling Output

- Hindcast model
- Updated monthly
- No significant changes Dec. 2012
- Available on the Web
- Bigger picture:
  - Deposition intermittent, widely scattered
  - More JTMD in Hawaii



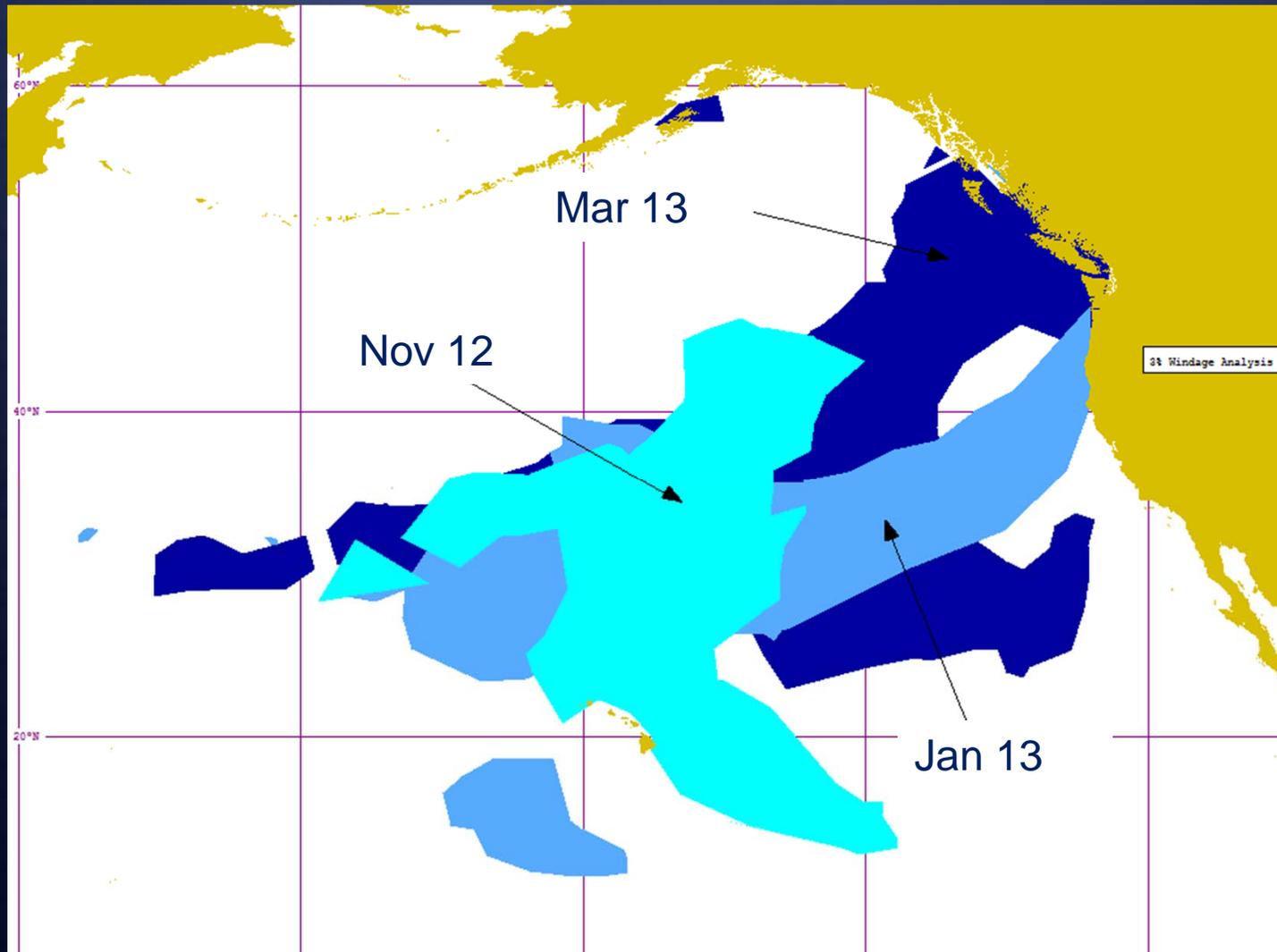
[http://marinedebris.noaa.gov/info/images/gnome\\_graphic.jpg](http://marinedebris.noaa.gov/info/images/gnome_graphic.jpg)

# Marine Debris

NOAA Marine Debris Program | Office of Response and Restoration | NOAA National Ocean Service



## Seasonal Variation, 3%-Windage, Mar 2013



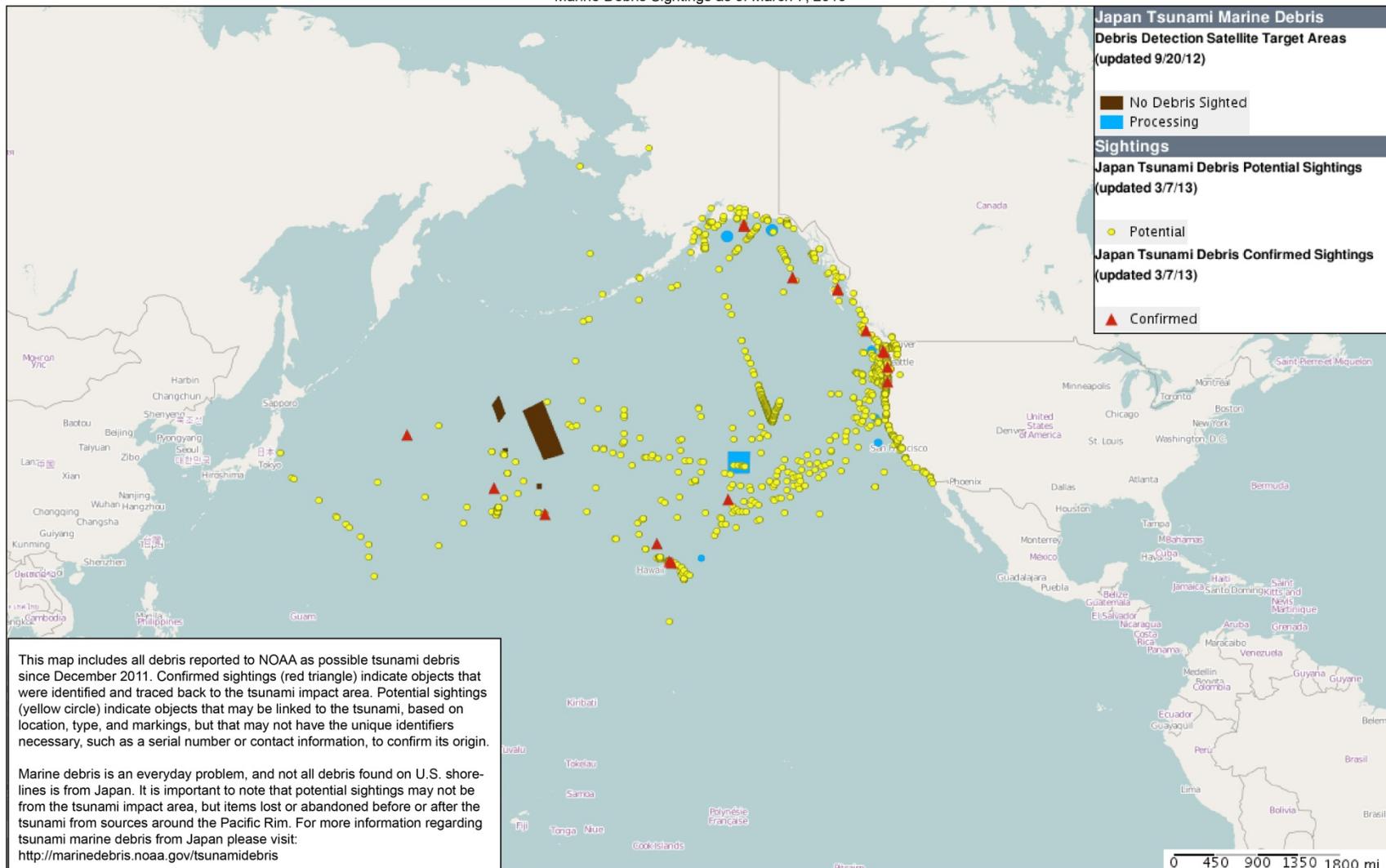


## Longer Outlook

- In winter 2012-2013, the model indicates high floating debris items again arriving along the Oregon, Washington and British Columbia Coast.
- The amounts of high floating debris are expected to be less than what was observed last winter.
- Lower floating objects are forecast to arrive along the West Coast of North America between Northern California and British Columbia.

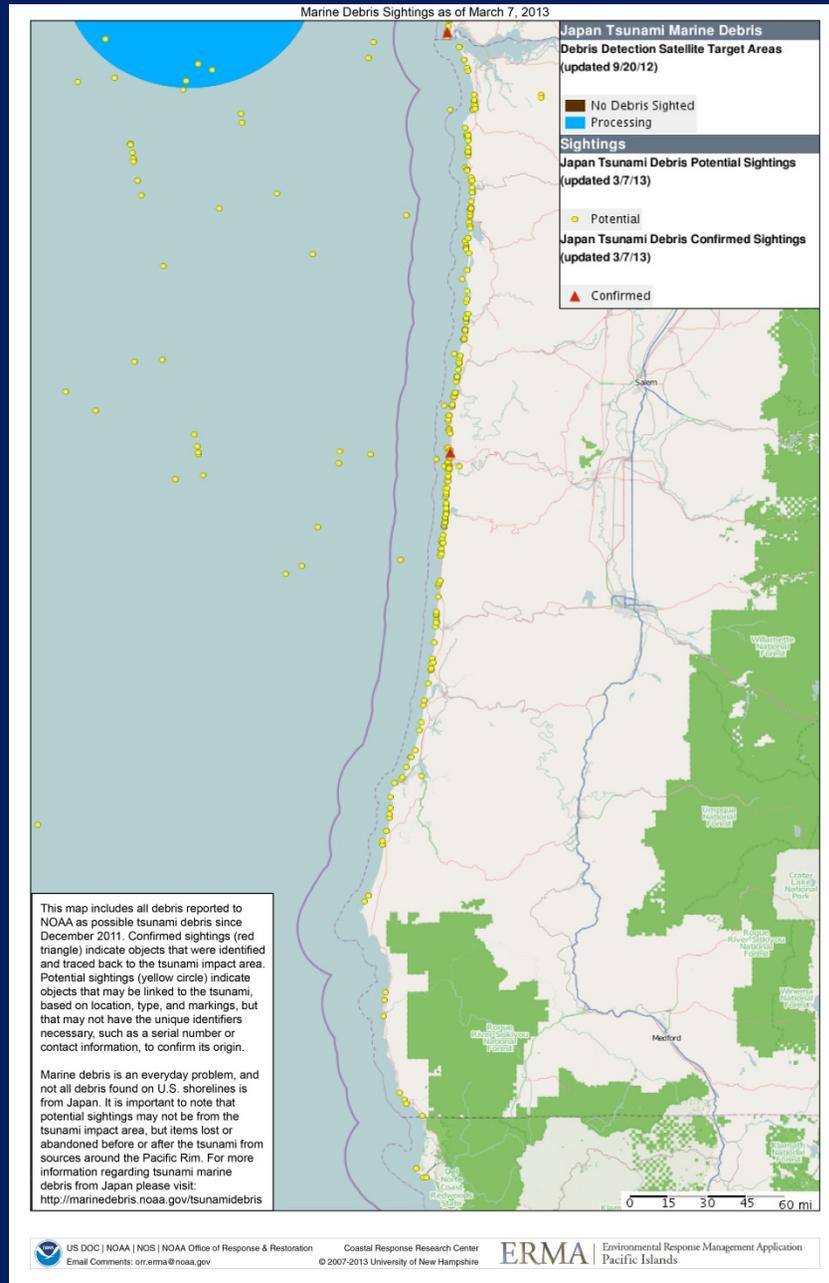
# JTMD Sightings: Pacific Rim

Marine Debris Sightings as of March 7, 2013



# JTMD Sightings: Oregon

- Increased reporting recently
- Possibility of more low windage items
- Amounts, type, exact locations, and timing impossible to predict
- NOAA expects that marine debris deposition will continue to be scattered and intermittent



[http://marinedebris.noaa.gov/tsunamidebris/debris\\_sightings.html](http://marinedebris.noaa.gov/tsunamidebris/debris_sightings.html)



## Thank you

Get info:

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

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

Report sightings:

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

Nir Barnea

[Nir.barnea@noaa.gov](mailto:Nir.barnea@noaa.gov)

206-526-6943

# What we are seeing on our beaches in Oregon



# Many Cleanups...Many Pounds

- Surfrider Chapters have led 14 group/scheduled cleanups so far in 2013 ~10,000 lbs.
- Many more small, rapid response cleanups on either daily or as needed
- Cannon Beach Model
- Other debris...



# SOLVE Statewide Spring Beach Cleanup

- March 30<sup>th</sup>, 10am-2pm
- Anywhere that needs cleaning



# OMDT Community Workshops

- Goal: assist communities in developing strategies for rapid response cleanups, identifying problem locations, and points of contact with OPRD.



# Help Spread the Word!

- More info: [oregon.surfrider.org](http://oregon.surfrider.org)
- Tonight, Newport 6:30pm
- 3/25 Lincoln City
- 3/26 Pacific City
- 3/28 Tillamook
- 4/3 Seaside
- 4/10 Cannon Beach
- 4/16 Rockaway Beach
- Total of 15 workshops



# Japanese Delegation Visit

February 14-16, 2013

Lincoln City, OR

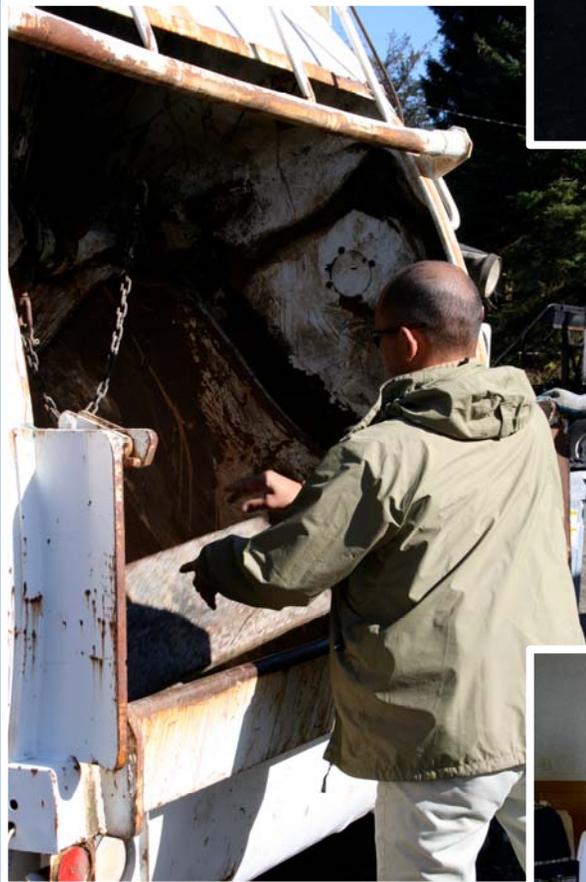
# Delegation Representatives

- Japan Environmental Action Network “JEAN” (NGO)
- Japan Ministry of Environment
- University of Kyushu
- University of Kagoshima
- KIDS Now, Miyagi Disaster Relief Volunteer Center (NGO)
- Peace Winds Japan (NGO)
- Cleanup Gamou (NGO)

# Meeting with Oregon-based Japan-related organizations

- Discussed ongoing coordination with SOLVE and Japan-related organizations
- Strategized how Japanese representatives could help in Oregon





# Beach Cleanup & Monitoring



# Hatfield Marine Science Center

- Met resident octopus
- Saw location of dock memorial
- Presentation by Gayle Hansen about algal species on JTMD



# Japan-US Marine Debris Workshop

- Presentations on:
  - Recovery efforts in Japan
  - Marine debris models and monitoring in Japan
  - Helping Japanese children cope with the disaster
  - Oregon's tsunami debris response
  - OR State Dept. of Fish & Wildlife: Invasive Species
  - OR State Parks & Recreation: JTMD effort on the beach



Thank you to everyone who  
contributed to the visit – especially  
Chinook Winds Casino Resort!

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# **Brig. Gen. Mike Caldwell** **Chair, Governor's Task Force on JTMD**

- **Closing Comments**