



# Marine Debris

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## Marine Debris is Everyone's Problem (and anyone can do something about it)

Neal Parry, Nir Barnea, NOAA Marine Debris Program  
C-MORE Marine Debris Education Program

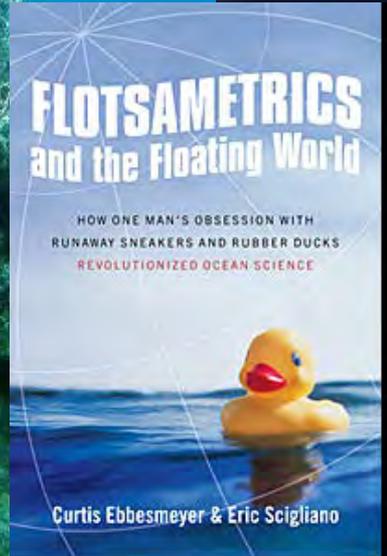
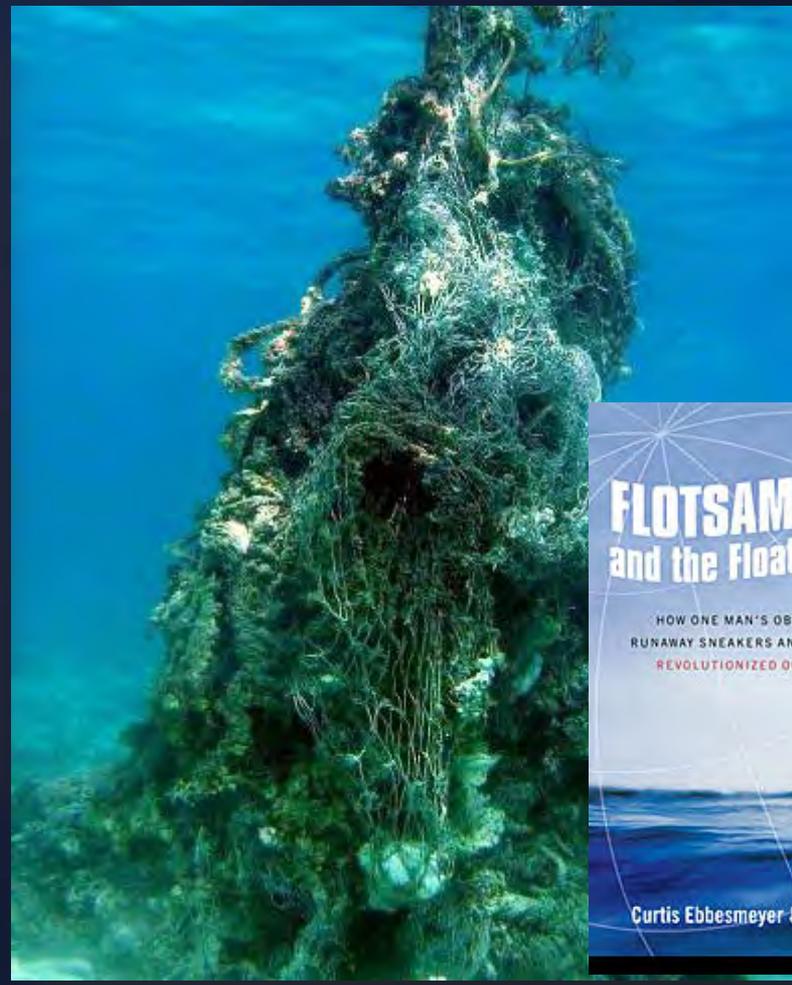


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Land



Ocean

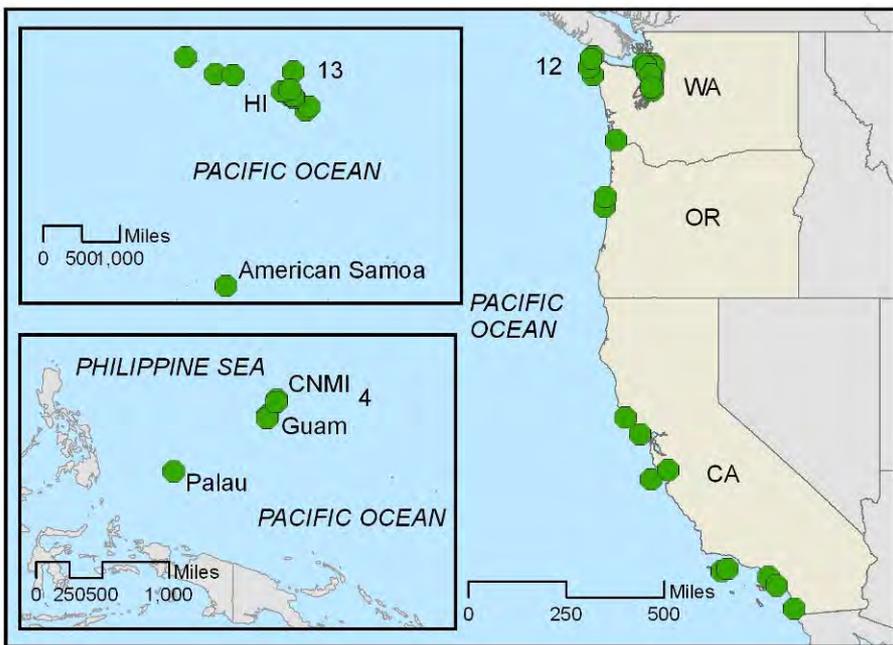
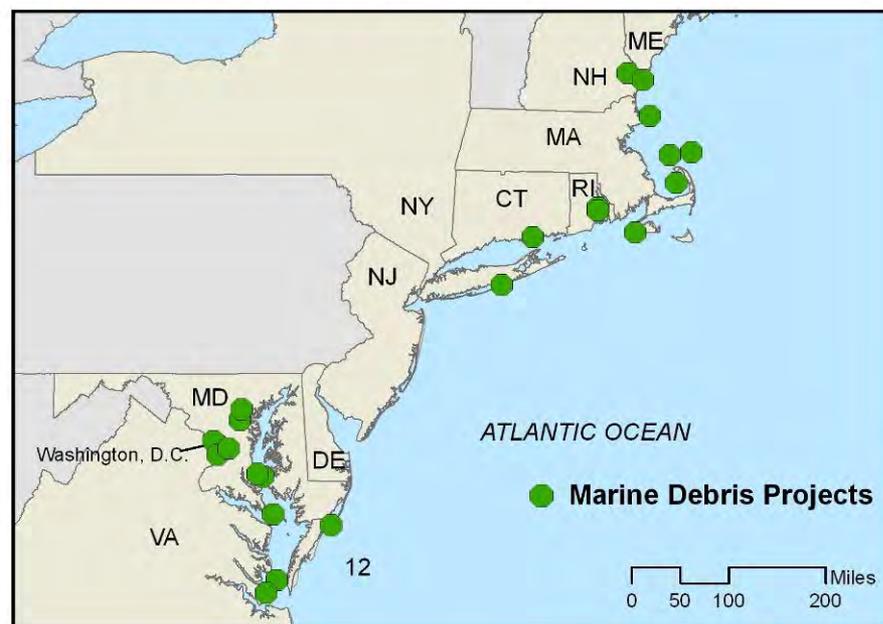
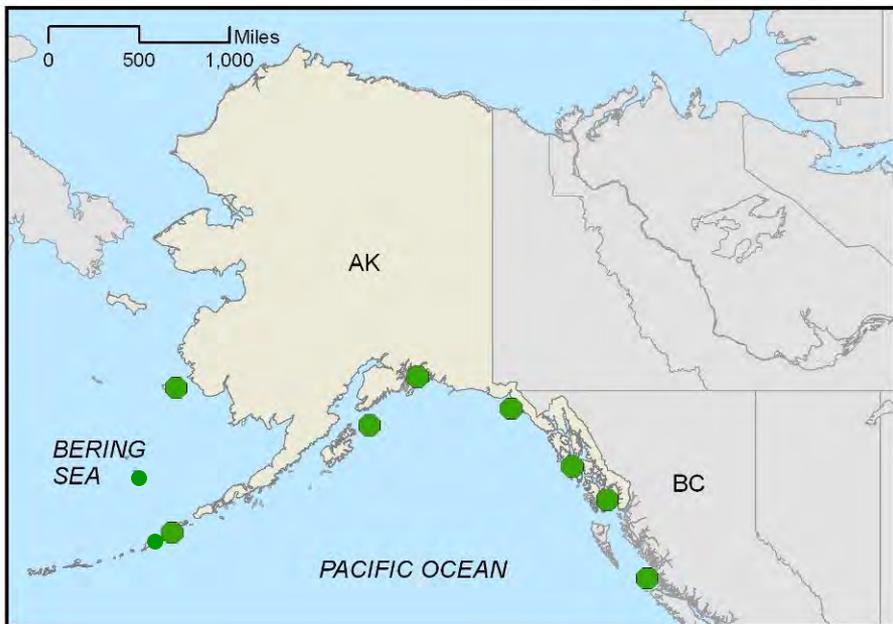
## NOAA Marine Debris Program

- Established in 2005
- Mandated by the Marine Debris Research, Prevention, and Reduction Act, Dec. 2006
- Dedicated to promoting and leading research, prevention, and reduction activities nationwide
- MDP has regional coordinators for the East Coast, Gulf of Mexico, Great Lakes, West Coast, Alaska, and Hawaii
- Website: [www.marinedebris.noaa.gov](http://www.marinedebris.noaa.gov)



The screenshot shows the NOAA Marine Debris Program website. At the top, it features the NOAA logo and the text "Marine Debris OFFICE OF RESPONSE AND RESTORATION • NOAA'S NATIONAL OCEAN SERVICE". The main content area is titled "NOAA Marine Debris Program" and "UPDATES & NEWS". A large featured article is titled "Marine Debris Monitoring and Assessment Project" with a photo of a person measuring debris on a beach. Below this, there is a list of links: "Demystifying the 'Garbage Patches'", "All About Plastics", "Frequently Asked Questions", "5th Int'l Marine Debris Conference", "NEW Outreach Materials", "Turning Marine Debris Into Energy!", "Abandoned & Derelict Vessels", "Monitoring and Assessment Project", "2011 Marine Debris Calendar", and "Smithsonian Ocean Portal". On the right side, there are "Special Features" including a "5th International Marine Debris Conference" banner, a "2011 Marine Debris Calendar" button, a "Marine Debris BLOG" button, a "Marine Debris INFO" button, and a "Marine Debris VIDEOS" button. A sidebar on the left contains navigation links: Home, About the Program, Marine Debris Info, Projects, Funding Opportunities, Outreach & Education, In the News, Photo Galleries, Marine Debris 101, and Marine Debris BLOG. There is also a search bar and a small text block that reads: "Marine debris threatens oceans and coasts; marine mammals, fish, and seabirds; human health and safety; and navigation."

# NOAA Marine Debris Projects



**New York**



**Los Angeles**



**Alaska**



**Hawaii**





**United States**



**Canada**



**England**



**Sweden**



**Japan**



**Hawaii**



**Venezuela**



**Antarctica**



**Tanzania**



**Philippines**

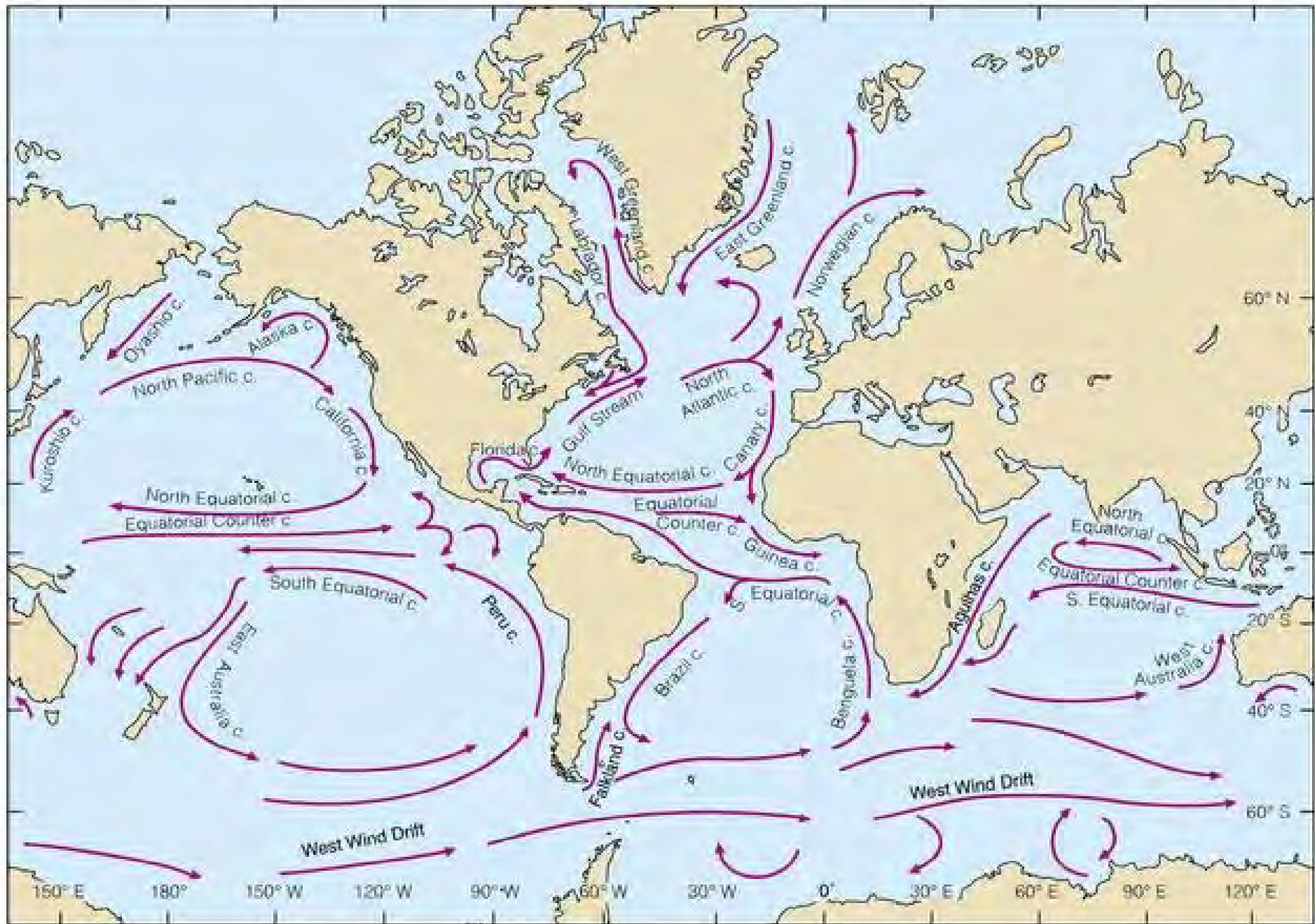


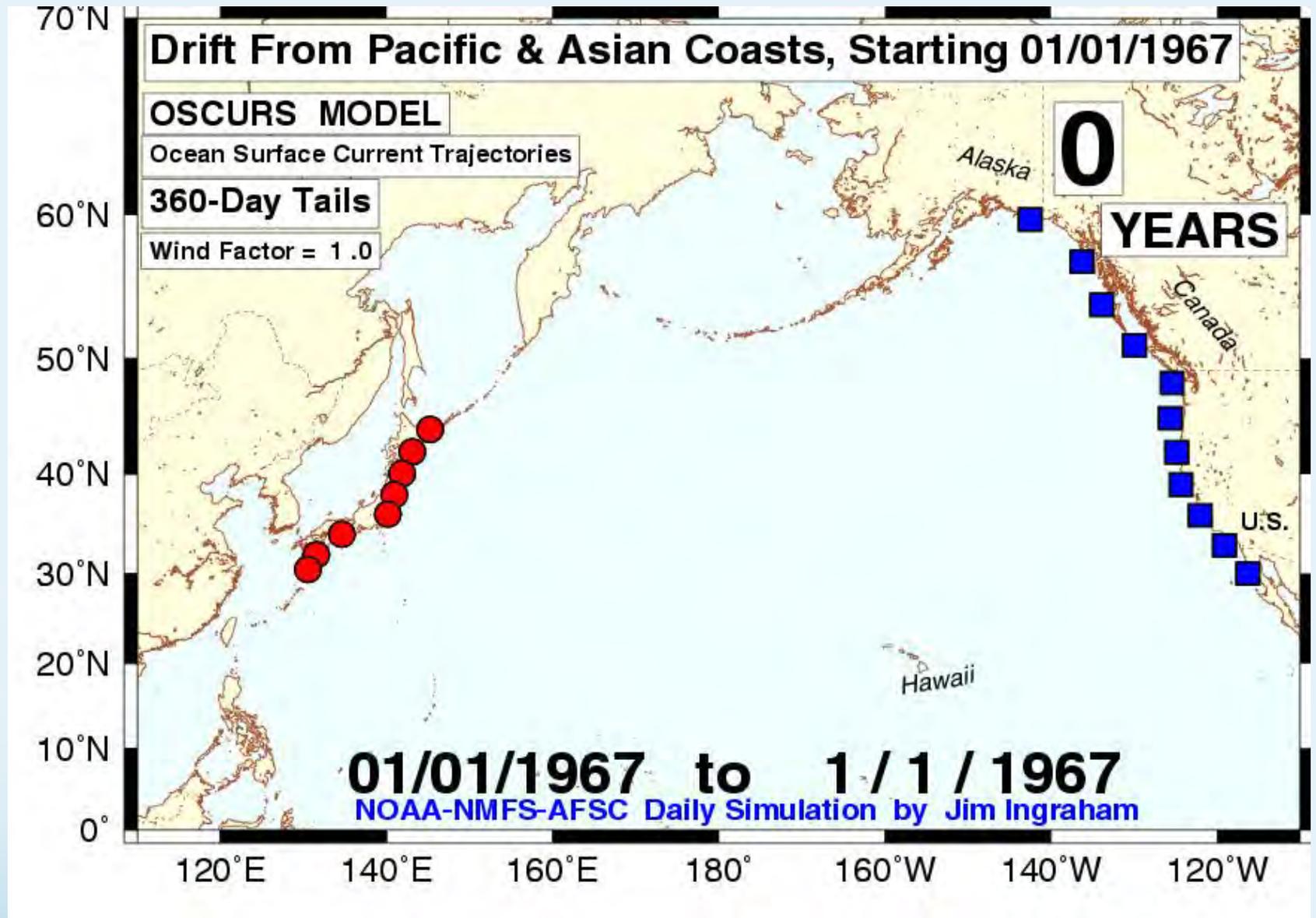
**New Zealand**

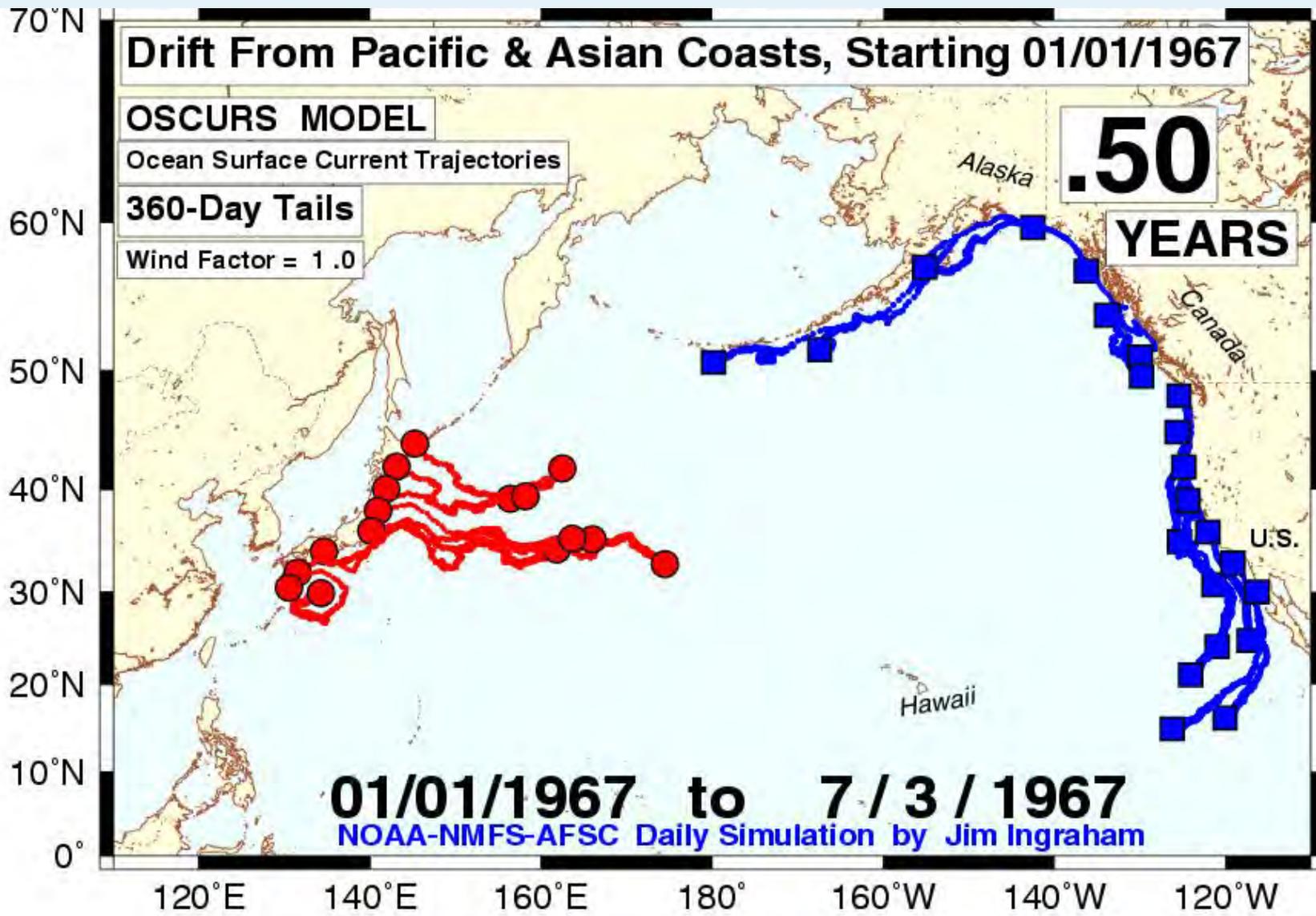


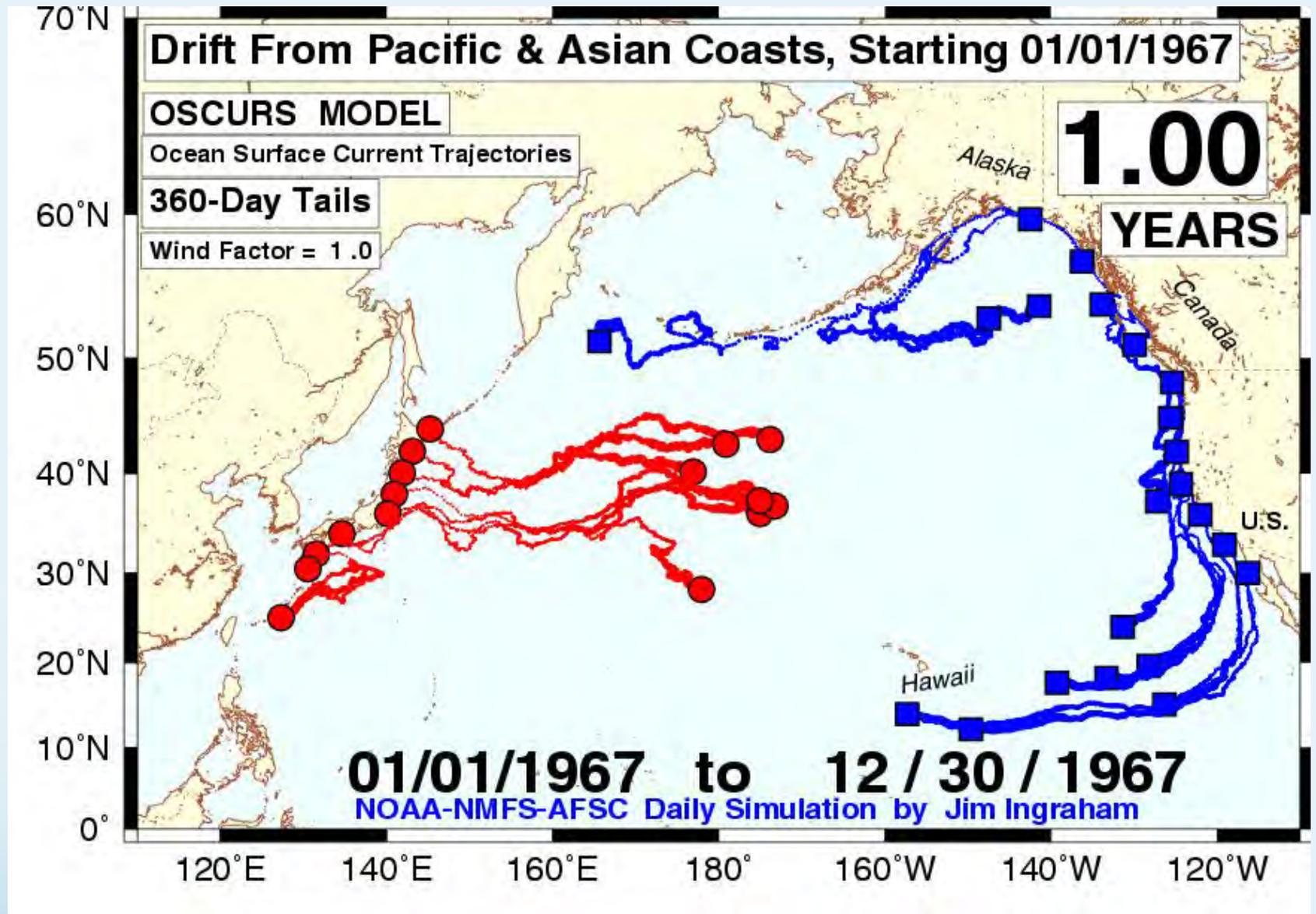
**China**

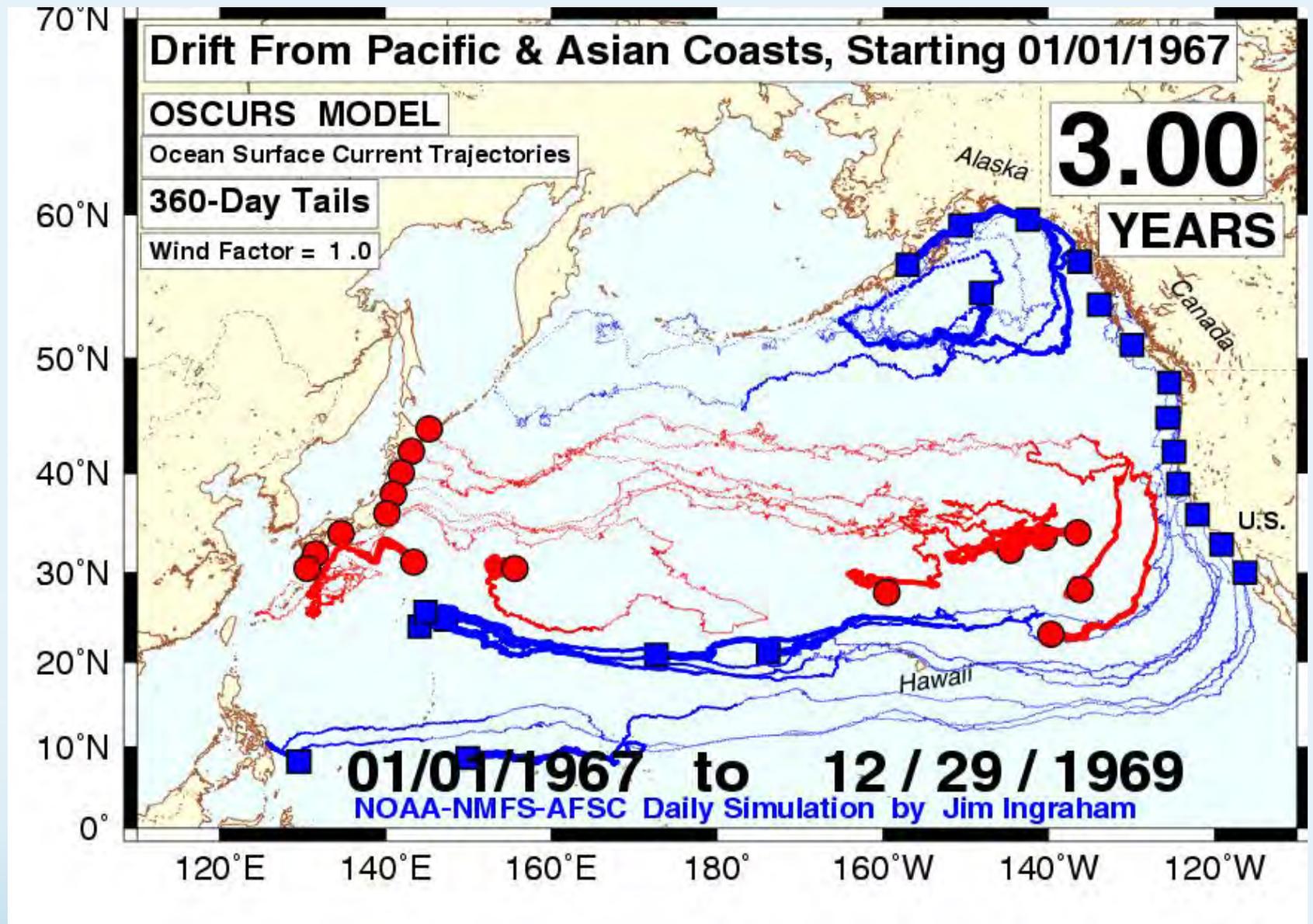
Slide courtesy of Dr. Richard Thompson

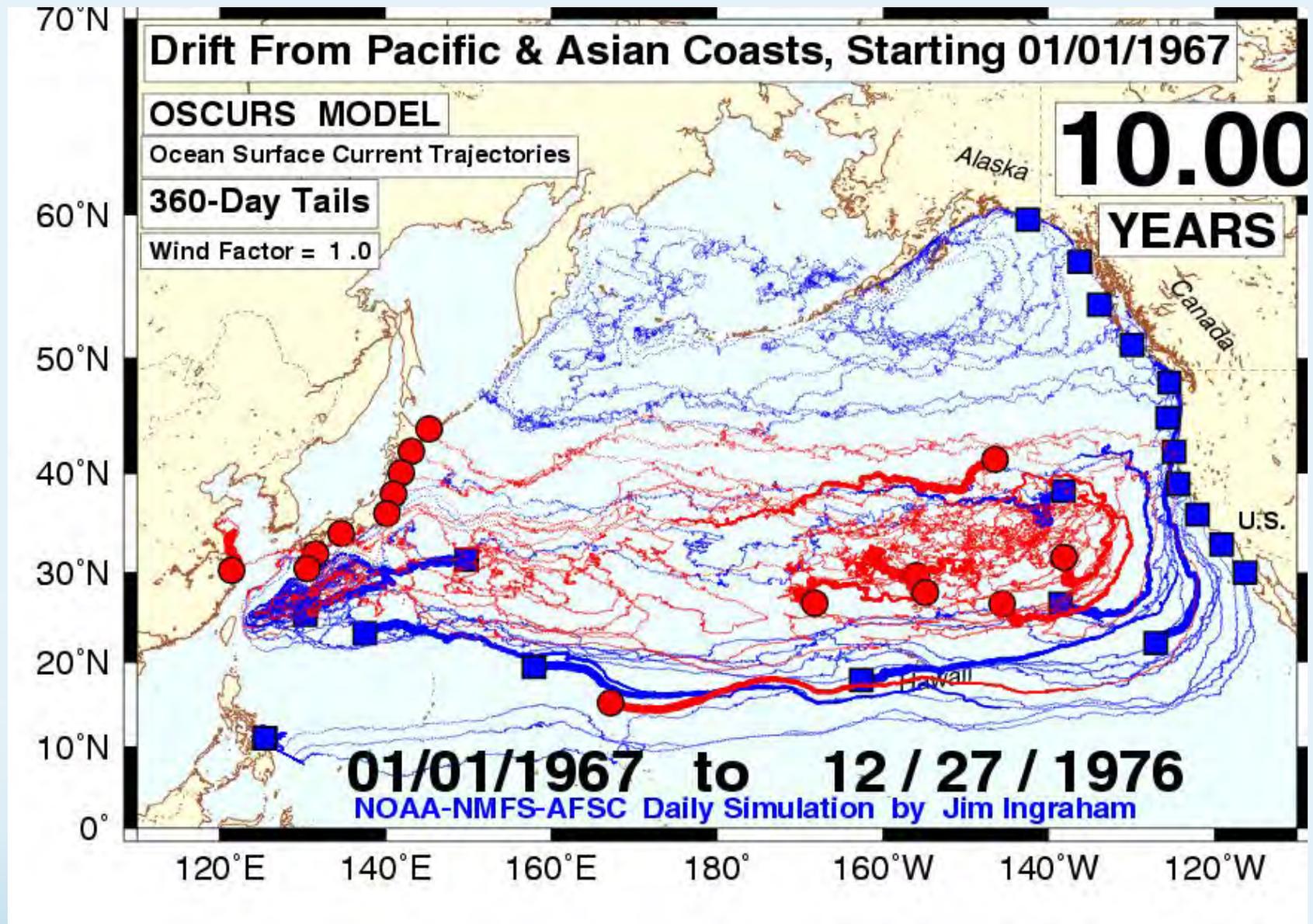


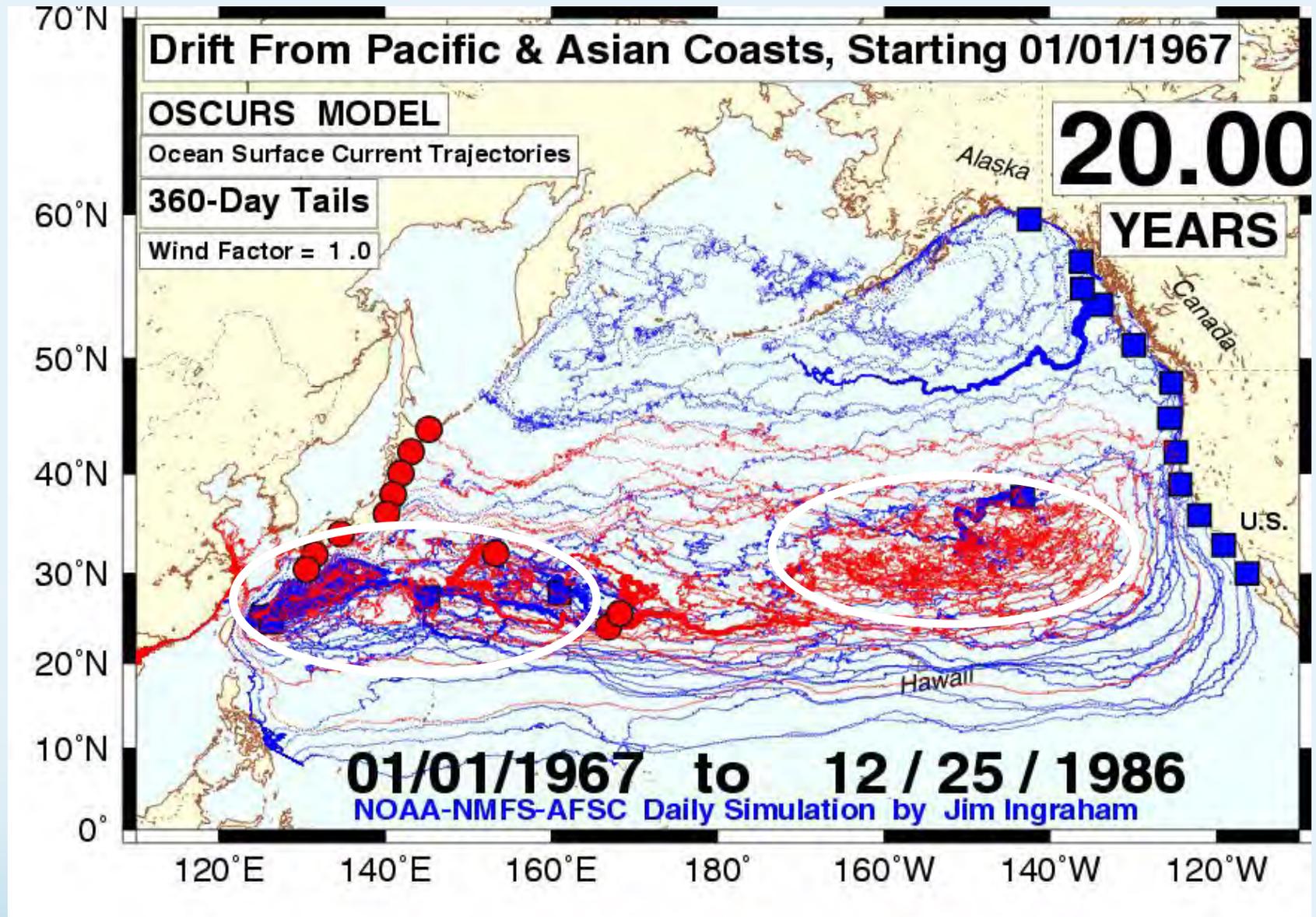














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## Marine debris impact on wildlife





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## Marine debris impacts on the economy

### *Tourism*

- *New Jersey: Loss off ~\$2B in 1987-88*
- *Annual beach cleanup: ~1.5M*

### *Ghost fishing*

- *Puget Sound: \$167k – \$1.86M crab loss to derelict pots*



Photo: Stilaguamish



Photo: eoearth.com



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## Marine debris impact on public safety



- Puget Sound: Divers entanglement
- Korea: Seo-Hae ferry boat sinking





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## Microplastics impact?



Photo: Tokyo University

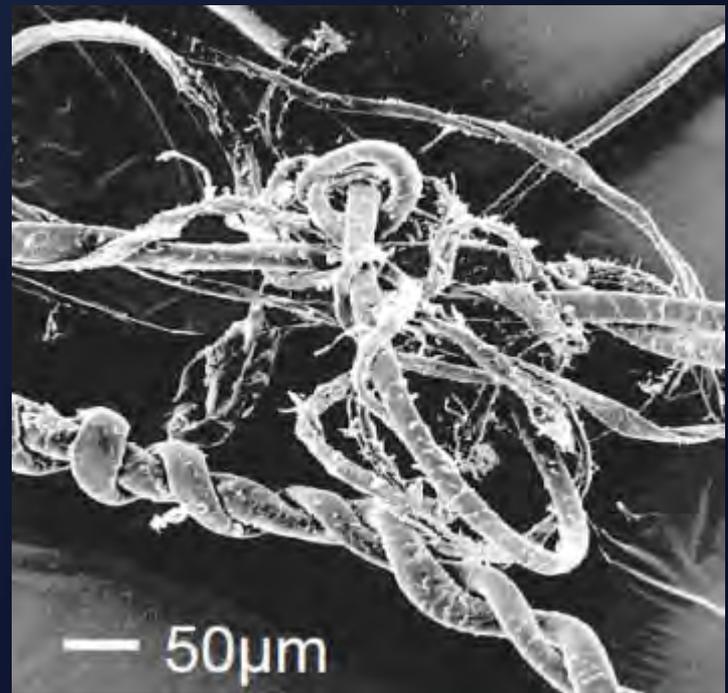


Image: University of Plymouth, UK

## Deep Water Survey in California



Photos: NOAA

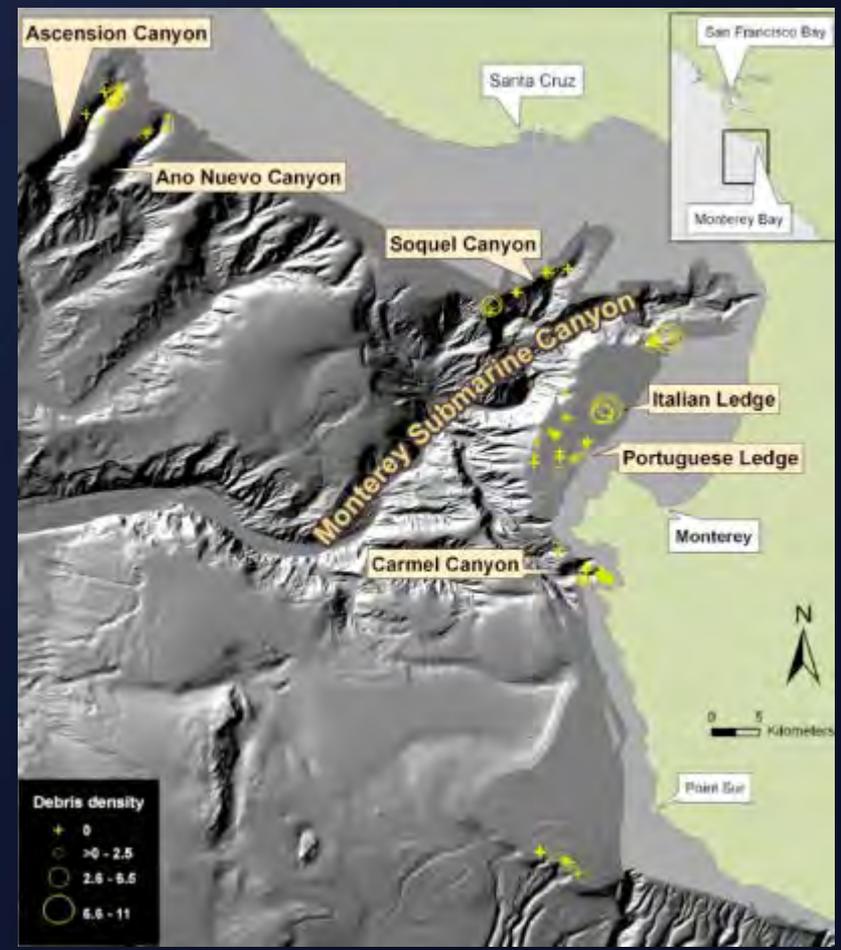


Figure: NOAA



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## Marine-based littering





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## Clean marinas in California and elsewhere

*A partnership to provide clean marinas and protect waterways from pollution*



## Impact of lost recreational fishing gear



Monofilament



Pelican injured by fishing hook and monofilament

## Monofilament recycling



Fish responsibly: recycle your fishing line



Monofilament recycling bin, Santa Monica pier



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## Prevention: reduce and reuse



Source: <http://www.blogto.com/upload/2008/04>



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## Recycle

- Only about 25% of the plastic produced in the U.S. is recycled.
- If we recycled the other 75% we could save 1 billion gallons of oil and 44 million cubic yards of landfill space annually.

(Source: University of Utah)



Source: City of Port Angeles

## Prevent littering

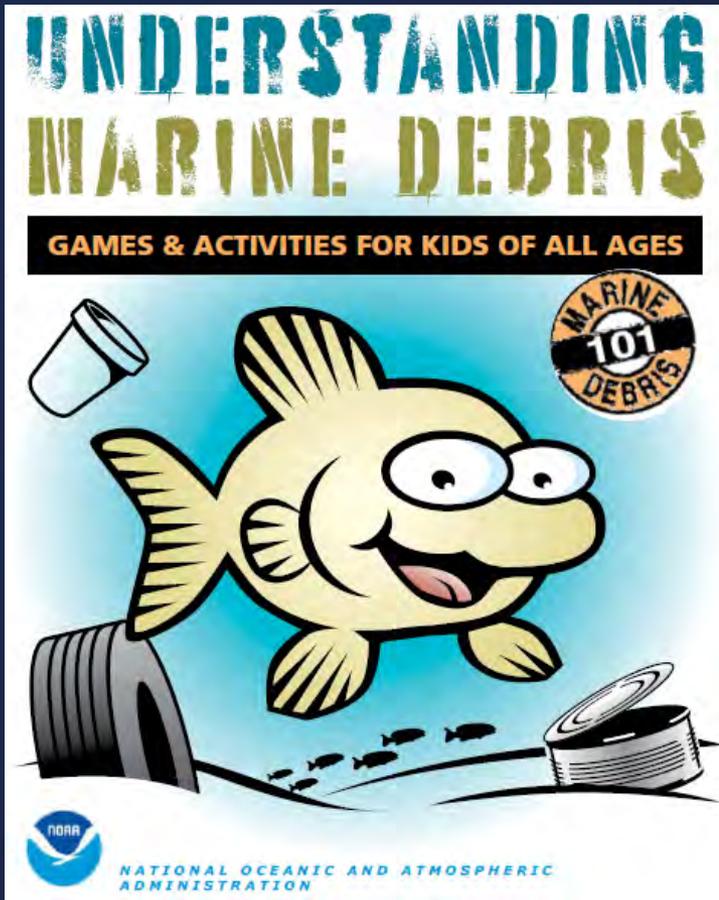


Source: Baltimore Sun



Source: City of Port Angeles

## Be an advocate



Activity book

## Deniz kirliliği hepimizin sorunu.



Deniz kirliliği denizdeki canlıları, okyanusları ve kıyıları tehdit etmeye devam ediyor. Nerede olursak olalım, balık tutarken, yüzerken, tekne ile seyahat ederken ya da plajda dinlenirken bile bu sorun direkt olarak hepimizi etkilemekte. Bizim ürettiğimiz çöpler drenaj yoluyla ya da akarsular yoluyla hem çevremize hem de okyanuslara ulaşıyor.

Deniz kirliliğini durdurmak için ne yapmak gerektiğini öğrenmek hepimizin görevi.

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# Thank you!

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