

Marine Debris

How Trash Enters Our Waterways and How We Can Prevent It









What is Marine Debris?

Marine Debris – "Any manufactured or processed solid waste material that enters the marine environment from any source."



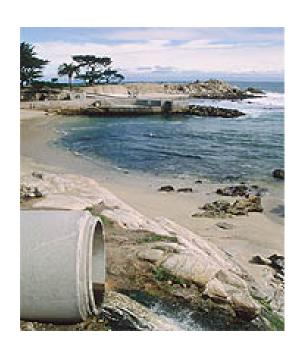




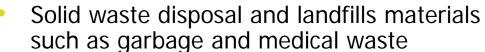




Sources of Marine Debris



- Storm water discharges
- Combined sewer overflows
- Beach visitors
- Ships and other vessels



- Offshore oil platforms
- Industrial activities
- Illegal dumping or littering





Approximately 20% comes from ocean-based sources











Photo Credit: NOAA Marine Debris Program , Ocean Conservancy

Approximately **80**% comes from land-based sources











So...What Is It Made Of?

Shoreline Debris (i.e. found on beaches and shores) is mostly **plastic**

Item	Count	Percentage
Cigarettes/Cigarette Filters	217,423	35.23%
Food Wrappers/Containers	94,182	15.26%
Caps, Lids	48,225	7.81%
Bags (Plastic)	43,783	7.09%
Cups, Plates, Forks, Knives, Spoons	23,990	3.89%
Straws, Stirrers	22,201	3.60%
Glass Beverage Bottles	19,902	3.22%
Beverage Bottles (plastic - 2 liters or less)	19,592	3.17%
Bags (Paper)	19,450	3.15%
Beverage Cans	13,628	2.21%
Top Ten Total	522,376	84.64%

So...What Is It Made Of?

Ocean Debris

Plastic accounts for over 3/4 of all debris found in the marine environment







Photo Credit: 5 Gyres Institute

Hazard to **Human Health** and Safety





Damage to **Economy**



Dangers for Marine Wildlife

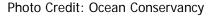


Photo Credit: Andy Colling, NOAA Office of **National Marine Sanctuaries**









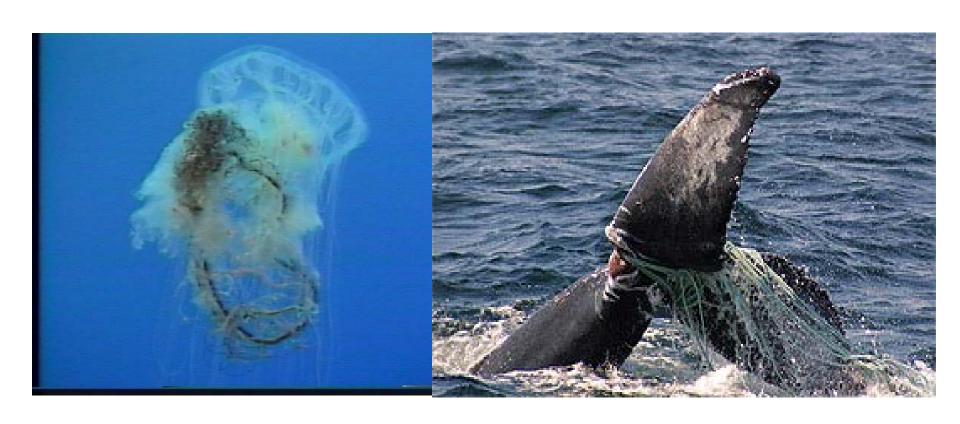




100% of Laysan Albatross Impacted (NOAA)

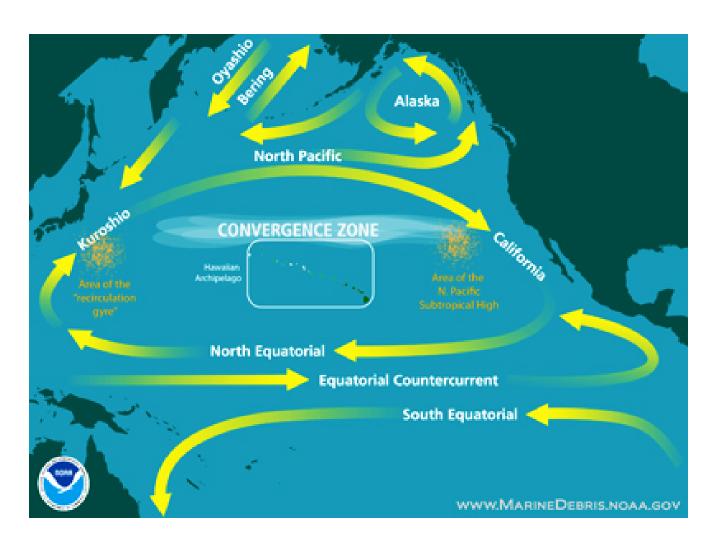


Plastic Debris Impacts All Levels of the Marine Ecosystem





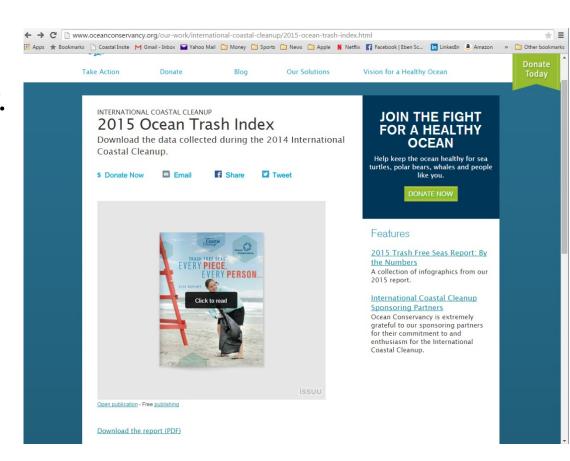
North Pacific Gyre





International Coastal Cleanup

- Started in 1986 entering its 30th year.
- 10.5 million volunteers
- 192 million pounds of debris removed
- 50 states, 153 countries





Data Collection



California Coastal Cleanup Day

Coastal Cleanup Day, a major part of the International Coastal Cleanup, engages people to **remove trash** and debris from California's beaches and waterways, to **identify the sources** of the debris, and to **change the behaviors that cause**

pollution.







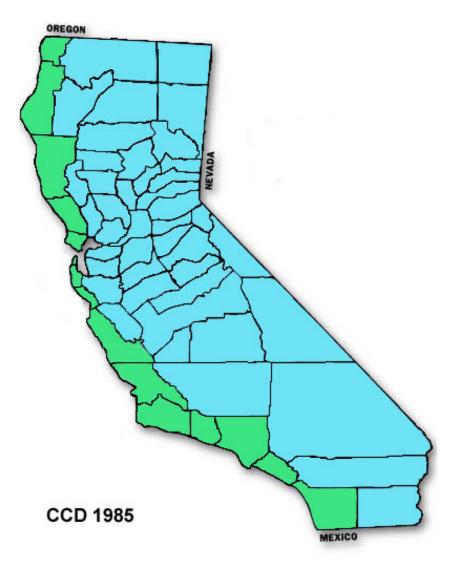








California Coastal Cleanup Day





California Coastal Cleanup Day





58,425 volunteers

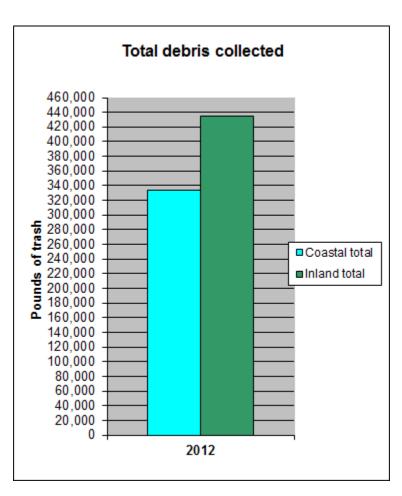
624,404 pounds of debris

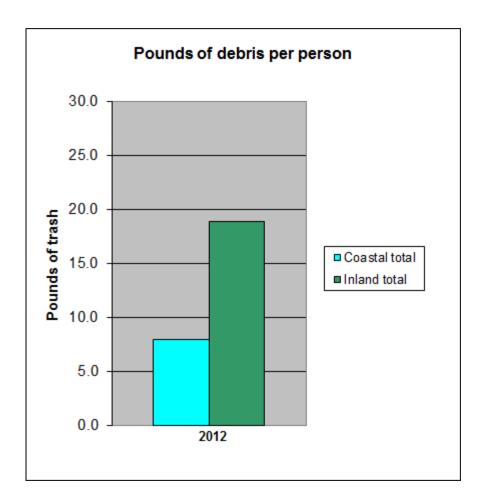
984miles of shoreline













- Reduced wasteful use of bags and gloves
- Provided reusable buckets and gloves
- Encouraged volunteers to "Bring Your Own"





- •In 2011, a pilot program expanded the Cleanup to the boater community
- •2 yacht clubs participated
 - •71 volunteers total
 - •1,265 pounds of debris





- Based on successes, boater participation grew! In 2017...
- 60 yacht clubs, marinas and boating groups participated
 - 1,959 volunteers total
 - 26,266 pounds of debris removed from shoreline and by watercraft
 - 258 non-motorized vessels









is Saturday, September 15th Won't you join us?









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Photo Credit: 5 Gyres Institute





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