

Marine Debris

PACIFIC

Collection of Benthic Marine Debris During the 2008 West Coast Groundfish Trawl Survey

Composition and abundance of benthic marine debris will be investigated at offshore locations during 2 passes of the 2008 West Coast Groundfish Trawl Survey from the US-Canada to the US-Mexico borders. Debris items from ~750 randomly selected tow sites (55-1,280 m) will be classified into 8 categories (plastic, metal, clothing, glass, toxic, derelict fishing gear, military debris and other) and counted and weighed. Previous benthic marine debris surveys based on litter collected during benthic trawls are reported for the Mediterranean Sea, Bering Sea, Gulf of Alaska, Oregon coast and the Bay of Biscay but rarely has such an extensive, coast-wide survey been proposed. Preliminary results indicate that marine benthic debris was more frequently encountered in the southern portion of the survey, occurring in 65% of the southernmost tows versus 25% overall. The proposed research will reveal the density of marine debris within the study area and provide insight on sources and distribution (geographic and depth). Marine debris and derelict fishing gear collected will be removed and result in improved benthic habitat for fish and invertebrates.



Marine debris collected during the Northwest Fisheries Science Center's West Coast Groundfish Bottom Trawl Survey *Photo courtesy of the Survey Team.*

WHAT IS MARINE DEBRIS?

Marine debris is any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.

MARINE DEBRIS SOURCES

Sources of marine debris include land-based sources, such as littering, dumping, and industrial losses. Ocean-based debris can come from fishing vessels, cargo ships, stationary platforms, and other vessels.

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MANDATES

Mandates supporting NOAA's marine debris efforts include the following:

- Marine Debris Research, Prevention, and Reduction Act of 2006, 33 U.S.C. §§ 1951 et seq.
- U.S. Ocean Action Plan
- Coral Reef Conservation Act
- Marine Plastic Pollution Research and Control Act, 33 U.S.C. §§ 1901 et seq.
- Marine Protection, Research, and Sanctuaries Act, (Title II) 33 U.S.C. §§ 1401 et seq.
- Clean Water Act, 33 U.S.C. §§ 1251 et seq.

PARTNERS

- NOAA Northwest Fisheries Science Center, Fishery Resource Analysis and Monitoring Division (FRAM)
- NOAA Hatfield Marine Science Center, FRAM

BENEFITS OF THE PROJECT

- Map, remove, and characterize extent of marine debris along U.S. west coast
- Cleaner underwater habitat
- Healthier ecosystem and increased bottom habitat
- Clearer understanding of sources of debris along U.S. west coast

CONTACTS

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More examples of debris removed during the Northwest Fisheries Science Center's West Coast Groundfish Bottom Trawl Survey *Photo courtesy of the Survey Team.*

This project is funded through NOAA's National Ocean Service, Office of Response & Restoration, Marine Debris Program. The NOAA Marine Debris Program works with other NOAA offices, as well as other federal, state, and local agencies and private sector partners to support national, state, local and international efforts to protect and conserve our nation's natural resources, oceans, and coastal waterways from the impacts of marine debris.