



PACIFIC

Derelict Fishing Gear Mapping and Removal in the Main Hawaiian Islands

Marine debris continues to present a hazard to marine life and habitat as well as to safe navigation in the main Hawaiian Islands (MHI). As recently as November 2004, a three-ton mass of derelict fishing gear was found in Kaneohe Bay, O'ahu, and an emergency team consisting of federal, state, local, and non-governmental organization partners was assembled to dismantle and dispose of the debris. Additional small-scale removal efforts take place on each of the islands on an as-needed basis.



Derelict fishing nets spotted during aerial surveys. Photos courtesy CRED.

This project, coordinated by the NOAA Pacific Islands Fisheries Science Center Coral Reef Ecosystem Division (CRED), includes the survey and removal of marine debris around the main Hawaiian islands (MHI). It is the first comprehensive effort to determine the distribution and abundance of marine debris in the MHI, about which relatively little is known.

In 2005 and 2006 aerial surveys were conducted on Kauai, Hawaii (Big Island), Lanai, Maui, Molokai, and Oahu. Maps of exact DFG locations were produced with geographic information systems (GIS) software. In addition, removal efforts were conducted on Lanai and Oahu and resulted in 34 metric tons* removed.

In 2008, CRED will conduct a series of aerial surveys in an effort to further characterize the extent of derelict fishing gear (mainly nets) accumulation in the near shore environment of the MHI. A subsequent analysis will be conducted to compare previous survey results to current findings. The maps of derelict fishing gear in the MHI will be disseminated for use by other agencies, organizations and the general public. CRED will also conduct a targeted removal operation on the shores of Oahu.

* = 2,204 lbs.

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.

CURRENT PARTNERS

- NOAA Fisheries Service, Pacific Islands Fisheries Science Center, Coral Reef Ecosystem Division (CRED)
- University of Hawaii, Joint Institute for Marine and Atmospheric Research (JIMAR)
- Schnitzer Steel Hawaii Corp.
- Covanta Energy
- NOAA Hawaiian Islands Humpback Whales National Marine Sanctuary
- NOAA Fisheries Service, Pacific Islands Regional Office
- State of Hawaii, Department of Land and Natural Resources
- Kauai, Honolulu, Maui, and Hawaii Counties

BENEFITS OF THE PROJECT

- Allow for a current assessment of derelict fishing gear accumulation in the MHI
- Opportunity to raise public awareness on the impacts of marine debris
- Reduce wildlife entanglement and habitat degradation
- Decrease the impact on coastal habitat, species of concern, and maritime navigation
- Nets are used to create usable electricity and not put into landfill

CONTACTS

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Survey map of Oahu. Map courtesy of CRED.

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.