# Protecting and Restoring Natural Resources in Hawaii

#### Issues

- The Hawaiian archipelago is home to diverse natural resources – from endangered Hawaiian monk seals and humpback whales to pristine coral reefs and sandy beaches.
- Coral reefs alone contribute more than \$360 million per year to the Hawaiian economy from marine-related tourism and commercial and recreational fishing.
- Heavy vessel traffic in the Hawaiian islands brings greater potential for ship groundings and spills.
- Oil refineries, agriculture and the associated processing, shipyards, and pollution from past military activities could harm natural resources of the islands.

### What we do

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) acts as a trustee for natural resources on behalf of the public. DARRP collaborates with federal, state, and tribal entities and also works with cleanup agencies (such as EPA), local organizations, the public, and those responsible for the incident to:

- protect coastal and marine natural resources;
- respond to discharges of oil and hazardous substances;
- assess risks and injuries to natural resources; and
- restore injured natural resources and related socioeconomic benefits.

#### How we do it

DARRP acts as a trustee for natural resources to:

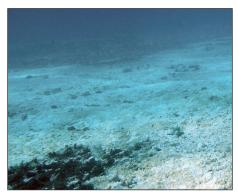
- work cooperatively with those responsible for the incident;
- develop innovative approaches and techniques for remediation and restoration;
- work with the public to select restoration options to compensate for injuries to natural resources; and
- design and implement or oversee natural resource restoration projects and monitor their success.



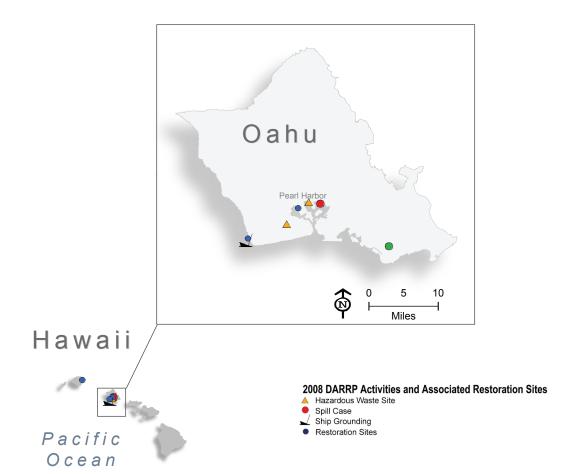
Reattachment of corals in the aftermath of the M/V Cape Flattery Ship Grounding at Barbers Point (Kalaeloa) - see case highlights.

### **DARRP Accomplishments**

- Restoration and/or protection of 13 acres of marine habitats (completed and planned activities) and more than 20 tons of derelict fishing debris removed from reefs in Hawaii.
- Emergency restoration at Kalaeloa (Barbers Point) recementing 2800 dislodged coral colonies to the reef and removal of 45 tons of loose rubble that threatened to crush and bury intact coral habitat.
- Settlements have resulted in 8 protection and restoration projects in Hawaii.
- Cleanup actions promote recovery of coastal resources at 7 hazardous waste sites in Hawaii.



Coral reef habitat obliterated by the M/V Cape Flattery Ship Grounding, Barbers Point - see case highlights.



## Historic and ongoing case highlights

- Tesoro Oil Spill, Kauai Restoration removed 21 tons of derelict fishing nets from the island's eastern shore, preventing further damage to the shoreline and coral reefs. The public's use of beaches was enhanced by increased trash clean up. Restoration also increased protection of nesting colonies of seabirds that were harmed by the oil.
- M/V Cape Flattery Ship Grounding, Barber's Point Emergency restoration has removed 45 tons of loose rubble that threatened to crush and bury intact coral reef habitat; over 2800 corals were reattached to the reef habitat (photos on page 1: impact photo on bottom; restoration photo on top).
- Pearl Harbor Naval Complex Worked with the Navy, State of Hawaii, and EPA to determine extent of ecological harm to Pearl Harbor from Navy and other activities; also currently determining options for cleanup of contaminated areas.

- Midway Atoll Worked with USFWS and the Navy to clean up residual fuel, close landfills, and remove drums, derelict vessels, and engine parts that were releasing contaminants to the ocean off Midway.
- Chevron Pipeline Oil Spill, Pearl Harbor Enhancing 8 acres of coastal marsh; removed 5 acres of invasive red mangrove to create shallow water habitat; repaired shoreline and refurbished boat dock at the U.S.S. Arizona Memorial visitor center.

For further information about DARRP, please visit <a href="http://www.darrp.noaa.gov">http://www.darrp.noaa.gov</a>

