

Marine Debris Projects

Sponsored by: NOAA, Community-based Restoration Program Marine Conservation Alliance Foundation

# Northern Gulf of Haska

#### Gulf of Alaska Keeper's marine-debris cleanup area



Cordova

Homer

**Gore Point** 

Gorth is a

non-profit organization dedicated to combating marine debris. We are a diverse group of Alaskans devoted to removing this menace from Alaska's magnificent coast.

For years, in an ongoing effort, GoAK crews and volunteers have cleaned mountains of marine debris from public beaches in Prince William Sound and the northern Gulf of Alaska.

Together, we have removed over one-halfmillion pounds of plastic marine debris from 850 miles of northern Gulf of Alaska shoreline. Sadly, thousands of tons of marine debris must still be cleaned from Alaska's shorelines.

## Marine Debris smothers many Gulf of Alaska beaches and adjacent forest floors.







from around the world is found on Gulf of Alaska Beaches. Netherlands

Indonesia







BLEEK



#### Pharmaceuticals

SMILE

I 人 法 手 液 WORKER HAND CLERNSER

### Cleansers/Bleach

Immense quantities of toxic debris are deposited on northern Gulf of Alaska beaches.

Coolants

Medical Waste

AMET

Biocides

#### Industrial Chemicals

### Spill Swill - The Exxon Valdez Oil Spill Marine-Debris Legacy

Cleanup debris from the Exxon Valdez Oil Spill contaminates area beaches.

**Pom Poms** 

Absorbent Boom

Rope Mop

Rope Mop

**Pom Poms** 

### Petroleum Products

**Engine Oil** 

Fuel

Refined petroleum products from a variety of sources inundate Alaska's Gulf Coast. Lost commercial cargo, vessel accidents, intentional dumping, and stockpiling contribute to the problem.

Many of these products poison coastal habitat. Lubricants

Propane

Creosote

# **Ingestion** – Many mammals, from small rodents to bears, eat plastic debris.





# **Indigestion** ~ Plastic bits in animal scat.

Coyote

### Black Bear

 River Otter

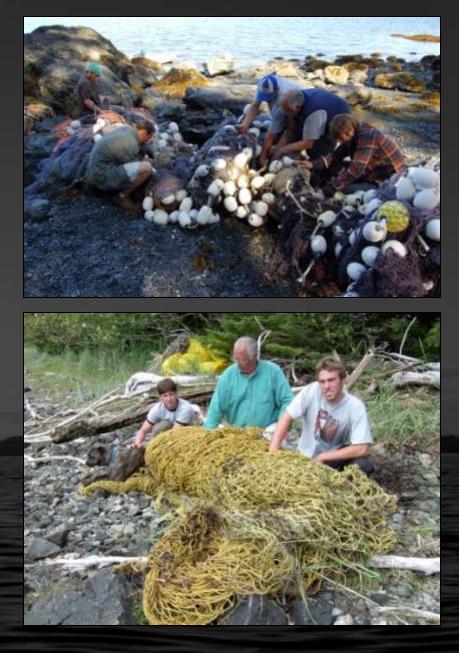
## Nets are difficult and time consuming to remove













Styrofoam

An extraordinary amount of Styrofoam debris layers Gulf of Alaska beaches. Styrofoam cleanups are difficult, time consuming, and labor intensive.

Bears and other animals love to chew and shred Styrofoam. In the process, small pieces become scattered throughout the intertidal zone and adjacent forest. Many animals ingest Styrofoam and other plastics.



# Before and After A bear-scattered Styrofoam cleanup







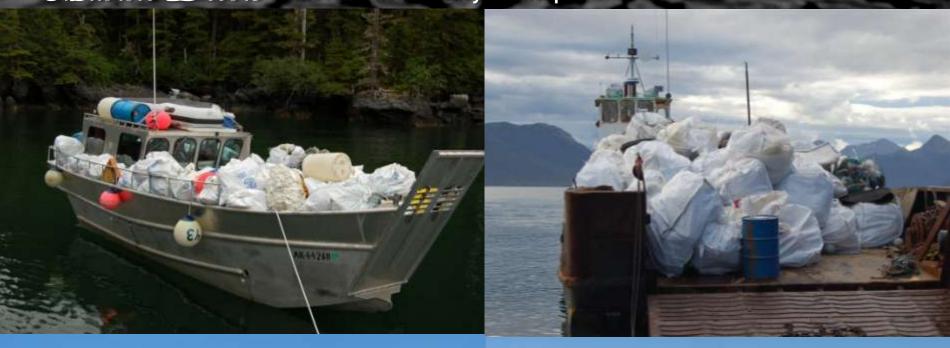
A 2009 marine-debris cleanup in Chugach Bay, Kachemak Bay State Wilderness Park, Kenai Peninsula.

> Dense pockets of marine debris are common along the northern Gulf of Alaska coast. On many beaches, tons of debris per mile blanket sensitive coastal habitat, smothering vegetation, choking spawning streams, killing wildlife, and threatening fisheries.

**Marine Debris** comes in every conceivable form. Here, a deeply embedded fabric bundle is pulled from a Prince William Sound beach in Zaikof Bay on Montague Island.

### Marine Debris ready for loading in Tonsina Bay, Kachemak Bay State Wilderness Park, Kenai Peninsula.

## Marine Debris removal is neither easy or cheap.





## Logistics and Transport

Because of the immense amount of marine debris fouling northern Gulf of Alaska beaches, and the distance remote projects are from ports, transport, labor, fuel, and disposal costs are high. To maximize efficiency and reduce costs, Gulf of Alaska Keeper carefully plans each project and utilizes the most efficient resources available to conduct specific cleanup projects.



A helicopter and large landing craft used to remove 40 tons of plastic marine-debris from Gore Point in 2007.

One of five loads of marine debris removed from Zaikof Bay on Montague Island, Prince William Sound in 2008.





Most of the debris that GoAK collects is shipped to landfills for proper disposal. Recycling in Alaska is generally unavailable, limited, or too expensive. GoAK donates recovered commercial-fishing gear and other items back to the fishing industry or to local communities for arts and crafts.



Gulf of Alaska Keeper annually re-cleans 17 selected beaches. Newly accumulated debris is categorized, quantified, and recorded in an ongoing baseline data-collection effort. Each year, a large amount of new debris arrives on our coastline.

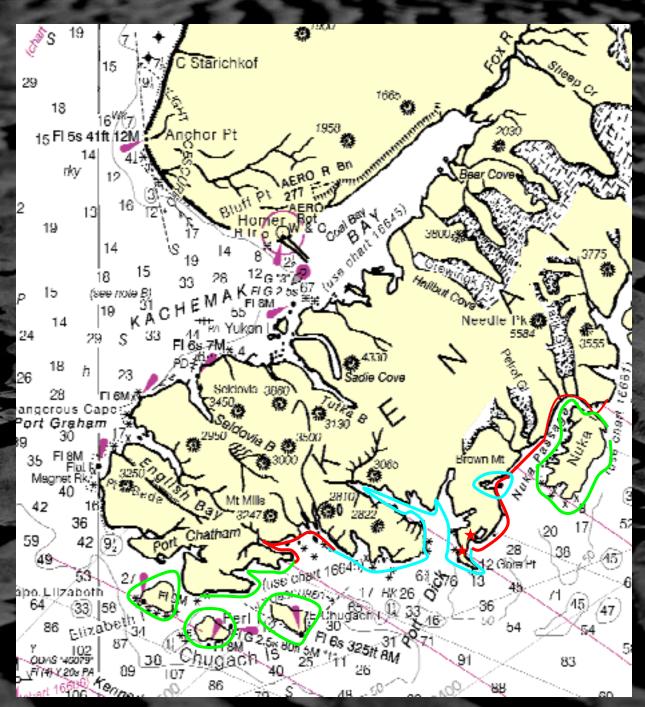
One season's accumulation of beverage bottles on Gore Point's quarter-mile east beach.

GoAK's crew sorts marine debris on a Gore Point monitoring plot.



Marine-debris monitoring sites established in 2006.

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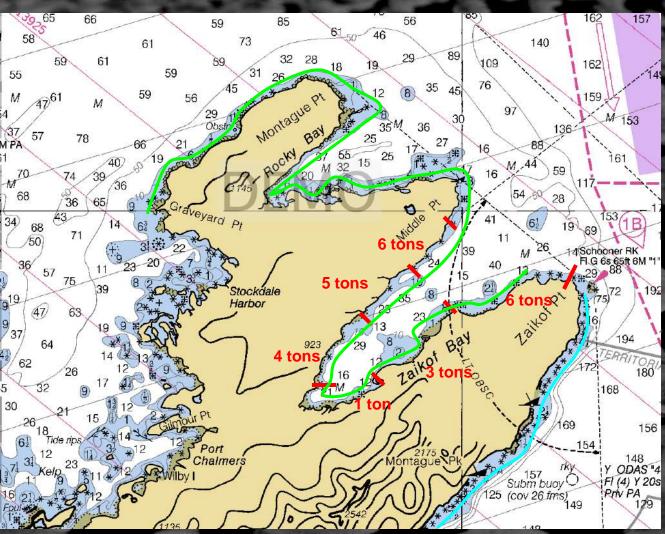


Gore Point Projects

2007 2008 2009 Monitoring Sites

GoAK cleanup projects will continue along the heavilyfouled northern Gulf of Alaska shoreline. Each summer, cleanup crews will work north and east from the Gore Point region toward Resurrection Bay and Prince William Sound.





Montague Island

During the summer of 2008, GoAK cleaned Prince William Sound beaches on Smith Island, Green Island and Montague Island. Montague Island beaches in Zaikof Bay, and those facing the Gulf of Alaska, are among the dirtiest in the world. Tons of plastic debris per mile litter this scenic and valuable wildlife habitat.



2008 Zaikof Bay Marine-Debris Cleanup Tons of MD removed from each beach segment Marine-Debris survey 2007 Marine-Debris survey 2006

## Valued Partners:

NOAA, Community-based Restoration Program; Marine Conservation Alliance Foundation; University of Alaska Anchorage; Chugach Alaska Native Corporation; Port Graham Native Corporation;

USFS, Glacier Ranger District; National Outdoor Leadership School; Alaska Center for Coastal Studies; Alaskans for Litter Prevention & Recycling; BP; Princess Tours; Alyeska Pipeline Company; REI; Johnson Tires; Insulfoam; Nordic Viking LLC; American Seafoods;

Cities and Harbors of Whittier, Seward, and Homer; Kenai Peninsula Borough; Honey Charters; PWS Sound Eco-Charters; Sound Eco-Adventures; Alaska Walkabouts Charters; Lazy Otter Charters; Dozens of private vessels; Hundreds of volunteers.

#### We all have a part to do.



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