Marine Debris In Alaska March 2012



Solid Waste Program

Division of Environmental Health

> Department of Environmental Conservation

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What is marine debris?

The National Oceanic and Atmospheric Administration (NOAA) defines marine debris as "any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned in the marine environment or Great Lakes." Simply put, marine debris is trash in the water.

Marine debris comes from local sources as well as global contributions. It can be in many forms from plastic bags, cigarette filters, and water bottles, to marine buoys and fishing nets.

Why is it a concern?



Not only is it an issue of aesthetics in that it's an eyesore to look at, it can also cause serious impacts to the environment posing potential physical, biological, and chemical risks.

Marine Debris found at Yakutat (glass, plastic, metal, netting, etc.)

- Marine debris destroys habitat and entangles marine life.
- Marine mammals, sea birds, shorebirds, and fish often mistake small plastic marine debris for food. This debris then accumulates in their digestive system, leading to starvation and death.
- Marine debris may leach and/or absorb hazardous materials which are harmful to marine life.
- Larger marine debris can interfere with navigation and cause damage to marine vessels (i.e. boat propellers and intakes).



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Won't marine debris simply degrade in the marine environment?

Yes and no. Organic material such as paper and unpainted wood products readily degrade. However, more durable materials such as plastic, metals, and glass don't. These materials can take generations to break down and even the smallest pieces remain harmful to marine life.



Debris in Western Alaska

Why not just clean it up?

Marine debris is a moving target. It moves according to ocean and wind currents. It's not evenly distributed at the surface or throughout the water column which precludes an effective cleanup approach. The best that we can do is to attempt to clean it up once it collects on shore.

Who's working on the problem?

NOAA and the Marine Conservation Alliance Foundation (MCAF) are the two main organizations that address marine debris in Alaska. NOAA and MCAF work with many other organizations to conduct marine debris monitoring and cleanups throughout Alaska.



Marine Debris found at Port Heiden (auto parts and tank)

The NOAA Marine Debris Program was designated by Congress to coordinate and support national and international efforts to research, prevent, and reduce the impacts of marine debris. To learn more about marine debris and NOAA's Marine Debris Program visit their website at: <u>http://marinedebris.noaa.gov/</u>

The Marine Conservation Alliance Foundation (MCAF) was formed in 2003 as the research, education, and marine debris removal arm of the Seattle and Juneaubased Marine Conservation Alliance (MCA).

MCA is an industry association representing many of the harvesters, processors, and communities of Alaska. MCAF provides information about their marine debris program at: <u>http://www.mcafoundation.org/</u>.

