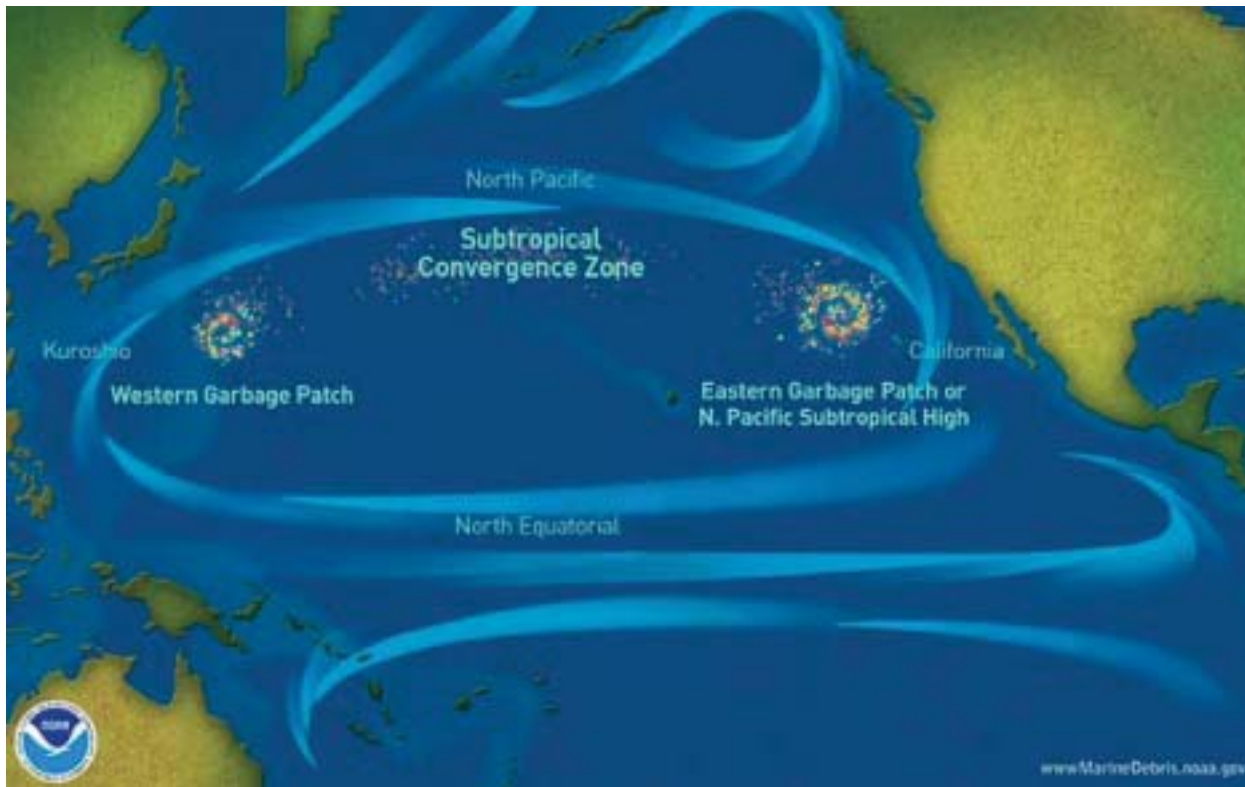


SUMMIT COUNTY CITIZEN VOICE

Environment: Petition to EPA seeks strict Clean Water Act regulation of ocean plastics pollution

Studies now show widespread impacts to marine life



Patches of plastic debris accumulate where they are concentrated by ocean currents.

Posted on August 26, 2012 by Bob Berwyn

SUMMIT COUNTY — With some parts of the world’s oceans literally choking on plastic debris, environmental activists say it’s time for the EPA to take the lead in regulating plastic pollution in a systematic way.

The Center for Biological Diversity, well-known for effective legal action that has resulted in protection for numerous rare species, last week petitioned to EPA to limit plastic pollution under the Clean Water Act.

Plastic production and consumption has spiraled out of control. The Center for Biological Diversity’s petition claims that the amount made in the past 10 years exceeds all the plastic in history up to the year 2000

— and every year, billions of pounds end up in the world’s oceans.

More specifically, the global production of plastic has increased from 1.5 million tons in 1950 to 230 million tons in 2009, with an average annual growth of around 9 percent. And even though plastic recycling has improved, that hasn’t stemmed the increased demand for virgin plastic.

“Plastics are an everyday convenience for us but a daily death sentence for seabirds, seals, sea turtles and hundreds of other ocean species,” said environmental attorney Emily Jeffers. “Our oceans are

littered with grocery bags, drink lids, water bottles and candy wrappers. It's time for the EPA to step in and finally address this crisis."

In some areas, the concentration of plastic reaches more than 20,000 pieces per square kilometer, and the the problem is getting worse around the globe.

According to the petition, studies show that:

"Off Japan's coast, floating particles of plastic debris increased ten fold from the 1970s through 1980s, and then ten fold again every 2-3 years in the 1990s. In the Southern Ocean, plastic debris increased 100 times during the early 1990s. Around the British Isles, surveys have shown a 3-to 4-fold increase in the volume of plastic fibers in seawater from the 1960s to the 1990s. The increase occurred during a worldwide quadrupling of plastic fiber production."

The plastic waste kills hundreds of thousands of seabirds, endangered sea turtles, rare seals and other marine species each year. Plastic debris comprises 50 to 80 percent of beach litter, floating marine debris, and trash on the ocean floor. Most shoreline litter has urban sources, which reflects current inadequate disposal practices, as well as waste from recreational visitors. In the Los Angeles area alone, 20 tons of plastic fragments — like grocery bags, straws and soda bottles — are carried into the Pacific Ocean every day.

Plastic pollution has deadly consequences for at least 267 marine species, including endangered animals like Pacific loggerhead turtles, Steller sea lions and Hawaiian monk seals, which number only about 1,000 in the wild.

The petition outlines impacts to various marine animals:

Fish in the North Pacific ingest 12,000 to 24,000 tons of plastic each year, which can cause intestinal injury and death and transfers plastic up the food chain to bigger fish and marine mammals.

Sea turtles also mistake floating plastic garbage for food. While plastic bags are the most commonly ingested item, loggerhead sea turtles have been found

with soft plastic, ropes, Styrofoam, and monofilament lines in their stomachs. Ingestion of plastic can lead to blockage in the gut, ulceration, internal perforation and death.

Hundreds of thousands of seabirds ingest plastic every year. The plastic reduces the storage volume of their stomachs, meaning they consume less food and ultimately starve. Nearly all Laysan albatross chicks — 97.5 percent — have plastic pieces in their stomachs; their parents feed them plastic particles mistaken for food.

Marine mammals ingest and get tangled in plastic. Large amounts of plastic debris have been found in the habitat of endangered Hawaiian monk seals, including in areas that serve as pup nurseries. Entanglement deaths severely undermine recovery efforts of this seal, which is already on the brink of extinction. Entanglement in plastic debris, especially packing bands, has also led to injury and mortality in the endangered Steller sea lion. In 2008 two sperm whales were found stranded along the California coast with large amounts of fishing net scraps, rope and other plastic debris in their stomachs.

The petition seeks criteria to limit visible plastic pollution in oceans to zero and set strict limits on small plastic items in our oceans and on our beaches. Under the Clean Water Act, states must adopt water-quality standards recommended by the EPA and identify waters that do not attain those standards. This can result in better monitoring, assessment and cleanup of plastic in our waters. States like California and Hawaii have already taken action to control trash under the Clean Water Act, and plastic standards would require other states to follow suit.

"This isn't rocket science: If we want healthy sea life, we need to keep garbage out of our oceans," Jeffers said. "We can make it happen, but it's got to become a national priority. We're hoping this petition will jumpstart the process."

For more information about plastics and to download the petition with sources for the facts above, please see visit the center's [ocean plastics pollution web page](#).