

# EXECUTIVE SUMMARY

## ACCORDING TO THE UNITED NATIONS ENVIRONMENT PROGRAMME,

“Marine litter is one of the most pervasive and solvable pollution problems plaguing the world’s ocean and waterways.”

Litter can travel to the ocean from many miles inland, blown on the wind or carried along by rivers and streams. We are all responsible, from beachgoers to oil-rig workers and fishermen, for cigarette butts, food wrappers, bottles, and bags in the water. Overflowing sewage systems and storm drains add to the burden by ferrying trash from rural roads and city streets to the sea. And, despite national and international regulations against dumping, some people on boats still drop trash directly into the ocean. In recent years, organic materials that were once the most prevalent component of marine debris have been supplanted by synthetics. Not only do items like packing straps, tarps, nets, and containers last for years, but also they are often highly buoyant, traveling thousands of miles on ocean currents.

Each year, Ocean Conservancy provides a compelling global snapshot of marine debris collected at sites all over the world at the International Coastal Cleanup held the third Saturday of every September. This year’s report, *A Rising Tide of Ocean Debris*, presents data recorded by nearly 400,000 volunteers in 104 countries and locations and 42 US states at the 23rd annual Cleanup.

This report reveals the types and sources of debris and zeroes in on the startling impacts of ocean trash on wildlife and its connection to the challenge of global climate change. Its recommendations provide a roadmap for eliminating marine debris altogether by reducing it at the source, changing the behaviors that cause it, and supporting better policy.

The comprehensive body of data compiled each year at the Cleanup—the Marine Debris Index—has informed major legislation like the Marine Debris Research, Prevention, and Reduction Act of 2006, and inspired improvements

in packaging and other technologies as well as expanded recycling efforts in communities large and small.

## KEY FINDINGS

**1** A tidal wave of ocean debris is a major pollution problem of the 21<sup>st</sup> century. During the 2008 International Coastal Cleanup in September, nearly 400,000 volunteers picked up an astounding 6.8 million pounds of trash, trash that has a major impact on ocean health. Toxic materials enter the food chain, sharp items injure beachgoers, and accident-causing debris snarls boat propellers. Trash weakens economies, sapping precious dollars from tourism and our seafood industries. And it harms individual species as well as entire ecosystems, like coral reefs, that are essential for the survival of marine life.

**2** Certain categories of debris show up more often in certain places. The Marine Debris Index is the only state-by-state, country-by-country measure of trash in our waterways and ocean. During the 2008 Cleanup, volunteers collected 11,077 diapers in the Philippines, 19,504 fishing nets in the United Kingdom, and 1,362,741 cigarette butts in the US. That’s the kind of information that helps planners at the local, regional, national, and international levels tackle marine debris effectively.

**3** Of the 43 items tracked during the Cleanup, the top three items of trash found in 2008 were cigarette butts, plastic bags, and food wrappers/containers. All readily fall from human hands, and can be easily contained if people dispose of them carefully.

**4** **Marine debris kills.** Every year, thousands of marine mammals, sea turtles, seabirds, and other animals are sickened, injured, or killed because of trash in the ocean. Animals choke or become poisoned when they eat trash, and drown when they become entangled in bags, ropes, and old fishing gear. The majority of entangled animals found during the Cleanup were bound up by old fishing line. The loss of wildlife affects not only the beauty and health of the planet, but also countless local economies based on the bounty of the sea.

**5** **Marine debris degrades ocean health and compromises its ability to adapt to climate change.** Marine debris is yet another stress on an ocean already facing transformation due to global climate change in the guise of rising sea levels, warming water, and changing ocean chemistry. As marine organisms and ecosystems struggle to adapt to climate change, we can improve their resilience and help to give them a fighting chance by eliminating the stresses caused by human impacts like trash in the ocean.

## RECOMMENDATIONS

Humans have created the marine debris problem, and humans must take responsibility for it. How big is the challenge? In 2008, a major report from the National Research Council titled *Tackling Marine Debris in the 21<sup>st</sup> Century* recommended a goal of discharging zero waste into marine environments.

The Cleanup data tells us that we are putting huge quantities of dangerous items into the ocean. Based on the accumulated evidence put forth in this report and over the past 23 years, Ocean Conservancy recommends the following actions to end marine debris:

**1** **Expand public and private partnerships to monitor and reduce marine debris.** Ending marine debris requires everyone's participation. More corporations and private citizens have joined government, foundations, and non-governmental organizations in the environmental arena and helped shape change as never before. We must find every opportunity to pull all stakeholders into solution scenarios.

**2** **Fund increased research on the sources and impacts of marine debris.** We need science-based solutions. Armed with knowledge, we can focus our attention on particular areas of greatest vulnerability and target sources and types of marine debris that are proving the most harmful. Bolstered by information about what these things are, where they originate, and their quantities, we can work more efficiently and effectively to reduce litter at the source in addition to cleaning up what's already out there.

THE NATIONAL RESEARCH COUNCIL  
RECOMMENDED A GOAL OF DISCHARGING  
ZERO WASTE INTO MARINE ENVIRONMENTS.

**3** **Reduce, reuse, recycle.** Much of what winds up in the ocean wasn't truly necessary in the first place. We can produce less packaging up front and cut back on debris through programs that encourage positive changes in behavior such as recycling and the routine use of cloth grocery bags.

**4** **Seek better technological solutions.** Human ingenuity has already closed in on some of the breakthroughs we need to reduce marine litter, such as bottle designs that use less plastic and environmentally friendly materials.

**5** **Support the inclusion of comprehensive ocean management in all climate change initiatives.** Citizens must vote for and actively support climate change policies that protect the ocean. Government, for its part, must lead with policy changes that include strategies to minimize the negative impacts climate change has on the ocean and policies that reduce sources of marine debris.

**6** **Engage in community efforts like the International Coastal Cleanup.** Events like the Cleanup really do make a difference, whether making the local beach or shoreline free of debris or raising awareness and empowering individuals to support a healthier, more resilient ocean.