



KEEPING OUR MARINAS CLEAN

---

*Building Partnerships to  
Reduce Marine Debris*

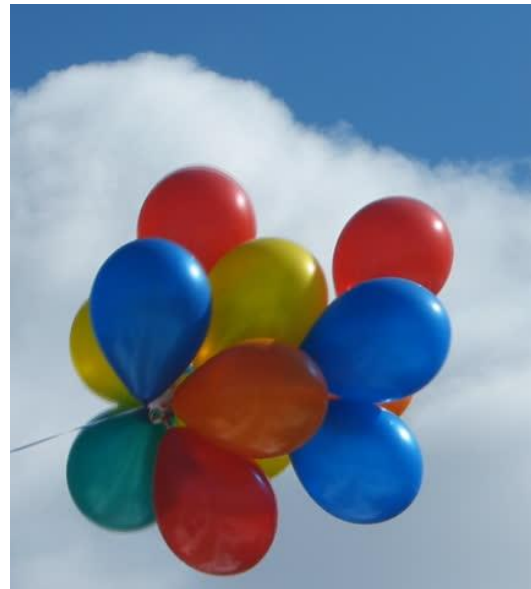
# NAMEPA's Mission

- **Preserve and protect** the marine environment
- Demonstrate maritime's commitment to environmental protection and pollution prevention
- Support the **marine industry**
- Engage maritime businesses, government and public to **"Save Our Seas"** by promoting sound environmental practices
- **Educate** the public on the importance of protecting marine resources



# What is marine debris?

- Anything **man-made** that ends up in the marine environment via point or non-point source
- 80% of marine debris comes from **land-based sources**
- Can be transported by runoff, wind, or dumping





# Where can you find it?



Marinas, beaches, inlets, underwater, above water, gyres, currents, streams, rivers, deltas, channels...anywhere!

# The numbers

- “There are **5.25 trillion pieces** of plastic debris in the ocean. Of that mass, **269,000 tons float** on the surface, while some **four billion plastic microfibers** per square kilometer litter the deep sea.” – National Geographic
- “Shoppers using approximately **500 billion single-use plastic bags** per year...enough to circumnavigate the globe **4,200 times**” – Ocean Crusaders
- “Between **5 and 12 million tons of plastic** enter the ocean annually from land-based sources.” – The Ocean Conservancy
- “Marine debris adversely impacts at least **260 marine species**, including marine mammals, sea turtles and seabirds.” – National Oceanic and Atmospheric Administration (NOAA)
- “Fatal entanglement in and ingestion of marine debris by marine animals has increased by **40% in the last decade.**” – Ocean Health Index





# TOP TEN MARINE DEBRIS ITEMS (1990-2015)

Cigarette butts and filters	52,907,756
Food wrappers, containers	14,766,533
Caps, lids	13,585,425
Cups, plates, utensils	10,112,0389
Beverage bottles (plastic)	9,549,156
Bags (plastic)	7,825,319
Beverage bottles (glass)	7,062,199
Beverage cans	6,753,260
Straws, stirrers	6,263,453
Rope	3,251,948
.....	
<b>Total</b>	<b>132,077,087</b>

Source: [http://act.oceanconservancy.org/pdf/Marine\\_Debris\\_2011\\_Report\\_OC.pdf](http://act.oceanconservancy.org/pdf/Marine_Debris_2011_Report_OC.pdf)



North American Marine Environment Protection Association

**NAMEPA**



# HOW LONG UNTIL IT'S GONE?

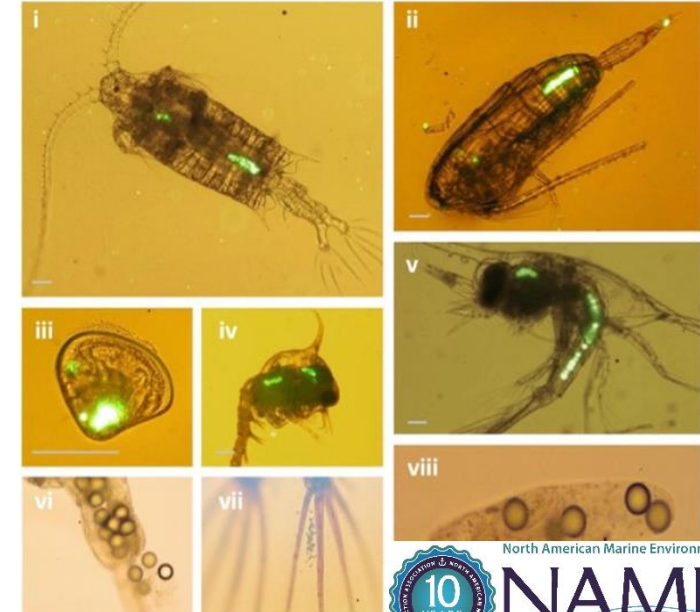
Estimated decomposition rates of common marine debris items





# Ingestion, Entanglement, Injuries

- Mistaking debris for food causes **malnutrition and starvation**
- Debris has been found in the stomachs of **plankton** - ecosystem-level disaster
- **Trapped** in fishing line, beverage containers, etc.
- **Cut** wildlife
- **Toxic** items can bio-accumulate in fatty tissues of marine mammals





# The problem with plastic

- Never fully decompose – they breakdown into small pieces called **microplastics** (<5mm)
- Absorb chemicals it breaks down which can **contaminate** sediment and waterways
- High **durability** and **buoyancy**
- Leach harmful chemicals into water as it photodegrades
- Can be **mistaken for food**



North American Marine Environment Protection Association  
**NAMEPA**

# Impacts on humans



- Impact **seafood economy** by damaging fishing gear and critical habitats, depleting fisheries, and transporting invasive species
- Decrease **tourism** due to eyesore on beaches
- Cost money to clean debris up in communities

- **Navigation** hazards
- Block **channel** passages





# Marina Cleanup Day!



- Partnership with Ocean Conservancy, California Coastal Commission (CCC), California State Parks Division of Boating and Waterways (DBW)
- Target boating facilities, boating groups, sailors, fishermen, and water enthusiasts

# Why marinas?

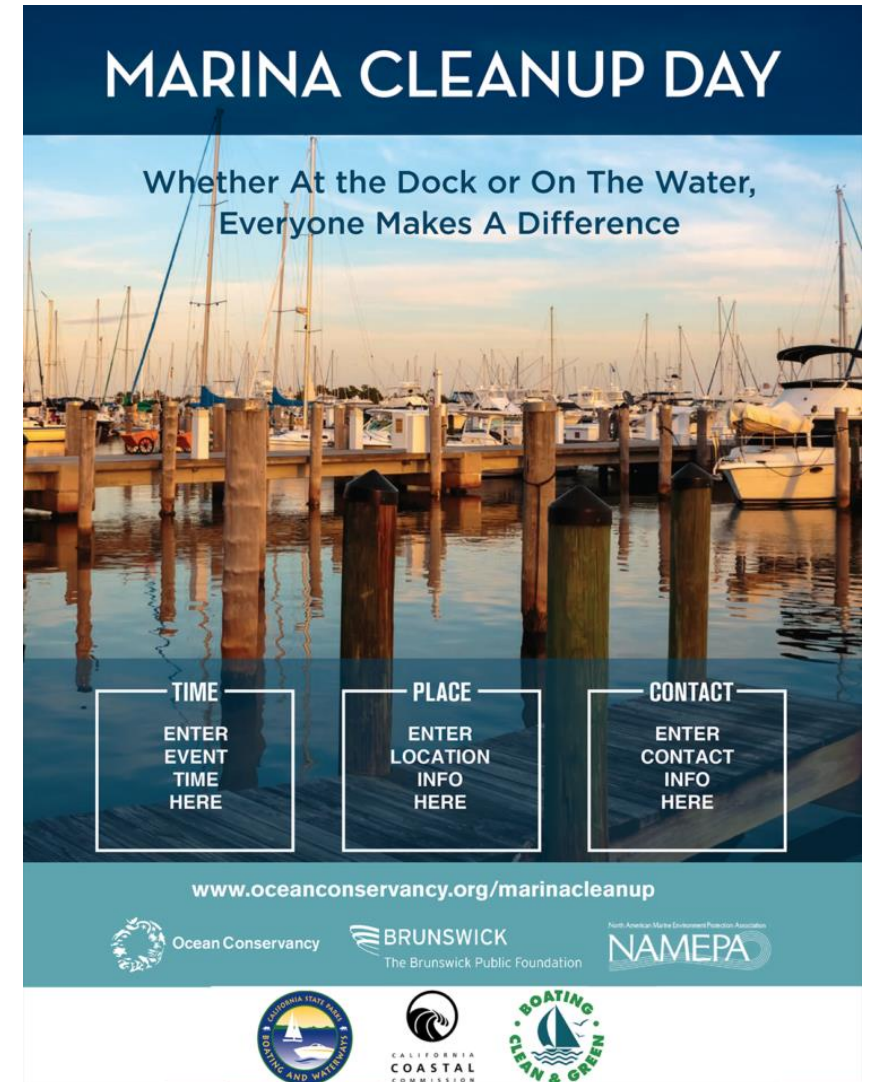


- Direct **access to waterways**
- Usually in areas of high **tourism**, trade, and/or seafood production
- Community of **seafarers** who are responsible for proper waste disposal on boats
- Reduce risk of **boat damage** from debris



# How to host a Marina Cleanup Day

- Check out the [Do-It-Yourself Cleanup Tool Kit](#)
- Set date, location and time and **register** online
- Receive **Cleanup Toolkit** and supplies
- **Recruit** volunteers and advertise with flyer templates
- **Collect data** to report to Ocean Conservancy



Makes a  
difference

Preserves  
marine  
ecosystems

## Good Mate Boat Cleanups



PEOPLE: **5,707**

POUNDS: **208,532**  
(94,589 KG)

MILES: **726**  
(1,168 KM)

TOTAL ITEMS COLLECTED: **127,852**

Builds  
community

Keeps boaters  
and marine  
animals safe



# Do your part!

- Organize a **Marina cleanup!**
- Volunteer** with a local organization or beach clean-up
- Reduce**, Reuse, Recycle!
- Educate** yourself and others
- Use **Clean Swell** app to contribute to marine debris research



## 8 Easy Ways to Use Less Plastic

Marine debris is comprised primarily of plastic, which marine life may ingest or become entangled in. Here are some easy ways you can use less plastic:

- Skip the bottled water and use a reusable water bottle.
- Avoid using a straw. Straws are one of the top 10 marine debris items found on beaches.
- Avoid using disposable silverware.
- If necessary, use paper instead of plastic.
- Or better yet, use reusable bags.
- Don't discard your electronics - instead, repair or upgrade your devices. You can also turn them in for recycling.
- Use fewer garbage bags and compost!
- Wear clothing made of natural, non-synthetic fibers. Polyester clothing is actually made of plastic.

We each play a role in keeping our planet whole.

Advocate • Educate • Activate

Check us out on:

 [www.namepa.net](http://www.namepa.net)   

NAMEPA is a 501(c)(3) non-profit organization. ©2014 NAMEPA. All rights reserved. NAMEPA is an Equal Opportunity Employer. NAMEPA is a proud member of the National Marine Debris Alliance (NMDA). NAMEPA is a proud member of the National Marine Debris Alliance (NMDA). NAMEPA is a proud member of the National Marine Debris Alliance (NMDA).