

The background is a dark teal color with a dense collage of various marine debris items in lighter shades of blue and green. These items include plastic bottles, tires, fishing nets, anchors, and other unidentifiable pieces of trash. The text 'NOAA Marine Debris Program' is overlaid in white, with the word 'NOAA' in a smaller font above 'Marine Debris Program'.

NOAA Marine Debris Program

CHARLES GRISAFI, FLORIDA AND CARIBBEAN
REGIONAL COORDINATOR



NOAA Marine Debris Program Overview

Established in **2006** by Congress as the federal lead for marine debris, amended in **2012** through the **Marine Debris Act**

Vision: the global ocean and its coasts free from the impacts of marine debris

What is Marine Debris?

“any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.”



Legislative Mandates

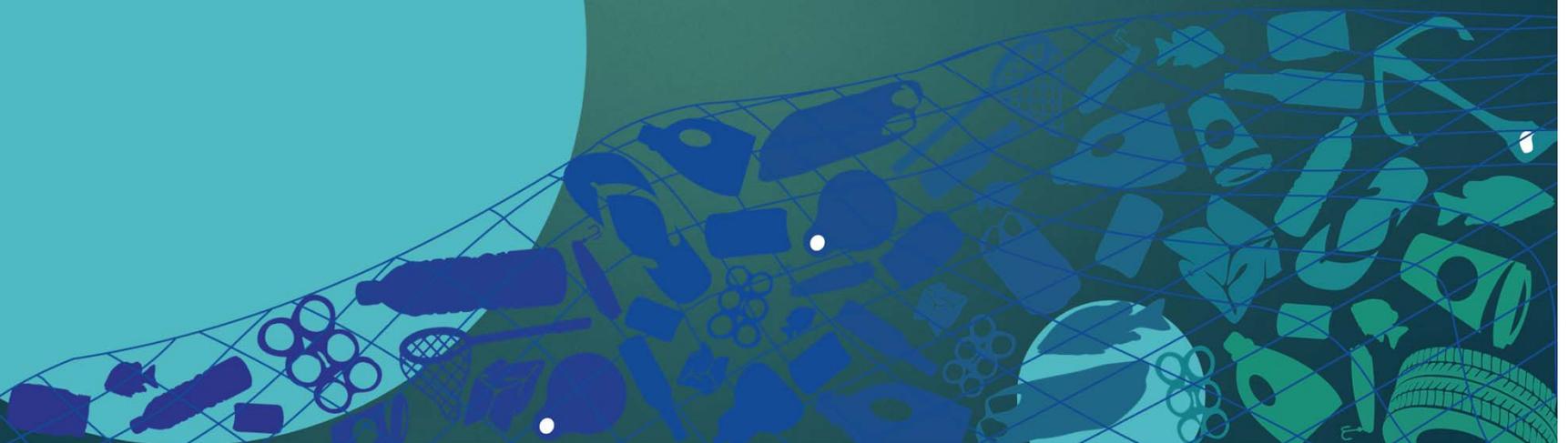
- ▶ Identify, determine sources of, assess, prevent, reduce, and remove marine debris
- ▶ Provide national and regional coordination
- ▶ Reduce adverse impacts of lost and discarded fishing gear
- ▶ Conduct outreach and education
- ▶ Address “severe marine debris events”



Photo: NOAA CREP

Program Pillars

- REMOVAL
- PREVENTION
- RESEARCH
- EMERGENCY RESPONSE
- REGIONAL COORDINATION



Removal

Community-based marine debris removal grants. Fund about 10 to 12 projects per year.

Recipients include NGOs, industry, and state and local governments

Removal priorities include:

- Derelict Fishing Gear
- Aquaculture gear
- Abandoned and derelict vessels
- Debris from natural disasters
- Debris in critical habitat



Prevention

National prevention grant competition. Typically fund 10 to 12 projects per year.

Projects that **change behavior** in order to prevent or reduce a specific type of marine debris

Prevention priorities include:

- Education and outreach with K-12 and college level students
- Fishing communities
- Coastal tourism industry
- Stormwater and solid waste management
- Single-use plastic reduction



Photo: Mote Marine

Research

Competitive Research grant competition. Typically every other year.

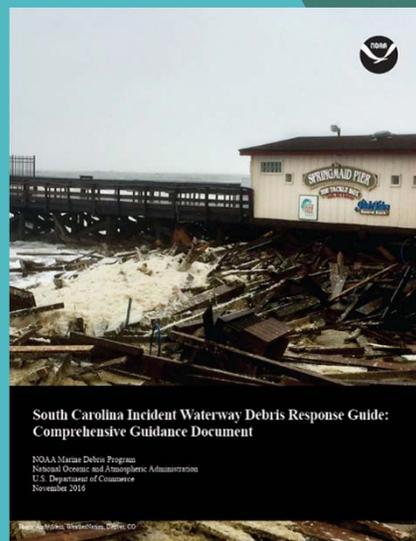
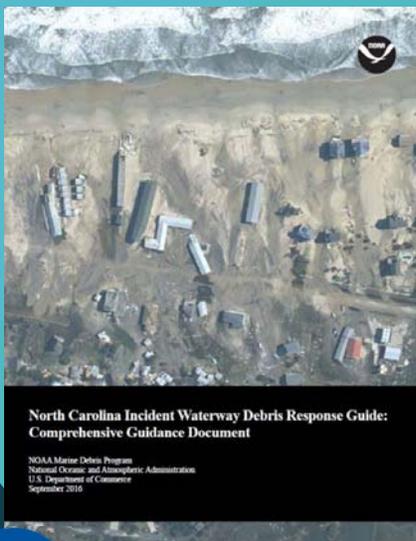
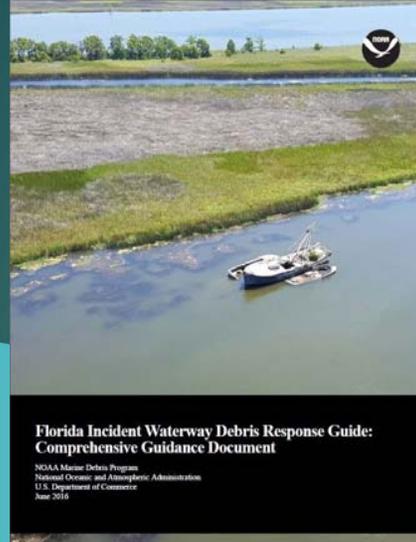
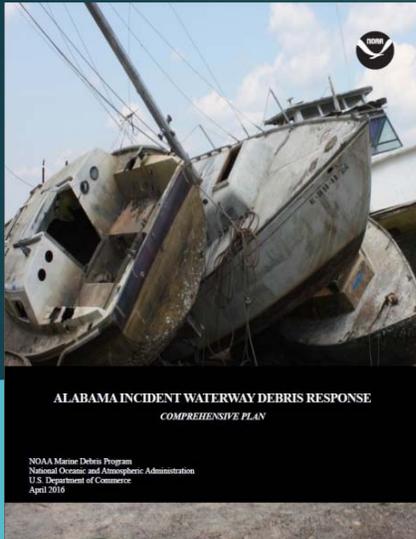
Joint projects with academia, NOAA partners

Research priorities include:

- Microplastics quantification
- Fishing gear assessment and modification
- Economic impacts
- Plastic and chemical impacts on wildlife and habitats
- Detection methods



Emergency Response



Emergency Response Plans for each coastal state

The plans will improve preparedness for response and recovery operations following an acute waterway debris release incident in coastal areas.

NOAA MDP provides scientific support to other federal and state agencies responding to a natural disaster

- Serving in Emergency Operations Centers or Incident Command Posts
- Mapping and debris assessments
- Environmental compliance
- Supplemental funding

Supplemental Funding

- The Bipartisan Budget Act of 2018 authorizes NOAA to allocate \$18 million for “marine debris assessment and removal” related to the consequences of Hurricanes Harvey, Irma, and Maria.

Hurricane Irma Funding

Two direct grants to the state of Florida. Both **FWC** and **DEP** will receive grants.

- **FWC grant will focus on 4 different projects:**
 1. Statewide vessel database upgrade and removal of 225 vessels displaced by Hurricane Irma
 2. Removal of derelict fishing gear within the Florida Keys National Marine Sanctuary
 3. Assess and map marine debris hot spots throughout the state that were impacted by Hurricane Irma
 4. FDACS, Division of Aquaculture to assess, remove, and dispose marine debris in and around Aquaculture Use Zones
- **DEP grant will focus on marine debris removal in Biscayne Bay Aquatic Preserve and Rookery Bay NERR**

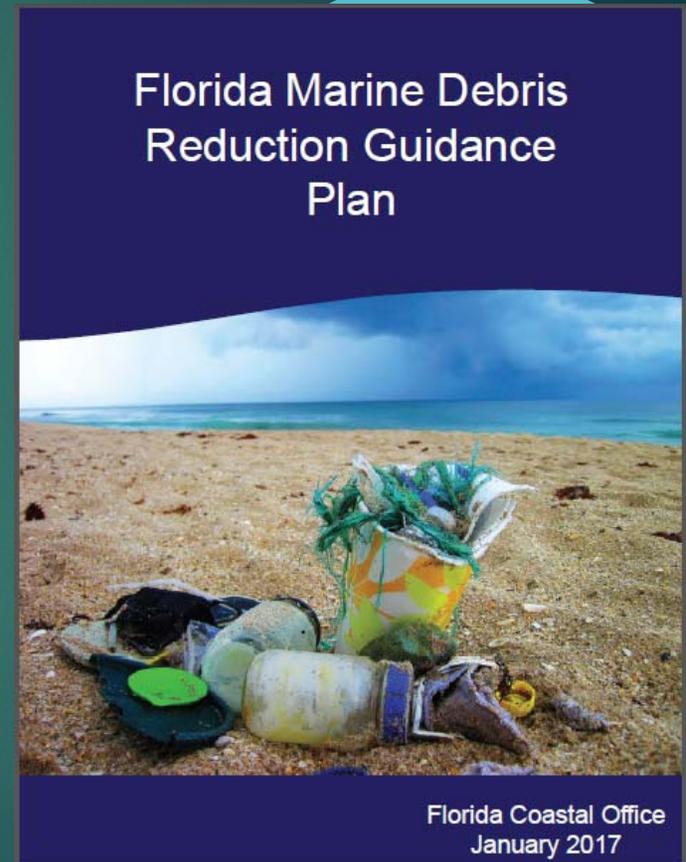


Regional Coordination



Florida Marine Debris Reduction Guidance Plan

- The result of multiple years of collaboration between stakeholders including federal and state agencies, local governments, non-governmental organizations, universities, and industry.
- Coordinated message among partners is a much more powerful communication tool and avoids duplication
- The Plan will act as a guide to measure progress toward addressing the marine debris problem in Florida.
- Helps us (NOAA MDP) prioritize projects for funding



Florida Marine Debris Reduction Guidance Plan

Five Priority Marine Debris Topics for Florida

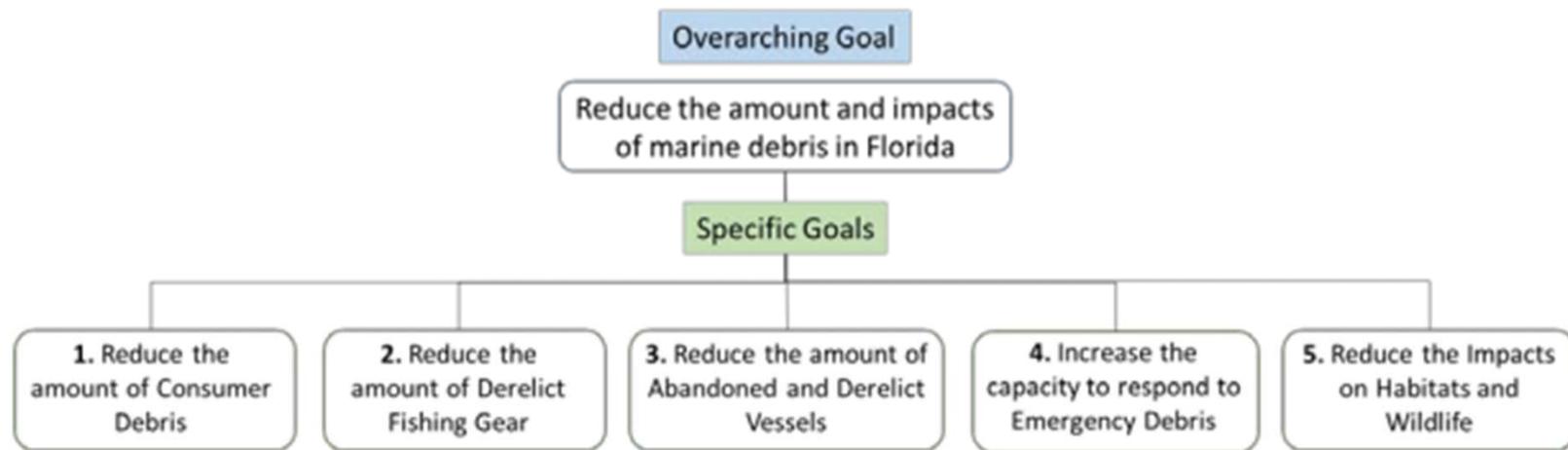


Figure 4 – Overview of the overarching goal and the specific goals of the Florida Marine Debris Reduction Guidance Plan.



Implementation

- 5 Working Groups Based on the 5 Specific Goals
- The 5 Working Groups meet twice per year to share resources and discuss implementation progress
- Representative from NOAA, FDEP, and FWC working with the 5 Work Groups to Facilitate and Coordinate Implementation

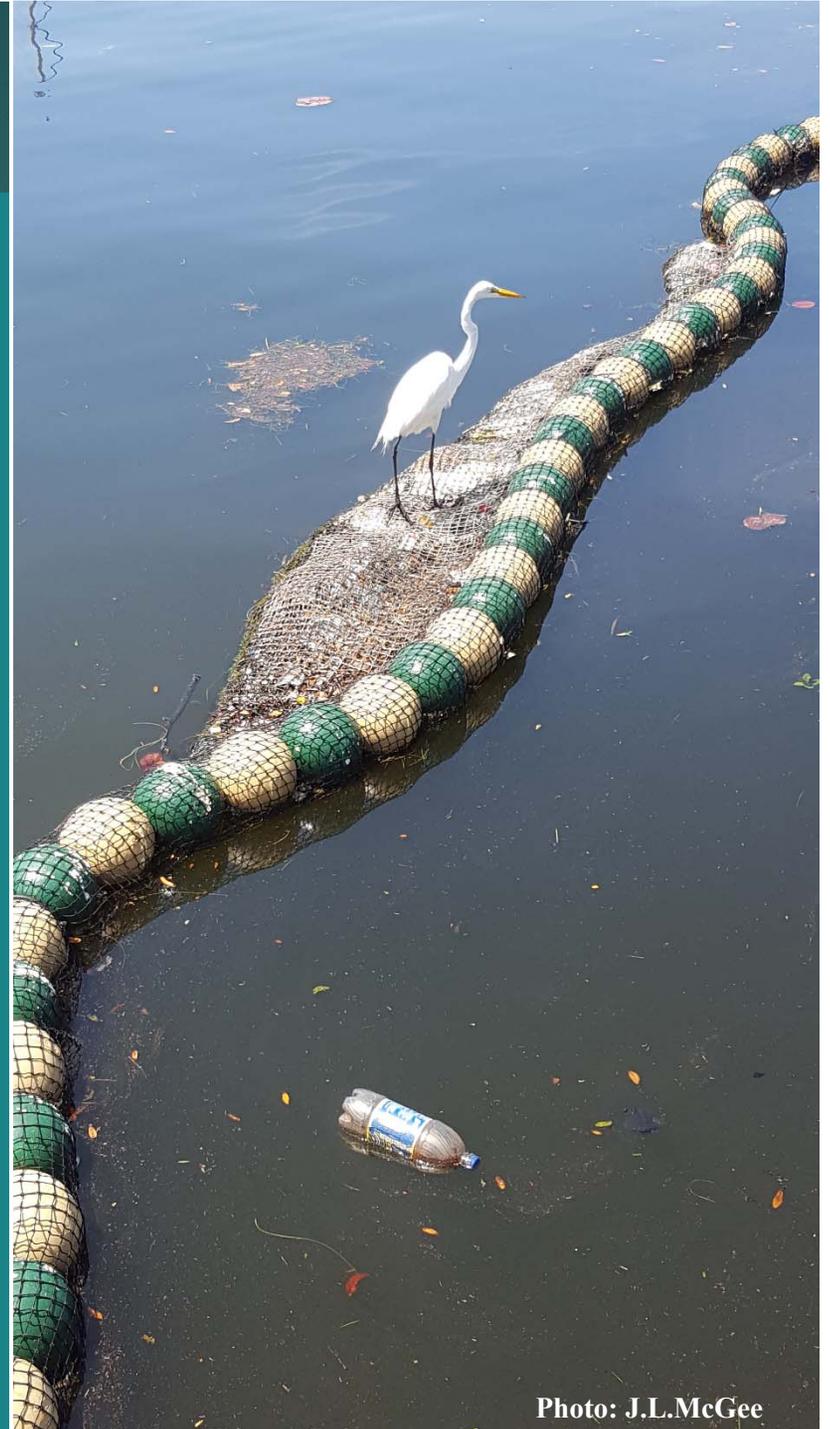
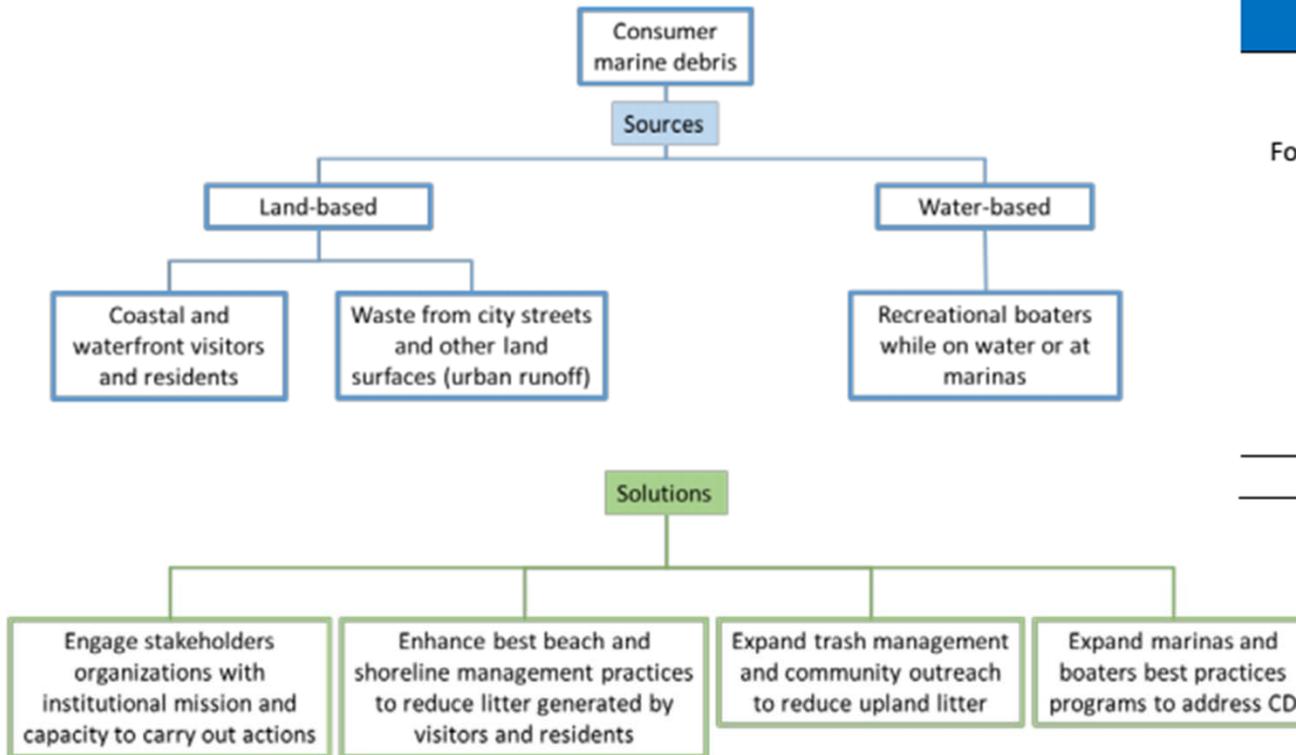


Photo: J.L.McGee



Goal 1 – Reduce the Amount of Consumer Debris



Type of debris	Number of items
Cigarette Butts	246,502
Bottle Caps (Plastic)	74,477
Food wrappers (candy, chips)	64,321
Beverage bottles (plastic)	46,987
Bottle caps (metal)	35,896
Straws, stirrers	33,720
Beverage cans	31,059
Beverage bottles (glass)	25,620
Plastic & foam packaging	18,252
Other plastic bags	16,168
Total	593,002

Figure 5 – Conceptual diagrams of the main sources of consumer debris in Florida and suggested solutions to prevent and intercept consumer items before becoming marine debris.



Goal 1 – Reduce the Amount of Consumer Debris

- NOAA MDP funded Florida Marine Debris Regional Collaboration Portal
- DEP CCCL Beach Events – BMPs guide
 - Developed by FWC, NOAA and USF CMS in 2017
 - Supports CCCL special events field permits
- New DEP Skip The Straw program



Consumer Debris in Florida



Bird Key – Uninhabited island



MacArthur Causeway / Port of Miami

Photo credit: Dave Dobler, Volunteer Cleanup. Org

Canal Systems in Miami

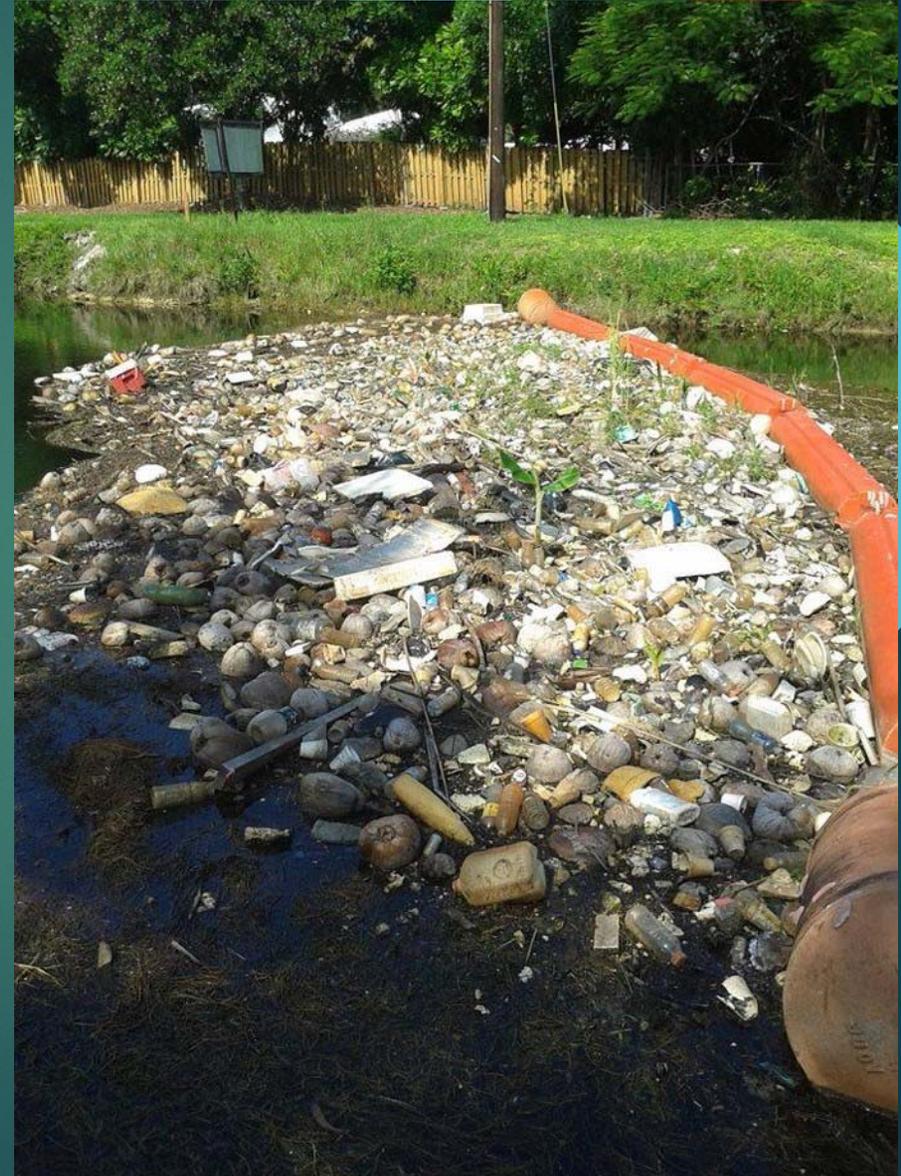


Photo credit: Dave Dobler, Volunteer Cleanup. Org

Goal 2 – Reduce the Amount of Derelict Fishing Gear

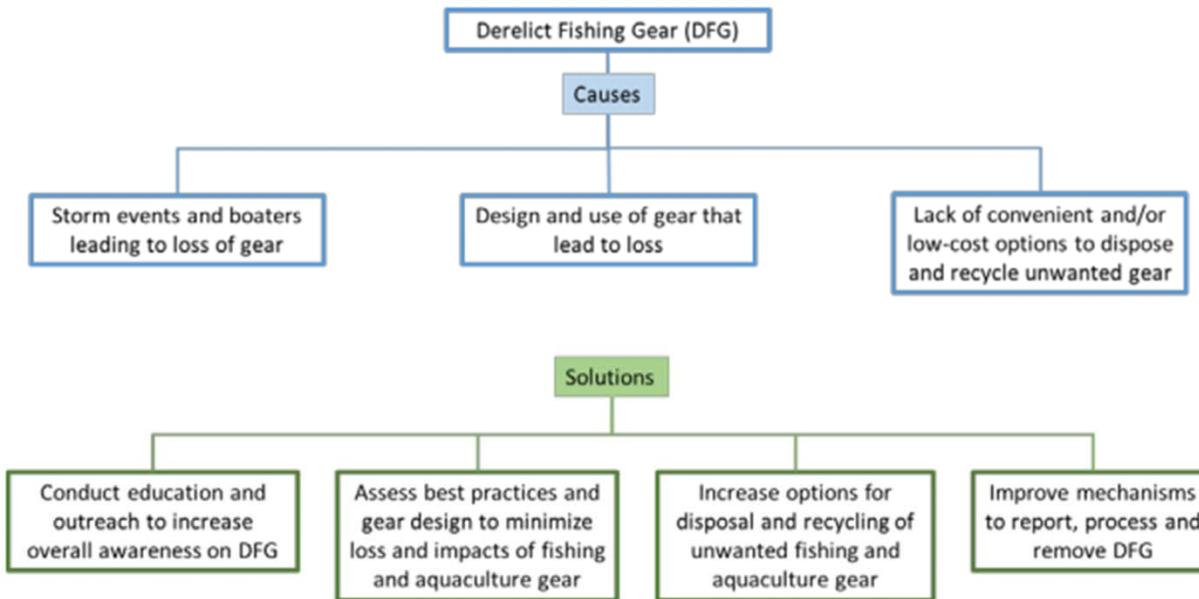


Figure 6 – Conceptual diagrams of the main causes of derelict fishing gear in Florida and suggested preventive and removal solutions.

Objectives

Objective 1 – Increase overall awareness of DFG

Objective 2 – Reduce the loss and impacts of fishing gear

Objective 3 – Increase options for disposal and recycling of unwanted fishing gear

Objective 4 – Build capacity to report, process and remove DFG

Objective 5 – Address marine debris from aquaculture practices

Goal 2 - Reduce the Amount of Derelict Fishing Gear

Monofilament Recovery and Recycling Program

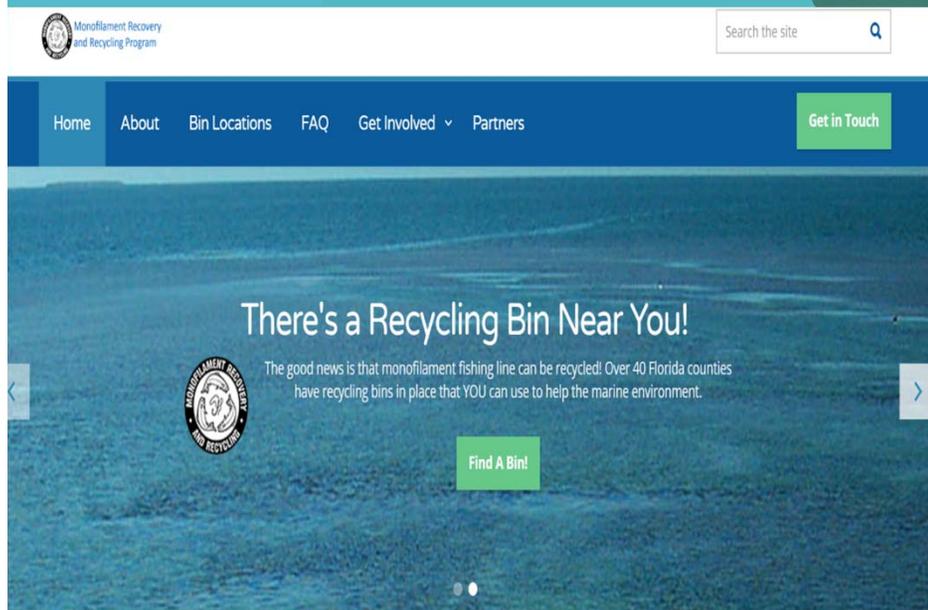


<http://mrrp.myfwc.com/>

Trap Retrieval Program



<http://myfwc.com/fishing/saltwater/trap-debris/>



DACS, Division of Aquaculture Initiatives



Goal 3 – Reduce the Amount of Abandoned and Derelict Vessels

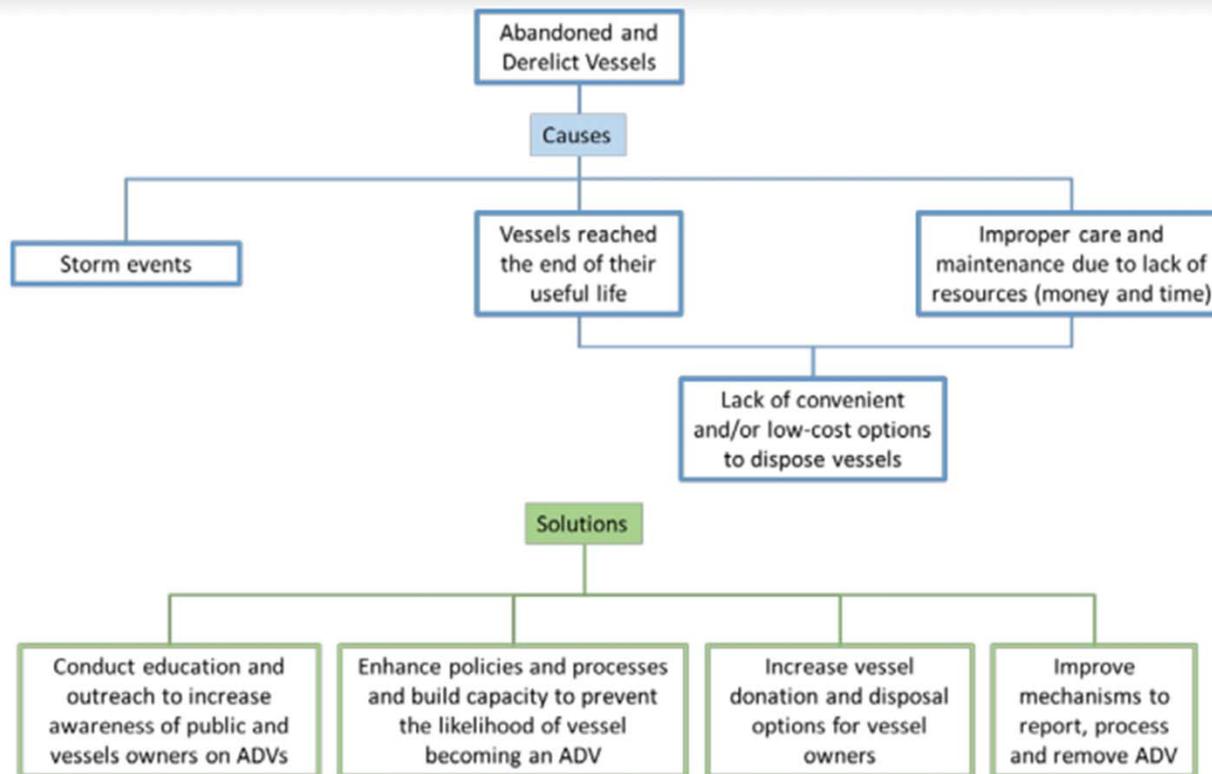
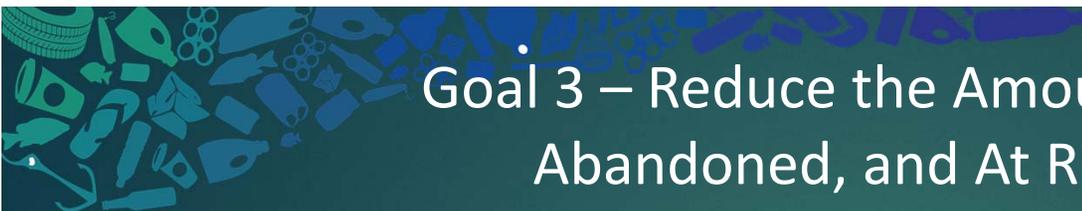


Figure 7 – Conceptual diagrams of the main causes for abandoned and derelict vessels in Florida and suggested preventive and removal solutions.





Goal 3 – Reduce the Amount of Derelict, Abandoned, and At Risk Vessels

- Development of vessel removal BMPs for different statewide habitats (mangroves, shallow bottom)
- Statewide ADV vessel database upgrades
- Expansion of FWC vessels at risk program to ensure a vessel owner has an effective means for propulsion for safe navigation
- FL Statute amended stating an owner or operator of a vessel may not anchor, moor, tie, to an unpermitted, unauthorized, or unlawful object that is on or affixed to the bottom of the waters of the state.
- FL Statute amended to include penalties related to the operation of a vessel with an expired registration.
- The Department of Highway and Motor Vehicle Safety **may not** issue a certificate of title to any applicant for any vessel that has been deemed derelict by a law enforcement officer

Goal 4 – Increase the Capacity to Respond to Emergency Debris

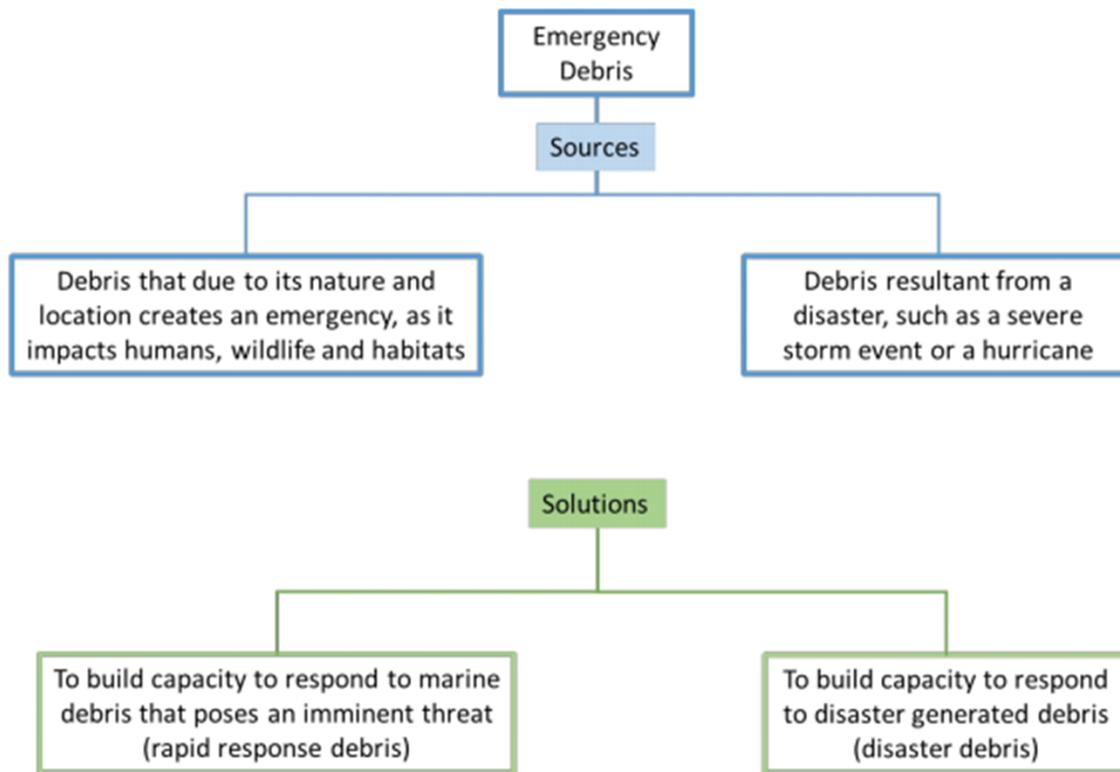


Figure 8 – Conceptual diagrams of the main sources of emergency type of debris and suggested solutions.



Goal 5 – Reduce the Impact of Marine Debris on Wildlife and Habitats

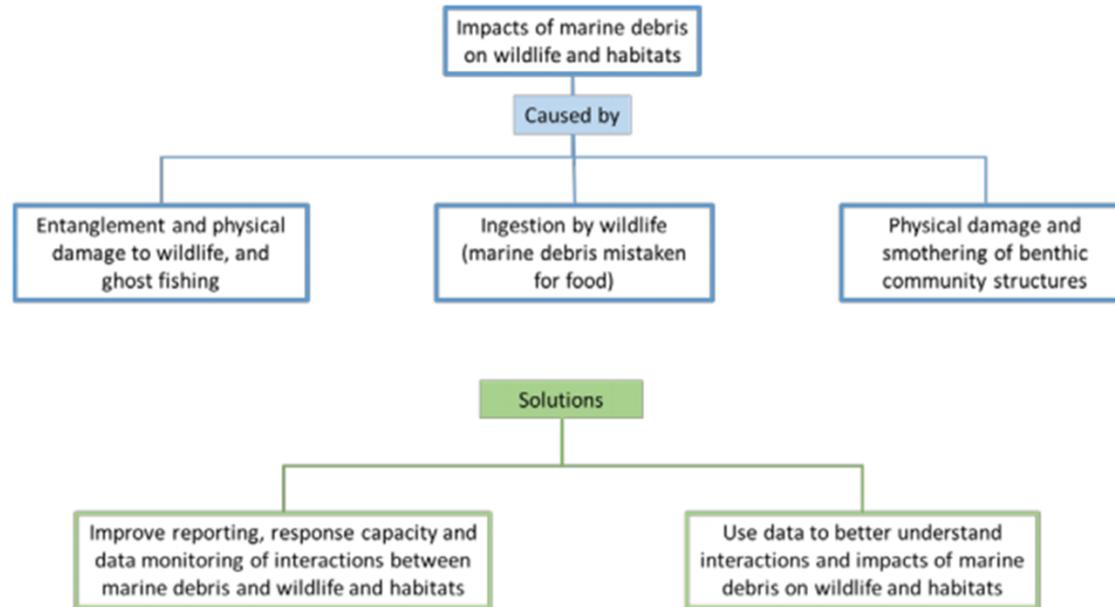


Figure 9 – Conceptual diagrams of the main causes for environmental impacts by marine debris and suggested solutions.



Entanglement in and ingestion of fishing gear and other marine debris by Florida manatees, 1993 to 2012

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ABSTRACT: Entanglement in and ingestion of marine debris by marine life has become a recognized threat worldwide, and the endangered Florida manatee is no exception. Manatees are known to become entangled in various types of fishing gear and other marine debris, and foreign objects are often found in the gastrointestinal tract of dead manatees. We examined a 20 yr dataset (1993 to 2012) of manatee rescue and necropsy records for evidence of entanglement in or ingestion of marine debris. In over 6500 manatee necropsy reports, over 11% either had ingested or showed evidence of entanglement in marine debris (or both). Fifty manatees died as a direct result of either entanglement in or, most commonly, ingestion of marine debris; fishery-related gear was



Florida Fish and Wildlife Conservation Commission

Home : Wildlife & Habitats : Managed Species : Manatee : **Manatee Entanglement/Ingestion Impacts – Keep fishing line and other debris out of the waterways!**

Species Profiles
 Managed Species
 Alligator Management Program
 American Crocodile
 Bald Eagle
 Black Bears
 White-tailed deer
 Freshwater Turtles
 Gopher Tortoise
 Manatee
 Report Sick or Injured Manatee
 Educational Information

Human-related Impacts to Manatees

Report Entanglement Emergencies
 Wildlife Alert Hotline: 888-404-FWCC (3922)
 State mobile: #FWC or #FWC
 Text to: T1peMyFWC.com

Humans, for whatever reason and for many years, have either accidentally dropped, intentionally discarded or gleefully thrown items into water. Accidentally or intentionally introduced into rivers, bays or oceans, human-generated trash becomes marine debris, which can be a big problem for aquatic wildlife and habitats. Entanglement in and ingestion of marine debris by marine life can be fatal, and manatees are no exception.



SAVE THE DATE



for the Florida Marine Debris Reduction Planning Workshop!

Dates: January 30 – February 1, 2019

Venue: NSU Guy Harvey Oceanographic Center

Location: Dania Beach, FL

Photo credit: FWC

Stay Connected

Website:

www.marinedebris.noaa.gov

Blog:

<https://blog.marinedebris.noaa.gov/>

Social Media:



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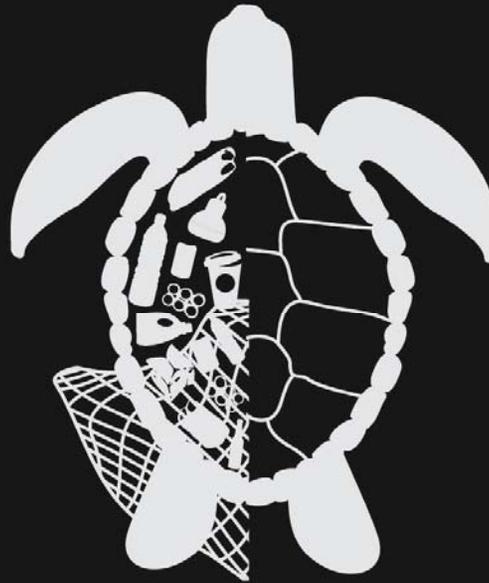
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The screenshot shows the NOAA Marine Debris Program website. At the top is the NOAA logo and the text "Marine Debris Program OFFICE OF RESPONSE AND RESTORATION". Below this is a navigation menu with links: ABOUT US, DISCOVER THE ISSUE, CURRENT EFFORTS, EDUCATIONAL MATERIALS, IN YOUR REGION, and MULTIMEDIA. The main content area features a large image of trash on a sidewalk with the caption "Trash Pollution Solutions: A Community-Based Approach for Baltimore City". To the right of this image is a text box stating "The NOAA Marine Debris Program is the U.S. Federal government's lead for addressing marine debris." Below the main image are several icons for different resources: Derelict Vessel Info Hub, How To Help, Emergency Response, Garbage Patches, and Monitoring Toolbox. Further down is a "MARINE DEBRIS BLOG" section with a list of articles: "Spring Break Means Warming Weather and Marine Debris", "Balloons and the Mid-Atlantic", "Marine Debris as a Potential Pathway for Invasive Species: A New MDP Report", and "Addressing Marine Debris in the Mid-Atlantic". To the right of the blog section are buttons for "Get Marine Debris News", "Contact Us", and "MDP Clearinghouse". At the bottom right are social media icons for Facebook, Flickr, and Twitter, along with a "Share / Save" button. The footer contains small text: "Revised: Mar 13, 2017 8:30am | Site map | Contact Us | Disclaimer | Privacy Policy | User Survey | Information Quality" and "Web site owner: Marine Debris | Office of Response and Restoration | NOAA's Ocean Service | NOAA | US Department of Commerce | USA.gov".

**YOUR
CHOICES
MATTER.**



**HOW
WILL YOU
CHOOSE?**

Trash doesn't belong in the ocean.



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NOAA Marine Debris Program

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