

# Marine Debris

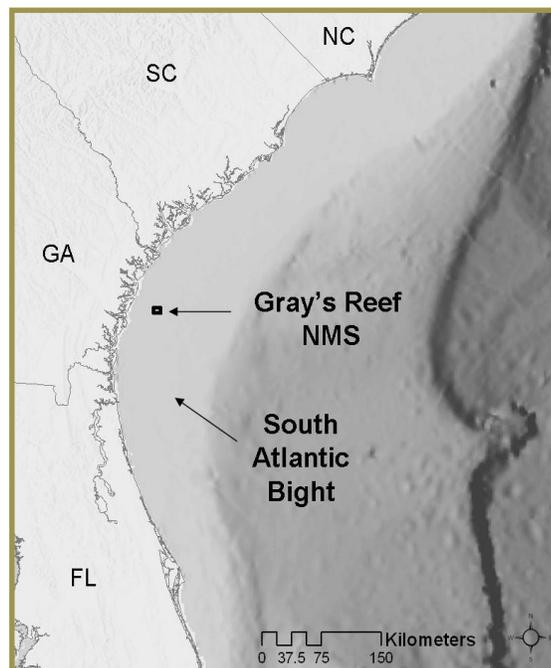
## ATLANTIC

### Assessment, Monitoring, and Reduction of the Causes and Impacts of Marine Debris in the South Atlantic Bight

The South Atlantic Bight (SAB) extends from Cape Canaveral, FL to Cape Hatteras, NC and is home to thriving benthic and fish communities. NOAA's Gray's Reef National Marine Sanctuary (GRNMS) is the only natural area protected off the Georgia coast and the only federally protected ocean bottom habitat in the South Atlantic Bight. Less than one percent of the 17 square nautical mile sanctuary is densely colonized live bottom habitat, which attracts a growing number of recreational fishers and divers.

As part of a recent characterization of GRNMS, the Biogeography Branch (BB), within NOAA's Center for Coastal Monitoring and Assessment, has characterized marine debris in Gray's Reef. They found that incidence of the debris at the limited densely colonized ledge sites in the sanctuary was significantly greater than at sand or sparsely colonized live bottom, and is further influenced by the level of boating activity and physiographic characteristics (e.g., ledge height).

Building upon this work, scientists from the BB will work with sanctuary staff to establish a long-term monitoring program to quantify accumulation rates and impacts of marine debris at densely colonized ledge habitat. NOAA scientists will design the survey, select and mark sites, and then perform the initial survey and remove debris from each site. GRNMS will then perform the survey on an annual basis. At the same time, GRNMS will expand outreach programs to educate users and the general public about the importance of reducing marine debris inputs.



Location of South Atlantic Bight and Gray's Reef National Marine Sanctuary.

#### WHAT IS MARINE DEBRIS?

*Marine debris is any manufactured or man-made solid material that enters the coastal or marine environment. It may enter directly when it is lost or dumped from a ship, or indirectly when debris washes out to sea via rivers, streams, and storm drains.*

#### MARINE DEBRIS SOURCES

*Sources of marine debris include land-based sources, such as littering, dumping, and industrial losses. Ocean-based debris can come from fishing vessels, cargo ships, stationary platforms, and other vessels.*

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## MANDATES

Mandates supporting NOAA's marine debris efforts include the following:

- Marine Debris Research, Prevention, and Reduction Act of 2006, S.362
- U.S. Ocean Action Plan
- Coral Reef Conservation Act
- Marine Plastic Pollution Research and Control Act, 33 U.S.C. §§ 1901 et seq.
- Marine Protection, Research, and Sanctuaries Act, (Title II) 33 U.S.C. §§ 1401 et seq.
- Clean Water Act, 33 U.S.C. §§ 1251 et seq.

## PARTNERS

- NOAA/NOS/NCCOS/CCMA/Biogeography Branch
- Gray's Reef National Marine Sanctuary
- NOAA Coastal Services Center
- Local fishing groups
- Local diving clubs

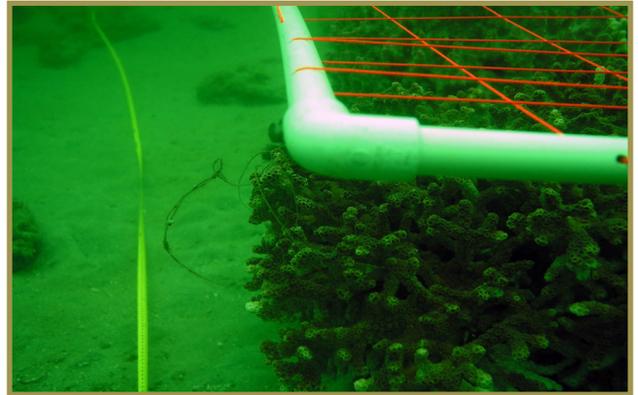
## BENEFITS OF THE PROJECT

- Removal of debris from sensitive hard-bottom habitat
- Reduced impacts from marine debris on benthic organisms
- Improved knowledge of debris accumulation rates
- Refined models predicting debris distribution
- Improved monitoring and removal efforts
- Greater awareness about the impacts of marine debris among South Atlantic Bight residents
- Reduced input of marine debris

## CONTACTS

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Fishing line entangled with *Oculina* coral. Photo courtesy of NOAA CCMA Biogeography Branch.



Net entangled in live bottom in GRNMS. Photo courtesy of NOAA CCMA Biogeography Branch.



Debris items found during recent survey. Photo courtesy of NOAA CCMA Biogeography Branch.

*This project is funded through NOAA's National Ocean Service, Office of Response & Restoration, Marine Debris Program. The NOAA Marine Debris Program works with other NOAA offices, as well as other federal, state, and local agencies and private sector partners to support national, state, local and international efforts to protect and conserve our nation's natural resources, oceans, and coastal waterways from the impacts of marine debris.*