

North Carolina Marine Debris Action Plan: 2022 Accomplishments Report



The [North Carolina Marine Debris Action Plan](#) (Action Plan) provides a strategic framework for prevention and removal of marine debris along the North Carolina coast. In 2022, it inspired strategic coordination and direction for the organizations and communities that address marine debris.

- These are highlights captured through work groups. Action Plan partners and many others conducted an impressive amount of work that is not reflected here.

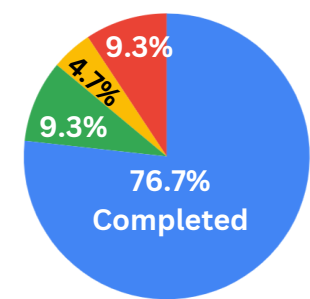
GOAL 1: LEAD AND COORDINATE

Efforts for applying the Action Plan were led by the N.C. Marine Debris Action Plan Leadership Team.

- The committee held six meetings and worked to present highlights of ongoing projects during the N.C. Marine Debris Symposium.
- Eight subcommittees, including a Leadership Team, met throughout the year to develop and implement projects, as well as facilitate and track the plan's progress.

Action Plan Progress

Completed • In Progress • Ongoing • Not Started



GOAL 2: PREVENT

Educators at the N.C. Aquarium on Roanoke Island, Jennette's Pier, North Carolina Coastal Federation (Coastal Federation), and UNCW Marine Quest collectively educated **7,651 K-12 students and 2,560 educators** about marine debris.



The North Carolina Aquarium at Roanoke Island and Jennette's Pier collected items to be recycled through Terracycle, preventing them from entering the waste stream. In 2022, they collected:

- 20.9 lbs. of Cigarette Butts
- 6.45 lbs. of Fruit Squeeze Pouches
- 8.65 lbs. of Colgate Oral Care Program

The N.C. Marine Debris Symposium and Coastal Carolina Riverwatch brought together marine debris and plastic pollution stakeholders from all over North Carolina for three days of collaboration, networking, and solution development.



The Symposium provided a collaborative forum for the exchange of information on recent research, infrastructure best management practices, policy development, removal projects, and advocacy that prevents plastic pollution.

GOAL 2: PREVENT (continued)



All three Topsail Island towns and the Town of Wrightsville Beach now prohibit using unencapsulated polystyrene, commonly called Styrofoam, for floating docks, piers and walkways.

- These ordinances were put in place when town officials took action after learning about the Coastal Federation's large-scale marine debris removal and the resulting Resilient Docks and Piers Report. The report includes recommendations for improved Marine Construction to reduce damage, losses, and marine debris resulting from storms in North Carolina.

Incorporating marine debris research into public outreach and education efforts, Coastal Carolina Riverwatch, Duke University Environmental Law and Policy Clinic, and N.C. Marine Debris Symposium hosted the NC Plastic Policy Workshop.

- Plastic policy experts in North Carolina instructed local government planners, solid waste representatives, and local elected officials on actions they can take to facilitate prevention and reduction of marine debris. They also created the [Plastic Prevention Policy Packet and Toolkit](#).

Don't Waste Durham's ReCirculation Project recognized the GreenToGo reusable container system which provides customers with durable to-go containers to be returned, washed, and reused at participating establishments. The project also recovers and redistributes durable, reusable materials from the recycling system.



THE
RE:CIRCULATION
PROJECT

GOAL 3: REMOVE



Topsail Island rewards businesses that take action to reduce debris, encourages alternatives to single use plastics, and creates awareness of the impacts of polystyrene and ways to reduce its use through their Beach Clean Initiative. This project provides educational messaging, supports Ocean Friendly Establishments, and encourages the use of encapsulated polystyrene.

North Carolina Plastic Waste Reduction Coalition capitalized on successful statewide social media initiative, **#NCBeyondPlastic**, during Beyond Plastic Week of Action.

- Through informative infographics, webinars, advertised cleanup events, and calls for action, Beyond Plastic Week helped to promote cleanups and marine debris awareness.

The Coastal Federation embarked on the eighth year of the Lost Fishing Gear Recovery Project working with 48 commercial watermen and women to **remove 1,983 crab pots** from coastal waters.

- The Coastal Federation's marine debris team worked with watermen and women and contractors to remove **326.59 tons (652,180 pounds)** of large-scale marine debris from coastal waters.
- Additionally, over the course of eight cleanup events, volunteers helped remove **1,200 pounds** of small-scale debris.



GOAL 4: PREVENT AND REMOVE ABANDONED & DERELICT VESSELS



In 2022, the N.C. Wildlife Resources Commission, Coastal Federation, and N.C. Division of Coastal Management oversaw the removal of **a total of 95 abandoned and derelict vessels**.

- N.C. Wildlife Resources Commission removed 74 vessels under funding through the N.C. General Assembly.
- The Coastal Federation removed 15 vessels with funding through National Fish and Wildlife Foundation, 3 under funding through National Oceanic and Atmospheric Administration Marine Debris Program, and 3 under funding through the N.C. General Assembly.

N.C. Wildlife Resources Commission will continue to maintain and update the current state-wide Abandoned and Derelict Vessels database as vessel removal projects are completed and new vessels are reported. The database is updated by utilizing the ArcGIS Online Collector application.

- Data management efforts from the N.C. Division of Coastal Management and N.C. Wildlife Resources Commission aims to provide an opportunity for partners to contribute vessel data updates, as well as assess the vessel data for Abandoned and Derelict Vessel (ADV) removal work.

GOAL 5: RESEARCH AND ASSESSMENT

N.C. Sea Grant and N.C. State University, in cooperation with Sound Rivers, Plastic Ocean Project and the University of Birmingham (UK), sampled and tested 90 water samples at 15 stations located throughout the Neuse River watershed to understand microplastics in our waterways.

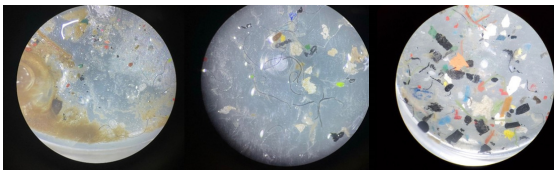


Photo by Kayla West, Plastic Ocean Project

- Every sample contained microplastics, and over 150 unique synthetic compounds were identified.
- Polyethylene, polypropylene and polystyrene were the top three types of plastics found, with various other chemicals found including resins, paint and sealants.

- Additional funds are being sought to expand the research and investigate intervention strategies.

As part of the National Oceanic and Atmospheric Administration-facilitated [Southeast Marine Debris Action Plan](#), N.C. Sea Grant contributed to the creation of "**Tangled in Trash**" – the first reporting tool designed to document when and where marine debris harms animals in the Carolinas and Georgia. Anyone can join the project and submit an observation by [downloading the app](#) through Anecdota.



"This tool will house reported wildlife and marine debris interactions to help users, researchers, wildlife responders, and others identify critical trends and concerns and strategize actionable solutions."

Kelly Thorvalson, conservation programs manager for South Carolina Aquarium and Project Coordinator

GOAL 5: RESEARCH AND ASSESSMENT (continued)



Photo by Coastal Carolina Riverwatch

Coastal Carolina Riverwatch partnered with the City of Jacksonville's Stormwater Program to reduce the amount of macroplastics by deploying a 'Trash Trout' on Scales Creek, a tributary of the New River.

- Through **12 data collections, a total of 435 items**, polystyrene being the most common, have been removed and discarded.
- They also collected 40 samples upstream and downstream of the Trash Trout to determine the abundance of debris and the effect the trap has in reducing it.

LEADERSHIP TEAM

These logos represent partners who participated in the Leadership Team in 2022. Many additional organizations not identified here were engaged in Subcommittees and continue to support the actions of the plan. We welcome others to join the efforts! We cannot do it alone.

Please email sarajh@nccoast.org if interested.



Stay connected through our Debris Free NC pages on Facebook and Instagram!

