MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN

2021 ANNUAL REPORT

MARCO

MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN

A MESSAGE FROM THE MANAGEMENT BOARD

The Mid-Atlantic Regional Council on the Ocean (MARCO) had a busy year in 2021, filled with new partnerships, research and stakeholder engagement. We even welcomed a new chair to the management board, Ms. Kimberly Cole, Administrator of the Delaware Coastal Programs, who will serve a two-year term at the helm. Read on to learn about just some of MARCO's accomplishments in 2021.

In May we supported the Mid-Atlantic Committee on the Ocean (MACO) to host the third annual Mid-Atlantic Ocean Forum, where 634 participants joined virtually over four days to learn about regional ocean mangement issues. New to the 2021 forum was a focus on diversity, equity, inclusion and justice (DEIJ), with DEIJ initiatives woven throughout the presentations and a full session dedicated to expanding the conversation. We can't wait to continue those conversations into the future. But hosting the forum was not all that we got up to last year.

MARCO continued to build its partnership network with other regional organizations. In the fall MARCO signed a memorandum of understanding (MOU) with the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) to strengthen the ocean and coastal data collection capabilities of MARCO and MARACOOS. MARCO also joined the Northeast Regional Ocean Council (NROC) and The Coastal States Stewardship Foundation (CSSF) to co-host the Regional Wildlife Science Entity (RWSE) to support regional planning, coordination, and collaboration on research and monitoring for wildlife and offshore wind. In addition to expanding our partnerships to collect data we also commissioned a blue economy assessment for the Mid-Atlantic.

MARCO contracted with the Center for the Blue Economy at Middlebury Institute of International Studies at Monterey to complete the assessment looking at the economic value of the ocean and coasts of the Mid-Atlantic. The assessment is under review and will be published in 2022. We are looking forward to sharing it with you, our stakeholders, to support your work!

While 2021 was a busy year for MARCO, we have just as many projects and activities coming in 2022 that we are looking forward to implementing and sharing. From the release of the blue economy assessment, to helping host the fourth annual ocean forum, to identifying new partnership opportunities, MARCO is committed to researching and managing our coasts and oceans. We look forward to working with all of you in 2022 and in years beyond.

MARCO MANAGEMENT BOARD

DELAWARE
Kimberly Cole (Chair)
Delaware Coastal Programs
Delaware Department of Natural Resources and Environmental Control

NEW JERSEY
Kevin Hassell
New Jersey Coastal Management Program
New Jersey Department of Environmental Protection

VIRGINIA
Laura McKay
Virginia Coastal Zone Management Program
Virginia Department of Environmental Quality

MARYLAND
Catherine McCall
Chesapeake and Coastal Services
Maryland Department of Natural Resources

NEW YORK
Kisha Santiago-Martinez
New York Ocean and Lake Program
New York Department of State

ABOUT MARCO

The Mid-Atlantic Regional Council on the Ocean (MARCO) was established in 2009 by the governors of the five Mid-Atlantic coastal states: Virginia, Maryland, Delaware, New Jersey, and New York. MARCO is the recognized Regional Ocean Partnership in the Mid-Atlantic, and is led by a Management Board that comprises coastal managers or other state agency leadership from each of the five states.

SHARED PRIORITIES

Climate Change. Coastal and ocean communities and economies are already experiencing the impacts of climate change. There is increasing urgency to foster ocean and coastal resilience and better understand the ocean's role in mitigation. Learn more about how MARCO is advancing this priority on the Climate Change web page.

Marine Habitats. MARCO works to ensure the protection of marine habitats, including sensitive and unique offshore ecosystems such as deep-water corals and canyons. Learn more about how MARCO is advancing this priority on the Marine Habitats web page.

Renewable Offshore Energy. Many of the Mid-Atlantic states have set ambitious renewable energy goals, which may be met in large part through offshore wind development. MARCO is working to understand and plan for the impacts of this burgeoning industry on the region's ecosystems, economy, and infrastructure. Learn more about how MARCO is advancing this priority on the Renewable Offshore Energy web page.

Water Quality. MARCO works to improve the region's coastal and ocean water quality through actions that prevent or reduce marine debris and address coastal and ocean acidification. Learn more about how MARCO is advancing this priority on the Water Quality web page.

ADDITIONAL PRIORITIES

Diversity, Equity, Inclusion, and Justice. MARCO recognizes the need to engage a broader diversity of people and partners in ocean and coastal issues, and to create a deeper sense of our shared ocean culture and identity among residents of the region.

Regional Blue Economy. MARCO seeks to conduct actions that create a more sustainable and inclusive blue economy, with healthy ocean ecosystems as a foundation, in the Mid-Atlantic, particularly given ongoing impacts from the COVID-19 global pandemic.

DIVERSITY, EQUITY, INCLUSION AND JUSTICE

STATEMENT ON DIVERSITY, EQUITY, INCLUSION AND JUSTICE

We have a shared responsibility to care for the ocean, a vital component of the planet that supports society by providing sustenance, carbon and heat storage, ecosystem services, jobs, recreation, and a place for cultural and spiritual practices. These benefits should be accessible to everyone in the Mid-Atlantic region. However, past and current ocean use and planning efforts have not incorporated input from many in marginalized or vulnerable communities that may have carried the burden of negative impacts from coastal and ocean development.

Black, Indigenous, people of color, as well as underrepresented and marginalized communities have not been included or had access to participation in ocean decision-making processes. MACO is committed to listening and incorporating information from the widest possible set of stakeholders to better understand and address injustices and inequities. MACO will ensure its work reflects a commitment to Diversity, Equity, Inclusion and Justice (DEIJ), as well as addresses the needs of stakeholders from a variety of backgrounds and industries. Our efforts recognize past and current injustices related to ocean use, development, or climate change impacts. Moving forward we will examine and modify our actions to ensure we do not perpetuate those injustices in all activities of MACO.

STEPS MARCO AND MACO ARE TAKING TO INCREASE DEIJ

1. **Expand the stakeholders with whom we engage,** including collaborators and members of its work groups to reflect the full diversity of the Mid-Atlantic region.

2. **Provide opportunities** to be inclusive, ensure access to information, and foster transparent decision-making.

3. **Invest in gaining a better understanding of principles of ocean justice** and relevant governmental actions that have contributed to injustice.

4. **Commit to more thorough and inclusive data collection and mapping,** to identify resources and data that inform member entities on past and current ocean injustices, and increase understanding of disproportionate vulnerability to harm, or opportunities to share equitably in benefits as a result of ocean use and/or development.

5. **Expand information-sharing efforts** by encouraging forum participation and identifying resources that empower communities and entities to advance ocean justice, participate in decision-making, and gain new opportunities for determining ocean outcomes that affect their lives and communities.

6. **Incorporate these principles** into existing MACO framework documents.

7. **Advance this work** in each of our individual entities.

ACTIVITIES IN 2021 TO INCREASE DEIJ IN THE MID-ATLANTIC

Since the release of MARCO's Diversity, Equity, Inclusion and Justice (DEIJ) statement in 2019, we have **kept our commitment to listening and incorporating information from the widest possible set of stakeholders to better understand and address injustices and inequalities.** The seven action items in the DEIJ statement have helped guide us to move forward with this important initiative.

MARCO published a profile in the Ocean Data Portal's "Ocean Stories" section highlighting the personal and professional journeys of three Mid-Atlantic women at the core of Black in Marine Science's (BIMS) success: Symone Barkley, Dr. Jeanette Davis and Dr. Camille Gaynus. DEIJ was also a focus of the third Annual Ocean Forum. MARCO was honored to have a tribal blessing from Chickahominy Indian Tribe Chief Stephen R. Adkins. While DEIJ was woven throughout the forum, the full session to continue conversations had some of the most engagement from attendees of the entire forum. **The team is excited to continue weaving DEIJ throughout the sessions at the fourth Ocean Forum in 2022.**

As mentioned under MARCO Major Accomplishments and Projects **a new Indigenous Nations, Communities & Cultures map collection was assembled for the MARCO Portal** to assist with ocean planning and increase awareness of the region's deep American Indian heritage and history.

WORK GROUPS

MARCO and MACO collaborate with governmental agencies, tribal nations and many other interested stakeholders through a series of specially focused work groups. Additional work groups or other coordination efforts will be established and led by MARCO, federal agencies or other regional ocean partners to address emerging priorities over time, based on available resources.

COMMUNICATION COMMITTEE

The MARCO Communications Committee was established in June 2019 to increase stakeholder engagement around regional ocean issues. The committee is tasked with identifying channels, platforms, and opportunities for stakeholder input to achieve this goal. The committee also works on the creation and dissemination of interesting, timely content that seeks to elevate the issues and ocean resources of the Mid-Atlantic. Through the committee's effort, stakeholders have been engaged, retained, and educated on ocean resource conservation topics. An additional outcome from the committee's efforts is to increase the accessibility of MARCO's content.

MARINE DEBRIS WORK GROUP

This work group meets monthly to carry out social marketing campaigns and other activities to change behavior around the problems of consumer debris, derelict fishing gear, microplastics and abandoned or derelict vessels. Current focus is reducing the intentional release of helium balloons and the use of plastic water bottles. The work group monitors 1 mile stretches of beach in each state to collect data on marine debris types and amounts and displays the data on the MARCO ocean data portal. The group also organizes regional Marine Debris Summits.

MARITIME COMMERCE AND NAVIGATION SAFETY WORK GROUP

The MACO Maritime Commerce and Navigation Safety Work Group works to ensure that issues impacting the safe transit of people and goods on Mid-Atlantic waters are preeminently integrated into regional planning efforts. Among its roles, the work group shares information with the public on Coast Guard studies and proposals (e.g., port access route studies, new anchorage areas) through platforms including the Mid-Atlantic Ocean Data Portal, as well as prominent navigation safety issues including port/infrastructure changes and storm season updates.

MID-ATLANTIC COASTAL ACIDIFICATION NETWORK (MACAN)

This work group meets monthly to carry out social marketing campaigns and other activities to change behavior around the problems of consumer debris, derelict fishing gear, microplastics and abandoned or derelict vessels. Current focus is reducing the intentional release of helium balloons and the use of plastic water bottles. The work group monitors 1 mile stretches of beach in each state to collect data on marine debris types and amounts and displays the data on the MARCO ocean data portal. The group also organizes regional Marine Debris Summits.

MID-ATLANTIC OFFSHORE WIND REGIONAL COLLABORATION

The Mid-Atlantic Offshore Wind Regional Collaborative (OWRC) will work with the OMDT to identify data needs and how to obtain those data, will compile information about best practices and identify issues that would benefit from closer collaboration that are not already being addressed by other offshore wind working groups in the region. In addition, the OWRC is committed to working with MACO to support its commitment to Diversity, Equity, Inclusion and Justice (DEIJ) and seek to incorporate DEIJ objectives into its work.

NON-CONSUMPTIVE RECREATION WORK GROUP

The Non-Consumptive Recreation work group seeks to identify, characterize, and share information about measures to maintain the recreational value of important non-consumptive recreational areas and the activities they sustain.

OCEAN MAPPING DATA TEAM (OMDT)

The OMDT is a group of state, federal, and tribal agencies as well as consultants working to promote and develop data products for the MARCO Ocean Data Portal. The 40-member OMDT meets quarterly and advises the MARCO Management Board on data and tools to be added to the Portal. There is a wide range of ocean data presented on the Portal including (but not limited to): administrative boundaries, marine life abundance, oceanography, and human uses.

MID-ATLANTIC COMMITTEE ON THE OCEAN (MACO)

STEERING COMMITTEE

MACO is a committee established by the Mid-Atlantic Regional Council on the Ocean (MARCO), the Mid-Atlantic regional ocean partnership (ROP), to foster collaboration among states, federal agencies, the Mid-Atlantic Fishery Management Council (MAFMC), and federally recognized tribes and with stakeholders.

STATE GOVERNMENT

Kimberly Cole
Delaware Department of Natural Resources and Environmental Control

Kevin Hassell
New Jersey Department of Environmental Protection

Mike Snyder (Chair)
New York Department of State

FEDERAL GOVERNMENT

Wright Frank
Bureau of Ocean Energy Management

Roselle (Henn) Stern
Army Corps of Engineers

Tricia Hooper
National Oceanic and Atmospheric Administration

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

Jessica Coakley
Mid-Atlantic Fishery Management Council

FEDERALLY RECOGNIZED TRIBES

Dr. Kelsey Leonard
Shinnecock Indian Nation

ABOUT MACO

The Mid-Atlantic Committee on the Ocean (MACO) is a committee established by MARCO to foster collaboration among states, federal agencies, the Mid-Atlantic Fishery Management Council (MAFMC), and federally recognized tribes, and to engage stakeholders. The purpose of MACO is to enhance the vitality of the region's ocean ecosystem and economy through increased communication and collaboration.

COLLABORATIVE EFFORTS

MARCO and MACO collaborate with governmental agencies, tribal nations and many other interested stakeholders through a series of specially focused work groups on marine debris, ocean acidification, ocean mapping and data, non-consumptive recreation, and offshore renewable energy.

MACO'S GOALS

- Provide a venue for ongoing regional information sharing and coordination about the Mid-Atlantic's Ocean ecosystem and economy;
- Generate a deeper understanding and awareness of state, federal, tribal and regional fisheries management entities' programs and other activities affecting ocean waters off the Mid-Atlantic;
- Identify and pursue, where appropriate, opportunities for collaboration on regional ocean issues;
- Generate and maintain a list of contacts engaged in ocean planning to facilitate communication across the region;
- Identify ways to enhance federal data sharing and support for the Mid-Atlantic Ocean Data Portal to inform ocean planning and management; and
- Engage stakeholders in learning about, identifying and responding to regional ocean issues.

REGIONAL WILDLIFE SCIENCE ENTITY (RWSE)

ABOUT THE RWSE

The Regional Wildlife Science Entity (RWSE) is a collaborative entity among four sectors – federal agencies, state agencies, environmental non-governmental organizations, and offshore wind companies. The RWSE mission is to, "collaboratively and effectively conduct and coordinate relevant, credible, and efficient regional monitoring and research of wildlife and marine ecosystems that supports the advancement of environmentally responsible and cost-efficient offshore wind power development activities in U.S. Atlantic waters."

The RWSE concept was developed over the course of two years (2019-21) by the New York State Energy Research and Development Authority (NYSERDA), the Massachusetts Clean Energy Center, and a broad set of stakeholders developed a vision for a regional science organization to support research and monitoring for wildlife and offshore wind energy. In July 2021, NROC, MARCO, and CSSF were selected to host the RWSE. Since launching the organization, the Steering Committee, four sectors, and hosts have developed a plan to collaboratively fund the development of an Integrated Science Plan for Offshore Wind and Wildlife ("Science Plan") by early 2023. The Science Plan will articulate the data collection and analysis activities needed for identifying, assessing, and avoiding impacts to the distribution, abundance, and behavior of wildlife due to offshore wind development, and will provide a roadmap for funding those activities. The four sectors and scientific experts are supporting Science Plan development through several taxa-based Subcommittees.

RWSE STEERING COMMITTEE

The Steering Committee contains equal representation of the four Sectors. Representatives are elected by the members of each Sector Caucus. The committee will leverage the expertise of these entities, many of which are already involved in a host of studies to evaluate potential effects of offshore wind development on wildlife and ecosystems. Scientific and technical experts throughout the region will also be invited to provide input on topics such as research priorities, monitoring methods, interpretation of results, and data management.

Atlantic Shores Offshore Wind

Bureau of Ocean Energy Management (BOEM)

Equinor

Maryland Department of Natural Resources

Maryland Energy Administration (alternate member)

Massachusetts Clean Energy Center

National Audubon Society

National Oceanic and Atmospheric Administration (NOAA)

Natural Resources Defense Council
The Nature Conservancy

New York State Energy Research and Development Authority

Orsted North America

Shell (alternate member)

United States Fish and Wildlife Service

ONGOING AND COMPLETED PROJECTS

COMMISSIONED A MID-ATLANTIC BLUE ECONOMY ASSESSMENT

MARCO partnered with the Middlebury Institute and Dr. Charles Colgan to develop a Mid-Atlantic Blue Economy Assessment, which updates the marine economy definition in the region and examines several other sectors relevant to the region's blue economy.

NOAA Economics: National Ocean Watch (ENOW) data on the state ocean economy has been available for some time, but the measurement of the U.S. ocean economy has advanced with the publication by the U.S. Bureau of Economic Analysis (BEA) of the Maritime Economy Satellite Account in June 2020. **The Mid-Atlantic Blue Economy Assessment began the process of updating the economic data available to the states so it reflects broader and more refined measures at the national level.**

The **sectors included in the report are marine research and education; state government; and electric power generation.** MARCO and Middlebury Institute are also working to increase the precision of the ocean components of the tourism & recreation sector, and adding an estimate of the role of blue carbon in the Mid-Atlantic Ocean economy.

As a result of this initiative a report containing data for each state will be published in spring 2022. The data will be placed on the Middlebury Institute's website and the Mid-Atlantic Ocean Data Portal.

SECURED LEADERSHIP FOR THE RWSE

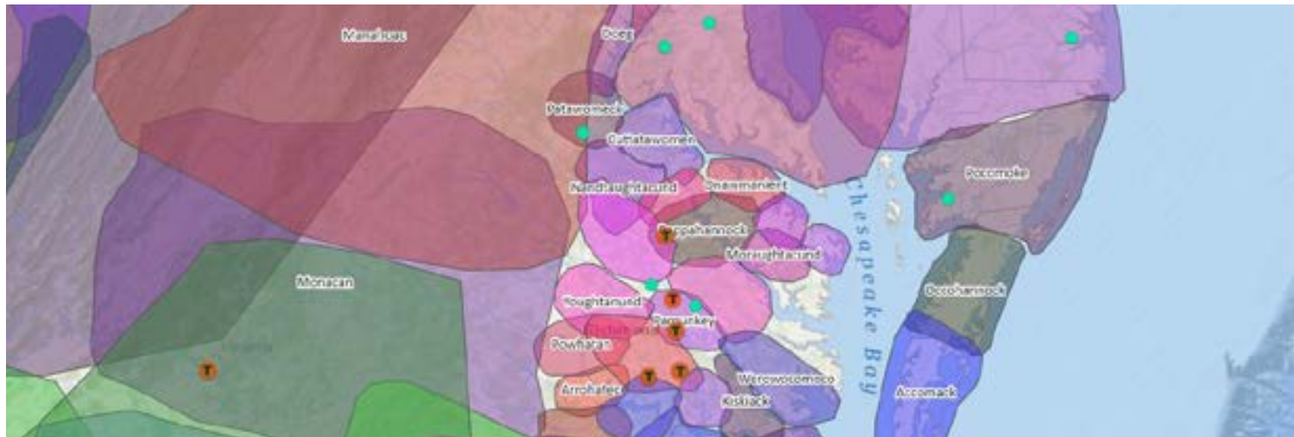
In July 2021, **NROC, MARCO, and CSSF announced that they were selected to host the Regional Wildlife Science Entity (RWSE).** You can learn more about the new partnership in a 2021 press release.

HOSTED THE 3RD ANNUAL MID-ATLANTIC OCEAN FORUM

Held virtually from May 3-6, the Ocean Forum began with a tribal blessing from Chickahominy Indian Tribe Chief Stephen R. Adkins. **The Forum featured panel discussions on ocean planning issues including offshore wind energy in the Mid-Atlantic, climate-induced ocean changes, ocean justice, and emerging technologies for monitoring the ocean.** The event also featured opportunities for public participation from 634 participants over four days and a poster session highlighting the work of students from throughout the region. The forum recording and agenda can be found online.

CREATED A MID-ATLANTIC TRIBAL LAND LAYER FOR THE PORTAL

A new Indigenous Nations, Communities & Cultures map collection was assembled for the MARCO Portal to assist with ocean planning and increase awareness of the region's deep American Indian heritage and history. T**he collection contains three maps based on federal datasets and two added in collaboration with the Indigenous-led nonprofit organization Native Land Digital.** The Portal's previously published map showing the headquarters locations of state and federally recognized tribes in the Mid-Atlantic was also updated as part of the effort.



LAUNCH OF BALLOON REDUCTION CAMPAIGN

The community based social marketing (CBSM) campaign to reduce the intentional release of balloons created messaging based on feedback from community surveys. **The pilot campaign was launched on October 20th in partnership with the National Aquarium, Virginia Aquarium and New York Aquarium.** Social media, posters hung at aquariums and pledges were **used to raise awareness about the harms of releasing balloons and offering alternative ways to celebrate** or honor loved ones. In addition, a **website was created to provide alternative activities** for families and groups to do instead of balloon releases.

UPDATED MARCO'S WORK PLAN

The MARCO management board worked with stakeholders and partners to identify what activities MARCO will work on over the next two years. **The work plan spans 2022-24 and includes goals and strategies that MARCO will be undertaking.** The work plan will be shared with stakeholders and partners in 2022.

MARCO BY THE NUMBERS

7 INTERAGENCY WORK GROUPS AND COMMITTEES

1,050 NEW MAPS ADDED TO THE DATA PORTAL

13% INCREASE IN DATA PORTAL USERS

17 DATA PORTAL WEBINARS AND TUTORIALS

4 MARCO WEBINARS

10 SECTORS REPRESENTED AT WEBINARS

1,137 ATTENDEES AT MARCO WEBINARS

634 ATTENDEES AT MACO OCEAN FORUM

2,173 LISTSERV MEMBERS

CLIMATE CHANGE ADAPTATION

The Atlantic Ocean provides commercially, recreationally, and ecologically important resources that support the region's coastal economies and communities. Coastal states in the region are seeking to understand how a changing climate impacts the ocean so they can plan and adapt accordingly.

SUPPORTING OCEAN ACIDIFICATION ACTION PLANNING AND IMPLEMENTATION IN THE MID-ATLANTIC WORKSHOP

The Mid-Atlantic Coastal Acidification Network (MACAN) **co-hosted the workshop in partnership with the Ocean Acidification (OA) Alliance** on October 26, 2021. With the majority of the Mid-Atlantic coastal states pursuing OA Action Planning, **the workshop connected 137 researchers and state agency decision makers** from across the region to support OA Action Planning.

Workshop recording 1: https://vimeo.com/653772335
Workshop recording 2: https://vimeo.com/653780611

CLIMATE CHANGE AND THE IMPACTS TO DEEP-SEA CORALS WEBINAR SERIES

A webinar on climate change and the impacts to deep-sea corals was held on June 24 to celebrate World Oceans Month. Scientists from Woods Hole Oceanographic Institution and Temple University presented on:

- **Air-sea interactions** critical to large-scale weather and climate predictions.
- **Habitat suitability models for Lophelia pertusa,** the primary reef-forming species in the region and the wider deep-sea.
- **Projections of Lophelia pertusa distribution and abundance from present-day to 2050 and 2100** in four emissions scenarios ranging from a 'sustainable future' to 'business-as-usual.

Webinar recording available online at:
https://youtu.be/rXxlIVZ3T1Q.

CLIMATE-INDUCED OCEAN CHANGES WEBINAR

In the summer 2021, MACO hosted a **webinar series on climate-induced changes in the ocean** based on feedback from stakeholders at the 2020 forum who expressed interest in learning more on the topic.

The **three part webinar series** kicked off with a **plenary session at the 2021 Forum** focused on how climate change is impacting ocean processes, including deoxygenation of marine and estuarine waters in the region.

The **two subsequent webinars were hosted in partnership with MARACOOS and NOAA's Eastern Region Climate Team** as part of the Climate Team's monthly webinars. The first webinar in June focused on the **impacts to the Atlantic Meridional Overturning Circulation** and the second in July covered the **general causes and consequences of a warming ocean.**

OCEAN ACIDIFICATION WEBINAR SERIES

January: Examining the Biological Responses of Ocean Acidification in Early Life-Stages of Fishes of Inshore Waters of the Mid-Atlantic

February: Climate Change and Submerged and Cultural Resources in the Mid-Atlantic

April: State-Led Ocean Acidification Action Planning in the Mid-Atlantic

Webinar recordings available online at:
https://midacan.org/webinars

MARINE HABITATS

Cold-water corals, deep submarine canyons, and a broad, sandy continental shelf are among the diverse ocean habitats of the Mid-Atlantic region. In addition to being home to and critical migration corridors for wildlife like sea turtles, whales, dolphins, seabirds, fish, crustaceans, corals, and other species, these habitats support commercial and recreational fisheries and other important economic activities in the region. MARCO is working with partners to map and document the Mid-Atlantic Ocean habitats in order to maintain sustainable resource use and healthy ecosystems in light of climatic changes and increased human use pressure.

UPDATED FISH, MAMMAL DATA AND BIRD DATA MAP LAYERS

The MARCO Portal, in coordination with the Marine-life Data and Analysis Team (MDAT), NOAA Northeast Fisheries Science Center (NEFSC), OceanAdapt, and Northeast Ocean Data Portal, **published several hundred maps depicting the distribution and biomass of fish species in the northeastern U.S. continental shelf ecosystem**. The update incorporated three new years of federal trawl survey data into the Portal's **collection of fish maps so they now cover a full decade (from 2010-19).**

Work began to produce a more precise version of the Portal's North Atlantic right whale model and new fish species maps that represent past decades and depict distributions of fish that are most vulnerable to submarine cable projects.

A map depicting the first satellite tracks for individual black-capped petrels was also added to the MARCO Portal in collaboration with the U.S. Geological Survey South Carolina Cooperative Fish and Wildlife Research Unit, U.S. Fish & Wildlife Service and Northeast Portal. The endangered seabird has fewer than 2,000 breeding pairs and is known to migrate between the Caribbean and Mid-Atlantic waters.

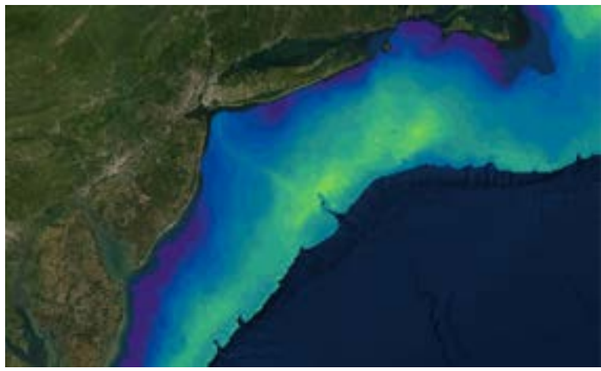
NEW STORY MAPS ON THE MARCO PORTAL

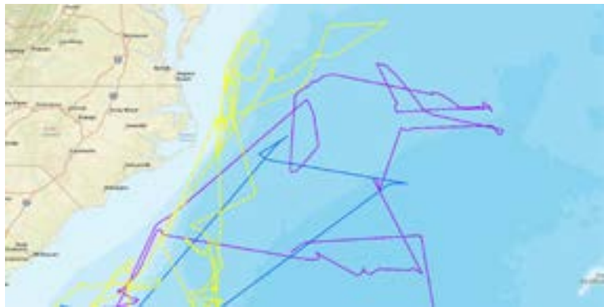
Building upon MARCO's 2020-21 webinar series on the region's canyons and corals, a story map was produced titled "Deep Sea Treasures of the Mid-Atlantic: Norfolk, Hudson, and Baltimore Canyons." Together with a collection of images available on the MARCO website and map data available on the Portal, MARCO has **produced a package of digital content that offers the public a rare glimpse at life in the deepest reaches of our coast.**

The **MARCO Portal's "Ocean Stories" section profiled three** Mid-Atlantic women at the core of Black in Marine Science's success: Chief Learning Officer Symone Barkley, then an environmental educator at the National Aquarium in Baltimore; Chief Innovation Officer Dr. Jeanette Davis, a children's book author and marine environmental DNA (eDNA) researcher at NOAA in Maryland; and Chief Financial Officer Dr. Camille Gaynus, a postdoctoral researcher at the University of Pennsylvania in Philadelphia. **The story recounted their professional journeys, common bond as graduates of Hampton University in Virginia, and role in building what only months earlier began as a Twitter thread into an influential nonprofit dedicated to making the marine science field more diverse.**

REGIONAL WILDLIFE SCIENCE ENTITY

The new Regional Wildlife Science Entity (RWSE) **will support regional planning, coordination, and collaboration on research and monitoring for wildlife and offshore wind energy**. Administered and directed by the Northeast Regional Ocean Council (NROC), Mid-Atlantic Regional Council on the Ocean Coastal States Stewardship Foundation (MARCO), and the (CSSF), RWSE **aims to create an essential forum for sharing information, standardizing data collection and monitoring protocols, defining key scientific research needs** at project and regional scales, and amplifying the results of existing and ongoing research.





WATER QUALITY

In recent decades, the Mid-Atlantic states have made progress in reducing degradation of marine waters, particularly with respect to nutrients and sediments. Yet, despite federal and state legal and regulatory frameworks which seek to improve water quality in the Mid-Atlantic, problems such as plastics and marine debris remain and are even increasing. MARCO is working regionally to address both existing and emerging marine water quality concerns.

LAUNCH OF BALLOON REDUCTION CAMPAIGN

The community based social marketing (CBSM) campaign to reduce the intentional release of balloons created messaging based on feedback from community surveys. **The pilot campaign was launched on October 20th in partnership with the National Aquarium, Virginia Aquarium and New York Aquarium.** Social media, posters hung at aquariums and pledges were **used to raise awareness about the harms of releasing balloons and offering alternative ways to celebrate** or honor loved ones. In addition, a website was created to provide alternative activities for families and groups to do instead of balloon releases.

MARINE DEBRIS SUMMIT

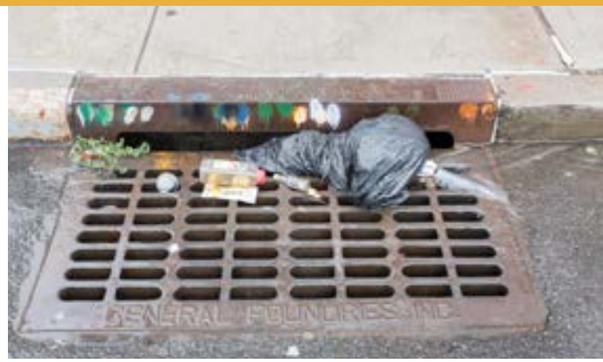
The 2021 Marine Debris Summit **brought together researchers, policymakers, educators and businesses to present research and solutions to decrease litter and marine debris in the Mid-Atlantic and envision a future without marine debris.** The types of marine debris explored during this Summit included consumer and single-use plastics, microfibers and microplastics, and derelict and abandoned fishing gear. **This virtual three day event included 335 attendees from 15 states and 21 international countries.**

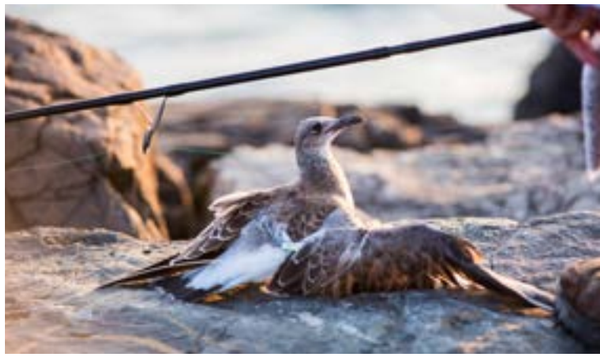
MARINE DEBRIS STORY MAP

In conjunction with the campaign launch, **three maps added to the Portal marked locations throughout the region where MARCO initiated recurring beach cleanups beginning in 2016 and recorded how many pieces of balloon litter and other plastic trash were recovered.** Users can click any of these mile-long sites for a pop-up showing statistics for each month or season when collections took place, as well as the total amount of marine debris collected in each location. As a companion to the maps, MARCO and the Virginia Coastal Zone Management Program created an educational story map **that explores the issue of balloon litter in the coastal and marine environment and provides information about each of the survey locations.**

SUBMITTED A MARINE DEBRIS REDUCTION GRANT LETTER OF INTENT

During the 2020 International Coastal Cleanup, **plastic bottles and bottle caps ranked in the top three categories of debris in every Mid-Atlantic State and the District of Columbia.** This project, if accepted for funding, will apply several Community-Based Social Marketing (CBSM) techniques to **increase the use of reusable water bottles and decrease single use plastic water bottle and cap litter in the marine environment.** This project **will focus on access to clean water through water bottle refilling stations**, an identified barrier to the behavior of single use water bottle use, while **providing sustainable improvement to coastal and ocean habitats** identified as critical for federally and state listed marine species.





RENEWABLE ENERGY

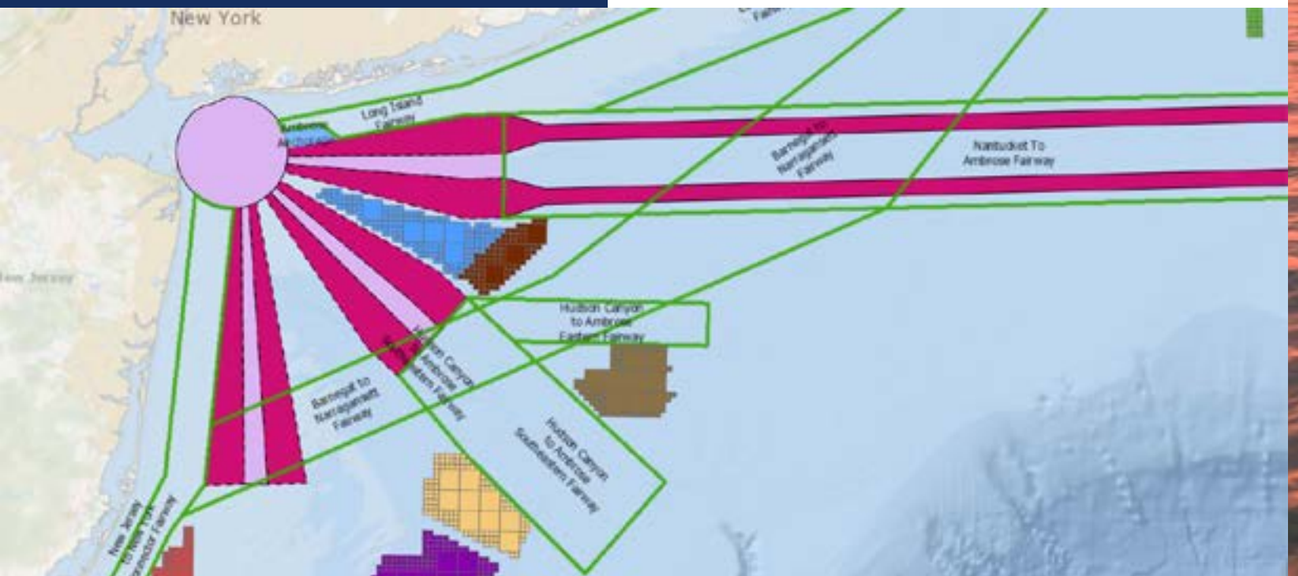
The importance of reducing greenhouse gas emissions, achieving energy independence, and relieving congested energy transmission routes has elevated renewable energy on U.S. public policy agendas and in the public consciousness. With a gently sloping continental shelf and strong offshore winds, the Mid-Atlantic is well-suited to offshore wind development, which could be a solution for states to meet renewable portfolio standards and goals. As offshore wind development ramps up, states are tasked with considering how this exciting new industry will affect the busy and ecologically productive waters of the Mid-Atlantic.

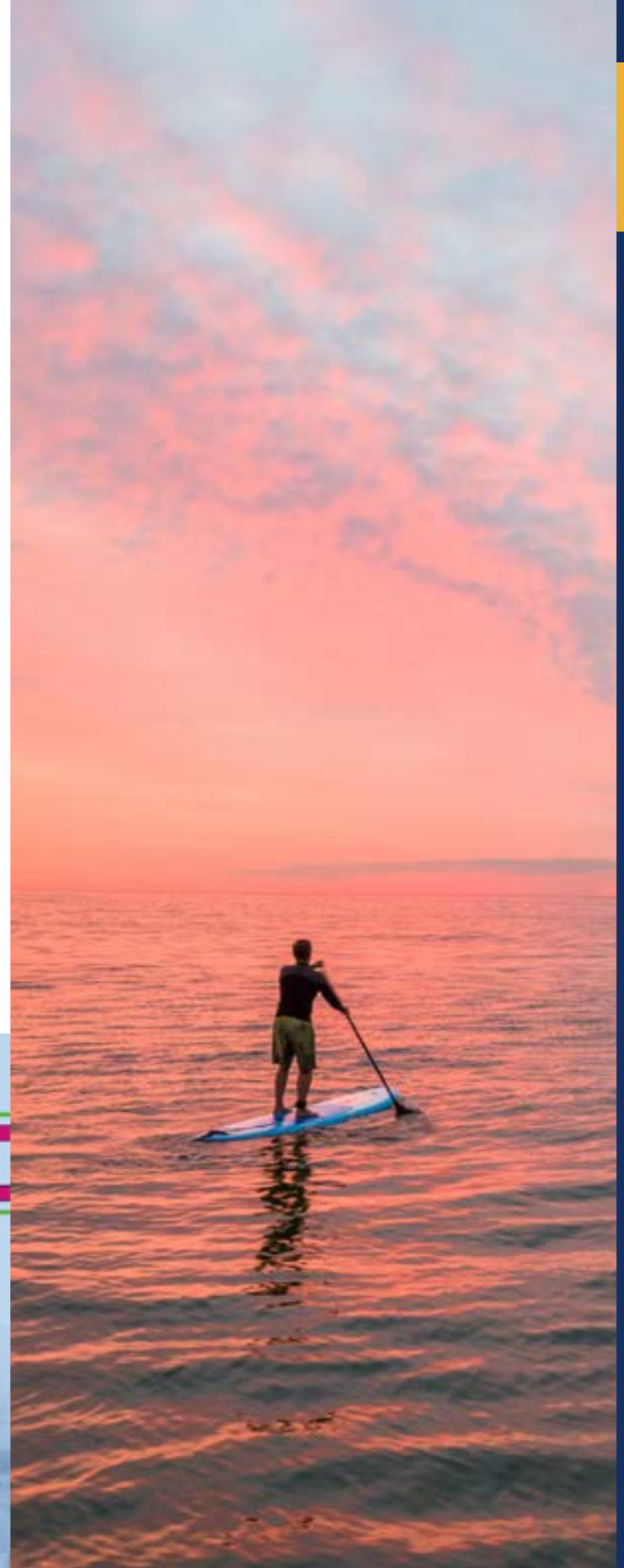
PORT ACCESS ROUTE STUDIES

The Portal served as a hub for public engagement on a series of U.S. Coast Guard Port Access Route Study (PARS) reports for the Northern New York Bight, New Jersey Coast/Delaware Bay, and Chesapeake Bay approaches. **Federal Register notices published by the Coast Guard encouraged the public to visit the Portal to view routing measures proposed in the studies** and the site was cited frequently by maritime industry representatives and stakeholders as they submitted comments.

NEW YORK BIGHT OFFSHORE WIND LEASE AREA MAPS

The Portal tracked the latest developments regarding proposed offshore wind energy areas in the New York Bight and promptly made interactive maps available to the public. In collaboration with NOAA and the Regional Wildlife Science Entity, the MARCO and Northeast portals also **added maps to represent the components of a proposed Passive Acoustic Monitoring design for regional long-term monitoring of marine mammals** in the region's offshore lease areas and wind energy areas.





FUNDERS SUPPORTING MARCO'S GOALS

With MARCO's partners and funders' support, MARO continues to create communications products, collect data and engage in research to improve how ocean resources are managed in the Mid-Atlantic.

GEORGE AND BETTY MOORE FOUNDATION

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

NEW YORK STATE DEPARTMENT OF STATE

VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM

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