MARCO has identified several tasks, tied to specific actions, to accomplish these broader goals:

1. Through the Mid-Atlantic Committee on the Ocean (MACO), foster collaboration among states, federal agencies, the Mid-Atlantic Fishery Management Council, federally recognized tribes, and stakeholders.

2. Identify opportunities for regional coordination of research, monitoring, and outreach around ocean and coastal acidification in the Mid-Atlantic.

3. Minimize conflicting uses related to offshore wind development through stakeholder engagement.

4. Reduce or prevent marine debris by implementing regional behavior change campaigns using community-based social marketing (CBSM) and build acceptance of marine debris reduction policies in the Mid-Atlantic.

5. Reduce potential harmful encounters between wildlife and recreators by increasing awareness of and access to state or regional best practices.

6. Update Portal data layers to better represent commercial and recreational fisheries interests and incorporate new marine life information into the Portal.

7. Maintain and enhance Portal operations and communications.

8. Maintain and enhance MARCO Management Board activities, operations, administration, and capacity.

In 2023, we will begin the important work of putting these tasks in action. We will welcome new members to the MARCO staff to help manage and provide outreach for ongoing and new projects related to ocean issues in early 2023. In the spring, accessibility improvements to MARCO webpages and the CBSM surveys mentioned above, will be implemented. Tribal outreach will begin in the summer. Engagement and listening sessions will be woven throughout the remainder of the year.

Throughout 2023, we will have plenty of events for stakeholders and the public to join us for learning opportunities, including DEIJA & Ocean Planning Webinars/Workshops, the fifth annual Mid-Atlantic Ocean Forum, Ocean Acidification State of the Science meeting, an Offshore Wind Transmission Workshop series, and a Marine Debris Summit. The Ocean Conservation Work Group will provide education on the National Marine Sanctuary designation process, such as the proposed Hudson Canyon, and highlight how the Portal can be used to visualize resources in the area. Additionally, updates and maintenance to MARCO webpages and the Portal will continue to be a priority.

Finally, we are excited that Regional Ocean Partnerships (ROPs) received federal authorization under the National Atmospheric and Oceanic Administration (NOAA) through the passing of the ROP Act in December 2022. The authorization recognized all four existing ROPs, including MARCO as well as the Northeast Regional Ocean Council, the Gulf of Mexico Alliance, and the West Coast Ocean Alliance. It also articulated a governance structure and framework to inform potential new partnerships. The full legislation can be found here, with Regional Ocean Partnerships beginning on page 3868.

Big things are in store this year, and we look forward to sharing them with you to support your work and ensure a healthy ocean ecosystem and economy!

Kimberly Cole, Chair
a. In support of the efforts to be inclusive, and to ensure access to information or enjoyment of ocean resources, MARCO added “Accessibility” to its Statement on Diversity, Equity, Inclusion, Justice, and Accessibility. Accessibility means having a place, environment, or event that is set up from the start to be accessible to all individuals. Accessibility provides for the “ability to access” the functionality, and possible benefit, of some system or entity and is used to describe the degree to which a product or service is accessible by as many people as possible. There may be barriers to access for a variety of reasons—for example, underserved communities can experience barriers to access due to language differences or difficulties attending meetings due to venues, times, or travel costs. (National Collaborative on Workforce and Disability definition.)

b. MACO member agencies participated in a workshop to identify segments of the population in the Mid-Atlantic that are disproportionately impacted (either positively or negatively) by decision-making or management of ocean uses, understand those impacts, and further engage those groups in MACO-led ocean use discussions. Disproportionately affected segments of the Mid-Atlantic population were identified and ways to expand engagement were considered. The workshop ideas became the basis for a draft DEIJA plan to apply DEIJA principles within MACO and across its member organizations in 2023-2024.

c. Work Groups have identified stakeholder groups with whom they could more effectively engage. Their 2023 work plans will include ways to obtain and incorporate information from a wider set of stakeholders in ocean planning and more equitably deliver MACO products and services.

DIVERSITY, EQUITY, INCLUSION, JUSTICE AND ACCESSIBILITY

**Steps MARCO and MACO are Taking to Increase DEIJA**

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.
**ONGOING/COMPLETED PROJECTS**

**FOURTH ANNUAL OCEAN FORUM**
Held virtually from May 5-6, the 2022 Ocean Forum featured plenary sessions, presentations and panel discussions on blue carbon as a climate change mitigation strategy, sustainable ocean ecosystems, and planning for sustainable ocean economies. For the first time, pre-recorded presentations were available on demand prior to and during the Forum. ([Watch ON-DEMAND PRESENTATIONS](#)). A poster session highlighted the work of students from throughout the region. ([See the POSTERS](#)). ([Watch the Forum RECORDING](#)).

**CONNECTING VIRGINIA’S OCEAN ACTION PLAN WITH REGIONAL OCEAN PLANNING EFFORTS AND DATA**
With funding from Virginia’s CZMA FY21 program, MARCO coordinated the Virginia Ocean Planning efforts over the course of October 2021 - September 2022 with ongoing and future regional ocean planning opportunities. The project team, which included the MARCO Program Director as well as the MARCO Operations Manager, coordinated among three regional, topic-specific work groups (the Mid-Atlantic Coastal Acidification Network, the Offshore Wind Regional Collaboration, and the Ocean Mapping & Data Team) to help inform the Virginia Ocean Plan about regional activities and data that could be leveraged or elaborated upon at the state level, and to connect Virginia’s priorities to regional resources. The Liaison participated in calls and meetings of the regional ocean planning community and the Virginia Ocean Planning Committee to connect these efforts in light of Virginia’s ocean planning needs.

**EXPLORE THE MID-ATLANTIC BLUE ECONOMY**
MARCO released [New Perspectives on the Ocean Economy in Mid-Atlantic States](#), which calculates the contributions of oft-overlooked portions of the ocean economy, concluding that marine research and education, state expenditures related to the ocean, and coastal electricity production support $8,000 jobs and $25.5 billion in annual economic activity. The analysis also uses a new approach to estimate the value of peak summer tourism with greater precision than standard government measures, and for the first time attempts to place an economic value on the region’s “blue carbon” – the ability of marine plants to store carbon that would otherwise be released to the atmosphere and exacerbate climate change. This report explores the impact of ocean-reliant economic activity in sectors that haven’t been covered by other analyses, but play an essential role in supporting jobs, wages and businesses.

**SOCIAL MEDIA USE**
By increasing the use of Instagram and Facebook, MARCO stayed better in touch with stakeholders by sharing educational campaigns such as Prevent Balloon Litter, highlighting tourism in each of the Mid-Atlantic states, marine sanctuaries education, and celebrating 50 years of ocean and coastal conservation. Sharing these campaigns allowed MARCO more frequent interaction with our followers than quarterly newsletters alone.

**SITING CHALLENGES IN FEDERAL WATERS**
An Offshore Wind Regional Collaborative (OWRC) transmission siting subcommittee identified and prioritized 33 transmission siting challenges in federal waters. Each challenge was assigned two prioritizations based on how important it is to avoid the challenge, and data availability on the MARCO Ocean Data Portal. Our analysis showed: 1) a strong alignment exists between federal and state agencies on the challenges identified; 2) the Portal contains a majority of the up-to-date, high-quality data needed to avoid or minimize transmission siting challenges in federal waters; and 3) resulted in a short list of priorities to focus on so that newly proposed projects will have the best available desktop data on which to design their envelope of transmission routes. Work commenced on a two-part story map series to provide the basics of transmission planning, the sub-committee efforts, and an interview with an offshore wind developer representative from Dominion Energy, which explores the considerations developers must take into account when planning and constructing power cables connecting from offshore wind farms to terrestrial power infrastructure. This work has not yet been released.

**PORTAL TOOL ENHANCEMENTS**
Major upgrades to a pair of the MARCO Portal’s tools enabled registered users to combine and compare its thousands of interactive maps with data from external sources in new ways to reveal potential relationships, answer questions and tell stories. The Shapes Tool (formerly “Drawings”) was expanded to allow users to upload GIS files such as shape files and latitude/longitude coordinates from their desktops, save them in their MyPlanner tabs, and share them with fellow Portal Groups members. In addition, the Map Layer Import Tool was improved to allow users to display a wider selection of map data types from outside websites. Finally, the MARCO Portal continued its partnership with the Mid-Atlantic Regional Association Coastal and Ocean Observing System (MARACOOS) by maintaining a number of long-term oceanography data products based on its real-time data.

**FISHING STAKEHOLDER ENGAGEMENT RELATED TO FISHING DATA ON THE MID-ATLANTIC OCEAN DATA PORTAL**
With funding from the Virginia Coastal Zone Management Program, MARCO hosted a webinar in partnership with the Northeast Regional Ocean Council (NROC) and the Responsible Offshore Development Alliance (RODA) to update stakeholders on recent fishing data product developments and enhancements on the Mid-Atlantic Ocean Data Portal. Participants were also sent a follow-up survey to ascertain opinion of the Portal usability and data products.
NEW! OCEAN CONSERVATION WORK GROUP
An Ocean Conservation work group was established to provide a forum for discussing what steps could be taken to identify conservation measures and ocean areas in the Mid-Atlantic that should be prioritized for conservation and identify relevant data needs. Stay tuned in 2023 for more details.

MID- ATLANTIC COASTAL ACIDIFICATION NETWORK (MACAN)
MACAN is coordinated by both MARCO and the Mid-Atlantic Regional Association Integrated Ocean Observing System (MARACOOS) to foster collaboration and coordination across sectors and states in the Mid-Atlantic regarding ocean and coastal acidification.

OCEAN MAPPING DATA TEAM (OMDT)
The OMDT work group promotes and develops data products for the MARCO Ocean Data Portal. Data products are developed to ensure decision making is based on the best quality data available.

MARINE DEBRIS WORK GROUP
The Marine Debris Work Group increases coordination and builds shared understanding around current and emerging marine debris issues. The Work Group has been focused on behavior change projects using Community-Based Social Marketing (CBSM), specifically on balloon-release behaviors. They have developed a regional campaign based upon CBSM research and concepts to prevent balloon releases.

MID- ATLANTIC OFFSHORE WIND REGIONAL COLLABORATION (OWRC)
Mid-Atlantic Offshore Wind Regional Collaboration (OWRC) provides a forum for interested MACO members to share and receive information about meetings and decision points related to offshore wind in the Mid-Atlantic. The Work Group has been focused on transmission siting challenges in federal waters.

MARITIME COMMERCE AND NAVIGATION SAFETY
The Maritime Commerce and Navigation Safety work group works to ensure issues impacting the safe transit of people and goods on Mid-Atlantic waters are preeminently integrated into regional planning efforts.

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.

COMMUNICATION COMMITTEE
The MARCO Communications Committee identifies opportunities for diverse stakeholder input, creates and disseminates timely content that elevates ocean issues and resources of the Mid-Atlantic and plans for greater integration of diversity, equity, inclusion and accessibility of MARCO content.
# MARCO by the Numbers

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>130,000</strong></td>
<td>Map layer activations on Mid-Atlantic Ocean Data Portal</td>
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<td><strong>8</strong></td>
<td>Interagency Work Groups and Committees</td>
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<tr>
<td><strong>240</strong></td>
<td>New maps added to portal</td>
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<td><strong>17</strong></td>
<td>Portal webinars, trainings &amp; demos</td>
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<td><strong>6</strong></td>
<td>Webinars held</td>
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<td><strong>18%</strong></td>
<td>Increase in use of Mid-Atlantic Ocean Data Portal’s Marine Planner</td>
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<tr>
<td><strong>328</strong></td>
<td>Webinar participants from 6 sectors</td>
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<td><strong>184</strong></td>
<td>Participants at the 2022 Ocean Forum</td>
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<td><strong>2,581</strong></td>
<td>Listserv members</td>
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CLIMATE CHANGE ADAPTATION

EXPANDING KNOWLEDGE OF OCEAN AND COASTAL ACIDIFICATION

The Mid-Atlantic Coastal Acidification Network (MACAN) hosted its annual webinar series in spring 2022. The series included a demonstration of a coastal acidification module for Mid-Atlantic teachers, highlighted research conducted by Sea Grant Ocean Acidification Fellows, and examined how scientists are linking biological monitoring with chemical observations to understand potential impacts of Ocean Acidification. Recordings of the webinars are on the MACAN website here. The MACAN Steering Committee also provided feedback and comments on the Mid-Atlantic chapter of the NOAA Coastal Community Vulnerability Assessment that is being compiled by the Interagency Work Group on Ocean Acidification. Finally, MACAN initiated a regional ocean and coastal monitoring inventory by disseminating a questionnaire that was distributed to hundreds of stakeholders in the region. The results of the survey will be synthesized in calendar year 2023, and will result in an update to the acidification monitoring maps on the Mid-Atlantic Ocean Data Portal.

COLLABORATIVE EFFORT TO EXPAND DATA

MARCO collaborated with the Marine Life Data & Analysis Team (MDAT) and the Northeast Regional Ocean Council to introduce new fish biomass data products on the Portal derived from the NOAA Northeast Fisheries Science Center bottom trawl database. Where the Portal previously housed species group data for 2010-19, three more decades were added, enabling users to animate or toggle through time series maps showing fish group distributions back to 1980 and analyze how their distributions may have changed.

NEW MARINE MAMMAL DATA

Perhaps no area of the MARCO Portal’s catalog saw an expansion in 2022 like its marine mammal data. A series of new maps charted the locations of marine mammal stranding events reported over the course of two decades from Virginia to Maine, with data maintained by NOAA and gathered by members of the U.S. National Marine Mammal Stranding Network. The Portal’s monthly North Atlantic right whale maps were recreated at higher resolutions using new distribution data. The Portal’s cetacean species group products were also updated to reflect this new data. And in collaboration with industry members and experts, MARCO created a map showing the most popular areas for whale and dolphin watch tourism off the Mid-Atlantic coast.

MARCO RESPONDS TO THE OCEAN CLIMATE ACTION PLAN

MARCO submitted input to inform the development of the Ocean Climate Action Plan. Several ocean and coastal activities are vital contributors to the Mid-Atlantic regional sustainable ocean economy which should be considered as ocean climate actions are developed. Other areas of emphasis included knowledge, science and technology and the importance of partnerships and collaboration.

MARINE HABITATS

RWSC

The Regional Wildlife Science Collaborative for Offshore Wind (RWSC) made significant progress in 2022 on developing the Integrated Science Plan for Offshore Wind and Wildlife (“Science Plan”). Four Subcommittees convened once per month to identify ongoing research and field activities related to offshore wind and marine mammals, birds & bats, sea turtles, and habitat & ecosystem off the Atlantic coast. These Subcommittees are leading the authoring of the Science Plan, a draft of which is anticipated in mid-2023. The Subcommittee meetings are continuing into 2023 and are open to the public. You can join those meetings by visiting www.rwsc.org/events. The RWSC is collaboratively led by four Sectors with equal representation on the Steering Committee. The RWSC is hosted by the two Regional Ocean Partnerships on the Atlantic coast, MARCO and the Northeast Regional Ocean Council.
CONTINUATION OF THE BALLOON REDUCTION CAMPAIGN

Following a successful fall 2021 pilot campaign with the National Aquarium, Virginia Aquarium, and New York Aquarium, a spring pilot of the community-based social marketing (CBSM) campaign to reduce the intentional release of balloons was launched on April 4, 2022. Exhibit kits were also designed and shipped to MARCO members so that they can take the campaign to local events. So far over 1,300 people have pledged to not release balloons. State partners continue to monitor 1-mile beach segments to monitor the changes in balloon debris as the campaign is implemented.

NEW WASTEWATER OUTFALLS LAYER ON THE PORTAL

A trio of map layers added to the MARCO Portal provides users a glimpse of the volumes, sources and sites of wastewater discharge in the ocean and its tributaries. The map replaced and improved upon the former Offshore Discharge Flow layer by including data in key coastal tributaries such as the Chesapeake Bay, Delaware Bay and River, Hudson River and Long Island Sound. Also added from MarineCadastre.gov were a Wastewater Outfall Pipes layer showing the routes of publicly owned point source discharges to surface waters and a Wastewater Facilities map showing the location of treatment works along the Atlantic coast.

MID-ATLANTIC MARINE DEBRIS COLLABORATIVE TOOL

With support from NOAA, the Mid-Atlantic Marine Debris Collaborative was created. This tool is a place where state partners can upload information on previously completed and ongoing marine debris reduction efforts. The tool maps these projects creating a mid-Atlantic view of local initiatives. Having this snapshot of the region is helpful for identifying new, region-wide marine debris reduction efforts that can complement existing or completed projects. Currently, there are over 90 different marine debris reduction efforts uploaded into the tool. This tool is available to MARCO members and the general public here.

REDUCING SINGLE-USE PLASTIC WATER BOTTLES

In 2021, MARCO members worked with local partners to identify areas in waterfront recreational areas where water refill stations could be installed to promote use of reusable water bottles. Although a proposal for funding from NOAA Marine Debris was not awarded, new funding was secured and members have pivoted their focus in order to maintain momentum on this initiative. With new funding identified, efforts to implement CBSM approaches are being explored.
**UPDATES TO MARCO WEBPAGES**

A new page was added to the MARCO Data Portal website for updates on government agency actions and public comment opportunities related to ocean planning in the region. The page provides a snapshot of activities that are mostly closely connected to MARCO priorities and work. Gathering and maintaining the list of informational resources can aid MARCO partners and interested parties to stay up to date on activities in the Mid-Atlantic and encourage responsible ocean development and planning.

**MARCO RESPONDS TO THE NATIONAL OUTER CONTINENTAL SHELF OIL AND GAS LEASING PROPOSED PROGRAM**

The Bureau of Ocean Energy Management (BOEM) posted a Notice of Availability of the 2023-2028 National Outer Continental Shelf Oil and Gas Leasing Proposed Program and Draft Programmatic Environmental Impact Statement (2023-2028 Proposed Program and PEIS). As part of MARCO’s continued opposition to oil and gas exploration and development in the Mid-Atlantic for its potential devastating and irreversible impacts to our valued coastal communities and irreplaceable resources, a comment letter was submitted supporting the exclusion of both the North and Mid-Atlantic Planning Areas from BOEM’s oil and gas leasing program.

**ADVANCES IN RENEWABLE ENERGY**

MARCO states sit on both of BOEM’s NY Bight and Central Atlantic Intergovernmental Renewable Energy Task Forces. Two major accomplishments occurred to advance the Biden-Harris 30x30 initiative and Mid-Atlantic State goals.

i. The New York Bight offshore wind auction, which is the country’s largest offshore wind auction to date, gathered $4.37 billion dollars and includes novel stipulations designed to promote a robust domestic supply chain for offshore wind energy and enhance engagement with Tribes, the commercial fishing industry and underserved communities.

ii. Eight draft wind energy areas (WEAs) were identified in the Central Atlantic that appear most suitable for renewable energy development, taking into consideration possible impacts to local resources and ocean users.

**NEW RESOURCES ON THE DATA PORTAL**

A new section was created on the Portal listing informational resources for current and recent government agency actions related to offshore wind and other ocean planning issues in the region.
MARCO MANAGEMENT BOARD

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

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

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

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

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