



MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN



HIGHLIGHTS: MOVING IN THE RIGHT DIRECTION

MID-ATLANTIC REGION: A RISING TIDE OF NEW CHALLENGES



The ocean waters of the Mid-Atlantic provide a wealth of economic and environmental services to local communities, States and the nation.

The people of the Mid-Atlantic region are a significant force that influences our ocean and coastal environment. The intensity of these human influences continues to increase, creating a new generation of challenges that is growing in urgency.

Volatile energy prices, a pressing need to embrace renewable energy development, and a growing public awareness of adverse climate change impacts have begun to fundamentally affect the way we view our coastal and offshore areas. Water quality impairments continue to have negative impacts on ecosystem function and limit the quality of life in our coastal communities. Increased activity and disturbances in offshore areas threaten sensitive and unique habitats and ocean features.

The risks of failing to address these ocean and coastal problems are grave, with serious implications at the regional, national, and global level for sustaining human communities and the resources on which we depend.



VALUE OF A REGIONAL APPROACH TO OCEAN MANAGEMENT

The Mid-Atlantic States have long been leaders in embracing new approaches to responsible and sustainable management. To successfully address a new generation of challenges, and to ensure that future generations can enjoy healthy and productive ocean ecosystems, the Mid-Atlantic States are committed to a new comprehensive, regional approach.

A regional partnership can:

- overcome jurisdictional barriers and provide a mechanism for coordinating actions to achieve region-wide results;
- help avoid unintentional conflicts between adjacent States managing shared resources;
- lead to greater predictability and efficiency in regulatory processes;
- position the region to take advantage of new opportunities to protect sensitive or unique offshore resources;
- lead to sustainable development of shared energy resources;
- build a solid foundation for promoting greater, more effective federal and private investment, and for generating more attention, on priority issues for the Mid-Atlantic States;
- promote a more comprehensive and ecosystem-based approach to the management of human activities; and,
- improve how the region addresses the connections between upland, nearshore, and offshore areas.



MARCO Is FORMED

The Mid-Atlantic Governors' commitment to a regional approach is evidenced by the rapid creation of the Mid-Atlantic Regional Council on the Ocean (MARCO). Coastal policy makers and Coastal Zone Management Program (CZM) directors from New York, New Jersey, Delaware, Maryland and Virginia each devoted time and funds to bring about this new regional organization. Exclusive of staff time, the five states have, to date, dedicated about \$300,000 to the formation of MARCO and implementation of initial actions.

- July 2008** In response to New York State's initial call, coastal managers from the Mid-Atlantic region begin discussions about the need for and benefits of forming a regional ocean partnership.
-
- October 2008** A white paper ("Considerations for a Mid-Atlantic Governors' Initiative on Ocean and Coastal Conservation"), looking at other existing regional ocean partnerships and identifying priority issues in the Mid-Atlantic, is commissioned by New York.
-
- December 2008** MARCO States participate in "An Ocean Forum" held in Baltimore.
-
- February 2009** Staff from the five States drafts a regional agreement for Governors' approvals. (see page 3)
-
- April 2009** Staff from the five States drafts issue papers for the 4 major topics for MARCO: renewable energy, habitat protection, climate change adaptation and water quality.
-
- June 2009** Mid-Atlantic Governors' Ocean Summit is hosted by New York. The Mid-Atlantic Ocean Governors' Agreement on Ocean Conservation, agreeing to collaborate as a region and advance goals to protect the ocean and coast in the Mid-Atlantic, is signed. Staff creates the MARCO website hosted by New Jersey CZM.
-
- August 2009** Staff from the five States drafts an Actions and Timelines document and forms interstate workgroups to carry out items identified in the action plan.
-
- October 2009** Development of a MARCO Geographic Information System (GIS) Mapping and Planning Portal and marine spatial planning decision support tools are funded by Virginia CZM through a grant to The Nature Conservancy.
-
- December 2009** MARCO sponsors and New York hosts the Mid-Atlantic Ocean Stakeholder Conference to gather stakeholder input on the Actions and Timelines document (see page 4). A Climate Change and Sea Level Rise Information Exchange White Paper is funded by Maryland CZM.
-
- May 2010** MARCO Management Board meets in Delaware to review progress and initiate efforts to update action items.
-
- August 2010** Management Board meets in Delaware to refine MARCO governance structure, work on two-year action plan, and form five "action teams." Federal agencies attend and discuss mutual activities with MARCO.

THE MARCO AGREEMENT

On June 4, 2009, the Governors of New York, New Jersey, Delaware, Maryland and Virginia agreed to address regional ocean management challenges by signing the Mid-Atlantic Governors' Agreement on Ocean Conservation. They committed to regional collaboration to advance goals to protect our ocean and coast.

The Governors' MARCO Agreement outlines the significance and changing nature of the Mid-Atlantic region, the guiding foundations of the agreement, and the four priority issue areas.

The structure of MARCO is composed of:

- The Council (the five Mid-Atlantic Governors)
- An Executive Committee (State Secretaries and Agency Heads)
- A Management Board (State CZM Directors and Senior Policy Advisors)
- Five Action Teams (State staff with expertise in the four priority issue areas plus a team for coastal and marine spatial planning)

The four priority issue areas and goals are:



Collaborate on a regional approach to support the sustainable development of renewable energy in offshore areas.



Coordinate protection of important habitats and sensitive unique offshore areas on a regional scale.



Prepare the region's coastal communities for the impacts of climate change on ocean and coastal resources.



Promote improvements in the region's coastal water quality.

AN ACTION PLAN BUILT WITH STAKEHOLDERS

Discussions held on the day of the Governors' Summit in June 2009 built on expert knowledge and led to an action plan that identified initial actions to advance each of the Governors' four shared priorities. This initial Action Plan also included some actions that address multiple priorities. Key among these actions is marine spatial planning, a process that facilitates decision-making by presenting information on the suitability of offshore areas for certain activities.



Nancy Sutley, Chair, White House Council on Environmental Quality at the Governors' Summit.

The Governors' Agreement also recognized that the initial action plan would benefit from vetting by a broader group of stakeholders and committed to holding an Ocean Stakeholder Conference by the end of the year.

The December 2009 Mid-Atlantic Ocean Stakeholder Conference

The set of initial actions represented a **first step towards regional action** rather than an attempt to capture all of the long-term objectives laid out by the States. This first step also presented significant opportunities for MARCO engagement and partnership with the many diverse constituencies across the Mid-Atlantic region. To focus on these actions MARCO convened the Mid-Atlantic Ocean Stakeholder Conference in December 2009.



High profile leaders and representatives of the full range of ocean interests, all **sharing a common interest** in Mid-Atlantic ocean health and coastal community vitality, met in New York City with key state agency staff from New York, New Jersey, Delaware, Maryland, Virginia and representatives of key federal agencies to spark discussion and new ideas on moving forward. A summary of the meeting is available on the

MARCO website at <http://www.midatlanticocean.org/>.



(above) Attendees of the 2009 Mid-Atlantic Ocean Stakeholder Conference. (below) Members of the MARCO Management Board (l to r) Greg Capobianco - NY, Sarah Cooksey - DE, Gwynne Schultz - MD, Laura McKay - VA, and Ruth Ehinger - NJ.



Based on the valuable feedback and dialogue from the Stakeholder Conference, MARCO initiated collaboration with federal partners to **implement the priority actions** and is drafting an updated action plan. In order to accomplish MARCO's defined action items, each of the five states will need additional resources.

OFFSHORE RENEWABLE ENERGY



Mid-Atlantic Governors' Action

Reduce the region's reliance on fossil fuels and increase its energy independence by making the Mid-Atlantic a leader in the appropriate development of offshore wind energy.

Highlights of MARCO's progress to date include:

- MARCO has launched efforts to develop consistent survey and monitoring protocols for individual offshore wind projects based on ecological baseline studies recently conducted in the region. MARCO is working to ensure that development will occur in a consistent manner and that data can be shared across the region to better understand the impacts. This uniformity in survey design and monitoring should provide clarity for applicants and allow them to proceed more quickly through the various phases of development. As part of this effort, the MARCO states all supported an application by NJ CZM to the Bureau of Ocean Energy, Management, Regulation and Enforcement (formerly Minerals Management Service) for a grant to further develop the protocols to be used nationally by the Bureau for renewable energy siting.
- The MARCO States are participating in the Atlantic Offshore Wind Energy Consortium. States are exploring the use of that forum as a means to leverage greater federal investment in research related to the potential impacts of wind energy development and the development of siting criteria.
- Virginia CZM funded a study, "Wind and Waterbirds," completed in May 2010 (<http://www.deq.virginia.gov/coastal/description/2007projects/2-03-07.html>), that identifies birds most at risk in the Mid-Atlantic region for which data were available. Of the 46 species for which data were available, six species were identified as being particularly vulnerable to population losses. Although far more data are needed, this information will help refine our bird migration corridor mapping needs and ultimately help minimize conflicts with offshore energy development.
- Red Knots are one of the six migratory bird species at risk. The Mid-Atlantic region serves as a hemispherically important staging area where the birds rest and feed during their long migrations (see map and photo at right) between North and South America.



HABITAT PROTECTION

Highlights of MARCO's progress to date include:

- The MARCO States recognized early on that to address habitat protection, and to appropriately site energy facilities, it was essential to create a Geographic Information System (GIS) portal through which all the States and the general public could view data layers depicting the location of Mid-Atlantic habitats such as canyons, migration corridors, sandy shoals and coral beds. To that end, Virginia CZM funded The Nature Conservancy to develop an internet-based mapping and planning portal through which everyone can view and share maps and data of Mid-Atlantic ocean resources. View the MARCO Portal at www.MidAtlanticOcean.org.
- As a step in creating a portal, state resource managers completed a survey to determine how the portal should be designed to best support their responsibilities. Comments and suggestions collected through the survey identified crucial data layers and whether or not they were currently available. The results showed that there is limited regional biological data on habitats, such as coral beds and bird/marine mammal/sea turtle migration corridors. Human use data also is limited.
- With a second year of Virginia CZM funding, the MARCO States continue to work with The Nature Conservancy to develop decision support tools that will aid in marine spatial planning for the entire region. These tools will allow resource managers and stakeholders to visualize various management schemes, share them online and adapt them in order to reach future consensus on a marine spatial plan.
- MARCO and the Mid-Atlantic Fishery Management Council are collaborating on an ecosystem-based approach to fishery and ocean management. The Chair of the Council attended the June 2009 Governors' Summit in New York and the August 2010 MARCO Management Board meeting in Delaware. MARCO staff gave a presentation at the October 2010 MAFMC meeting in New Jersey on MARCO's updated action plan, the new MARCO Mapping and Planning Portal and concepts for new decision support tools.

Mid-Atlantic Governors' Action

Protect the region's ecologically significant offshore habitats. Starting with the ten offshore canyons, identify measures to ensure the long term protection of sensitive habitats.



CLIMATE CHANGE ADAPTATION

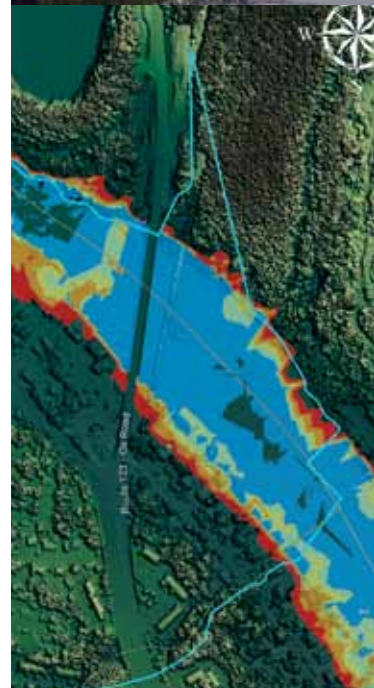


Mid-Atlantic Governors' Action

Assess and address the key vulnerabilities of the region's coastal residents, property, and economic and environmental infrastructure from climate change impacts.

Highlights of MARCO's progress to date include:

- Through a Maryland CZM grant, MARCO developed a paper titled, "MARCO Climate Change and Sea Level Rise Information Exchange." The paper profiles the current status of adaptation-related activities; provides links to key contacts and information sources; organizes activities by State as well as by topics such as policy development; provides data, tools and technical assistance; and, identifies opportunities for regional cooperation.
- MARCO is working to obtain a comprehensive view of existing high resolution elevation data (Light Detection And Ranging-LiDAR) that is needed in order to create regional sea level rise inundation maps. MARCO will then identify the facilities and transportation networks that may need to be retrofitted or relocated as a result of sea level rise. MARCO's initial work defined the types of regional infrastructure (i.e., capital investment from either the private or the government sectors that support day-to-day functioning of the region) under consideration. Identifying vulnerable infrastructure, both natural and man-made, will inform the design and mitigation needs for future federal and regional infrastructure investments.
- MARCO is developing targeted messaging of the risks of climate change and sea level rise to communities. As a first step, Delaware CZM surveyed residents to examine their basic knowledge and awareness of climate change and sea level rise.
- MARCO collaborated with Virginia Sea Grant on an application to the National Oceanic and Atmospheric Administration (NOAA) titled, Mid-Atlantic Sea Level Rise and Inundation: Sea Grant—Coastal Zone Management Regional Implementation Projects. NOAA approved this \$160,000 grant in July 2010. A request for proposals (RFP) seeking projects to address top priority regional issues, jointly prepared by MARCO, the Mid-Atlantic CZM managers and Sea Grant, was released. MARCO and Sea Grant will jointly select projects that will begin by October 1, 2011.



WATER QUALITY IMPROVEMENT



Mid-Atlantic Governors' Action

Support the health of the region's tourism and fishing industries by addressing threats to water quality.

Highlights of MARCO's progress to date include:

- MARCO compiled State efforts/best management practices and existing information on marine debris/floatable control. This compilation:
 - provides information on current state efforts and best management practices to reduce, mitigate, and remove marine debris; however it does not evaluate the success, performance or results of these efforts;
 - serves to illuminate areas for enhanced efforts at the individual state level and at the regional level; and,
 - serves as a “base line” study against which to measure the implementation of future actions.
- MARCO designated state coordinators and identified federal partners who will identify water quality information gaps and develop strategies to address them.
- MARCO initiated the creation of an effective partnership with the Mid-Atlantic Coastal Ocean Observing Regional Association (MACOORA), to identify and address these gaps.
- MARCO is working with the Mid-Atlantic Sea Grant Directors to help define research priorities for water quality and other issues through the Sea Grant Mid-Atlantic Ocean Research Plan. MARCO staff has attended meetings and reviewed this soon-to-be-released research plan.



MARCO's MAPPING AND PLANNING PORTAL

The MARCO Mapping and Planning Portal is an online tool that allows state, federal, and local decision-makers and the public to visualize, query, map, and analyze ocean and coastal data in the Mid-Atlantic region. Offshore renewable energy and habitat protection goals will be more readily and transparently addressed through the MARCO Portal -- the first produced by a regional ocean partnership.

Key data layers are grouped into five categories (sidebar left) and are now available. Many additional data acquisition and analysis needs also have been identified. The MARCO Portal gives you:

- *Choice of base maps: topographic, streets, or satellite view*
- *Panning and zooming to areas or bookmarked selections*
- *Selection of layer combinations to create customized maps*
- *Transparency adjustment for enhanced overlay creation*
- *Saving and printing maps in Adobe PDF format*
- *Search and identify tools for more detailed information*
- *Drawing and measurement tools*
- *Concise fact sheets plus GIS metadata for each data layer*

The MARCO Coastal and Marine Spatial Planning Team is working to add additional data and features. To fully support a CMSP process, decision support tools will be added. These tools will allow users to create management scenarios and evaluate quantitatively how well they meet goals held by diverse ocean resource stakeholders.

Portal Data Categories

Administrative

(e.g. official boundaries)

Biological

(e.g. sea-floor habitats)

Geophysical

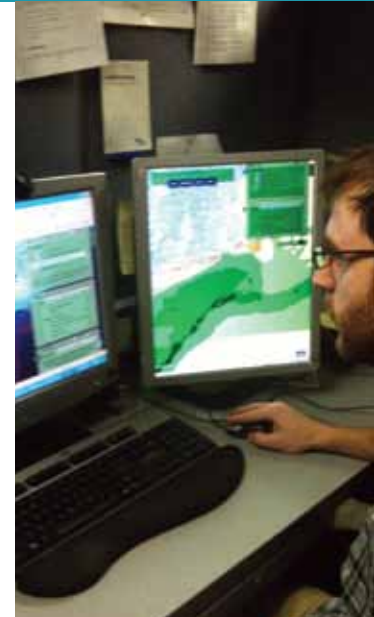
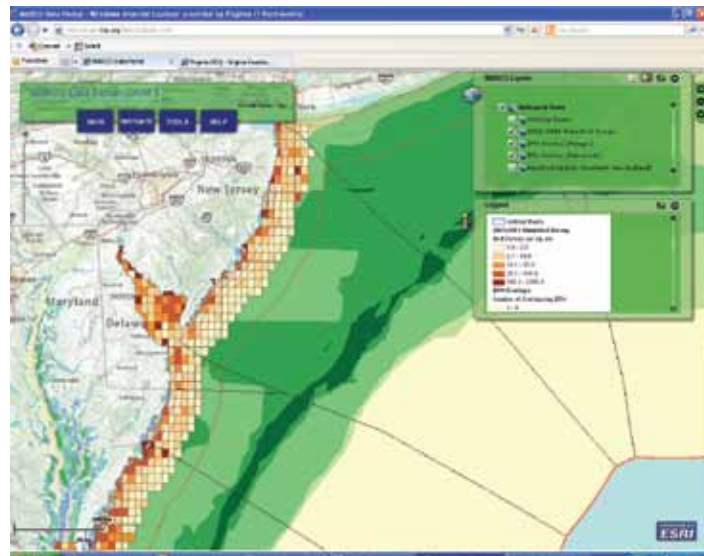
(e.g. water depth, sediments)

Human Uses

(e.g. fishing, shipping)

Decision Support

(e.g. overlays of various uses and natural features)



www.MidAtlanticOcean.org

This publication was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA09NOS4190163 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



Virginia Coastal Zone
MANAGEMENT PROGRAM

Front cover photo: Loggerhead sea turtle hatchling by Lisa Morse/Marine Photobank -- Inside cover map: Mid-Atlantic coast map by The Nature Conservancy -- Page 1: Center collage image by Jay Odell/TNC -- Page 3: windmill by Hans Hillewaert; Bluefin tuna by NOAA/Marine Photobank; beach by Matt Fleming -- Page 4: photos courtesy New York Department of State -- Page 5: windmill by Hans Hillewaert; wind farm by Harvey McDaniel; Red knot migration map by Center for Conservation Biology/W&M; Red Knots in flight by Barry Truitt/TNC -- Page 6: Bluefin tuna courtesy NOAA/Marine Photobank; Northern Gannet by Andres Trepte/www.photo-natur.de; Lophelia pertusa cold water coral thickets courtesy NOAA/Marine Photobank; Bottlenose dolphins courtesy NOAA -- Page 7: Hurricane Irene off mid-Atlantic coast by NASA MODIS Rapid Response Center; Hurricane Isabel floods Oyster Virginia courtesy Northampton Planning District Commission; map of inundation areas in Occoquan Virginia by VACZM -- Page 8: family at beach by Matt Fleming; fish caught in abandoned net by Elaine Blum/Marine Photobank; fishing by Laura Younger; marine debris by Malik Naumann/Marine Photobank -- Page 9: CZM staff using MARCO portal by Laura McKay/VACZM; Right whales courtesy NOAA; cargo vessel courtesy NOAA.