2017 Draft Annual Work Plan and Progress Report

June 2017

MID-ATLANTIC REGIONAL

OCEAN ACTION PLAN

CONTENTS

INTRODUCTION

The Mid-Atlantic Regional Planning Body (RPB), comprised of representatives of Mid-Atlantic States, federally recognized Tribes of the Mid-Atlantic, Federal agencies, and the Mid-Atlantic Fisheries Management Council, is working to implement the actions of the Mid-Atlantic Ocean Action Plan (https://www.boem.gov/Mid-Atlantic-Regional-Ocean-Action-Plan/). The tables in this document present plans for 2017 and progress through June 2017. Note that some actions may not have planned activities in 2017, but may be addressed in future years.

[Mid-Atlantic Regional Planning Body Member Entities]

STATES

Delaware | Maryland | New Jersey | New York | Pennsylvania | Virginia

FEDERALLY RECOGNIZED TRIBES

Shinnecock Indian Nation | Pamunkey Indian Tribe

FEDERAL AGENCIES

Department of Agriculture (represented by the Natural Resources Conservation Service)

Department of Commerce (represented by the National Oceanic and Atmospheric Administration)

Department of Defense (represented by the U.S. Navy and the Joint Chiefs of Staff)

Department of Energy (represented by Energy Efficiency & Renewable Energy)

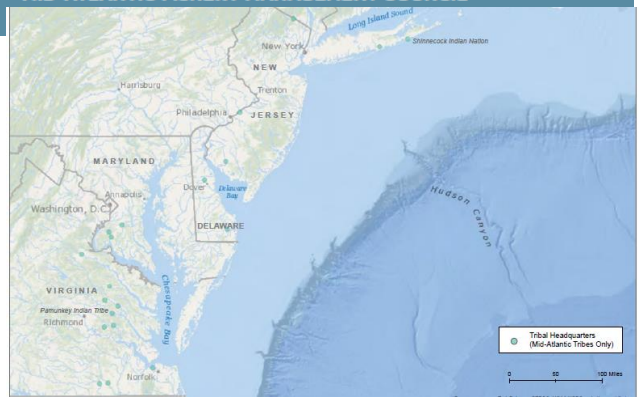
Department of Homeland Security (represented by the U.S. Coast Guard)

Department of the Interior (represented by the Bureau of Ocean Energy Management)

Department of Transportation (represented by the Maritime Administration)

Environmental Protection Agency

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL



Comments on the work plan and progress may be submitted to the RPB at: MidAtlanticRPB@boem.gov. We thank you for your interest and support in our actions to promote a healthy ocean ecosystem and to foster sustainable ocean uses.

Kelsey Leonard, Shinnecock Nation, Tribal Co-lead
Laura McKay, Virginia, State Co-lead
Lisa Croft, NOAA, Federal Co-lead

Goal: Healthy Ocean Ecosystem	**Action**: #1 Identify & Increase Understanding of **Ecologically Rich Areas**
Champion: Laura McKay (VA) ***Work Group Members: Federal Agencies*:** Lisa Croft (NOAA), Joe Atangan (DoD), Chris Darnell (USFWS), Mary Boatman (BOEM), Leann Bullin (BOEM), Buddy Lobue (EPA); ***States*:** Catherine McCall, Kim Hernandez, Gwynne Schultz (MD); Kim Cole (DE), Liz Semple, Kevin Hassell (NJ), Karen Chytalo, Sherryll Jones, Peter Clouse, Mina Innes (NY); ***MAFMC Rep*:** Stew Michels; ***Tribal Rep***: Kelsey Leonard (Shinnecock Tribe); ***Technical Input:*** Pat Halpin, Jesse Cleary, Corrie Curtice (Duke); Jay Odell (Portal Team); Kate Morrison, Judy Tucker (MARCO)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. Evaluate and refine marine life data layers and synthesis approach. Finalize framework for identifying ERAs.	1. Finalize and post framework for identifying Ecologically Rich Areas (ERAs) in June 2017. 2. Continue updates of marine mammal, seabird, sea turtle and habitat layers by fall 2017. 3. Develop SeaSketch survey (March-April 2017) and conduct with key scientists and stakeholders May – August 2017. 4. Marine-life Data Analysis Team (MDAT) and the ERA Work Group determine which datasets are critical for characterizing each of the components of ERAs (high productivity, high biodiversity, high abundance, vulnerable marine resources and rare marine resources) based on survey results by October, 2017.
B. Apply methodologies and identify potential ERAs* *The ERA Work Group and MDAT do not believe all ERAs can be identified by the end of 2017 due to continued uncertainties as to how	1. Create draft maps illustrating the 5 components of ERAs (productivity, abundance, biodiversity, rarity and vulnerability) by mid-October 2017. 2. Conduct workshops to present marine life data syntheses and gather input on data critical to characterizing components of and types of ERAs in May and November 2017. 3. Present results of May workshop to full RPB at June 2017 meeting. 4. Identify additional opportunities (e.g. MAFMC meetings) to engage stakeholders in reviewing datasets informing the ERA components and to determine criteria for selecting a pilot ERA by July 2017. 5. Develop an outline for a sample ERA Report in July 2017.

much additional synthesis of component maps will be feasible.	6. Develop a fact sheet with FAQs describing what an ERA is, how ERA component data and ERA reports could be used by agencies and stakeholders in July 2017. Fact sheet may include: • link to online SeaSketch ERA training tool • link to draft outline for in-depth ERA reports
C. Select one or more potential ERAs, based on a set of criteria to be developed	1. Solicit additional input from RPB and stakeholders on *criteria for selecting a pilot* ERA May - November 2017 (dates include both ERA workshops in May and November 2017.
	2. By September 2017, explore resources for conducting a November ERA workshop and in-depth review of pilot ERA to take place in 2018.
	3. Finalize criteria for selecting a pilot at December RPB in-person meeting.
	4. RPB selects pilot ERA for in-depth review during 1st quarter of 2018.
D. Review the pilot ERA and develop report on ecological function, trends and current management	1. By December 2017, contract with appropriate entities and/or identify appropriate staff to begin work on the pilot ERA report in 2018.

Progress as of June 2017	The Framework for identifying ERAs was approved by the RPB on March 21, 2017. It will be presented and finalized at the June 20 2017 RPB meeting. The framework includes descriptions of five ERA components (productivity, biodiversity, species abundance, rarity and vulnerability) and four types of ERAs (fixed, clustered, ephemeral and ambulatory). A SeaSketch survey, developed for the Northeast, was tailored for the Mid-Atlantic to solicit input from scientists as to which data layers are most useful in depicting the five components. The survey contains multiple potential data layers that could be used in describing each component. Survey results will be used to select the data layers describing each of the ERA components. A workshop was held in Dover Delaware on May 19, 2017 to: 1) allow scientists and stakeholders to explore which data layers are critical to be included under each component; and 2) explore potential criteria for selecting a pilot ERA. Comments received during the workshop included the need for a concise fact sheet describing what ERAs are and how ERA data and reports would be used; the need for more stakeholder engagement in identifying all ERAs; and clarification of next steps and timelines for the overall ERA action. In considering criteria for selecting a pilot ERA, participants made many suggestions but some common themes were that the area should: have high quality data; be experiencing multiple human uses and be of interest to multiple types of stakeholders; be large enough to contain ecological processes within it but not too large. Questions arose as to whether all ERAs should be identified before a pilot is selected or whether a pilot ERA could be selected as refinement of the identification of all ERAs continues. During a May 31 ERA Work Group call, the group recommended that the work proceed sequentially as outlined in the OAP but that the timeline for identifying all ERAs and selecting a pilot area would need to extend beyond 2017. A summary of the May 2017 workshop in Dover, Delaware will be posted on the MARCO website following final review by the ERA Work Group.
Public Stakeholder Opportunities	• A public webinar was held on the morning of May 19, 2017. Representative maps were presented. During the workshop the SeaSketch survey tool was presented. During the afternoon portion of the workshop scientists and stakeholders had the opportunity to provide input on data synthesized to date as well as criteria for selecting a pilot ERA.

	• The June 20 2017 RPB public meeting in Silver Spring, Maryland, will provide opportunity for the public to learn of progress on steps for this action and on planned future steps. • The ERA fact sheet, to be developed in July 2017, will describe opportunity for the public to provide input via the SeaSketch survey and may request written comments on criteria for selecting a pilot area. • Presentations on the ERA identification process will be scheduled at relevant meetings of key stakeholders as resources allow. • A November 2017 workshop would provide additional opportunity for stakeholder engagement and review of maps of ERA components and input on criteria for selecting a pilot ERA. • A December 2017 RPB meeting would provide opportunity for stakeholders to provide comment on proposed ERA components and selection criteria.

Goal: Healthy Ocean Ecosystem	**Action**: #2 Map **Shifts in Ocean Species and Habitats**
Co-Champions: Laura McKay (VA), Kevin Chu (NOAA) ***Technical Input:*** Pat Halpin, Jesse Cleary, Corrie Curtice (Duke); Jay Odell, (Portal Team); Kate Morrison (MARCO)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. Identify information sources	1. Convene small work group by January 2017 to discuss available resources.
	2. MDAT to prepare a literature review of information available describing shifts in distribution and core abundance of fish, birds, marine mammals and sea turtles under its contract with MARCO by March 2017.
	3. Post document on MARCO website by spring 2017. Invite scientists and others to review the draft and submit suggestions for additional resources to be added to the document.

B. Recommend ways to make information more accessible	1. Once all existing and available information on species shifts is compiled in early 2017, convene a larger work group by summer 2017 to review the data and discuss recommendations for displaying data in the Mid-Atlantic Ocean Data Portal.
	2. Present ideas/recommendations to RPB during summer/fall monthly RPB calls.
C. Convene resource managers, scientists, Traditional knowledge holders, commercial fishermen and others to review and discuss methodologies to create maps, uses for maps, data gaps	1. Conduct workshop by April 2017 to review literature on fish and discuss ways to present visualizations of shifting ocean species.
	2. Convene larger work group by summer 2017 to discuss the need for a stakeholder workshop to review the data, and if deemed worthwhile, draft an agenda and seek RPB approval to move ahead with a workshop in late 2017 or early 2018.
D. Coordinate among RPB and partners to acquire needed data	1. Develop an RPB-approved list of data needs regarding species shifts by December 2017.
Progress as of June 2017	A conference call was convened on Oct 13, 2016 by the co-champions with Marine Life Data Team (MDAT) and Mid-Atlantic Regional Council on the Ocean (MARCO) staff**.** On this call it was recommended that a full work group include additional RPB members and that input from scientists be sought. The participants discussed sources of information about shifting species in the mid-Atlantic. MDAT described their efforts to compile research on shifting species and habitats under their current contract with MARCO. Several websites with information about species shifts were identified including NOAA's Northeast Fisheries Science Center maps of changing distributions of more than 50 species of fish and invertebrates at http://nefsc.noaa.gov/ecosys/spatial-analyses/. Also Rutgers University has a website devoted to information about shifting distributions at: http://oceanadapt.rutgers.edu. Most research pertains to commercially valuable fish species and species that are caught in the NMFS trawl surveys however, it was noted that this site does not include sea scallops, clams or lobsters. Information about shifts in marine mammals, sea turtles and seabirds is more difficult to compile, since sighting information is less routine and individuals travel great distances during seasonal migrations. MDAT checked with NOAA/NCCOS to determine whether data are available for birds and whether there is any additional data on corals with regard to shifts in

	location (or simply losses) due to ocean acidification. A workshop was hosted on April 4-5, 2017 by MARCO and MARACOOS at Rutgers University. A summary of that workshop is forthcoming and will be posted on the MARCO website. The MDAT at Duke completed their literature review which has been posted by the MARCO Management Board. The report can be seen at: http://midatlanticocean.org/resources/#oceanplanning This is being considered a "living document" and additions are encouraged.
Public Stakeholder Opportunities	Scientists and stakeholders are invited to review the compilation of data resources regarding shifting species and habitats posted on the MARCO website and offer recommendations for additional sources of data.

Goal: Healthy Ocean Ecosystem	**Action: #3** Develop a Mid-Atlantic **Ocean Acidification Monitoring Network**
Co-Champions: Laura McKay (VA), Sherilyn Lau (EPA) ***RPB Work Group Members:*** Erica Ombres (NOAA/OAP), Gabrielle Canonico (NOAA/IOOS), Beth Phelan (NOAA Sandy Hook Lab), Karen Chytalo (NY DEC) ***Technical Input:*** A.J. Erskine (VA shellfish grower), Wei Jun Cai (UDel), Whitman Miller (SERC), Pete Rowe (NJ Sea Grant), Elizabeth Shadwick (VIMS), Grace Saba (Rutgers/MARACOOS), Peter Moore (MARACOOS), Kaity Goldsmith (MARCO), Robert Newberry (Delmarva Fisheries Assoc.)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and sub-steps to be taken*
A. Identify and compile a list of current regional ocean acidification monitoring efforts and technologies, research, and	1. Establish a network (MACAN) of researchers, natural resource managers, and industry stakeholders by winter 2017.
	2. Develop partnership with the Mid-Atlantic Regional Association for Coastal & Ocean Observing Systems (MARACOOS) by winter 2017.

data gaps, as well as opportunities for partnerships and support.	3. Set up webinar to collect and present current status of OA monitoring on coastal shelf and the Chesapeake Bay by winter 2017.
	4. Vet current monitoring information with researchers by spring 2017.
	5. Develop map of current monitoring efforts by late spring 2017.
	6. Compile list of MidA focused research resources.
	7. Conduct webinars on impacts to ecology by late winter 2017.
	8. Establish website for MACAN by spring 2017.
B. Identify and prioritize questions the Monitoring Network should address (e.g. location and number of needed monitoring sites, time intervals for measuring ocean acidification, etc.).	1. Convene workshop May 9 2017 to identify data gaps and monitoring needs.
	2. Develop list of research needs and data gaps.
	3. Vet list of research needs through RPB researchers and stakeholders as appropriate (will likely begin in 2017, but not be completed).
C. Convene scientists, stakeholders, Traditional Knowledge holders, and the public to develop and vet options for establishing and supporting the Monitoring Network.	1. Convene workshop May 9 2017 to develop options for establishing a comprehensive monitoring system (see milestone B.1).
	2. Develop preliminary plan for monitoring in the Mid-A by fall 2017.
	3. Vet monitoring plan through RPB, researchers and stakeholders as appropriate (will likely begin in 2017, but not be completed).
Progress as of June 2017	1. Mid-Atlantic Coastal Acidification Network (MACAN) was established in October 2016.
	2. MACAN hosted four webinars to share information among stakeholders: a. Monitoring Efforts in Estuaries and the Coastal Shelf in the Mid-Atlantic b. Impacts to Ecology c. Perspectives from the Commercial Shellfish Industry d. Perspectives from Natural Resource Management
	3. Inaugural MACAN workshop held in Annapolis, Maryland on May 9, 2017 to address the following objectives: a. determine key stakeholder concerns and needs regarding acidification impacts

	to estuarine, coastal, and ocean species and ecosystems b. initiate development of a comprehensive monitoring plan c. develop an initial list of regionally relevant species that may be vulnerable to acidification d. begin identify key research gaps to be pursued by MACAN and its partners e. identify additional information to be provided on the MACAN website
	4. Compiled a draft Mid-Atlantic Ocean Acidification Monitoring Map which was shared and reviewed at the May 9 workshop.
	5. Developed content for and launched the MACAN website, www.MidACAN.org. This website contains the presentations from the four webinars listed above.
Public Stakeholder Opportunities	Public webinars and workshop hosted by MACAN provided opportunities for stakeholder input on the primary concerns related to acidification provide feedback on monitoring maps and ecological data gaps.

Goal: Healthy Ocean Ecosystem	**Action: #4** Develop Regionally Appropriate **Marine Debris Reduction Strategy**
Co-Champions: Laura McKay (VA), Buddy LoBue (EPA) ***RPB Work Group Members:*** Jason Rolfe, John Kuriawa (NOAA); Kelly Somers, Lingard Knutson, Sherilyn Lau, Kristin Regan (EPA); Terron Hillsman (USDA); Sherryll Jones (NY); Liz Semple, Kevin Hassell, Virginia Loftin, Megan Rutkowski (NJ); Nicole Rodi, Kari St. Laurent (DE), Kim Hernandez, Donna Morrow (MD) ***Technical Input:*** Katie Register (VA), Kaity Goldsmith (MARCO)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. Identify existing efforts and prioritize options for regional	1. Develop a form for collecting data on current and recent projects by February 15.
	2. Collect data by March 31.

strategies for marine debris reduction. Note: Step A of the OAP contains additional tasks (including development of a region-wide marine debris shoreline monitoring program and a cost-benefit analysis on full lifecycle costs of plastics) not anticipated to be addressed in 2017	3. Analyze projects data by April 6.
	4. NOAA contractor to develop a digital sharing space by fall 2017 for Mid-A marine debris info and resources which will house project inventory.
	5. Survey RPB members for their priority marine debris sources and approaches on which to base strategy options by mid-April 2017.
	6. Analyze RPB survey responses by May 2.
	7. Hold work group by call by May 15 to begin developing strategy ideas in preparation for an early June workshop.
	8. Plan and conduct regional marine debris workshop by June 16.
B. Present options for regional strategies and implementation mechanisms to the public and RPB.	**1.** Hold work group call on June 13 to finalize presentation for full RPB meeting.
	2. Present options to full RPB by June 20, 2017.
C. Implement selected strategies.	1. Convene work group call July 11 to discuss chosen strategy and identify funding sources by August 15 2017. Note: New Jersey CZM Program has already identified some initial funding for grant proposal writing and/or project implementation. Also the NOAA Marine Debris Program may have grant opportunities. 2. Begin implementation by September 1, 2017.
Progress as of June 2017	All work in Step A was completed as well as milestone #1 of Step B.
Public Stakeholder Opportunities	On June 6, the Virginia CZM Program held a social marketing training webinar which was advertised to and made available to the public. The presentation of potential marine debris reduction strategy options will be presented to the public on June 20.

Goal: Healthy Ocean Ecosystem	**Action**: #5 Develop, Monitor, and Assess **Indicators of Ocean Health**
Champion: Karen Chytalo (NY) ***Work Group Members:*** *Federal Agencies:* Mary Boatman, Leann Bullin (BOEM); Chris Kinkade, Kevin Chu, Lisa Croft and Kenneth Sherman (NOAA); Sarah Bowman (NAVY); Hugh Sullivan (EPA); *State Agencies:* Sherryll Jones (NY-DEC), Kari St. Laurent (DE), Laura McKay (VA) ***Technical Input:*** Kaity Goldsmith (MARCO); Tony MacDonald (Monmouth); Jay O'Dell (TNC); Pat Field, Nick Napoli and Emily Shumchenia (CBI)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. Summarize existing indicators currently available. Analyze the potential for available indicators to gauge the overall health of the Mid-A ecosystem, understand what the indicators may show us, and identify needed indicators not currently available. Vet the list of available and needed indicators with scientists, Traditional Knowledge holders, and stakeholders in the region.	1. Initiate a Steering Committee to help guide contracted work by February 2017.
	2. Contract with experts to help pursue initial steps in this action by March 2017.
	3. Develop a list of existing indicators by April 2017.
	4. Present existing indicators to various stakeholder groups by April/May 2017.
	5. Develop an indicator framework (indicator themes, data categories, metrics, etc.) by May 2017.
	6. Identify data gaps by May 2017.
	7. Develop monitoring and assessment options by June 2017.
	8. Develop indicator reporting/display/dashboard options by June 2017.
	9. Develop draft White Paper by July 2017 (Paper to include indicator framework, monitoring and assessment options, indicator reporting/display/dashboard options, and summary of feedback gathered from RPB and stakeholder outreach by July 2017.)

	10. Conduct two-day Healthy Ocean Ecosystem Indicators Workshop by summer 2017.
	11. Produce Final Report by September 2017 To include: • summary of the process to develop an indicator framework; • summary of results of RPB and stakeholder outreach on indicators, monitoring, and assessment; and • criteria and options for deciding on an indicator framework, monitoring and assessment approaches, and reporting/display/dashboard.
B. Submit refined indicators to the RPB for consideration and endorsement.	1. Provide Final Report to RPB by Fall 2017.
Progress as of June 2017	MARCO contracted with the Consensus Building Institute (CBI) to help pursue initial indicators work. A steering committee was established in February to guide CBI's work. Calls were held in February, March, April and May. CBI developed an initial indicators framework and has been holding targeted industry outreach calls to obtain feedback on the initial indicators framework. To date contractors have interviewed 9 scientists, 6 fishing reps, 3 ENGOs, 1 recreation rep and 1 energy/sand rep and a webinar with Tribes. An outline for the white paper/final report was developed and discussed on the May 15 steering committee call. A workshop is planned for July 19-20 in Baltimore, MD.
Public Stakeholder Opportunities	Stakeholders were invited to outreach calls to provide feedback on initial indicators framework. Some space will be available for stakeholders to attend the July 19-20 workshop in Baltimore.

Goal: Healthy Ocean Ecosystem	**Action**: #6 Incorporating **Tribal Knowledge**
Champion: Kelsey Leonard (Shinnecock Nation)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. Document current processes for including Traditional Knowledge in decision making, determine where information should be included, and identify barriers to greater inclusion.	TBD
B. Identify measures to increase the inclusion of Traditional Knowledge in decision making, while providing protections for sensitive information.	TBD
C. Determine Traditional Knowledge documentation needs.	TBD
D. Inform Tribes and Indigenous communities about the general nature and scope of proposed ocean research and development projects prior to the application/permitting process, to enable Traditional Knowledge holders to provide input.	Tribes have been involved with the healthy ocean indicator development process and identifying data gaps. Webinar hosted May 2017.
E. Develop educational online training for best practices on integration of Traditional Knowledge of Tribes into regional ocean planning.	TBD
F. Identify mechanisms to support the engagement of Tribes and Indigenous Peoples in Federal ocean-related science investments.	TBD
G. Identify sources of training for agency staff about working with Tribes and Indigenous Peoples on ocean initiatives involving Traditional Knowledge.	TBD
Progress as of June 2017	In progress.
Public Stakeholder Opportunities	Not applicable.

Goal: Sustainable Ocean Uses – **National Security**	**Action: #1** Use the Plan and Data Portal to guide and inform Department programs, initiatives, and planning documents.
Champion: Joe Atangan (Joint Staff/Navy) ***Coordinating Federal Agencies*:** Mike Jones (DoD), Chris Scraba (USCG)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. Identify the Plan and Data Portal as important sources of information in decision making.	Develop internal guidance to agencies on the use of the Plan and Data Portal.
B. Consult the Plan and the Data Portal, along with other sources of information, in the preparation of internal agency guidance, existing procedures, and environmental planning.	Ongoing
C. Leverage the Plan and Data Portal to obtain supplemental regional information related to proposed actions and activities.	Ongoing
Progress as of June 2017	Ongoing
Public Stakeholder Opportunities	

Goal: Sustainable Ocean Uses – **National Security**	**Action: #2** Identify Department of Defense points of contact for the range of national security data layers in the Data Portal
Champion: Joe Atangan (Joint Staff/Navy) ***Coordinating Federal Agencies*:** Mike Jones (DoD)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps and substeps to be taken*
A. DoD will, to the extent practicable, update the national security data on the Data Portal as needed, such as when applicable permits are renewed or operations significantly change.	1. Conduct a review of Portal data by July 2017.

B. Identify appropriate points of contact for the national security data layers provided for inclusion into the Data Portal.	1. Review Code of Federal Regulations (CFR) to determine who is listed as responsible authorities for danger zones and restricted areas by June 2017. 2. Review data layer metadata and update responsible authorities for danger zones and restricted areas by July 2017. 3. Based on CFR review, submit required changes by October 2017.
Progress as of June 2017	Portal data and CFR reviews are on track for completion by July 2017.
Public Stakeholder Opportunities	

Goal: Sustainable Ocean Uses – **Ocean Energy**		
Champion: Darryl Francois (BOEM)		
Action	**Steps for 2017** *Verbatim from the Plan*	**Progress**
1. Identify key intersections of relevant federal programs and authorities that affect wind energy development.	A. Develop materials to describe leasing, environmental review, and regulatory entities, including where and when relevant authorities play roles in decisions related to offshore wind energy.	Related to DOE/DOI Offshore Wind Strategy (OSW) action to provide a regulatory roadmap by July 2017; BOEM will leverage this effort – anticipated summer 2017.
	B. Develop materials that identify intersections of key federal programs and statutes related to offshore wind energy.	Related to the federal offshore wind permitting subgroup action to identify participating agencies' federal responsibilities; BOEM will leverage this effort.

	C. Post information developed in Steps A and B to the Data Portal and BOEM websites.	Dec. 2016: BOEM published and posted A Citizen's Guide to help the public understand BOEM's authorization process for overseeing renewable energy projects on the OCS and to highlight opportunities for public involvement.
2. Develop internal BOEM guidance on integrating the Plan-developed best practices for using the Data Portal in management, environmental, and regulatory reviews.	A. Using best practices described in section 2.1 and Healthy Ocean Ecosystem Action 6, BOEM will increase use of the Data Portal in management, environmental, and regulatory reviews, as appropriate.	Oct 2016: BOEM added information in the EA for the NY Wind Energy Area regarding fishing and fisheries resources, and incorporated data from the Portal Jan 2017: BOEM posted on its National and Regional Guidelines for renewable energy activities and Survey Guidelines for renewable energy development webpages information stating that BOEM will use the Ocean Action Plan to inform and guide its actions and decisions in the Mid-Atlantic, and will consider the data products available from the Data Portal in its decision-making, and encourages lessees and applicants to do so also.
3. Partner in on-going and planned studies, identify knowledge gaps, and increase access to research planning cycles related to ocean energy.	A. Increase awareness of research planning cycles to facilitate early involvement of RPB entities.	Fall 2016: BOEM shared its National Studies List note to stakeholders with the RPB and encouraged ideas for studies in the Mid-Atlantic for FY 18-20, and will do so again in fall 2017; BOEM published and posted in Spring 2017 the Atlantic Science Year in Review 2016 about the ongoing and completed studies in support of its offshore renewable energy program.
	B. Maintain maps, data, information of OCS leasing areas, including boundaries and studies, and ensure data are provided to appropriate repository.	BOEM develops, maintains, and uses GIS data for activities related to planning, assessment, and environmental review of renewable energy projects on the OCS; BOEM's website provides direct access to data that it has developed or maintains.

	C. Partner in planned studies.	Related to DOE/DOI OSW action to improve communication of studies and collect data; BOEM will leverage this effort.
	D. Work with RPB member entities to develop a MidA regional studies list in support of new regional offshore wind issues, areas, and projects.	Nov 2016: BOEM held "Atlantic Ocean Energy and Mineral Science Forum" to share and gather studies information; presentations and proceedings are posted on the BOEM website.
	E. Identify opportunities for collaboration with the NOPP to assess interest among federal agencies on common topics for possible joint funding.	Jan. 2017: MidA and NE RPBs jointly submitted suggestions to the Subcommittee on Ocean Science and Technology for the "Plan for Ocean Research in the Coming Decade."
4. Use the data portal to enhance access to data, environmental reports, and proposed offshore wind development activities.	A. Link the data portal with BOEM ESPIS.	Related to DOE/DOI OSW action to improve communication of related studies and research; BOEM and the Data Portal Team are working to link the data portal with BOEM's Environmental Studies Program Information System (ESPIS); targeting late summer 2017.
	B. Place and maintain links to agency announcements about proposed offshore development activities on the data portal.	Ongoing
5. Improve consultations and communication with Tribes in the region.	A. Continue to implement BOEM's internal renewable energy policies.	Ongoing
	B. Coordinate closely with tribal partners to protect sites from impact and resolve any impact in consultation with the tribes.	The Shinnecock Indian Nation requested government-to-government consultation with BOEM to discuss renewable energy activities offshore New York and Rhode Island; meeting planned for June 20, 2017.

	C. Work to effectively communicate BOEM's science strategy regarding studies of interest to tribes in the Mid-Atlantic region.	Nov. 2016: Shared BOEM's National Studies List note to stakeholders with the RPB and encouraged entity input.
6. Enhance BOEM engagement of fishing industries through improved data and specific interactions.	A. Enhance existing public engagement strategies associated with fishing activities and resources and offshore wind.	Dec. 2016: BOEM briefed the Mid-Atlantic Fishery Management Council regarding the NY offshore wind lease sale and next steps.
	B. Continue to work with fishermen and offshore wind lease holders in the implementation of BOEM guidance to lessees.	BOEM created an Atlantic Fishing Industry Communication and Engagement webpage with maps to help commercial fishers learn more about BOEM's mission, related studies, and activities.
	C. More effectively communicate BOEM's science strategy for fisheries studies in its annual Studies Development Plan.	March 2017: BOEM contracted with National Academy of Science to establish Atlantic Offshore Renewable Energy Development and Fisheries steering committee to organize meetings to assist BOEM in obtaining scientifically credible, independent, objective perspectives and information on fisheries research and monitoring related to BOEM's renewable energy program; will organize a workshop in late 2017 to survey the range of issues regarding renewable energy activities on the Atlantic OCS and potential impacts on fisheries. March 2017: New BOEM/NMFS report, *Socio-Economic Impact of OCS Wind Energy Development on Fisheries in the U.S. Atlantic*, will inform BOEM's decision-making related to future offshore wind energy development by identifying potentially affected fisheries that may require additional information and analysis.

Progress as of June 2017	• BOEM invited ideas for studies in Mid-Atlantic for FY 18-20 in November 2016. • BOEM posted A Citizen's Guide in December 2016 to explain BOEM's authorization process for overseeing renewable energy projects on the OCS and to highlight opportunities for public involvement. • BOEM posted on its renewable energy guidelines webpages that BOEM will use the Plan and Portal in its decision-making, and encourages lessees and applicants to do so also. • BOEM working on a regulatory roadmap related to offshore wind energy. • BOEM and the Data Portal Team working to link the portal with BOEM's ESPIS; in late summer. • BOEM published and posted in Spring 2017 the Atlantic Science Year in Review 2016 about the ongoing and completed studies in support of its offshore renewable energy program. • BOEM contracted with the National Academy of Science to establish Atlantic Offshore Renewable Energy Development and Fisheries steering committee.
Public Stakeholder Opportunities	• BOEM will invite ideas for future studies in Mid-Atlantic in Fall 2017. • BOEM workshop in late 2017 to survey the range of issues regarding renewable energy activities on the Atlantic OCS and potential impacts on fisheries.

Goal: Sustainable Ocean Uses – **Commercial and Recreational Fishing**	**Action # 1**: Improve the sharing of information and ideas between States, Tribes and Federal agencies, and Fishery Management Councils on fisheries science and management
Co-Champions: Kevin Chu (NOAA/NMFS) and Stewart Michels (MAFMC and Delaware Division of Fish and Wildlife)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Convene annual meetings between NOAA and FWS leadership, MAFMC leadership, and state marine fisheries directors to identify shared interests and build collaboration.	NOAA Fisheries leadership and state directors will meet face to face for a day on August 7, 2017. This will be hosted by the Atlantic States Marine Fisheries Commission.

B. Offer to meet with Tribes to discuss fisheries management, and invite State officials to participate in meetings with Tribes.	NOAA offered via email to meet with the Shinnecock and Pamunkey Tribes. A mutually convenient time has not yet been found.
C. Explore with the MAFMC the possibility of RPB members participating as technical advisors to the Council's Ecosystem and Ocean Planning Committee for the purpose of identifying and monitoring fishing and non-fishing impacts on the environment and the impacts of other human activities on fishing.	This is under consideration by the MAFMC.
Progress as of June 2017	The annual meeting between NOAA and state fisheries directors has been scheduled (for August 7, 2017). NOAA and the Tribes are trying to work out mutually convenient time to meet. The MAFMC has the issue of RPB participation as an advisor to the Ecosystem and Ocean Planning Committee under consideration.
Public Stakeholder Opportunities	There are multiple opportunities for stakeholder engagement in the fishery management process. All meetings of the Mid-Atlantic Fishery Management Council and the Atlantic States Marine Fisheries Commission are open to the public (except with discussing personnel issues), and the regulatory process of the National Marine Fisheries Service allows for comment at several stages.

Goal: Sustainable Ocean Uses – **Commercial and Recreational Fishing**	**Action # 2**: Continue to actively engage stakeholders in fisheries science and management, and seek ways to make fishermen's knowledge available for planning.
Co-Champion(s): Kevin Chu (NOAA/NMFS) and Stewart Michels (MAFMC and Delaware Division of Fish and Wildlife)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Convene managers and recreational fishermen to discuss concerns.	A 3-day workshop was held in Providence RI in January 2017 with recreational fishermen from the Mid-Atlantic and New England. The

	workshop provided training in the fishery management process and discussed fishermen's concerns about science and management issues. Also, the NOAA Fisheries Regional Administrator, John Bullard, held a meeting with leaders of recreational fishing groups in New Jersey in April 2017 to listen to concerns and build better collaboration.
B. Work toward creating and supporting surveys or interview projects on Tribal and fishermen's ecological knowledge.	NOAA port agents surveyed recreational anglers in the fall of 2016 about black sea bass habitat use and behavior. This information was incorporated into the 2016 stock assessment of black sea bass.
C. Capture community knowledge, including Tribal knowledge, in ocean management and in the Data Portal.	See B. above. Capture of this kind of information in the Data Portal is not solely a NOAA responsibility.
Progress as of June 2017	See milestones comments.
Public Stakeholder Opportunities	In addition to the outreach efforts described in steps A-C, stakeholders have multiple opportunities to be engaged in providing advice and information to the Mid-Atlantic Fishery Management Council and to the NMFS.

Goal: Sustainable Ocean Uses – **Commercial and Recreational Fishing**	**Action: #3** Improve collaboration for the conservation of essential fish habitat
CO-Champions: Kevin Chu (NOAA/NMFS) and Stewart Michels (MAFMC and Delaware Division of Fish and Wildlife)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. NOAA will provide additional training for Federal agencies in the identification and conservation of essential fish habitat.	NOAA Fisheries GARFO (Greater Atlantic Regional Fisheries Office) Habitat Conservation Division is providing this training on an ongoing basis.

B. Train fisheries management staff in the use of the Data Portal.	Training on the Mid-Atlantic (and NE) Data Portal use is being arranged for NOAA's GARFO staff. Separate training sessions will be provided for managers of sustainable fisheries, protected resources and habitat conservation.
Progress as of June 2017	See milestones.
Public Stakeholder Opportunities	This activity provides training by one Federal agency to another Federal agency. There is not direct opportunity for stakeholder engagement.

Goal: Sustainable Ocean Uses – **Ocean Aquaculture**	**Action:** # 1 Use data and information in the Data Portal and other information sources developed as a result of this Plan to support aquaculture siting and permitting.
Champion: Kevin Chu (NOAA)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Refer potential applicants to the Data Portal.	Several persons interested in siting aquaculture facilities were referred to the Data Portal this year by the NOAA Regional Aquaculture Coordinator.
B. Seek to include information on the Data Portal.	NOAA is alert for data sets that could enhance the Portal with regard to aquaculture uses. However, other Federal and state agencies are likely to have more consistent and quantifiable data on aquaculture.
Progress as of June 2017	Both steps in this action are ongoing.
Public Stakeholder Opportunities	TBD

Goal: Sustainable Ocean Uses – **Ocean Aquaculture**	**Action**: #2 Improve collaboration on ocean aquaculture
Champion: Kevin Chu (NOAA)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. NOAA's aquaculture coordinator will coordinate with state programs, the aquaculture industry, Tribes and Federal partners.	Contact aquaculture practitioners and Federal agencies overseeing aquaculture in each Mid-Atlantic State.
Progress as of June 2017	The NOAA Regional Aquaculture Coordinator has contacted government agency aquaculture staff in every state to initiate a collaborative relationship.
Public Stakeholder Opportunities	TBD

Goal: Sustainable Ocean Uses – **Maritime Commerce and Navigation**			
Co-Champions: Chris Scraba, Doug Simpson (USCG), Jeff Flumignan (MARAD) ***Maritime Commerce and Navigation Safety Work Group:*** *Federal Agencies:* Darryl Francois/Amy Stillings (BOEM); Lisa Croft/Darlene Finch (NOAA), Jeff Orrock (NOAA-NWS); Joe Atangan (USFFC) State *Agencies:* Michael Snyder (NY DOS); Peter Clouse (NY DOS); Karen Chytalo (NY DEC); Kevin Hassell (NJDEP); Kimberly Cole (DE DNREC; Laura McKay (VA DEQ); *Technical Input:* Kate Morrison (MARCO); Jay Odell (TNC-Portal); Matt Campo (Rutgers-Portal). *Port Partners and OGAs*: USCG Sector Hampton Roads, Maryland-NC Region, Delaware Bay and New York along with Pilots Association and Port Authorities of respective ports.			
Action	**Steps for 2017** *Verbatim from the Plan*	**Progress/*Milestones***	**Public Stakeholder Opportunity**
1. Monitor marine commerce trends and traffic patterns to identify and address emerging commerce and navigation needs.	A. Annually review type-of-vessel categories to ensure that available data layers depict primary marine commerce vessel types (underway and short-term).	• May 3, 2017 Work Group Webinar: currently no new data products. MC.gov provided update to working group regarding intentions for future data. • November 2017 Webinar planned. • BOEM Fall 2017 (date tentative) Intersection of Offshore Wind and Maritime Transportation Workshop.	Partial – June 20 RPB
	B. Annually review AIS shipping data to identify changes in marine commerce trends and needs, and provide the findings to the RPB member entities with authorities that influence marine commerce (underway and short-term).	• May 2017 Work Group Webinar: currently no new products. MC.gov provided update to working group regarding intentions for future data. • BOEM FALL 2017 (date tentative) Intersection of Offshore Wind and Maritime Transportation Workshop.	Partial

2. Maintain reliable ocean use data sets relevant to navigation.	A. Develop processes to: (1) review available data layers that represent ocean use activities that influence or are influenced by navigation and marine commerce; and (2) compare the ocean data to AIS shipping data to identify real or potential effects on marine commerce trends and needs (short-term and ongoing).	• From May 3, 2017 Work Group Webinar: ○ MC.gov anticipates FY15-17 data from USCG during 4th quarter 2017. ○ District 5 to raise awareness of humpback whale unusual mortality event (UME) investigation by NOAA and encourage increased vessel awareness posture with local Harbor Safety Committees. • BOEM Summer 2017 (date tentative) NY State Task Force meeting on Offshore Renewable Energy.	Partial
	B. Review the data layers identified in Step A annually, and provide information regarding needed data updates to RPB member entities with authorities that influence marine commerce (short-term and ongoing).	• May 3 2017 Work Group Webinar: MC.gov update. • November 2017 Webinar planned. • December 2017 annual review update to RPB members.	Partial
	C. Develop a data management process that provides timely, useful, and relevant vessel traffic data products for the Mid-Atlantic (ongoing).	• May 3, 2017 Work group Webinar: MC.gov update. • November 2017 Webinar planned. • December 2017 annual review update to RPB members.	No
3. Catalogue intersections between entities whose authorities influence	A. Catalogue interagency coordination agreements that influence or are influenced by navigation (short-term).	• USCG is generating draft catalogue for Work group review in November.	Partial

marine commerce and navigation and identify opportunities for improved coordination.	B. Provide the RPB recommended opportunities to improve interagency coordination for review and potential agency action (short-term/ ongoing).	• Semi-annual May and November Work Group Webinars, beginning November 2017.	Partial
	C. Develop a process to annually review RPB member entity coordination practices pertinent to ocean uses that influence maritime commerce and navigation and identify opportunities to improve coordination and stakeholder engagement. The results of this review should be sent to the RPB membership for review and consideration (short-term and ongoing).	• Annually provide update of catalogue to RPB members in December.	No
4. Identify impacts to navigation and port infrastructure stemming from the Panama Canal expansion.	A. Monitor marine commerce trends and traffic patterns to identify and address emerging commerce and navigation needs, including possible changes to port infrastructure, primary cargoes, or cargo management practices (short-term and ongoing).	• Aug 2016: NOAA-sponsored interagency workshop on Panama Canal expansion. • May 3, 2017 Work Group Webinar: National Weather Service best practices and US Army Corps of Engineers (USACE) projects updates. • Sector Hampton Roads MSIB – Arrival-Departure of M/V COSCO Development from Port of Virginia May 8-9, 2017. • The Port of NY and NJ: 14,000 and 18,000 TEU Ship Simulation Study Protocols.	Partial

	B. Identify and track Mid-Atlantic ports conducting navigation channel deepening or widening projects to assess impacts to marine commerce disruption or rerouting measures (short-term and ongoing).	• May 3, 2017 Work Group Webinar: USACE projects updates. • The Port of NY and NJ: 14,000 and 18,000 TEU Ship Simulation Study. • February 2, 2017 Sector Hampton Roads Ports and Waterways Safety Assessment (PAWSA). • Port of VA/USACE Proposed Deepening and Widening Phased Construction Project to 55' deep and 1400' wide by 2020-21. • At request of MD pilots in Jun 2017, USACE will be asked to widen Seagirt Marine Term Channel, Baltimore, MD to accommodate larger NPX vessels. • Completion of Bayonne Bridge vertical clearance increase n 2017. • Delaware River Deepening to 45' – 2018.	Partial
	C. Assess coastal approaches against proposed port depths to predict whether offshore transit routes will change (short-term and ongoing).	• May 3, 2017 Work Group Webinar: USACE dredging project updates. • Review of Dam Neck Danger Zone Boundary to facilitate approaches to Chesapeake Bay and VA/NC Wind Energy Areas (WEAs) – ongoing. • Review of cumulative impacts from the NJ/DE/MD offshore WEAs-ongoing.	Partial

Goal: Sustainable Ocean Uses – **Sand Management**		
Champion: Darryl Francois, Jeff Reidenauer, (BOEM)		
Action	**Steps for 2017** *Verbatim from the Plan*	**Progress**
1. Promote strategic stakeholder engagement and regional partnering initiatives.	A. Promote engagement with federal, state, tribal, and local partners to improve coastal planning and information sharing, implement effective and sustainable resource management strategies for OCS sand, and facilitate efficient processes to best serve the public's short- and long-term coastal resilience needs.	BOEM to meet with fishermen about BOEM process in identifying sand resources and authorizing use of OCS sand as well as issues concerning dredging and potential impacts regarding sand resources off New Jersey in summer 2017.
	B. Serve as a liaison among federal agencies, states, tribes, and other stakeholders (through regional sand management working groups) to facilitate communication and share information regarding the use of OCS resources in an environmentally sustainable manner.	BOEM to meet with USACE mid-2017 to discuss collaboration on upcoming projects on Long Island, New York; BOEM coordinating with USACE on potential areas for future New Jersey projects. BOEM will facilitate a regional sand management working group meeting/webinar to share information on sand needs and data.

2. Develop a comprehensive inventory of sand resources to support planned and future restoration and resilience projects, provide availability for emergency use, and manage competing use challenges.	A. Leverage BOEM's geodatabase as a central repository for OCS sand resource data collected through state co-op agreements and environmental studies to better facilitate offshore sand management; make information on borrow site and potential resource locations available on Portal.	BOEM completed geophysical surveys of potential sand resource areas offshore southern New Jersey and Delaware in May 2017; Geological (vibracoring) sampling will be conducted in southern NJ and DE in June 2017; BOEM invested $12.8 million since Hurricane Sandy to identify sand resources and update databases and maps; creating a National Sand Inventory and Marine Mineral Information System (MMIS); BOEM reaching out to MARCO and data portal team as the efforts progress.
	B. Use USGS sediment transport studies to advise on short- and long-term regional cumulative impacts of offshore sand and aggregate resource extraction on stability of barrier islands, other coastal features.	Ongoing.
	C. Develop strategic approaches to optimize OCS sand resource management by considering geological, engineering, economic, environmental, and dredge operation variables for multiple uses of borrow sites.	BOEM study through interagency agreement (IA) with USACE examining geological, engineering, economic, environmental, and dredge operation variables for multiple uses of borrow sites.
3. Conduct studies to support sustainable management of offshore sand resources.	F. Routinely collaborate through ESP, with federal agencies and state and tribal entities with mutual study interests.	Through IA with NOAA, undertaking a programmatic regional geospatial assessment of EFH in 2017 to support leasing decisions in offshore waters; BOEM invited, received, and is evaluating several ideas for studies in Mid-Atlantic for FY 18-20.
	G. Enhance access to a range of data and studies by linking the Portal to ESPIS.	Atlantic Data Coordination meeting with Hurricane Sandy-funded state cooperative agreement partners held at Univ. of Rhode Island in April 2017 about the

		MMIS with 15 in person/40 via webinar, including NY, NJ, DE, MD, VA.
	C. Use Portal to inform ecological sustainable offshore sand extraction and placement, including information on non-consumptive recreation and other uses, when considering beach nourishment projects.	Ongoing.
4. Identify and improve existing federal-state interactions and cooperative agreements in the region.	D. Identify new and improve existing stakeholder relationships regarding coordination around beach nourishment and coastal restoration projects that utilize OCS sand resources.	Ongoing.
	E. Continue to collaborate with USACE regarding coastal resiliency needs and identify priorities that best support both programs, including OCS sand resource assessment and evaluation, data gaps and science needs, environmental coordination and consultation, and other elements.	BOEM and USACE signed a MOU in February 2017 to enhance coordination on managing sand, gravel, and shell resources from the OCS; the MOU establishes a framework for early and sustained coordination and cooperation between BOEM and the USACE, and supports consistency in environmental compliance, project scheduling, and negotiated agreement requirements for projects.
	F. Continue working through state co-operative agreements to continue building the comprehensive inventory of OCS sand resources in the Mid-Atlantic region	BOEM working with Atlantic State Cooperative Agreement partners on second round of agreements to identify new potential offshore sand resources; working with DE Geological Survey to develop a regional geologic model and framework, in coordination with NJ, VA, and MD Geological Surveys.

5. Engage fishing communities in planning and environmental review of proposed activities.	D. Communicate BOEM's sand resource management strategy and prioritization of OCS sand resources to avoid use conflicts with fishing grounds.	BOEM engaging fishing communities to avoid use conflicts in New Jersey; working with USACE and NJDEP to coordinate proposed OCS sand resource areas with fishing communities and develop a strategy; meeting with fishing community representatives in 2017; coordinating with Mid-A States to identify contacts within the fishing communities to ensure effective communication and outreach occurs for each project.
	E. BOEM will communicate its science strategy for fisheries studies in its annual studies planning process and solicit feedback from fishery stakeholders on priority research gaps.	BOEM solicited stakeholder feedback in November 2016 on ideas to address priority research gaps for its FY18-20 Studies Plan; continue to solicit feedback in development of short and long term strategy to address priority research gaps related to fisheries.
	F. BOEM will continue to inform and solicit feedback from NMFS and regional FMCs and work together to develop best management practices to avoid and/or minimize fishery impacts associated with dredging of offshore sand resources.	BOEM's ongoing project-specific EFH consultations; use best available science to inform development of appropriate BMPs for each project-specific scenario; coordinate with NMFS and FMCs in the SOW development for two new fisheries related studies applicable to the Mid-A in BOEM's FY17-19 National Studies List.
	G. BOEM will use data and information from the Portal and Plan to support enhanced engagement with commercial and recreational fishermen in planning and environmental review of proposed activities.	BOEM's geodatabase continues to evolve and will inform the Portal; BOEM-specific data coupled with other spatial data within the Portal used as a tool to visually communicate the spatial relationship of proposed BOEM activities with other fishery use conflicts.

	H. BOEM will identify potential conflicts or concerns through review of data used for scoping and environmental analyses, and work with fishermen to identify high use areas early on to avoid use conflicts.	BOEM planning a meeting with fishery stakeholders in New Jersey, tentatively summer 2017.
6. Engage tribes in planning and environmental review of proposed activities.	D. BOEM will continue tribal consultations for enhancing understanding of submerged cultural resources potentially impacted by OCS sand management.	BOEM will improve consultations and communication with federally-recognized tribes.
	E. BOEM will communicate sand resource management strategies to avoid use conflicts with tribal uses and submerged cultural resources.	Ongoing.
	F. BOEM will communicate its science strategy and seek partnerships with other federal and state agencies for submerged cultural resource studies in its annual studies planning process and solicit feedback from tribes on priority research gaps.	Ongoing.
	G. BOEM will use data and information from the portal and from tribes to enhance planning and environmental review.	Ongoing.
	H. BOEM and other federal and state agencies should work with tribes when possible early in the project planning process to identify submerged cultural resource areas of high significance and avoid use conflicts.	Work underway; BOEM will engage federally-recognized tribes in planning; will solicit feedback from tribes on priority research gaps.

Progress as of June 2017	• BOEM invited, received, and is evaluating ideas for studies in the Mid-Atlantic for FY 18-20. • BOEM and USACE signed a MOU in February to enhance coordination on managing OCS sand resources. • BOEM working with Atlantic State Cooperative Agreement partners on second round of agreements to identify new potential offshore sand resources. • BOEM participated in Atlantic Data Coordination meeting at URI in April about the MMIS. • BOEM planning for targeted meetings with states, USACE, and fishery stakeholders. • BOEM completed geophysical surveys of potential sand resource areas off southern NJ and DE in May 2017; Geological (vibracoring) sampling will be conducted in southern NJ and DE in June 2017. • BOEM creating a National Sand Inventory and Marine Mineral Information System (MMIS), will inform Portal.
Public Stakeholder Opportunities	• BOEM will meet with targeted constituent groups on specific topics. • BOEM will facilitate a regional sand management working group meeting/webinar to share information on sand needs and data. • BOEM will invite ideas for future studies in Mid-Atlantic in Fall 2017.

Goal: Sustainable Ocean Uses – **Non-consumptive Recreation**	**Action:** Identify, characterize, and share information about measures to maintain the recreational value of important non-consumptive recreational areas and the activities they sustain.
Champion: Elizabeth Semple (NJDEP) **Coordinating Federal Entity:** Douglas Simpson (USCG) ***Work Group Members:*** Chris Scraba (USCG); Amy Stillings (BOEM); Lisa Croft (NOAA); Kevin Chu (NOAA); Scott Steinback (NOAA) Chris Darnell (USFWS); Michael Snyder (NY DOS); Peter Clouse (NY DOS); Karen Chytalo (NY DEC); Sherryll Jones (NY DEC); Kevin Hassell (NJDEP); Kimberly Cole (DE DNREC); Nicole Rodi (DE DNREC); Gwynne Schultz (MD DNR); Catherine McCall (MD DNR); Lisa Gutierrez (MD DNR); Laura McKay (VA DEQ); Nick Meade(VA DEQ); Kate Morrison (MARCO); Jay Odell (TNC-Portal); Jeanne Herb (Rutgers-Portal); Jennifer Whytlaw (Rutgers-Portal) Matt Campo (Rutgers-Portal)	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Define, in collaboration with stakeholders, what it would mean for ocean and coastal uses and areas to be considered important for non-consumptive recreation. A variety of factors may be considered (e.g., intensity of use, contributions to local economies, maintaining dark skies and natural sounds). Complete identification and mapping of such areas and put them on the Data Portal.	Develop a short survey for the public and stakeholders. Distributed through partners and stakeholder groups to account for the importance of recreational uses, the economic values, conflicts for and with recreational uses and impacts to natural resources. Summer 2017.
B. Identify and assess potential impacts and use conflicts to important non-consumptive recreational uses from other human uses, as well as potential impacts and conflicts between non-consumptive recreational uses and marine and coastal resources.	Surveying of stakeholders will be implemented, through partner organizations wherever possible, to determine stakeholder views on the important issues and conflicts regarding non-consumptive uses. Summer 2017.
C. Work with USFWS to develop and disseminate guidance for recreational users on best practices that reduce potential impacts between recreational activities and marine and coastal wildlife.	Identify known best management practices for non-consumptive uses. Summer/Fall 2017.
D. Identify, catalogue, and highlight potential improvements to current Federal, State, and Tribal authorities, standards, and processes for maintaining non-consumptive recreational uses.	Refine information on identified Federal, State, and Tribal authorities, standards and processes through the workgroup and RPB. Fall 2017.

E. Convene stakeholders, the public, and RPB entities throughout the region to review findings and improve communication to increase understanding of recreational uses with and between agencies, stakeholders, and the public.	The Work Group will work with MARCO staff to hold meetings with stakeholders and the public to provide opportunity for comment on survey results, USFW best practices, identified impacts to and from important recreational uses and catalogued Federal, State, and Tribal authorities, standards and processes. Fall 2017.
F. Develop and publicly post report(s) for Federal agencies, States, Tribes, and the RPB on potential improvements to practices and processes as determined necessary, feasible, and appropriate.	1. Develop a report and post workgroup findings. Winter 2017/2018. 2. Develop actions steps to follow based on workgroup findings and stakeholder input.
Progress as of June 2017	Survey in development. Initial draft of authorities, standards & policies has been circulated. . Initial discussions about hosting meetings, possible leveraging partners to increase the number of meetings held across the region. Plans are underway to hold workshops in each state between August and October of 2017.
Public Stakeholder Opportunities	The summer/fall workshops in 2017 will have space available for key representatives of the non-consumptive recreation industry and stakeholders.

Goal: Sustainable Ocean Uses – **Tribal Interests and Uses**	**Action #1:** Identify, review and, if appropriate, recommend updates to Tribal consultation policies as they pertain to ocean planning.
Co-Champions: Shinnecock Indian Nation and Pamunkey Indian Tribe	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Compile and review Tribal consultation policies from Federal and State agencies.	RPB is still compiling consultation policies. Have received policies from: NOAA, BOEM, DOD.
B. Identify how agencies can improve existing policies and provide outreach to Tribes about how to engage with agencies under existing/ improved policies for topics such as resilience planning, sustainable fisheries management, submerged cultural resources, energy independence, and application of Traditional Knowledge for planning, management, and decision making.	Will coordinate webinar for Fall 2017 to discuss tribal consultation policies with RPB.
Progress as of June 2017	In progress.
Public Stakeholder Opportunities	Not Applicable.

Goal: Sustainable Ocean Uses – **Tribal Interests and Uses**	**Action #2:** Develop Tribal and agency ocean planning contact directories.
Co-Champions: Shinnecock Indian Nation and Pamunkey Indian Tribe	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Develop a directory of Tribal contacts, including both environmental and historical preservation Tribal contacts, as well as a process for updating the current status of contact information for all federally recognized and state recognized Tribes in the Mid-Atlantic region that wish to participate.	Bureau of Indian Affairs developed interactive directory we will be linking to for information on tribal contacts, in addition to a tribal ocean planning network (TOPN) contact list.

Develop a directory of contacts in Federal agencies and State governments to post on the RPB website, including State Historic Preservation Officers (SHPOs) and Tribal Historic Preservation Officers (THPOs), and a process for updating the current status of contact information.	RPB is still compiling lead contacts from member entities for Tribal outreach.
Progress as of June 2017	In Progress.
Public Stakeholder Opportunities	Not Applicable.

Goal: Sustainable Ocean Uses – **Tribal Interests and Uses**	**Action #3:** Work with Tribes to develop a Tribal Ocean Planning Network to facilitate coordination between Mid-Atlantic and Northeast Tribes in the ocean planning process.
Co-Champions: Shinnecock Indian Nation and Pamunkey Indian Tribe	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Develop a Tribal Ocean Planning Network by coordinating with the RPB Tribal Co-Lead from the Mid-Atlantic (in consultation with Tribal Co-Leads in the Northeast) and explore opportunities for additional facilitation support. (short-term)	Tribal Ocean Planning Network Presentation to be given at National Congress of American Indians Conference June 2017.
B. Identify delegates and alternates to the Tribal Ocean Planning Network from all federally recognized and state recognized Tribes in the Mid-Atlantic and Northeast regions, to engage in Tribal Ocean Planning Network activities including operating a communication list-serve, hosting webinars, and holding sideline meetings at annual Tribal conferences such as the National Congress of American Indians, and the United South and Eastern Tribes. (short-term and ongoing)	Tribal Ocean Planning Network representatives to be begin to be identified at NCAI Mid-Year Conference June 2017.
Progress as of June 2017	In Progress.
Public Stakeholder Opportunities	Not Applicable.

Goal: Sustainable Ocean Uses – **Tribal Interests and Uses**	**Action #4:** Enhance understanding of Tribal rights.
Co-Champions: Shinnecock Indian Nation and Pamunkey Indian Tribe	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Post historical, legal, and other documents detailing Tribal rights on the RPB website or similar media; documents will include a timeline of Treaties with Tribes in the region specific to marine uses. (short-term)	Collecting documents
Progress as of June 2017	In Progress.
Public Stakeholder Opportunities	Not Applicable.

Goal: Sustainable Ocean Uses – **Tribal Interests and Uses**	**Action #5:** Federal and State governments meet with Tribes to discuss issues related to Tribal participation in regional ocean planning and management, including policy and technical matters and grant opportunities.
Co-Champions: Shinnecock Indian Nation and Pamunkey Indian Tribe	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Federal agencies contact the Tribes in the Mid-Atlantic region to seek informal meetings. (short-term and ongoing)	BOEM has contacted Shinnecock Indian Nation. NOAA has a meeting with Shinnecock Indian Nation planned for June 2017.
B. Convene Federal and State governments for an informal meeting with Tribal government officials. The meetings should take place at a mutually agreed upon location that does not require excessive travel for Tribal participants and include a discussion of grant opportunities for Tribes, as well as training on use of the Federal grant portal to find Tribal funds.	NY Department of Environmental Conservation has scheduled meeting with Shinnecock Indian Nation. Additional meetings to be scheduled with other RPB entities and Tribes for 2017.

C. Share reports of meetings with the RPB.	Reports from June Meetings to be shared August 2017.
Progress as of June 2017	In Progress.
Public Stakeholder Opportunities	Not Applicable.

Goal: Sustainable Ocean Uses – Tribal Interests and Uses	**Action: #6** Account for Tribal historic resources under the National Historic Preservation Act.
Co-Champions: Shinnecock Indian Nation and Pamunkey Indian Tribe	
Steps for 2017 *Verbatim from the Plan*	**Milestones** *Expected dates for steps to be taken*
A. Engage Tribal historic preservation offices in updates of the Plan and ongoing regional ocean planning, to ensure that historic and cultural resources are accounted for and to enhance any NHPA consultations that may be needed for future projects.	Ocean Action Plan has been sent to Tribal PHOs throughout the region. Webinar for their feedback on implementation to be scheduled for Fall 2017.
Progress as of June 2017	In Progress.
Public Stakeholder Opportunities	Not Applicable.

Mid-Atlantic Ocean Data Portal		
(MARCO's Ocean Mapping & Data Team serves as the work group for the portal actions) ***Champion:*** Laura McKay (VA), ***Members***: ***Federal Reps***: Megan Treml (NOAA), Christine Taylor, Lora Turner, Josh Wadlington (BOEM); Elizabeth Pendleton (USGS); Doug Simpson, David Snider, Onni Irish (USCG); Joe Atangan, Sarah Bowman (DoD); Sherilyn Lau (EPA); Hoyt Battey (DOE); George Jackson (DOT/MARAD); Pam Toschik, Caleb Spiegel (USFWS); ***State Reps***: Nick Meade (VA); Kim Hernandez, George Edmonds (MD); Nicole Rodi (DE); Kevin Hassell(NJ); Jeff Herter, Mina Innes, Melissa Albino, Alex Kuttesch (NY); ***Tribal Rep***: Kelsey Leonard (Shinnecock Tribe); ***MAFMC Rep***: Stewart Michels (DE) ***Technical Team:*** Tony MacDonald, Karl Vilacoba (Monmouth University); Jay Odell, Chris Bruce (TNC); Rick Lathrop, John Bognar, Jim Trimble (Rutgers University); Nick Napoli (MARCO contractor); Kate Morrison (MARCO)		
Action	**Steps for 2017** *Verbatim from the Plan*	**Progress**
1. Develop and implement a plan to sustain Data Portal operations and maintenance.	A. Develop a range of levels of portal maintenance and updating options and associated costs.	Beginning in late 2016, the portal technical team conducted initial assessments of the relative costs associated with maintaining the portal under different scenarios. These initial assessments cover the cost of the portal's IT infrastructure, data management and development, portal team management and coordination, and stakeholder engagement and communications. These assessments will be updated in late 2017 recognizing that pending federal and state commitments to update data products will influence longer-term budget considerations and scenarios.
	B. Convene RPB entities or data relevant to the continued maintenance and updating of the Data Portal to prioritize operational needs, agree to appropriate roles and discuss partnerships options.	MARCO's Ocean Mapping & Data Team has been meeting quarterly since 2014. The team was expanded after the January 2017 meeting, adding several more technical experts from the RPB member entities. The expanded team met in April 2017 to discuss responsibilities for maintaining and updating relevant data products. The OMDT serves as the work group for the RPB. It identifies data gaps, helps procure new data layers and identifies

		user trainings and ocean stories or case studies about the use of the portal. Trainings of potential users and stories of portal uses are critical to obtaining long-term support for the portal.
	C. Identify partnership and collaboration commitments to meet ongoing needs.	The portal team continues to maintain important partnerships and ongoing activities in collaboration with the Northeast Ocean Data Portal and the Marine Cadastre for some of the most important data assets, including AIS, VMS, VTR, marine life, and ecologically rich area data products (to name a few). The portal team also continues to partner with MARACOOS to inform products for the portal's "Oceanography" theme.
2. Maintain operational components including web services, data development and integration.	A. Continue to develop and integrate new data and updated layers from a variety of sources in consultation with RPB member entities and stakeholders.	Since the end of 2016, the portal has added datasets on ocean economics (the revenues generated by ocean dependent businesses and activities), national monument boundaries, and the deep-sea coral protection area in consultation with appropriate RPB members. In addition, portal team members have begun participating in OAP work groups, including non-consumptive recreation, ocean acidification, maritime commerce and navigation, identifying ERAs, mapping species shifts and developing healthy ocean indicators.. The portal team has also had numerous individual discussions with members of other OAP work groups. Through these interactions, the portal team has identified data requirements and informed its data development work plan through 2017. The work plan through 2017 includes new or updated products on commercial fishing activity, vessel traffic, sand resources and requirements, ocean economics and population, ocean

		acidification, marine life, and oceanography.
	B. Continue and/or expand efforts to manage and publish authoritative Federal agency data in a timely and readily useable form such as web services, through mechanisms such as data sharing agreements among RPB member entities.	Some of the data in the portal are provided by the Marine Cadastre project, which publishes web services for authoritative federal data. Continued engagement with federal agencies through the OMDT and in collaboration with the Marine Cadastre team will help to ensure priority datasets are increasingly maintained by responsible federal agencies over the long-term.
	C. Further explore opportunities to capture Tribal data on the Data Portal.	No progress to report as of June 2017, but Portal Team will seek opportunities during the reminder of the year.
3. Continue to engage in agency outreach and public engagement to enhance date and Data Portal functionality to effectively support decisions related to ocean management.	A. Compile and post on the Data portal user success stories of applications of the Data Portal to ocean planning decisions through engagement with RPB member entities and stakeholders.	The portal currently includes nine ocean stories describing different uses of the portal. In addition, the team has developed four shorter portal use cases describing how the portal has been used for decision-making and for educational purposes. Some of these additional stories will be added to the portal as appropriate and others may be used through a variety of public communication tools. Additional use cases are in development. Continued engagement with the OMDT, OAP work groups, and the public is expected to yield many more ocean stories and portal use cases in 2017.
	B. Expand Federal agency data managers' participation in relevant RPB work groups and the MARCO OMDT and help leverage their agencies' assets.	As of April 2017, the expanded OMDT includes new members from USGS, BOEM, USFWS, and several MARCO states. In addition, previous members from a range of state and federal agencies have been re-confirmed. The expanded OMDT had been given increasing responsibility for participating in data updates,

		identifying portal use cases, and helping to organize portal trainings.
Public Stakeholder Opportunities	• The portal team continues its "How Tu" Tuesday webinar series aimed at providing an overview of specific datasets or portal features. • The portal team has participated in numerous conferences and regional workshops and expects to continue to attend relevant MARCO or RPB workshops related to the implementation of the OAP. • The portal team is identifying opportunities for stakeholder input on specific data products in collaboration with the appropriate OAP work groups. Potential opportunities include reviewing or informing updated commercial fishing, vessel traffic, non-consumptive recreation, and marine life data products. • The portal team continues to conduct targeted outreach to ocean stakeholders to communicate the value and various potential uses of the portal as well as to identify potential ocean stories and portal uses cases. The portal team encourages stakeholders to let the portal team know how the portal is being used in different contexts or if they know whether a group is interested in training.	

DRAFT Performance Monitoring and Evaluation (PM&E) Tracker

The Mid-Atlantic RPB seeks to develop and use a tool to track (1) progress on Plan implementation and (2) compelling outcomes and success stories as a result of implementation and evaluate the effectiveness of actions taken. The previous text in this document describes work planned for 2017 and completed as of June 2017 but does not yet evaluate progress or document outcomes or effectiveness.

The right tool could serve as a cornerstone of the PM&E process to track whether and how the RPB is implementing the final Plan. This information can inform every aspect of the process going forward, including adjusting how the RPB carries out its business and informing Plan updates and/or amendments. It could also go a step further and collect information about concrete outcomes of Plan implementation that result in positive outcomes for ocean health, better governmental decision making, enhanced stakeholder engagement and satisfaction, and other compelling outcomes and success stories. This information can showcase progress.

Proposed mechanism: Action champions would be asked to complete the following written template quarterly or semi-annually. Those completed templates would then be compiled into a single progress report that reflects the status of Plan implementation at regular intervals. This compiled progress report would be shared publicly.

Note:

- This PM&E tracker would be an annual **retrospective exercise** to be completed after the annual work plan for each action is written and completed.

Action Title	Performance Monitoring	Evaluation	Compelling Outcomes and Success Stories
	Documentation of progress toward action implementation. What has been accomplished thus far? Which milestones have been achieved?	*Has the action champion, workgroup or RPB accomplished what it hoped to accomplish as a result of achieving these milestones?*	*Compelling outcomes or success stories that have resulted from implementation of this action thus far. These outcomes may relate to topics such as promoting ocean health, good governance, stakeholder engagement, or improving data access. Potential examples include streamlined permitting, creation of new data, new funding opportunities, the formation of new MOUs/MOAs between agencies, and the application of data products toward a specific measurable outcome.*
Generic example entry for Action X:	• Working group was formed in specific month/quarter (step A). • Working group compiled list of data gaps in specific month/quarter (step B). • Webinar was held in specific month/quarter with a specific stakeholder community (step C).	A key stakeholder community received information and an opportunity to provide input that they otherwise would not have had. This was accomplished in the timeframe originally envisioned. This has enhanced collaboration and transparency, and improved data for decision making.	Implementation of Action X steps A through D resulted in the development of a groundbreaking new dataset and enhanced engagement with a stakeholder group that had previously not participated in decision making on this topic, but has expressed a strong interest in how that ocean resource is managed. This has built goodwill between the stakeholder community and key government agencies and sets the stage for better governmental and private sector decision making as a result of improved collaboration and better information that has been shared transparently. For more information, see project website at xxxx.