From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Mar 4, 2014 at 9:56 AM
Subject: Re: Comments on Mid Atl RPB Framework
To: Troy W Hartley <thartley@vims.edu>
Cc: "MidAtlanticRPB@boem.gov" <MidAtlanticRPB@boem.gov>, "McKay, Laura (DEQ) (Laura.McKay@deq.virginia.gov)" <Laura.McKay@deq.virginia.gov>, John Kuriawa - NOAA Federal <john.kuriawa@noaa.gov>

Thank you for your message and for submitting comments on the Draft Framework. The MidA RPB will consider all comments received in revising the Draft Framework, and will post them on the website. The MidA RPB will discuss the revised framework during its in-person meeting in the Spring of 2014. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Fri, Feb 28, 2014 at 8:28 PM, Troy W Hartley <thartley@vims.edu> wrote:
Please accept the following comments on the Draft Mid-Atlantic Regional Ocean Planning Framework.

Two overarching comments:

1) Framework lacks a clear commitment to help identify new sustainable economic development opportunities. Most key elements, principles, etc. are about avoiding negative outcomes and not about finding any positive outcomes, particularly for stakeholders that may be inclined to resist regional planning as another layer of government bureaucracy. For example, a Principle could be to "Enable opportunities…" for more efficient and effective sustainable economic development through multi-use of the ocean resources and ecosystem services.

2) Framework lacks details on how it intends to ensure the use of sound science. It could include a clear statement that regional ocean planning should be informed by the best available science. For example, why not establish a science advisory board? Utilize the Sea Grant programs in each state as an organizing body for access to university scientific and research capacity and input.

One substantive, specific comment:
Consider adding a 10th objective to Ocean Planning Goal 2: "Unanticipated, emerging activities. Provide a deliberative, multi-stakeholder, multi-government deliberative process for dealing with emerging, unforeseen and rapidly evolving issues (e.g., climate adaptation and resiliency planning; water resource management)."

Specific comments:
Page 2. List of key elements.

- "Use enhanced collaboration….to resolve disputes…collaborative, mediative approaches…" This suggests that the RPB needs a mechanism to reach out to the judicial system, since they have the constitutional responsibility of adjudicating disputes that might arise between conflicting uses of ocean resources and spaces. The judicial system also has its own formal dispute resolution and mediation mechanisms, in addition to their court procedures. Any RPB-enabled mediation and dispute resolution

mechanisms would need to be recognized by the judicial system if it wants to effectively resolve these disputes.

- "Consult scientists…" versus "Commitment to use the best available science…." Late is a stronger statement.

Page 5. Principles.
Principle 4 Sound science is weak. "Will consider" is much less committal than "will be informed by the best available science and traditional knowledge in decision making"

Page 6. Ocean Planning Goal 1.
Typo in Note? Do you mean "consider traditional values" or "consider traditional knowledge." Traditional values has a more common meaning as an element of a political philosophy, whereas traditional knowledge means acknowledging the value and relevance of local ecological knowledge held by local residents.

Page 8. Ocean Planning Goal 2.
Could be an opportunity to strengthen commitment to enabling new sustainable economic growth opportunities in this section. For example, Planning Goal 2 text could say "…and supports new economic opportunities and growth."

Note text could include: "…reduces conflict, enhances compatibility, and fosters new opportunities."

Regards, Troy Hartley

Troy W. Hartley, Ph.D.
Director, Virginia Sea Grant
Research Associate Professor, Marine Science & Policy
Virginia Institute of Marine Science
College of William & Mary
P.O. Box 1346
Rt. 1208 Greate Rd.
Gloucester Point, VA 23062

Ph. (804)684-7248
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Fax. (804)684-7269
Email. thartley@vims.edu
VASG Web. http://vaseagrant.vims.edu/
Personal web. http://www.vims.edu/about/directory/faculty/hartley_tw.php

Mid-Atlantic Regional Ocean Planning Comment Form

Please complete this comment form in legible handwriting. Your submitted comment form will be scanned in, posted to the Mid-Atlantic RPB's website, and become part of the written record. The comment form can either be handed to a Mid-Atlantic Regional Planning Body (RPB) Member, the facilitator, or sent via mail to:

Maureen Bornholdt, MidA RPB Federal Co-Lead
Bureau of Ocean Energy Management
Office of Renewable Energy
381 Elden Street
Mail Stop 1328
Herndon, VA 20170

Name: Jere Stephano

Affiliation: estuary & ocean lover, MERR, SURFRIDERS

Contact Information (phone, email, and/or address): 302·684·8136 tidesturn·jls@comcast.net
2815 S. Bay Shore Drive
Milton, DE 19968

Thank you for your comprehensive efforts. There is one ommission in your document I believe may have been an oversight: the non-human land-air-sea species who depend upon the ocean for their very lifeblood. And so I value Gregg Rosner's focus of what we can do as stewards of the ocean. May I suggest ~~making~~ changing the document to be more explicit in 3 ways:

1. how we can honor the element of water that makes all life possible
2. how we can be a voice for all nonhuman animal and plant species who depend upon the ocean for their existence
3. how we can sustain the ocean in order to benefit from its resources.

Though #1 and 2 were implicit in your plan, only #3 was explicit. Thus the ocean as a resource for man came across so loudly it drowned out the importance and connection with #1 and 2.

I am grateful for the careful way you are crafting this plan and admire the results. Thanks for asking for input from those who live by and love the ocean habitat.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Mon, Mar 24, 2014 at 8:53 AM
Subject: Re: Idea
To: tommy minor <tommyminor@gmail.com>

Thank you for your message. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Mid-Atlantic Regional Ocean Planning Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Sun, Mar 23, 2014 at 8:21 AM, tommy minor <tommyminor@gmail.com> wrote:
I have an idea: Stop relying on the comfort of oil and gas exploration. Stop enslaving the world economies to petroleum. Stop leaving the future generations with a legacy of pollution, death, and poor health.
Invest in alternative methods. Work on the improvement of alternative sources we already have.
I can live with windmill farms, but not oil derricks.

The proponents of oil and gas talk incessantly about leaving the huge national debt to our children and their children. How about the legacy of failure to move away from petroleum and coal and their terrible side effects? If we lead on the development of these alternatives. Show the wisdom of adventure in this field. We can prosper ahead of the others who choose to stay in the past.

We live in a technological revolutionary era. Embrace the technology and prosper or live in the past and wither.

Mid-Atlantic Regional Ocean Planning Comment Form

Please complete this comment form in legible handwriting. Your submitted comment form will be scanned in, posted to the Mid-Atlantic RPB's website, and become part of the written record. The comment form can either be handed to a Mid-Atlantic Regional Planning Body (RPB) Member, the facilitator, or sent via mail to:

Maureen Bornholdt, MidA RPB Federal Co-Lead
Bureau of Ocean Energy Management
Office of Renewable Energy
381 Elden Street
Mail Stop 1328
Herndon, VA 20170

Name: Pat Okerlund

Affiliation: Private citizen

Contact Information (phone, email, and/or address):

757-339-3450 okc200@cox.net

Some politicians are in favor & pushing offshore oil drilling which involves seismic testing which could harm or kill more than 100,000 marine animals. I am opposed to drilling for oil and seismic testing. We should be putting all our energies into developing clean energy, such as wind, to reduce burning fossil fuels which are the prime cause of global warming which causes our climates to change resulting in extreme weather events. Norfolk and surrounding areas are already affected by sea level rise. Houses are flooding on a regular basis. Some houses have been raised up, but it's very expensive and not everyone can afford it. The owners can't move because they can't sell their damaged homes.

I'm also concerned about oil spills if there is offshore drilling. Not only would it destroy wildlife, it would destroy our tourism and livelyhoods of fishing

industry and sensitive ecological areas that would never fully recover.

Mid-Atlantic Regional Ocean Planning Comment Form

Please complete this comment form in legible handwriting. Your submitted comment form will be scanned in, posted to the Mid-Atlantic RPB's website, and become part of the written record. The comment form can either be handed to a Mid-Atlantic Regional Planning Body (RPB) Member, the facilitator, or sent via mail to:

Maureen Bornholdt, MidA RPB Federal Co-Lead
Bureau of Ocean Energy Management
Office of Renewable Energy
381 Elden Street
Mail Stop 1328
Herndon, VA 20170

Name: TERRA PASCAROSA DUFF

Affiliation: TERRASCAPES ENVIRONMENTAL

Contact Information (phone, email, and/or address):

TERRA@TERRASCAPES.ORG

MY KNOWLEDGE ON OCEAN PLANNING HAS BEEN ENHANCED TEN-FOLD, IN LARGE PART, DUE TO ATTENDING THE LISTENING SESSIONS & THE OCEAN FRONTIERS II MOVIE SCREENING DURING THE WEEK OF MARCH 16, 2014. I HOPE THAT THE MUCH TALKED ABOUT DUPLICATED EFFORTS ARE AVOIDED AND WE CAN WITNESS MORE COLLABORATIVE EFFORTS FROM ALL OF THE GOVT ENTITIES, NGOS, ENVIRO GROUPS & LOCAL BUSINESSES IN ORDER TO DRAFT A SUSTAINABLE & SUCCESSFUL OCEAN PLANNING WORK PLAN.

Mid-Atlantic Regional Ocean Planning Comment Form

Please complete this comment form in legible handwriting. Your submitted comment form will be scanned in, posted to the Mid-Atlantic RPB's website, and become part of the written record. The comment form can either be handed to a Mid-Atlantic Regional Planning Body (RPB) Member, the facilitator, or sent via mail to:

Maureen Bornholdt, MidA RPB Federal Co-Lead
Bureau of Ocean Energy Management
Office of Renewable Energy
381 Elden Street
Mail Stop 1328
Herndon, VA 20170

Name: Ms. Tanterrian Taylor

Affiliation: Cheroenhaka-Nottoway Indian Tribe

Contact Information (phone, email, and/or address):

(757) 559-6150 email: Sunshine_23504@Yahoo.com.

5920 Poplar Hall Drive Apt. E304, Norfolk, VA 23502

How do you plan to Reach the Public?
Commercial & recreational fisher, Fishing communities?
Overfishing of the Larger Ships.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 9, 2014 at 2:57 PM
Subject: Re: Comments Re: Draft Mid-Atlantic Implementation Framework for the National Ocean Policy
To: Brighton/Smith <cab5@cox.net>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Wed, Apr 9, 2014 at 11:24 AM, Brighton/Smith <cab5@cox.net> wrote:
Re: Draft Mid-Atlantic Implementation Framework for the National Ocean Policy

Given a close physical proximity to the sea, I appreciate that an Ocean Policy to manage current and emerging maritime activity is being formulated. Thank you for undertaking this ambitious project

As a long time resident of the Cape Henry section of Virginia Beach, I regularly witness human activity on the ocean and in the mouth of the Chesapeake Bay. From my shoreline perspective sovereign, maritime transport, commercial fishing and recreational activity all occur simultaneously in and around nature. Unfortunately, I have also observed consequences of that activity: Sea turtle and marine mammal strandings as well as lost fishing gear and debris on the shore.

To learn more about this planning initiative I signed up for the informational webinar and participated in the local listening session in Norfolk. As a newcomer to the process, I am not familiar with everything that has transpired in plan drafting and with limited knowledge, I am sharing my thoughts and submitting comments and questions on the draft Mid-Atlantic implementation framework for the National Ocean Policy.

Overall, I am very impressed with the framework being developed. A holistic approach to managing maritime activity is clearly needed. Preserving environmental integrity of the ocean as usage grows and evolves inherently ensures resiliency and economic potential. Consolidated efforts to share data and negate redundancies and contradictory regulations will provide a more efficient platform to manage activity.

My concerns and questions involve:

1. Departure from the original intent of the Executive Order (13547 – “Stewardship of the Oceans, our Coasts and Great Lakes”) mandating the development of the National Ocean Policy

2. Engaging Industry in the process; and

3. Geographic extent

While recognizing the economic importance of our oceans and coasts, the executive order 13547 focuses on protection of our marine resources. The draft Mid Atlantic framework clearly addresses stewardship but departs somewhat from the original intent by shifting focus to economic growth, which begs the question: Is an economic development plan or a resource management plan being drafted? I would prefer that the original tone in the executive order be carried over into our regional implementation plan. That is, that economic integrity is preserved through measured conservation.

In developing this plan, industry involvement is needed, but pushing economic development is not the only way to achieve that. Has an advisory industry group been established? Given the international scope of maritime industries, its likely industry participants could bring worthwhile strategies adopted elsewhere to the table. It is well established that economic growth and environmental conservation are not mutually exclusive and corporate entities that rely on the ocean to fill their coffers need a safe clean environment. And, most recognize that sustainable efforts pay off, not just in the marketplace, but also in the cost of doing business. The benefits associated with eco-branding are being pursued through all business realms and companies like Maersk that operate in Norfolk participate in the sustainable initiatives (more info).

Lastly, the geographic extent of the plan should not exclude bays and estuaries. The human connection to the ocean is often through these waterways. Traffic funneling through the narrow mouth of the Chesapeake Bay is constricted. With Chesapeake Bay ports capable of handling gigantic post-Panamax vessels and LNG export and offshore energy and mining activity looming on the horizon, the ocean approach to and the mouth of the Bay could soon become very crowded and potentially dangerous. Much of the traffic passes through quickly, but a fair number of vessels anchor for days and sometimes weeks in the Bay. Over winter, on any given day, there have been 10 or so ships anchored off Cape Henry waiting for coal. In some years that number has doubled. At the very least, the mouth of the Chesapeake Bay should be included and the right to incorporate bays and estuaries should be reserved.
Thanks for your attention,

Carol Brighton
www.TidewaterCurrent.com

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Thu, Apr 10, 2014 at 1:48 PM
Subject: Re: Surfrider Foundation Comments on M-A RPB Draft Framework
To: Matt Gove <mgove@surfrider.org>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Thu, Apr 10, 2014 at 1:11 PM, Matt Gove <mgove@surfrider.org> wrote:
Please let me know if you have any questions, thanks!
Matt

Matt Gove
Mid-Atlantic Policy Manager
Surfrider Foundation
mgove@surfrider.org
952-250-4545

April 10, 2014

Maureen A. Bornholdt, Federal Co-Lead, Mid-Atlantic Regional Planning Body
Program Manager, Office of Renewable Energy Programs
Bureau of Ocean Energy Management, U.S. Department of the Interior

Gwynne Schultz, State Co-Lead, Mid-Atlantic Regional Planning Body
Senior Coastal and Ocean Policy Advisor
Maryland Department of Natural Resources

Gerrod Smith, Tribal Co-Lead, Mid-Atlantic Regional Planning Body
Chief Financial Officer
Shinnecock Indian Nation

RE: The Mid-Atlantic Regional Planning Body's Draft Framework

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith,

On behalf of the Surfrider Foundation (Surfrider), our thousands of Mid-Atlantic members, volunteers, and supporters—and nine chapters in New York, New Jersey, Delaware, Maryland, Virginia, and DC—we thank you for the opportunity to comment on the document, *Draft Mid-Atlantic Regional Ocean Planning Framework* (Framework), released December 16th, 2013.

We appreciate the efforts that the Mid-Atlantic Regional Planning Body (RPB) members have put forth under constrained staff and budget allotments. We applaud the changes made to further support coastal and ocean ecosystem health and the non-consumptive recreational activities reliant on them. Please consider the following suggestions.

HEALTHY OCEAN AND COASTAL ECOSYSTEMS

Surfrider believes that healthy coastal and ocean ecosystems should be the overarching goal of the RPB. Ecosystem protection is one of the primary goals of the *National Ocean*

Policy[1] and a core element of regional ocean planning. We support the addition of Principle #9 (Intrinsic Value), which stresses the importance of healthy coastal and ocean ecosystems as a core value of the RPB.

As the Mid-Atlantic region depends on healthy coastal and ocean ecosystems for economic, ecological, and cultural values, we suggest the RPB further prioritize them. For example, please consider adding language about ocean wildlife and ecosystem services in the Objectives under Ocean Planning Goal #1. Currently only "habitat" is mentioned. Ecosystem services and wildlife are not necessarily included in "habitat" and are just as important to conserve, protect, enhance, and restore. Additionally, Ocean Planning Goal #1 should be prioritized over Ocean Planning Goal #2.

NON-CONSUMPTIVE RECREATIONAL USE

Surfrider represents a range of coastal and ocean recreational users that cherish those areas as a place to relax, play, and reenergize. Surfrider, in collaboration with Point 97, The Nature Conservancy, and Monmouth University's Urban Coast Institute, recently completed an online survey of economic and spatial data for non-consumptive recreational users in the Mid-Atlantic. This data will be integrated into the MARCO Ocean Data Portal, filling a crucial data need.

As a major economic driver of coastal economies and communities, we would like to see more emphasis placed on protecting (and preserving access) for non-consumptive recreational uses, which are sustainable uses of our coasts and oceans. Currently, the Framework only mentions non-consumptive use under Ocean Planning Goal #2, Objective #7, "Coordinate improved understanding of near-shore and offshore non-consumptive recreational uses … to inform management of ocean activities and resources that may impact those activities." The Framework should include language about protecting and allowing access for recreational users into the future, not solely an "understanding" of non-consumptive recreation.

REGIONAL OCEAN MANAGEMENT PLAN

Surfrider is concerned that the Framework does not specifically cite the need for the RPB to produce a regional ocean management plan. The idea that the RPB will function solely as a forum for disputes between agencies doesn't make sense without a concrete plan for how those disputes will be decided. Similarly, if there is no plan, how will each participating federal and state agency work together to better manage our coasts and oceans and not continue to act unilaterally?

We believe that a regional ocean plan should include designated areas that provide protection for priority habitats and sustainable human uses (e.g., non-consumptive

[1] Executive Order 13547, Stewardship of the Ocean, Our Coasts and the Great Lakes. Fed. Reg. 43023. July 19, 2010.

recreation) from development such as renewable energy projects. Such protections need not be fully exclusionary to effectively steer project siting to less sensitive areas. Some examples include Special, Sensitive, and Unique (SSU) areas in Massachusetts's *Ocean Management Plan,*[2] Areas of Particular Concern in Rhode Island's *Ocean Special Area Management Plan*[3]*,* and Resources and Uses Conservation Areas (RUCAs) in Oregon's *Territorial Sea Plan*[4]. We also believe that a regional ocean plan should include clear standards and procedures for how government agencies evaluate new proposed uses as part of a coordinated permitting process.

The argument that a plan will be outdated as soon as it is finished ignores the fact that a plan can remain valuable with recurrent updates as new ocean data and management strategies arise. Please consider changing the language under "Role of the RPB" to reflect the process of creating a plan. Creating a plan should be the ultimate goal of the RPB process, and as such, the Framework should clearly define the steps to creating the final plan.

STAKEHOLDER ENGAGEMENT

Stakeholder engagement is crucial to the success of the RPB. We applaud the creation of the Stakeholder Liaison Committee (SLC) as a first step toward creating a plan for the Mid-Atlantic that balances the needs of those that live, play, and work here. Surfrider is actively reaching out to the broader non-consumptive recreational use community to solicit feedback and promote opportunities for public participation in the RPB process, as well as inform our participation as a member of the SLC.

Surfrider suggests either rewriting Principle #8 (Transparency and Engagement) to focus on the engagement of stakeholders, or, to add an additional Principle solely devoted to engagement. Additionally, the language on engagement should note that stakeholders will not just be contacted for feedback on RPB actions and documents, but be full partners in shaping and directing the RPB.

REGIONAL OCEAN ASSESSMENT

Surfrider stresses the importance of a comprehensive regional coastal and ocean assessment (Assessment) to the success and integrity of the RPB. The RPB cannot make informed decisions without adequate data. The Assessment should record historical and baseline information on coastal and ocean uses, ecosystem services, and natural

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[2] Massachusetts Secretary of Energy and Environmental Affairs. December 2009. *Available at* http://www.mass.gov/eea/waste-mgnt-recycling/coasts-and-oceans/mass-ocean-plan/

[3] Rhode Island Coastal Resource Management Council. October 2010. *Available at* http://www.crmc.ri.gov/samp_ocean.html

[4] Oregon Coastal Management Program. *Available at* http://www.oregon.gov/LCD/OCMP/Pages/Ocean_TSP.aspx

resources, while looking to project the changes within those categories and the cumulative impacts changes can have on the system. The Assessment should also identify key habitats and areas critical to ensuring ecosystem health, functionality, and resiliency.

To assist in completion of the Assessment, the RPB should convene an advisory panel of Mid-Atlantic coastal and ocean scientific experts, as well as collaborate with federal partners such as the National Oceanic and Atmospheric Administration (NOAA). This panel would be useful beyond the Assessment stage, to answer any scientific questions as the RPB moves forward.

RENEWABLE OCEAN ENERGY

Surfrider would like to see more emphasis on supporting renewable energy production (specifically offshore wind power) in the Framework. All Mid-Atlantic states have offshore wind power production proposals in some stage of development, so increased coordination through the RPB would be useful. An RPB-created coastal and ocean plan would give this potential economic driver more certainty of the permitting process, avoiding costly delays and reducing redundant efforts.

Objective #2 under Goal #2 does not limit the RPB to discussing renewable energy but is vague enough that oil and gas production could be construed as an RPB focus area. We think this is a mistake as some Mid-Atlantic states are solidly opposed to oil and gas development, which could lead to a stalemate of the RPBs functionality. Secondly, there are not any planned oil and gas developments or leases in the Mid-Atlantic until at least 2017, as laid out in the Department of the Interior's *Five-Year OCS Oil and Gas Leasing Program (2012-2017).*[5]

The Mid-Atlantic Regional Planning Body has the opportunity to protect our coastal and ocean ecosystems and the communities they depend on, before they are threatened. The Surfrider Foundation appreciates being part of this important process and we thank the RPB members for their contributions of time and energy in developing this framework. Together we can move forward with regional ocean planning, creating a stronger coastal and ocean ecosystem and economy in the Mid-Atlantic.

Sincerely,

Matt Gove
Mid-Atlantic Policy Manager
Surfrider Foundation

[5] Bureau of Ocean Energy Management. August 2012. *Available at* http://www.boem.gov/Five-Year-Program-2012-2017/

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Mon, Apr 14, 2014 at 11:16 AM
Subject: Re: Comment RPB
To: "Capt. Monty Hawkins" <mhawkins@siteone.net>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Mon, Apr 14, 2014 at 10:36 AM, Capt. Monty Hawkins <mhawkins@siteone.net> wrote:

Despite truly heroic efforts of individual scientists, I do not think NOAA's done a good job in the Mid-Atlantic: Not at all.
Nor do I think they'll do a better job when big-energy comes.
The Mid-Atlantic's RPB is, at least, commencing their activities with seemingly sound principles.
Our State representatives to the RPB should be more accessible than the federal side of NOAA Fisheries.
I especially support:
The RPB does not anticipate including in its planning efforts the major bays and estuaries of the Mid-Atlantic.

Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration.

Goal #1 focuses on protecting and conserving our ocean and coastal resources through efforts that improve our understanding of ocean resources and habitats, account for ecosystem changes, consider traditional values and scientific data in regional ocean planning, and foster collaboration across jurisdictions around ocean conservation efforts.
Draft objectives: Understanding, protecting and restoring key habitats

I'd add: ***Discovering,*** to Understanding, Protecting & Restoring Key Habitats..

Regards,
Monty

Capt. Monty Hawkins

mhawkins@siteone.net
Partyboat Morning Star
http://morningstarfishing.com
Ocean City, MD

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Apr 15, 2014 at 11:52 AM
Subject: Re: OffshoreWindDC comments on the Draft Mid-Atlantic Regional Planning Framework
To: Doug Pfeister <doug@offshorewinddc.org>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 11:12 AM, Doug Pfeister <doug@offshorewinddc.org> wrote:
Members of the Mid-Atlantic Regional Planning Body:

Attached please comments from the Offshore Wind Development Coalition (OffshoreWindDC) on the *Draft Mid-Atlantic Regional Planning Framework*.

Thank you for providing us with an opportunity to comment on the document. And please feel free to reach out to me with any questions.

Sincerely,
Doug Pfeister

_____

Doug Pfeister

Offshore Wind Development Coalition

doug@OffshoreWindDC.org

202-688-1424

1130 Connecticut Avenue, NW, Suite 300 Washington, DC 20036 • Phone: 202.688.1424 • www.OffshoreWindDC.org

April 15, 2014

VIA MIDATLANTICRPB@BOEM.GOV

Re: **Comments on the Draft Mid-Atlantic Regional Ocean Planning Framework**

Dear Members of the Mid-Atlantic Regional Planning Body:

The Mid-Atlantic Regional Planning Body (MidA RPB) released on December 16, 2013 a *Draft Mid-Atlantic Regional Ocean Planning Framework* that "proposes guideposts for how the MidA RPB could move forward with ocean planning with a draft vision statement, draft principles, draft goals, draft objectives, and an initial geographic focus" ("Frequently Asked Questions about the *Draft Mid-Atlantic Regional Ocean Planning Framework*," p. 1).

The Offshore Wind Development Coalition (OffshoreWindDC) and the American Wind Energy Association (AWEA) appreciate the opportunity the agency has provided to comment on the *Draft Framework*, and we respectfully submit this response.

OffshoreWindDC is an advocate for the U.S. offshore wind industry. The organization represents offshore wind developers and companies throughout the supply chain, including wind turbine manufacturers, offshore construction companies, environmental consultants, law firms, and other service providers. AWEA is a national trade association representing a broad range of entities with a common interest in encouraging the deployment and expansion of wind energy resources in the U.S. AWEA's members include wind turbine manufacturers, component suppliers, project developers, project owners and operators, financiers, researchers, renewable energy supporters, utilities, marketers, customers, and their advocates.

We are in agreement with a number of assertions made in the document. For instance, we agree that "compatibility of multiple interests" should be a "principle" (one of nine) that the RPB should uphold "so that multiple interests can co-exist in a manner that reduces conflict and enhances compatibility." We also support the "ocean planning goal" (one of two) to "plan and provide for existing and emerging ocean uses in a sustainable manner that reduces conflicts, improves efficiency and regulatory predictability, and supports economic growth."

Yet we want to be sure that the RPB remains within its mission and "**does *not* change** existing authorities or creating new mandates" (p. 2, emphasis not added). The discussion concerning "objectives," e.g., "facilitate greater collaboration around ocean energy issues in the Mid-Atlantic," and "actions," e.g., "coordinate data collection for environmental assessment to inform development of new offshore renewable energy projects," are ambiguous on this point. Who should reach these objectives? Who is taking these actions?

We agree with the Framework on page 1 that "Federal, State, and Tribal agencies" should be the ones taking "actions" like the one above, but this point is not spelled out with respect to "example actions" on pages 6-10. The case is even more true for "objectives," since the definitions section does not indicate *who* will be responsible for reaching "objectives." Our point is that the RPB should not assume the *responsibility* for facilitating greater collaboration around ocean energy issues or coordinating data collection. Otherwise, the RPB will be expanding its scope beyond "provid[ing] a forum for coordination of ocean planning activities in the region" (p. 4).

We thank you for providing this opportunity to comment on the *Draft Mid-Atlantic Regional Planning Framework* and hope the MidA RPB will consider this letter as it prepares its Final *Framework* and contact us with any questions RPB members may have.

Sincerely,

Doug Pfeister
Acting President
Offshore Wind Development Coalition

Tom Vinson
Vice President, Regulatory Affairs
American Wind Energy Association

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Apr 15, 2014 at 12:20 PM
Subject: Re: Draft framework comments MidA RPB
To: Gregg Rosner <gwrosner@hotmail.com>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 12:00 PM, Gregg Rosner <gwrosner@hotmail.com> wrote:

Comments for public submission.

Regards-

Gregg Rosner

April 15, 2014

Bureau of Energy Management
BOEM
381 Elden St.
Herndon, Va. 20170

Re: Public comments for Draft Mid-Atlantic Regional Ocean Planning Framework

The draft framework of the MidA RPB, (although some intentions have merit), essentially commits the fatal mistake of merging anthropogenic *economic and energy needs* with the indispensable natural systems of ocean life. It fails on many obvious principles and doesn't adhere to basic tenet of marine ecosystems that…"***the guiding principle of all bodies of water is that (they) "are dissipated systems bound by non-linear equations." Respectfully, these are somewhat random, multi-dimensional matrixes, with fluid dynamics predicated on time-space continuums and tropic transfers."*** The predatory evolution of mankind in marine habitats, fragments the soft boundaries of the world's oceans, and to formulate a planning framework to manipulate the last vestige of this water planet, Earth, is a contractual folly that terminates our unspoken contract with creatures of equal or greater intelligence.

The document also has multiple shortfalls within the dimensionality of an ***Essential Ocean Habitat*** **(**Gregg Rosner 2014). The conceptual components of establishing an ***EOH,*** are the integration of the primary building blocks of a healthy aquatic environment, habitat for all ocean life to communicate within their species (biophony), reside, forage for sustenance, raise their young and resolve predator/prey relationships. This definition includes scientifically determined and seasonal migratory routes, inclusive of free-range species requirements and habitat fidelity. An ***EOH*** determines specific protective measures for propagation of species in regards to genetic diversity and density, consistent with reproductive rates to support and protect current populations. In short, prevent any future loss, immediately.

The well-documented laws of the Marine Mammal Protection Act (MMPA), the Endangered Species Act (ESA) and the Magnuson-Stevenson Fisheries Act (MFCMA) are changed forever by the economic drivers of planned oil and gas exploration in the Mid-Atlantic Ocean, as promulgated by BOEM and the Mid-Atlantic Regional Planning Framework. The leasing of off-shore wind farm sites, the future proliferation of seismic testing procedures to determine spatial planning for energy development, are integral components of DRAFT Principles actualized in 2014. If **Principal 9**: *respecting the intrinsic value of the ocean and its biodiversity* was contracted and moved to **Principal 1**, then the RBP intent would be primarily one of *conservation* not *exploitation*. We should never recognize that humans are part of the ocean ecosystem. We are incapable of survival in water, and have no adaptive features that would permit justification for special inclusion in the medium. Our commercial intrusion into the ocean provides no multiplier benefits for any species, at any time.

Also, **Principle 4**, (Sound science). According to whom? My recommendation for oversight of marine mammals would be an objective body, such as The Marine Mammal Commission. The Sea Grant program, an academic initiative, funded by NOAA, could be a foundation of research and field studies. The MidA RPB in requesting some computations of species is highly accountable for public edification of all migratory pathways and populations of ocean animals, from the great whales to the plankton upwelling's which feeds them. This proposed human impingement, if applied relative to the self-guiding principles of an ***Essential Ocean Habitat (EOH),*** would allow for a direct measurement of impacts. Such metrics of ocean health, could establish societal moral values, with the achievable goals of compassion, caretaking, education and protection. If the measuring stick is one of available and henceforth future depleted natural resources, the aggregated loss of any species will compound itself in collective grief, undiminished for human generations.

In conclusion, some recommendations and thoughts:

- A working model and implementation of **Essential Ocean Habitat (EOH)** for all species. A demise of one critical population engages a chain reaction of unpredictable failures, resultant in the non-linear schemata collapse of integrated ocean systems. There can be no re-engineering such a scenario. For example, the Gulf of Mexico coastal bottlenose dolphin population suffers from chronic chromosomal damage from the Deepwater Horizon oil spill. How will they recover? Will all our coastal regions be under a NOAA directive UME (unusual mortality event) in perpetuity?
- A **Life Cycle Assessment (LCA)** framework that scientifically explains the changes of our ocean ecosystems relative to these proposed developments. This measurement is standard operating procedure for most scientific research.
- Where economic development and ecosystem conservation converge, the multiple interests can never peacefully coexist. The ecosystem loses in every instance.
- Exactly who has fiduciary responsibility for safe development and extraction of resources? Such industrialization will untimely incur impingements of historically proven migratory pathways for ocean species and their habitat. The MidA RBP, while clearly not a regulatory agency, should, within the guidance of framework, incorporate fiscal sensibilities and core monetization of functioning ocean ecosystems. This would provide a responsible risk assessment for development within the leasehold agreements currently held by BOEM, and provide insurance liabilities for future catastrophic occurrences.
- There is no Planet B, with another ocean. This is it. So how does the MidA RBP planning framework provide for a Plan B? In ten years? Twenty years? If all goes to accordance, then the oceans are systemically altered forever. What then? How can species so quickly adapt to accelerated change?
- In addition to all the anthropogenic stressors of biophony loss, over-fishing, plastics, chemical pollution, acidification and the like, our infinite wisdom has added the burden of human energy needs to oceans.
- Without the vitality of life in the oceans, there is no water planet, Earth.

Gregg W. Rosner

W. Fenwick Island, DE

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Apr 15, 2014 at 3:11 PM
Subject: Re: Comments on the MidA RPB draft framework
To: Shino Tanikawa <shino@nycswcd.net>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>, Rob Buchanan <avironvoile@gmail.com>, Meredith Comi <meredith@nynjbaykeeper.org>, Nellie Tsipoura <nellie.tsipoura@njaudubon.org>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 3:10 PM, Shino Tanikawa <shino@nycswcd.net> wrote:
Dear Ms. Bornholdt,

The New York New Jersey Harbor & Estuary Program Citizens Advisory Committee hereby submits the attached comment letter to the Mid Atlantic Regional Planning Body. Thank you for this opportunity.

Best,

Shino
--
Shino Tanikawa
District Manager
NYC Soil & Water Conservation District
121 Sixth Avenue, Suite 501
New York, NY 10013
212.431.9676 x315

CITIZENS ADVISORY COMMITTEE

of the New York – New Jersey
Harbor & Estuary Program

To: Ms. Maureen Bornholdt
Bureau of Ocean Energy Management
Office of Renewable Energy
381 Elden Street, Mail Stop 1328
Herndon, VA 20170

Cc: Management Committee and Policy Committee of the NY-NJ Harbor & Estuary Program.

From: Co-Chairs of the Citizens Advisory Committee of the New York-New Jersey Harbor & Estuary Program

Re: Draft Mid-Atlantic Regional Ocean Planning Framework

Date: April 15, 2014

Dear Ms. Bornholdt,

Thank you for the opportunity to submit our comments on the Mid-Atlantic Draft Regional Planning Framework.

The Citizens Advisory Committee (CAC) of the New York New Jersey Harbor & Estuary Program (HEP) is an advisory committee established to support and advocate for the HEP, a national estuary program. The CAC is an official committee of the Management Committee first convened by the US Environmental Protection Agency, Region II; NY State Department of Environmental Conservation; and NJ Department of Environmental Protection for the HEP and Bight Restoration Programs. The purpose of the CAC is to: 1) provide guidance and advice to the Management Committee on Program decision-making on behalf of the diverse stakeholders in the NY-NJ Harbor Estuary and NY Bight; 2) promote public awareness and understanding of the Program's issues, goals, and recommendations; 3) assist the Management Committee in developing and implementing the Comprehensive Conservation and Management Plan (CCMP) as required by Section 320 of the Water Quality Act of 1987.
We offer the following comments for your consideration.

1. **Improve outreach and provide more clarity**

Only one member out of our 49-member CAC took notice of this endeavor. Many of us vaguely recall receiving emails but did not pay much attention because it was difficult to understand what this is all about and there are so many other issues that require our attention, particularly when there is already another entity, Mid-Atlantic Regional Ocean Council (MARCO), with seemingly overlapping interests.

Citizens Advisory Committee Co-Chairs
Meredith Comi, NY/NJ Baykeeper ✧ meredith@nynjbaykeeper.org ✧ 732-888-9870
Rob Buchanan, Village Community Boathouse ✧ avironvoile@gmail.com ✧ 917-656-7285

An entity whose region covers six states with the largest metropolitan area in the nation undoubtedly has a difficult job of reaching out to the stakeholders. However, we have established communication networks that can be easily accessed. Had the MidA RPB partnered with the National Estuary Programs, of which there are at least five in the region and the Environmental Protection Agency is a partner, broader constituents would have been notified and engaged. Regardless of whether the bays and estuaries of the region will be officially included in the process, using existing communications networks is an efficient way of reaching the public.

While the Draft Framework proposes what appears to be worthy goals, we are not clear what exactly will result from this effort. Will there be a "master plan" for the region? If so, how will it be implemented and who will implement it? There is a mention of "products" but we are not clear what they are.

Finally, the BP disaster in the Gulf of Mexico suggests that the list "Vision, Principles, Goals, etc." be supplemented with addition of "Risks", with particular focus on proposed new ocean uses, e.g., the construction of LNG (liquid natural gas) facilities for fuelling the next generation of cargo superships, as well as enabling LNG export (which would also enhance risk in the upland where fracking would be thereby encouraged). With one of the goals of this effort being to "promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration," another agency – NOAA or EPA – may have been a more appropriate choice, if only for a better public perception and trust. Having the BOEM host the web site further adds to the perception that this is the lead agency in this effort.

2. **Significantly enhance the scientific, citizens and local government involvement through the creation of Science & Technical Advisory and Citizens Advisory Committees**

Two of the nine draft "operating principles" relate to sound science (Principles 4 & 5) and one to public participation (Principle 8), yet the Framework makes no mention of structures or mechanisms for effective public participation. Science & Technical Advisory and Citizens Advisory Committees are organizational structures that have traditionally provided the primary input to National Estuary Programs (NEPs) for the interested scientific, public and local government communities and have been proven to be effective in reaching a wide range of stakeholders. The MidA RPB should consider establishing such committees, either its own STAC and CAC or perhaps tapping into existing committees of the NEPs (e.g., each NEP sends representatives to the MidA RPB committees).

3. **Integrate the National Estuary Programs in the MidA RPB process and expand the membership to include US Army Corps of Engineers and the US Dept of Housing & Urban Development**

The first principle recognizes the importance of connectedness among the ocean, the coastal waters and the land. Collecting, vetting, and sharing ocean data should be closely connected with doing the same with data from estuaries and rivers, and again the exclusion of bays and estuaries seems counterproductive and artificial. If not officially incorporating the major bays and estuaries into the planning process, at the least MidA RPB should establish an official process for ensuring the connections to the coastal communities. We believe NEPs provide a good mechanism for accomplishing this. We encourage integration of the NEPs in the MidA RPB process, either officially through expanding the geographic scope or structurally by coordinating the STAC, CAC and Management/Policy Committees.

To further strengthen the connection to the coastal communities, we recommend adding two federal agencies to the membership: US Army Corps of Engineers, which is responsible for dredging and for post-Sandy planning and the US Department of Housing & Urban Development, which is responsible for post-Sandy recovery. These two agencies will also be beneficial in meeting the second goal: "Plan and provide for existing and emerging ocean uses in a sustainable manner that reduces conflicts, improves efficiency and regulatory predictability, and supports economic growth."

We also recommend you carefully evaluate the role of the ports along the eastern seaboard. These ports are frequented by large ocean vessels and including maritime transport of goods should be an important component of this planning process.

4. **Inclusion of maps**

Maps are essential in understanding any spatial planning exercises, as shown by the Data Portal you have provided. We recommend the following additional maps for inclusion on the Data Portal, and in future presentations and documents:

- nation-wide: the system of oceanic Regional Planning Bodies;
- along the East Coast: jurisdictional boundaries of key State and Federal agencies, National Estuary Programs and Fisheries Councils;
- within the proposed MidA RPB Region: the locations of key physical features, major natural resources and major human uses, current and proposed.

We thank you again for this opportunity to comment and look forward to a meaningful partnership.

Sincerely,

The Citizens Advisory Committee, New York-New Jersey Harbor & Estuary Program.

This letter has been adopted by the HEP CAC following procedures established in its bylaws (http://www.harborestuary.org/pdf/CAC%20Bylaws-Revision-Jun-03-11-F.pdf). CAC members who have voted in support of this letter include:

Meredith Comi, NY/NJ Baykeeper, NJ co-chair, Citizens Advisory Committee of the NY-NJ Harbor & Estuary Program

Rob Buchanan, Village Community Boathouse, NY co-chair, Citizens Advisory Committee of the NY-NJ Harbor & Estuary Program

Shino Tanikawa, New York City Soil and Water Conservation District, NY alternate co-chair, Citizens Advisory Committee of the NY-NJ Harbor & Estuary Program

Nellie Tsipoura, New Jersey Audubon, NJ alternate co-chair, Citizens Advisory Committee of the NY-NJ Harbor & Estuary Program

Bronx River Alliance

Donald Chesley, maritime consultant

Michelle Doran-McBean, Elizabeth River / Arthur Kill Watershed Association

Robert Alpern, Public Member, NYS Water Resources Planning Council

Manuel L. Russ, Concerned Citizens of Bensonhurst, Inc.

In addition, this letter has been endorsed by the following non-voting CAC members and non members:

Dr. Aline Euler, Ed.D., Alley Pond Environmental Center

NOTE: The New York-New Jersey Harbor & Estuary Program is a partner program and its members occasionally have conflicting positions on regulatory and management issues. One of the Program's roles is to facilitate the exchange of ideas and to work towards resolution of these issues. The opinions of individual agencies or committees do not necessarily reflect the opinion of the Program as a whole.

The Citizens Advisory Committee provides guidance and advice to the New York-New Jersey Harbor & Estuary Program Management Committee on Program decision making on behalf of the diverse stakeholders in the region. Its membership and meetings are open to all interested parties in the region that use, or have concerns about, the New York-New Jersey Harbor Estuary and New York Bight. The Citizens Advisory Committee is the only body in the New York-New Jersey Harbor & Estuary Program that can adopt official positions on issues and topics. These official Citizens Advisory Committee positions are adopted by a majority vote of Citizens Advisory Committee members. Citizens Advisory Committee positions do not necessarily reflect the opinion of the New York-New Jersey Harbor & Estuary Program or its members and partners.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Apr 15, 2014 at 3:49 PM
Subject: Re: Comments on the Draft Mid-Atlantic Regional Ocean Planning Framework
To: Miriam Balgos <mbalgos@udel.edu>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>, Alexis Martin <atmartin@udel.edu>, Erica Wales <ewales@udel.edu>, Taylor Daley <tdaley@udel.edu>, Biliana Cicin-Sain <bcs@udel.edu>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 3:45 PM, Miriam Balgos <mbalgos@udel.edu> wrote:
Dear members of the Mid-Atlantic RPB:

I am respectfully submitting the combined comments of the Gerard J.Mangone Center for Marine Policy staff (attached), as well as suggested revisions to the wording in particular parts of the draft Framework as indicated in the attached Word version of the draft Framework.

For your kind consideration.

Best regards,

Miriam Balgos

--
Miriam C. Balgos, Ph.D.
Associate Scientist
Gerard J. Mangone Center for Marine Policy
School of Marine Science and Policy
College of Earth, Ocean, and Environment
University of Delaware
Robinson Hall 301
Newark, Delaware 19716
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Program Coordinator, Global Ocean Forum
miriambalgos@globaloceans.org

Comments on the Draft Mid-Atlantic Regional Ocean Planning Framework

About Mid-Atlantic regional ocean planning

- Either as a third paragraph or as an enhanced key element (bullet) 3, we suggest adding the point that regional ocean planning should be undertaken in the context of climate change and climate adaptation planning and implementation as climate change, exacerbated by natural and human-made processes, has the potential to affect the status of the ocean and its ecosystems and resources and patterns of use.

- The purpose of the regional ocean planning process needs to be made clearer. The way it is stated at this point is confusing, and at the hearing session in DE that we attended, it seemed like people were not understanding fully what regional ocean planning is and what it is supposed to do.

Draft Description of Initial Geographic Focus

- Regarding the scope of the Mid-Atlantic Regional Ocean Planning, it seems counter-intuitive to exclude the major bays and estuaries of the Mid-Atlantic from the scope of regional ocean planning as these ecosystems link the terrestrial environment, coastal zone, and open ocean. What happens on land and in the bays/estuaries will have an effect on the overall health and resiliency of the ocean and its resources. The first principle of the framework is "interconnections" - hence, the major bays and estuaries should be included in the planning framework.

  Drawing connections and coordinating with initiatives and institutions responsible for estuarine and terrestrial areas planning and management in the region will not be sufficient to fully integrate the planning and management of the Mid-Atlantic ocean from the shoreline out to 200 miles. Less emphasis may be placed on bays and estuaries in terms of future management initiatives but planning efforts should be undertaken with the entire ocean waters of the region in mind.

Draft Principles

- We suggest that precautionary and sustainability principles be added here.

Planning Goals and Objectives

- Under DRAFT Ocean Planning Goal 1, we suggest adding a fourth objective on making use of increased understanding of key habitats, ecosystem changes, and traditional knowledge in the regional ocean planning and in the development and implementation of management tools and approaches.

- General comment on traditional knowledge: It is essential that cultural knowledge and values are explicitly acknowledged as important in the draft framework and we commend the Mid-Atlantic RPB for including such an important element. We also suggest that submerged cultural resources be addressed in the framework.

- Regarding **draft objective 2 on ocean energy** under DRAFT Ocean Planning Goal 2, how will the ocean energy issues be prioritized? Will there be greater weight on supporting renewable energy? This, again, speaks to the need for incorporating sustainability when planning for the future management of the Mid-Atlantic ocean region.

- Regarding **draft objective 4 on ocean aquaculture** under DRAFT Ocean Planning Goal 2, advancing ocean aquaculture in the US requires more than increased coordination among stakeholders. It requires development of a roadmap for incorporating marine aquaculture into the

regional ocean planning processes and to consider opportunities for siting marine aquaculture operations, including co-location with other industries. Currently, approval for aquaculture ventures occurs on a case-by-case basis through a multi-agency process; pre-evaluation and pre-selection of appropriate sites would considerably reduce the bureaucratic hurdles and time needed to initiate an aquaculture venture. Increased predictability and permit process efficiencies, along with a reduction in future user conflicts, would make federal and state waters off the U.S. coast more attractive to entrepreneurs looking to invest in offshore aquaculture to meet the food security needs of the United States.

The roadmap should also include public participation and education into the aquaculture siting and permitting process.

- Regarding **draft objective 6 on offshore sand management** under DRAFT Ocean Planning Goal 2, the management of the use of sand and gravel resources in the Mid-Atlantic should be placed in the context of broader coastal adaptation planning and implementation at the state and regional levels.

Suggested revisions to the text
There are specific changes that we suggest be made to the text. Please see the attached Word document for these suggested changes.

Submitted by:

Staff of Gerard J. Mangone Center for Marine Policy (Dr. Miriam C. Balgos, Ms. Alexis T. Martin, Ms. Erica Wales, Ms. Taylor Daley)
School of Marine Science and Policy
University of Delaware

PUBLIC DOCUMENT [released for public feedback on 12-16-2013]
Suggested revisions from Mangone Center staff

Draft Mid-Atlantic Regional Ocean Planning Framework

Since the formal establishment of the Mid-Atlantic Regional Planning Body (MidA RPB) in April of 2013, the MidA RPB has been identifying needs and opportunities that can be addressed through regional ocean planning. This document offers, for public review, the MidA RPB's draft framework for regional ocean planning. The framework will inform how the MidA RPB ~~moves~~ will move forward with ocean planning by articulating a vision, principles, goals, objectives, example actions, and a proposed geographic focus.

Public feedback and ideas about this draft framework will help the MidA RPB ensure it is accounting for the full diversity of ocean interests in the region. To provide input on this draft framework, please send comments in writing to MidAtlanticRPB@boem.gov by April 15, 2014. To facilitate a regional dialogue, the MidA RPB is planning a variety of in-person and online public input opportunities for early 2014. Details about these opportunities will be posted on the MidA RPB website at www.boem.gov/Mid-Atlantic-Regional-Planning-Body/ in the coming weeks. Members of the public can also request to receive email updates from the MidA RPB by sending a message to MidAtlanticRPB@boem.gov.

Definitions of the terms used in this document are as follows:

- **Vision:** Desired future state for the Mid-Atlantic ocean.
- **Principles:** Basic or essential qualities or elements determining the intrinsic nature or characteristic behavior of regional ocean planning. Principles describe how the MidA RPB intends to operate.
- **Goals:** Statements of general direction or intent. Goals are high-level statements of the desired outcomes the MidA RPB hopes to achieve.
- **Objectives:** Statements of specific outcomes or observable changes that contribute to the achievement of a goal.
- **Actions:** Specific activities that Federal, State, and Tribal agencies may take, individually or together, to address the stated objectives.
- **Geographic Focus:** The area of focus for MidA RPB planning and coordination efforts.

About Mid-Atlantic regional ocean planning

Regional ocean planning will improve our understanding of how the Mid-Atlantic ocean and its resources are being used, managed, and conserved; and guide planning to address current challenges and emerging opportunities. Regional ocean planning will help guide resource conservation and economic development by facilitating information sharing, fostering collaboration, and improving decision-making about a growing number of ocean uses vying for ocean resources and space. Partnerships with stakeholders will be critical to the success of this planning effort.

The regional ocean planning process **does *not* change** existing authorities or create new mandates at the federal, state, tribal, and local levels. Rather, it aims to improve the efficiency of those authorities as well as effectiveness of the mandates being implemented by the Federal agencies with jurisdictions in the Mid-Atlantic ocean.

Key elements of regional ocean planning include:

- Identify shared regional goals and objectives to guide decision-making by Federal, State, ~~and~~ Tribal, and local entities, informed by scientific understanding and stakeholder engagement and input.
- Provide participation by ocean stakeholders and the public.
- Build upon all relevant work at the regional, State, Tribal, and local levels.
- Identify emerging issues and account for the needs of both current and future generations, while remaining mindful of traditional uses.
- Efficiently use constrained public resources, while leveraging investments with private-sector partnerships.
- Consult scientists, technical~~,~~ and other experts in conducting regional ocean planning and developing ocean planning products.
- Inform data collection and analyses to better understand the potential benefits and risks of decisions.
- Compile a regional assessment of ocean uses, natural resources, and economic and cultural factors to provide a comprehensive understanding and context for ocean planning.
- ~~Use enhanced~~ Increase collaboration and coordination across jurisdictions and with stakeholders to avoid disputes and facilitate compatibility wherever possible. In order to resolve disputes that do arise, the MidA RPB will emphasize use of collaborative, mediative approaches in an effort to avoid costly, formal dispute resolution mechanisms and find solutions that meet the interests of multiple parties.

Mid-Atlantic Ocean Data Portal

The Mid-Atlantic Ocean Data Portal is an online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others. The Mid-Atlantic Regional Council on the Ocean (MARCO) initiated and oversees development of the portal in close coordination with the Portal Project Team, using funds provided by the National Oceanic and Atmospheric Administration's Regional Ocean Partnership funding program. For more information, please visit: http://portal.midatlanticocean.org/portal/

About the Mid-Atlantic Regional Planning Body

Regional ocean planning in the Mid-Atlantic is led by the MidA RPB, which includes representatives from Federal, State, Tribal, and the Mid-Atlantic Fishery Management Council entities, as listed below.

- The six Mid-Atlantic States: New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia
- The Shinnecock Indian Nation
- The Mid-Atlantic Fishery Management Council
- Eight 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
  - 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

To learn more about the MidA RPB and to view recent and historic postings, please visit www.boem.gov/Environmental-Stewardship/Mid-Atlantic-Regional-Planning-Body/index.aspx

Comment [T1]: Why is the Fish and Wildlife Service not represented in the RPB?

Role of the Mid-Atlantic Regional Planning Body

The MidA RPB provides a forum for coordination of ocean planning activities in the region. As part of the regional ocean planning process, the MidA RPB plans to do the following:

- Develop a work plan that describes strategies and activities designed to achieve the MidA RPB goals and objectives.
- ~~Compile~~ Conduct a capacity assessment to identify existing activities that are relevant to ocean planning.
- Complete a regional ocean assessment to provide baseline information for ocean planning in the Mid-Atlantic that takes into account current trends and forecasts about changing ocean uses and ecosystems.
- Consider developing a forward looking ocean plan to foster enhanced coordination on ocean management and stewardship across jurisdictions. The purpose and content of such a plan would be determined by the MidA RPB in collaboration with stakeholders.

DRAFT Description of Initial Geographic Focus

The MidA RPB proposes that the primary geographic focus area for regional ocean planning at this time be the ocean waters of the region. This means:

- From the shoreline out to 200 miles (EEZ), which includes State and Federal waters
- The northern limit would be the NY/CT and NY/RI border
- The southern limit would be the VA/NC border

The RPB does not anticipate including in its planning efforts the major bays and estuaries of the Mid-Atlantic. However, where necessary, the MidA RPB will draw connections and coordinate with estuarine and terrestrial areas for planning purposes, particularly in such cases where ocean uses may impact coastal communities, estuaries, and ports or other shore side infrastructure. Coordination and collaboration with Regional Planning Bodies and other entities in the Northeast and South-Atlantic, including leveraging of resources, will also be essential for success. The RPB will consider further refining the geographic focus as goals and objectives are determined, as informed by public input.

DRAFT Vision

The draft vision is intended to articulate the RPB's desired future state for the Mid-Atlantic ocean:

A Mid-Atlantic ocean where safe and responsible use and stewardship support healthy, productive, resilient, and treasured natural and economic ocean resources that provide for the wellbeing and prosperity of present and future generations.

Comment [T2]: Consider using another word

DRAFT Principles

The Mid-Atlantic ocean planning efforts would be guided by the following overarching principles:

Principle 1 (Recognize i~~I~~nterconnections) – The MidA RPB will facilitate an approach to managing ocean resources that recognizes and considers the interconnections across human uses and interests, marine species ecosystems and habitats, and coastal communities and economies.

Principle 2 (Compatibility of multiple interests) – The MidA RPB will coordinate in making information available to support economic development and ecosystem conservation so that multiple interests, including those of tribal nations, can co-exist in a manner that reduces conflict and enhances compatibility.

Principle 3 (Improving resilience) – The MidA RPB will consider the risks and vulnerabilities associated with past, present, and predicted ocean and coastal hazards (e.g., erosion, extreme weather, and sea level rise) and predicted changes to temperature and ocean acidification to protect Mid-Atlantic ocean and coastal communities, users, and natural features.

Principle 4 (Sound science) – The MidA RPB will ~~consider sound~~ incorporate the best available science and traditional knowledge in decision-making.

Principle 5 (Adaptive management) – The MidA RPB will apply a flexible and adaptive approach in accommodating changing environmental conditions, advances in science and technology, and new or revised laws and policies.

Principle 6 (Consistency with existing laws) – MidA RPB actions will be consistent with Federal laws, regulations, Executive Orders, and treaties, and with State laws, regulations, Executive Orders, and treaties where applicable.

Principle 7 (Coordination and government efficiency) – The MidA RPB will serve as a forum to increase inter-jurisdictional coordination to facilitate efficient and effective management of Mid-Atlantic ocean uses and resources consistent with regional needs. Such coordination will extend to partners and issues in adjacent uplands, in the Northeast and South Atlantic, and international waters to the east.

Principle 8 (Transparency and engagement) – MidA RPB processes and products will benefit from meaningful public input, be designed to be easily understood by all, and allow stakeholders to participate in the regional planning process and understand when and how decisions are reached that affect their lives.

Principle 9: (Intrinsic value) – The MidA RPB will respect the intrinsic value of the ocean and its biodiversity, at the same time recognizing humans as part of the ecosystem and dependent on the health of the ecosystem for our own well-being.

DRAFT Mid-Atlantic Ocean Planning Goals and Objectives

Mid-Atlantic ocean planning goals will be high-level statements of the desired outcomes the MidA RPB hopes to achieve. Objectives will describe specific outcomes and observable changes that contribute to the achievement of ocean planning goals. They are intended to serve as guideposts for the focus and work of the MidA RPB. Draft ocean planning goals and draft objectives are offered below for public feedback, and include articulation of some example actions that could be taken by the MidA RPB to achieve the draft goals and objectives for illustrative purposes.

DRAFT Ocean Planning Goal 1:
Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration.

Note: Goal #1 focuses on protecting and conserving our ocean and coastal resources through efforts that improve our understanding of ocean resources and habitats, account for ecosystem changes, consider traditional values and scientific data in regional ocean planning, and foster collaboration across jurisdictions around ocean conservation efforts.

Draft objectives:

1) (*Understanding, protecting and restoring key habitats*) Enhance understanding of Mid-Atlantic ocean habitats and physical, geological, chemical, and biological ocean resources through improved scientific understanding and assessments of the effects of ocean uses. Foster collaboration and coordination for protection and restoration of critical ocean and coastal habitats.

   Example action: Map and characterize canyon habitats in the Mid-Atlantic region. Identify Federal, State and Tribal habitat protection and restoration initiatives to leverage partnerships that maximize the opportunity for success.

2) (*Accounting for ocean ecosystem changes and increased risks*) Facilitate enhanced understanding of and take into account ~~in decision-making~~ current and anticipated ocean ecosystem changes for decision-making in the Mid-Atlantic. These include ocean- related risks and vulnerabilities associated with ocean warming (including sea level rise, coastal flooding/inundation), ocean acidification (including effects on living marine resources), and changes in ocean wildlife migration and habitat use.

   Example actions: Coordinate the collection and understanding of information needed to adjust human use activities in certain ocean areas in response to changing migratory pathways of marine life. Coordinate information sharing regarding sea level rise and ocean acidification in order to inform management of living marine resources and coastal communities and industries dependent on them.

3) (*Valuing traditional knowledge of the ecosystem*) Pursue greater understanding and acknowledgment of traditional knowledge along with other cultural values, and incorporate such knowledge and values in the ocean planning process.

   Example action: Include traditional ecological knowledge and consideration of local cultural values in regional capacity assessment.

DRAFT Ocean Planning Goal 2:
Plan and provide for existing and emerging ocean uses in a sustainable manner that reduces conflicts, improves effectiveness, efficiency and regulatory predictability, and supports economic growth.

Note: Goal #2 focuses on fostering coordination, transparency, and use of quality information to support accommodation of existing, new, and future ocean uses in a manner that reduces conflict and enhances compatibility. The MidA RPB has chosen to organize the draft objectives under Goal 2 by sector to facilitate initial data collection, future needs assessment, and highlight how the proposed actions will affect key stakeholders. During the subsequent phases of the ocean planning process, application of the principles articulated above calls for considering various sectors and concerns in an integrated, holistic, and collaborative manner. The MidA RPB intends to provide the means for decision-makers to implement their programs and authorities in an integrated way.

Draft objectives, organized by sector:

1) (*National security*) Account for national security interests in the Mid-Atlantic through enhanced coordination, increased transparency, and sharing of information across agencies.

   Example action: Consider military needs and preferences early in decision-making processes to avoid potential conflicts with proposed ocean activities and current and planned military training and testing areas.

2) (*Ocean energy*) Facilitate greater collaboration around renewable and nonrenewable ocean energy issues in the Mid-Atlantic.

   Example action: Coordinate data collection for environmental assessment to inform development of new offshore renewable energy projects.

3) (*Commercial and recreational fishing*) Foster greater understanding of the needs of Mid-Atlantic fishers and fishing communities in the context of the full range of ocean uses and conservation efforts.

   Example action: Identify areas of high fish productivity and high usage to inform management of ocean uses and habitat areas.

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4) (*Ocean aquaculture*) Inform ocean aquaculture siting and permitting in the Mid-Atlantic through greater coordination among stakeholders and management authorities to address compatibility issues.

   Example action: Facilitate interagency coordination regarding ocean aquaculture permitting.

5) (*Maritime commerce and navigation*) Enhance coordination to ensure new and updated nautical information and navigation practices at local, regional, and international levels are considered in regional ocean planning.

   Example action: Coordinate information about new and proposed revisions to existing maritime corridors in the Mid-Atlantic, taking into account global and regional trends in maritime commerce.

6) (*Offshore sand management*) Facilitate enhanced coordination among coastal jurisdictions, Federal and State regulatory agencies, and Tribal entities on the use of sand and gravel resources in the Mid-Atlantic.

   Example action: Coordinate regional identification and prioritization of sand borrow sites in Federal and State waters.

7) (*Non-consumptive recreation*) Coordinate improved understanding of near-shore and offshore non-consumptive recreational uses in the Mid-Atlantic to inform management of ocean activities and resources that may impact those activities (e.g., surfing, boating, whale watching, birding, diving).

   Example action: Share data about ocean areas important for recreational activity and recreational user perceptions on issues such as siting of ocean renewable energy facilities.

8) (*Tribal uses*) Recognize and take into account important Tribal uses and submerged cultural resources in the planning process.

   Example action: Document and foster shared understanding of ocean and coastal sites important to Tribal use, beliefs, and values related to the Mid-Atlantic ocean.

9) (*Critical ocean infrastructure*) Facilitate greater understanding of the current and potential future location of submerged infrastructure, such as submarine cables (e.g., for communication and electricity) and pipelines.

   Example action: Engage the submarine cables and submerged pipelines industries to understand their current and projected needs for ocean space, and conduct an inventory of obsolete structures.

The MidA RPB encourages public input on this draft document. Please send comments in writing to MidAtlanticRPB@boem.gov by ***April 15, 2014****. To facilitate a dialogue, the MidA RPB is also planning a variety of in-person and online public input opportunities for early 2014. Details about these opportunities will be posted on the RPB website (www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) in the coming weeks. Members of the public can also request to receive email updates from the RPB by sending a message to MidAtlanticRPB@boem.gov.*

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Apr 15, 2014 at 4:04 PM
Subject: Re: Comments on the draft framework of the MidA RPB
To: Shino Tanikawa <shino@nycswcd.net>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>

Thank you for providing suggestions to the MidA RPB. The MidA RPB will consider all comments received, and will post them on the website.

And thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 3:49 PM, Shino Tanikawa <shino@nycswcd.net> wrote:
Dear Ms. Bornholdt,

Thank you for the opportunity to comment on the draft framework.

I understand that the RPB will develop a regional ocean assessment, a work plan, and a capacity assessment (which agency has what resources) as products. I agree that these documents will be extremely useful not only to those who are charged with ocean resources management but also to citizens groups interested in protection of our ocean.

I would like to urge the RPB to also consider developing a plan for how to promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration. I think such a plan would be extremely important in light of the fact that there are proposals and/or interests for energy exploration off shore (LNG, wind, etc.) and we, as stakeholders, must ensure that the Mid-Atlantic region moves forward with a clearly articulated plan that protects the ocean ecosystem while addressing our energy and economic needs.

I would also like to encourage the RPB to reach out to estuary programs in the Mid-Atlantic region as the vehicle for communicating with stakeholders. Even if estuaries and bays are not to be incorporated officially in the planning process, these programs have the communications system that efficiently reaches out to organizations and individuals with stakes and interests in the health of the ocean.

Finally I would like to suggest a brief document (a "fact sheet") that outlines the differences between MARCO and the RPB. It is not exactly clear (beside the different memberships - MARCO being state-driven and RBP federal agency-driven) how the two entities will interact and/or coordinate efforts that seem to overlap in some ways.

I look forward to learning more about the RPB's work and becoming more involved.

Best,

Shino Tanikawa

--
Shino Tanikawa
District Manager
NYC Soil & Water Conservation District
121 Sixth Avenue, Suite 501
New York, NY 10013
212.431.9676 x315

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:48 AM
Subject: Re: Draft Framework comments by American Littoral Society
To: Sarah Winter <Sarah@littoralsociety.org>
Cc: "MidAtlanticRPB@boem.gov" <MidAtlanticRPB@boem.gov>, Tim Dillingham <tim@littoralsociety.org>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 4:11 PM, Sarah Winter <Sarah@littoralsociety.org> wrote:
Dear Ms. Bornholdt, Ms. Schultz, Mr. Smith and RPB members,

Please accept these comments on behalf of the American Littoral Society. Thank you for the opportunity to comment on the Draft Framework. We look forward to working with the RPB as the ocean planning process moves forward.

Best Regards,
Sarah Winter Whelan

Sarah Winter Whelan
Regional Marine Conservation Project Director

American Littoral Society
Cell: 503.267.9577
sarah@littoralsociety.org
http://www.littoralsociety.org

Ms. Maureen Bornholdt
Renewable Energy Program Manager
Bureau of Ocean Energy Management
US Department of the Interior
1849 C Street, NW
Washington, DC 20240

Mr. Gerrod Smith
Chief Financial Officer
Shinnecock Indian Nation
Southampton, NY 11969

Ms. Gwynne Schultz
Senior Coastal and Ocean Policy Advisor
Maryland Department of Natural Resources
580 Taylor Avenue
Annapolis, MD 21401

April 15, 2014

Re: Mid-Atlantic Draft Framework Comments

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith,

Thank you for providing this opportunity to comment on the Mid-Atlantic Regional Planning Body's (RPB) *Draft Mid-Atlantic Regional Ocean Planning Framework* (Draft Framework)[1] including the in person opportunities during the RPB's Draft Framework listening sessions. We appreciate the RPB's interest in hearing the suggestions and concerns of those attending the listening sessions.

The American Littoral Society (Society) is a national, membership based coastal conservation organization dedicated to promoting the study and conservation of marine life and its habitats. Since 1961 the Society has empowered people to care for the coast through advocacy, conservation, and education. We are based on Sandy Hook, New Jersey, with offices in Jamaica Bay and Delaware Bay. We believe our fifty years of connection to the Mid-Atlantic, its natural resources and coastal communities provides us with insights to share as the region's ocean planning process begins. On behalf of our thousands of members based within the Mid-Atlantic, we offer these comments.

[1] Mid-Atlantic Regional Planning Body, Draft Mid-Atlantic Ocean Planning Framework (Framework) (December 2013), *available at*: http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework/.

On July 19, 2010, our nation established its first ever National Stewardship Policy (National Ocean Policy) to ensure that "the ocean, our coasts, and the Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being, prosperity, and security of present and future generations[.]"[2] The National Ocean Policy (NOP), spurred to completion by the Deepwater Horizon disaster, was the culmination of two blue ribbon bipartisan panels' unanimous recommendations and the Interagency Ocean Policy Task Force's in depth review of ocean policy and robust public engagement efforts.

At its core, the National Ocean Policy is about better coordination and collaboration between the numerous federal agencies with existing management authority over our nation's ocean, coastal and Great Lakes resources to strengthen ocean governance and decision making to ensure healthy, productive and resilient marine ecosystems for this and future generations. That is the very premise that the Mid-Atlantic Regional Planning Body must carry into its regional ocean planning process. We offer these detailed comments in support of the RPB's future work to ensure it meets this goal.

I. The RPB must more broadly consider the connection bays and estuaries have to open ocean waters.

The coastal bays and estuaries of the Mid-Atlantic are iconic natural resources known throughout the region as places to recreate, fish, boat and live. They are also economic drivers for much of the Mid-Atlantic states' ocean economies. The Mid-Atlantic RPB's Draft Framework currently states that the RPB's geographic focus will include "the ocean waters of the region" but not "the major bays and estuaries."[3] The Draft Framework does state that as ***necessary*** the RPB will "draw connections and coordinate with estuarine and terrestrial areas for planning purposes."[4]

The RPB should not consider the connections between bays, estuaries and the open ocean "where necessary" but rather where natural or even where appropriate. Necessary implies a forced separation that runs counter to the very ecosystem-based principles of ocean planning and the National Ocean Policy. We urge the RPB to consider a more fluid interaction between the RPB's geographic focus and how the RPB can best integrate the impacts the bays and estuaries have on this region and the ocean planning process. We encourage the RPB to set up direct lines of communication with the appropriate National Estuary Programs -- Barnegat Bay Partnership, Delaware Center for the Inland Bays, Long Island Sound Study, Maryland Coastal Bays Program, NY/NJ Harbor Estuary Program, Partnership for the Delaware Estuary, along with the Chesapeake Bay Program – and seek their expertise and input on how the bays and estuaries might influence and be influenced by the RPB's work.

[2] Exec. Order No. 13547, 75 Fed. Reg. 43,023 (July 19, 2010).
[3] Framework at 4.
[4] *Id*.

As the Environmental Protection Agency states, "[t]housands of species of birds, mammals, fish, and other wildlife depend on estuarine habitats as places to live, feed, and reproduce. And many marine organisms, including most commercially-important species of fish, depend on estuaries at some point during their development."[5] In fact, this dependency on estuaries by so many species of fish and wildlife for protection and spawning has garnered estuaries the term "nurseries of the sea."[6] By the numbers, "[e]stuaries and coastal waters provide essential habitat for over 75 percent of the commercial fish catch and 80-90% of the recreational catch of fish."[7] Commercial and sport fishing alone "contribute $111 billion yearly to the nation's economy[.]"[8]

With healthier bays and estuaries, a healthier ocean and marine ecosystem will exist to support resilient coastal communities, fisheries and marine wildlife, and ocean economies. Given the Draft Framework's Principle 1[9] is to recognize interconnections across uses and interests, species and habitats and coastal communities and economies and Draft Ocean Planning Goal 1[10] is to promote ecosystem health and integrity, it is in the RPB's best interest to create a clear path in the Framework and subsequent work plan for considering the region's coastal bays and estuaries.

II. The Draft Framework must enhance its plans for stakeholder engagement and public participation.

Stakeholder engagement and public participation is crucial to successful marine planning. Every document tied to the National Ocean Policy highlights this fact. The *Final Recommendations of the Interagency Ocean Policy Task Force* emphasize the "importance of frequent and robust stakeholder, scientific and public engagement throughout the planning process."[11] The *Final National Ocean Policy Implementation Plan* calls "robust stakeholder engagement and public participation … essential to ensure that actions are based on a full understanding of the range of interests and interactions…[.]"[12] The National Ocean Council's *Marine Planning Handbook* confirms "engagement and substantive participation of stakeholders and the public" a "cornerstone of marine planning[.]"[13]

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[5] U.S. Environmental Protection Agency, Basic Information about Estuaries, *available at*: http://water.epa.gov/type/oceb/nep/about.cfm.
[6] *Id*.
[7] Restore America's Estuaries, Top 10 Estuary Facts, *available at*: http://www.estuaries.org/top-10-estuary-facts.html (last visited April 15, 2014).
[8] *Id*.
[9] Framework at 5.
[10] Framework at 6.
[11] Interagency Ocean Policy Task Force, Final Recommendations of the Interagency Ocean Policy Task Force, Exec Summary, p7-8, *available at*: http://www.whitehouse.gov/administration/eop/oceans.
[12] National Ocean Council, National Ocean Policy Implementation Plan (April 14, 2013), p. 23, *available at*: http://www.whitehouse.gov/administration/eop/oceans/implementationplan.
[13] National Ocean Council, Marine Planning Handbook (July 2013), p. 5, *available at*: http://www.whitehouse.gov//sites/default/files/final_marine_planning_handbook.pdf.

The U.S. Institute for Environmental Conflict Resolution (ECR), an independent federal agency, has spent much time considering how to specifically engage stakeholders in the marine planning context. We strongly encourage the RPB to consider the ECR's white paper, *Principles for Stakeholder Involvement in Coastal and Marine Spatial Planning*[14] as a resource to help the RPB move forward with stakeholder engagement and public participation efforts. In particular, we would point the RPB to the ERC's work on "stakeholder engagement planning" that encourages a stakeholder assessment, stakeholder planning and feedback on that planning. This may seem like a lot of planning for a planning process, but without the public or stakeholders you jeopardize the marine planning process. By planning for engagement and involvement you create an agreement between stakeholders and on how the RPB will engage and include the efforts of stakeholders. This reduces the likelihood of misunderstandings and paves the way toward truly collaborative relationships.

Our attention to stakeholder engagement and public participation is keen even at the Draft Framework stage because it is as integral to the planning process as the plan the RPB will create. We appreciate that the Draft Framework acknowledges that "partnerships with stakeholders will be critical to the success of this planning effort."[15] A RPB and stakeholder relationship with mutual trust and respect is critical to ensure that Mid-Atlantic ocean planning is an inclusive, transparent, and engaged process: as stakeholders, whether we have management authority or not, we are all invested in the process and the enhanced outcomes we want to see stem from ocean planning.

As such, we suggest that Principle 8, now "Transparency and engagement" be split into two principles, one on transparency and a second focused solely on stakeholder engagement and public participation. We also suggest the RPB add a third ocean planning goal focused on creating or ensuring a robust stakeholder engagement and public participation plan or, at the very least, create an objective under one of the existing two ocean planning goals specifically tied to stakeholder engagement and public participation. By creating a new goal for stakeholder engagement, you ensure that engagement is translated from the principle level of an essential quality of marine planning to a goal that will have action based components to ensure the RPB fulfills its responsibility to stakeholders and the public.

We appreciate the opportunity to provide these comments and look forward to working with the RPB as the ocean planning process moves forward to develop an ocean plan that protects, maintains and restores the Mid-Atlantic's vibrant and diverse natural resources.

Sincerely,

Tim Dillingham
Executive Director

[14] U.S. Institute on Environmental Conflict Resolution, Principles for Stakeholder Involvement in Coastal and Marine Spatial Planning (December 2011), *available at*: http://www.ecr.gov/pdf/StakeholderPrinciplesCMSP.pdf
[15] Framework at 2.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:49 AM
Subject: Re: Comments to Draft Mid-Atlantic Regional Ocean Planning Framework
To: Amy Trice <atrice@oceanconservancy.org>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 4:41 PM, Amy Trice <atrice@oceanconservancy.org> wrote:

Dear Mid-Atlantic Regional Planning Body Co-Leads,

Thank you for the opportunity to provide comments to the Draft Mid-Atlantic Regional Ocean Planning Framework. Please see the attached letter from Ocean Conservancy.

Feel free to contact me with any questions.

Sincerely,

Amy Trice
Policy Analyst - CMSP
1300 19th Street NW, 8th Floor
Washington, DC 20036
atrice@oceanconservancy.org
Web | Facebook | Twitter

1300 19th Street NW
8th Floor
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Ocean Conservancy

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April 15, 2014

Ms. Maureen Bornholdt
Renewable Energy Program Manager
Bureau of Ocean Energy Management
U.S. Department of the Interior
1849 C Street, NW
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Mr. Gerrod Smith
Chief Financial Officer
Shinnecock Indian Nation
Post Office Box 5006
Southampton, New York 11969

Ms. Gwynne Schultz
Senior Coastal and Ocean Policy Advisor
Maryland Department of Natural Resources
580 Taylor Avenue, E2
Annapolis, Maryland 21401

Re: Draft Mid-Atlantic Regional Ocean Planning Framework

Dear Mid-Atlantic Regional Planning Body Co-Leads,

We are writing to express our support of the draft Mid-Atlantic Regional Ocean Planning Framework. We look forward to the Mid-Atlantic Regional Planning Body (RPB) moving forward quickly into the plan development stage and using these goals as guidance for creating an ocean plan that will support a sustainable Mid-Atlantic ocean and economy. Additionally, we commend the recent efforts to engage stakeholders throughout the region during the listening sessions. However, as the RPB moves forward, we would like to underscore several key elements that we believe are critical to ensuring a successful ocean plan:

Iterative and adaptive planning. We urge the RPB to ensure that ocean planning is both iterative and adaptive. The ocean plan itself, and as necessary the Framework, should be updated on a regular basis to reflect new scientific and human use data and to address new challenges that arise. We recommend that the plan be updated approximately every 5 years in order to ensure it incorporates the most up-to-date information and addresses the most relevant needs. Ultimately, the RPB should create an adaptive plan that establishes baselines, considers current and future planning needs, monitors progress over time, and assess changes in ecosystems, sustainable development, and emerging technologies. Understanding the current ocean needs while accounting for the uncertainty of future, new technologies and potential changing ecosystems is of vital importance to the success of the overall planning process.

Stakeholder engagement. We urge the RPB to continue engaging ocean users as it develops a sustainable plan for the future of our oceans. We view the planning process as a means to engage all stakeholders to ensure their needs are considered and to reduce user conflict; this cannot be achieved without public participation. Simply put, the members of the RPB alone cannot access the important data available to, nor adequately represent the interests of, the wide array of ocean users in the Mid-Atlantic. The RPB should strive to obtain ongoing input from a range of ocean users and rely on stakeholders to provide data as appropriate, feedback, and other information.

Scientific review. The RPB must engage scientists with appropriate expertise to review data, monitoring plans, proposals, or projects to ensure the use of sound science throughout the planning process.

Focus planning on places with the most pressing need. With regards to the geographic focus, the plan should prioritize the most pressing conflicts within the region. Geographic relevance to existing and emerging uses where potential for conflicts are highest should be the first priority for the RPB. These areas may not always translate into including major bays and estuaries or far offshore areas. As the planning iterative continues through time, however, conflicts may arise in these areas that require prioritization and should be addressed. For example, the Chesapeake Bay currently has a planning framework in place to address water quality; therefore, an additional planning effort in the Bay is not necessary to achieve water quality reductions or a healthy ecosystem. We agree that coordination should occur when necessary in the terms outlined in the draft Framework— "where ocean uses may impact coastal communities, estuaries, and ports or other shore side infrastructure."[1] We support this type of coordinated approach within the planning framework but ask the RPB to continue prioritizing its efforts to achieve a healthy ocean ecosystem with sustainable uses in areas that are not currently undergoing planning. With this approach, the RPB is using the available resources in the most effective manner to achieve ecological and economic resilience.

Set clear deadlines. Lastly, we urge the RPB to set clear deadlines and benchmarks, with the final plan to be released by the end of 2016. Timelines will establish accountability while moving planning initiatives forward.

We support the RPB's work thus far to engage stakeholders and to lay the foundation for planning in the region. We hope the RPB will continue to strive for enhanced stakeholder engagement. Moving forward, we urge the RPB to work in a timely manner to achieve the goals outlined in the Framework with a shared philosophy of an adaptive and iterative plan for the Mid-Atlantic.

Thank you for your continued work toward a healthy and sustainable ocean.

Sincerely,

Anne Merwin
Director, Coastal and Marine Spatial Planning
Ocean Conservancy

[1] Mid-Atlantic Regional Planning Body. 2013. *Draft Mid-Atlantic Regional Ocean Planning Framework*.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:49 AM
Subject: Re: Comments on the draft Mid Atlantic Regional Ocean Planning Framework
To: Suzanne Thurman <merrinstitute@gmail.com>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 4:43 PM, Suzanne Thurman <merrinstitute@gmail.com> wrote:
Hello,
Please find attached my comments on behalf of my organization, MERR, as well as data pertaining to marine mammal and sea turtles species and their presence along the Delaware coast.

Thank you,
Suzanne Thurman

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Please note that we may not be able to check emails daily, as we may be in the field with a stranded animal. If you have an emergency and must speak to someone immediately, please call our stranding line at (302)228-5029.

Suzanne Thurman
Executive Director
MERR Institute, Inc.
801 Pilottown Rd.
Lewes, DE 19958
(302)228-5029
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merrinstitute@gmail.com
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Marine Education, Research & Rehabilitation Institute, Inc.
801 Pilottown Rd. Lewes, DE 19958
(302) 228-5029 merrinstitute@gmail.com
(302)644-2679 fax www.merrinstitute.org

…dedicated to the conservation of marine mammals and sea turtles and their habitat

April 15, 2014

Mid-Atlantic Regional Planning Board

Dear Committee Members,

Thank you for the opportunity to provide comments regarding ocean planning in the Mid-Atlantic Region. As the director of the Marine Education, Research and Rehabilitation Institute, Inc. (MERR), I will be providing comments from the perspective of marine mammal and sea turtle conservation, as well as that of marine habitat. I was able to attend one of the listening sessions held in Lewes, DE, as did many members of my organization who share a concern for ocean health issues. Based on the information presented during that session, and that contained in the public document, I would like to offer the following comments.

The Delaware coast experiences more than 36 species of marine mammals and sea turtles throughout the year. Most of these species are listed as threatened and endangered, while all of these species are protected by federal law under the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). MERR has collected 14 years (2000-present) of data on the occurrence of marine mammals and sea turtles in Delaware waters. However, this data did not seem to be represented in the Mid-Atlantic Regional Council on the Ocean (MARCO) portal. This distinct lack of data regarding the presence of marine species in this region is concerning, and we would like to see this data included so that there is an accurate representation of the presence of marine species, their location, and the time of year when they are utilizing the area.

Coastal Delaware is part of a dynamic and precious ecosystem, which serves as essential habitat for large whales, dolphins, porpoises, seals, manatees and sea turtles. The Atlantic Ocean, Delaware Bay, and Inland Bays and other waterways form an interconnected system with the marine species that source their living in these waters. Species of concern include the severely endangered North Atlantic right whale (*Eubalaena glacialis*), which utilizes the waters of coastal Delaware as feeding grounds. These species show fidelity to feeding areas, returning year after year to forage, and to teach their young how to feed on their own, post-weaning. The Delaware Bay and Indian River Inlet are amongst those areas that have been documented as right whale foraging grounds, both of which are fed directly from the ocean. The coast of Delaware serves as a migratory corridor for this and other species of large whales.

Most if not all of the currently identified projects proposed for the oceans will have enormous adverse impacts on the health of the ocean and the species that reside within

them. The projects of most immediate concern and those most likely to be considered by the Bureau of Energy Management (BOEM) include but are not limited to seismic testing for oil and gas exploration and the placement of wind turbines; subsequent oil drilling; and ocean based wind farms. Seismic testing as it has been proposed for oil and gas exploration includes extraordinarily loud airgun blasts that will sound every 10 seconds 24 hours a day. These blasts will occur 12 to 350 nautical miles off of the Delaware coast, and will reach 190 db, which translates to 250 db underwater. This level of sound, which is 2 times louder than a jet engine, would introduce anthropogenic sound at an exponential level that would be fatal to marine mammals, sea turtles, and their prey source. These marine animals use sound as a primary means of finding food, navigating, and staying connected to their groups and offspring. Calves can no longer hear the soundings of their parent, and vice versa. A calf separated from it's mother cannot survive. This extremely invasive level of sound will cause hearing loss, both temporary and permanent, brain swelling and hemorrhaging, internal organ damage, displacement and disorientation, loss of prey source, and inability to raise young in their natural habitat.

Proposals involving ocean based wind farms are of additional concern to the well being of marine mammals, sea turtles, and fish species. Seismic testing to identify location for turbines has been referenced previously in these comments. Construction of the turbines in and of itself poses detriments in the form of fatalities to marine mammals and sea turtles. Once constructed, the transformer has the potential to interfere with the naturally occurring electromagnetic fields of the earth, which are utilized by sea turtles and other marine species to navigate. There is little to no data referencing the effects on marine animals from shadow flickering caused by the spinning of the blades on the water surface and just below. There is also little to no data on the effects of the sound produced by vibration at the base of the turbine, and the sound wave created as the blades pass the tower. The rush to erect these turbines as a means of alternative energy without any empirical data to substantiate the impacts or lack thereof on marine dwelling species is inappropriate and may prove irreversible in it's harmful ramifications.

These projects have been approved utilizing Environmental Impact Statements that consider allowable take of dolphins to reach numbers of 4,000-11,000 individual animals per year. We do not consider this to be sound science, particularly in the face of the recent and ongoing bottlenose dolphin Unusual Mortality Event (UME) that has affected dolphins from NY to FL, which is nearly identical to the area in which seismic testing has been proposed. Empirical data has not been established for the impacts of human impact on marine species, particularly in terms of anthropogenic underwater sounds. We urge the planning board to identify the undeniable need to establish empirical, long range data prior to any actions that might be taken.

Ocean waters are already struggling to endure the impacts of human use. The issue of ocean health defines life and survival for marine animals, who are the true stakeholders in this decision making process. The waters in which these animals live, and the food that they eat show high levels of environmental toxins, human in origin. Oil spills, ocean outfall pipes, point source pollution, marine debris and so much more are the contributing

to toxic oceans. Toxicological studies of dolphins in the last few years are beginning to correlate bioaccumulations of toxins and pharmaceuticals with exposure to marine pollution (man-made) and harmful algal blooms, specifically brevetoxins. Marine mammals serve as important barometers for the health of our oceans, acting as sentinels for the presence of toxins that may also impact human swimmers and beachgoers. Localities where both dolphins and human diseases have been contrasted and compared in North America show evidence that has preliminarily linked fish source contamination and increased risk of human myelomas. Studies are continuing to evaluate the relationships between ocean health, marine mammal health and human health by calculating the incidence of cancers and other diseases in dolphins and humans in association with exposure to toxins in the marine environment.

We in Delaware live in a thriving community that sources it's livelihood from the ocean, whether it be through tourism, commerce, real estate, fishing, or personal enjoyment. Many of us choose to make our lives here, out of our affinity for the beautiful coast. As a community that relies so heavily on the enduring presence of these great ecosystems, it is imperative that we make decisions with an eye to the future, and identify ocean health as an essential factor in all of our futures. We would like to see Principle 9 (Intrinsic Value) relisted as Principal 1. There is nothing more important to the survival of humans and animals than that of ocean conservation. We hope that our community leaders and decision makers show the prudence to act as good stewards of our coastal areas by making decisions that help us to conserve and preserve marine ecosystems rather than exploit them, and in so doing will research other land based energy sources, such as solar energy and geo-thermal energy, and will work to improve potential bridge technologies such as the Bloom Energy Box and other alternative energy sources.

Below is a listing of the species that occur along the Delaware coast. Specific data is attached separately.

Sincerely,

Suzanne Thurman
Executive Director

Marine Mammal and Sea Turtle Species occurring along the Delaware Coast

Atlantic white-sided Dolphin	*Larenorhynchus acutus*
Blainville's beaked whale	*Mesoploden densirostis*
Bottlenose dolphin	*Tursiops truncatus*
Byrde's whale	*Balaenoptera edeni*
Common dolphin	*Delphinus delphis*
Common minke whale	*Balaenoptera acutorostrata*
Cuvier's beaked whale	*Ziphius cavirostris*
Dwarf sperm whale	*Kogia sima*
False killer whale	*Pseudorca crassidens*
Fin whale	*Balaenoptera physalus*
Gervais' beaked whale	*Mesoploden europaeus*
Harbor porpoise	*Phocoena phocoena*
Humpback whale	*Megaptera novaeangliae*
North Atlantic Right whale	*Eubalaena glacialis*
Northern bottlenose whale	*Hyperoodon ampullatus*
Pygmy sperm whale	*Kogia breviceps*
Risso's dolphin	*Grampus griseus*
Rough toothed dolphin	*Steno bredanensis*
Sei whale	*Balaenoptera borealis*
Short-finned pilot whale	*Globicephala macrorhynchus*
Sowerby's beaked whale	*Mesoplodon bidens*
Sperm whale	*Physeter macrocephalus*
Striped dolphin	*Stenella coeruleoalba*
True's beaked whale	*Mesoplodon mirus*
Grey seal	*Halichoerus grypus*
Harbor seal	*Phoca vitulina*
Harp seal	*Phoca groenlandica*
Hooded seal	*Cystophora cristata*
West Indian Manatee	*Trichechus manatus*
Loggerhead sea turtle	*Caretta caretta*
Leatherback sea turtle	*Dermochelys coriacea*
Green sea turtle	*Chelonia mydas*
Kemp's ridley sea turtle	Lepidochelys kempii

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:49 AM
Subject: Re: Comments on MidA Draft Regional Ocean Planning Framework
To: brent.greenfield@oceanpolicy.com
Cc: Mid-Atlantic Planning <midatlanticrpb@boem.gov>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 4:58 PM, <brent.greenfield@oceanpolicy.com> wrote:
Attached please find a National Ocean Policy Coalition comment letter on the Mid-Atlantic Regional Planning Body's draft regional ocean planning framework.

Please contact me at (713) 337-8821 or brent.greenfield@oceanpolicy.com if you have any questions.

Sincerely,
Brent

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April 15, 2014

Ms. Maureen Bornholdt
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Ms. Gwynne Schultz
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Shinnecock Indian Nation
PO Box 5006
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Submitted Electronically via MidAtlanticRPB@boem.gov

RE: Comments on Mid-Atlantic Regional Planning Body's Draft Regional Ocean Planning Framework

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

The National Ocean Policy Coalition ("Coalition") is pleased to submit comments on the Mid-Atlantic Regional Planning Body's ("Mid-Atlantic RPB") draft regional ocean planning framework. The Coalition is an organization of diverse interests representing sectors and entities that support tens of millions of jobs, contribute trillions of dollars to the U.S. economy, and seek to ensure that actions under the National Ocean Policy are implemented in a manner that best benefits the National interest, including protection of the commercial and recreational value of the oceans, marine-related natural resources, and terrestrial lands of the United States.

INTRODUCTION

Ocean and coastal policies play a critical role in our national, regional, and local economies, national security, culture, health, and well-being. The Coalition supports ocean and coastal policies that serve as mechanisms for job creation, infrastructure revitalization, and economic growth; conserve the natural resources and marine habitat of our ocean and coastal regions; and rely on full utilization of existing processes and programs and well-established authorities that are already in place.

The comments herein supplement the Coalition's comments included in the November 8, 2013 letter to the Mid-Atlantic RPB and the verbal comments that were delivered at the inaugural in-person meeting in September 2013 (see Appendix).

The ability to provide informed comments on the draft regional ocean planning framework ("draft framework") is regrettably constrained by the document's ambiguities, the absence of specific, concrete proposed actions and sequencing of activities, and the lack of public access to a final Mid-Atlantic RPB Charter. Before the draft framework is finalized, the Charter should therefore be made public and the draft framework revised and re-released in order to allow for formal and meaningful stakeholder and public engagement.

In the meantime, the Coalition's comments below underscore the need for the Mid-Atlantic RPB to:

- assume an advisory role that involves non-binding actions and products and leaves resource management decisions to existing statutorily-authorized entities;
- develop formal, meaningful, and transparent stakeholder processes and standards, engaging stakeholder groups as equal partners;
- adequately recognize and address the importance of economic activity in the Mid-Atlantic; and
- proceed in a manner that accounts for all existing and foreseeable and potential future activities simultaneously, without giving preference to certain uses over others.

Regulatory Implications

A chief driver of concerns regarding regional ocean planning efforts under the National Ocean Policy/RPB construct is the fact that, pursuant to the foundational National Ocean Policy documents, RPB products are to be implemented by federal agencies to the maximum extent, including through regulations where necessary.[1] Language included in the draft framework further demonstrates the nexus between Mid-Atlantic RPB actions and governmental decision-making activity.[2]

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[1] *See* Executive Order for Stewardship of the Ocean, Our Coasts, and the Great Lakes, July 19, 2010, *available at* http://www.whitehouse.gov/files/documents/2010stewardship-eo.pdf, Section 6 ("All executive departments, agencies, and offices that are members of the [National Ocean] Council and any other executive department, agency, or office whose actions affect the ocean, our coasts, and the Great Lakes shall, to the fullest extent consistent with applicable law…[p]articipate in the process for coastal and marine spatial planning and comply with Council certified coastal and marine spatial plans, as described in the Final Recommendations and subsequent guidance from the Council."); Final Recommendations of the Interagency Ocean Policy Task Force, July 19, 2010, *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf, Pages 47, ("Where pre-existing legal constraints, either procedural or substantive, are identified for any Federal agency, the NOC would work with the agency to evaluate necessary and appropriate legislative solutions or changes to regulations to address the constraints. In the interim, agencies would comply with existing legal requirements but should endeavor, to the maximum extent possible, to integrate their actions with those of other partners to a CMS Plan."); 61-62 ("…State and Federal regulatory authorities would adhere to, for example, the processes for improved and more efficient permitting, environmental reviews, and other decision-making identified in the CMS [Coastal and Marine Spatial] Plan to the extent these actions do not conflict with existing legal obligations. State and Federal authorities with programs relevant to the CMS Plan would in a timely manner review and modify programs, as appropriate, to ensure their respective activities, including discretionary spending (e.g., grants and cooperative agreements), adhere to the CMS Plan to the extent possible. State and Federal agencies would also be expected to formally incorporate relevant components of the CMS Plan into their ongoing operations or activities consistent with existing law. This may be implemented in a variety of ways. For example, agencies could enter into memoranda of understanding (MOUs) to coordinate or unify permit reviews and decision-making processes. Where existing regulatory or statutory requirements impose constraints on the ability of an agency to fully implement the CMS Plan, the agency would seek, as appropriate, regulatory or legislative changes to fully implement the CMS Plan."); 62 ("…CMS Plans…are intended to guide agency decision-making and agencies would adhere to the final CMS Plans to the extent possible, consistent with existing authorities…Once a CMS Plan is approved, Federal, State, and tribal authorities would implement them through their respective legal authorities."); and 65-66 ("Agencies would incorporate components of the CMS Plan into their respective regulations to the extent possible. Adherence with CMSP would be achieved through Federal and State agencies and tribal authorities incorporating CMS Plans into their pre-planning, planning, and permitting processes, to the extent consistent with existing laws and regulations. The CMS Plan signatories would periodically review these processes, and where legal constraints are identified, would seek to remedy these constraints, including by working with the NOC to evaluate whether a legislative solution or changes to regulations are necessary and appropriate."); National Ocean Policy Implementation Plan, April 2013, *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_implementation_plan.pdf , Page 21 (Marine planning will support regional actions and decision-making…); and Marine Planning Handbook, July 2013, *available at* http://www.whitehouse.gov//sites/default/files/final_marine_planning_handbook.pdf, Page 17 ("By their concurrence, Federal agencies agree that they will use the marine plan to inform and guide their actions in the region consistent with their existing missions and authorities.").

[2] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework, Pages 2 ("Regional ocean planning will…guide planning…;" and "Regional ocean planning will help guide resource conservation…")

Thus, while the Mid-Atlantic RPB states that the regional ocean planning effort "**does *not* change** existing authorities or create new mandates,"[3] its actions may have far-reaching consequences in part by serving as precursors to regulatory activity through the requirement that federal entities implement and ensure their consistency with RPB products. The inherent potential for uncertainty, confusion, delay, and adverse impacts likely to result from this non-statutorily based process underscores the critical need to reduce the likelihood of such an outcome.

While we acknowledge the pre-regulatory structure that already exists under the National Ocean Policy/RPB construct, the Coalition believes that the work of the Mid-Atlantic RPB should be advisory only and non-binding in nature. Consistent with the National Ocean Policy Implementation Plan's emphasis on the flexibility of regions to determine the scope, scale, and content of marine planning in a manner that "reflect[s] their unique interests, capacity to participate, and ways of doing business,"[4] the Mid-Atlantic RPB should accordingly utilize such flexibility to resolve that its actions will be advisory and non-binding.

User Group Engagement

In accordance with its previous requests,[5] the Coalition therefore reiterates the critical importance of establishing a formal role for commercial and recreational user groups (including direct RPB participation, and at minimum, the creation of a formal advisory committee under the Federal Advisory Committee Act) before the Mid-Atlantic RPB conducts any further activities. For the reasons stated above, the activities of the RPB should be held to stakeholder processes and standards at least as rigorous as those accorded to statutorily-authorized ocean use planning processes.

A clear, transparent, and inclusive process would decrease the likelihood of poorly-informed actions that unnecessarily constrain commercial and recreational activity or lead to unintended consequences for a range of interests in the Mid-Atlantic. The broad and diverse groups who could be impacted by Mid-Atlantic RPB actions must be given a meaningful and active voice and role in this group's activities so that their input can help guide a truly collaborative process and outcome.

Public comment periods, listening sessions, surveys, a single "ombudsman" seat on the RPB for non-government interests, and liaison committees that interact with third parties are often seen as one-way, passive and/or reactive communications that preclude true partnership-building and collaboration. As such, we are concerned that engagement options currently under consideration – while they may have a role in some processes – may not be sufficient in this instance to secure the buy-in, support, and consensus of concerned regional economic stakeholders with potentially divergent views. Limiting user group engagement to such mechanisms in this case could increase the likelihood that implementation of RPB products may unnecessarily harm the region's economy, communities, and livelihoods.

Furthermore, establishment of a formal role for commercial and recreational user groups (including the creation of a formal advisory committee under the Federal Advisory Committee Act) would be

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and 6 ("MidA RPB processes and products will…allow stakeholders to participate an understand when and how decisions are reached that affect their lives.").

[3] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 2, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

[4] *See* National Ocean Policy Implementation Plan, April 2013, *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_implementation_plan.pdf , Page 22.

[5] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 2 on Stakeholder Engagement at September 2013 Mid-Atlantic RPB Meeting).

consistent with and help support the draft framework's emphasis on stakeholder engagement.[6] If resource constraints preclude the Mid-Atlantic RPB's capacity to support a formal federal advisory committee,[7] then it seemingly lacks the capacity and should not endeavor to participate in a regional ocean planning process that could result in impacts on commercial and recreational interests and the jobs and communities that they support and seek to support.

In the event that the Mid-Atlantic RPB nevertheless continues to pursue the establishment of an informal stakeholder liaison committee, user groups and the public must be kept fully informed and engaged regarding any such effort, including through opportunities to participate as equal partners in the development and review of its proposed establishment, structure, and selection process.

Work Plan, Capacity/Regional Ocean Assessments, and Potential Ocean Plan

Language included in the draft framework document discusses the role of the Mid-Atlantic RPB, specifically noting that it plans to develop a work plan, capacity assessment, and regional ocean assessment that accounts for "current trends and forecasts about changing ocean uses and ecosystems," as well as "[c]onsider developing a forward looking ocean plan," whose purpose and content would be determined "in collaboration with stakeholders."[8]

The development of a work plan, capacity assessment, and regional ocean assessment, as well as any decision on whether to develop a regional ocean plan, must be subject to formal and meaningful engagement in a manner that provides sufficient opportunities to develop priorities and objectives in partnership with, and based on the input, advice, and consensus of, the region's commercial and recreational interests.

Furthermore, and as the Coalition has previously stated,[9] any such documents must account for all existing and foreseeable and potential future uses. In that regard, it is critical that the Mid-Atlantic RPB and framework recognize and acknowledge the need to address all regional environmental and economic issues simultaneously. RPB member discussion at the September 2013 inaugural in-person meeting and the text of the subsequently released draft framework suggest that the Mid-Atlantic RPB will focus on certain activities (i.e. facilitation of renewable energy projects, aquaculture permitting, and sand and gravel activity) that may reflect the consensus of many RPB members – but not the consensus of all concerned stakeholders.

The Coalition takes issue with an approach that focuses on some issues and not others; since individual uses and activities do not occur in a vacuum and decisions as to one use or a limited set of uses will

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[6] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework, Pages 2 ("Partnerships with stakeholders will be critical to the success of this planning effort;" and "Key elements of regional ocean planning include…[i]dentify shared regional goals and objectives to guide decision-making by Federal, State and Tribal entities, informed by stakeholder engagement and input…Provide participation by ocean stakeholders and the public.") and 6 ("Principle 8 (Transparency and engagement) – MidA RPB processes and products will benefit from meaningful public input, be designed to be easily understood by all, and allow stakeholders to participate and understand when and how decisions are reached that affect their lives.").

[7] *See* "Mid Atlantic RPB Stakeholder Engagement: Current mechanisms and options for the future," *available at* http://www.boem.gov/Environmental-Stewardship/Mid-Atlantic-Regional-Planning-Body/5_-Stakeholder-Engagement-for-RPB-Review-Draft-9-16-13.aspx, Page 4 ("Because the RPB does not currently have the capacity to support a formal Federal Advisory Committee, the RPB must ensure that the stakeholder engagement strategy chosen does not trigger FACA. This will require legal guidance.").

[8] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 4, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

[9] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 1 on Ideas for Initial Regional Ocean Planning Goals and Geographic Focus at September 2013 Mid-Atlantic RPB Meeting).

invariably impact other uses, simultaneous consideration of all existing and potential future uses is required.

Economic Goals

Lastly, many of the nation's existing laws aim to promote economic activity and resource development,[10] and the National Ocean Policy Implementation Plan itself cites the promotion of economic growth as a key driver and goal of the initiative.[11]

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[10] *See e.g.* 16 U.S.C. § 1452 (Coastal Zone Management Act), *available at* http://www.gpo.gov/fdsys/pkg/USCODE-2012-title16/pdf/USCODE-2012-title16-chap33-sec1452.pdf ("The Congress finds and declares that it is the national policy—(1) to preserve, protect, ***develop***, and where possible, to restore or enhance, the resources of the Nation's coastal zone for this and succeeding generations; (2) to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs to achieve wise use of the land and water resources of the coastal zone, giving full consideration to ecological, cultural, historic, and esthetic values ***as well as the needs for compatible economic development, which programs should at least provide for***…(D) ***priority consideration being given to coastal-dependent uses and orderly processes for siting major facilities related to national defense, energy, fisheries development, recreation, ports and transportation, and the location, to the maximum extent practicable, of new commercial and industrial developments in or adjacent to areas where such development already exists,*** (E) ***public access to the coasts for recreation purposes***…" [emphasis added]); 43 U.S.C. 1332 (Outer Continental Shelf Lands Act), *available at* http://www.gpo.gov/fdsys/pkg/USCODE-2011-title43/pdf/USCODE-2011-title43-chap29-subchapIII.pdf ("It is hereby declared to be the policy of the United States that—…(3) the outer Continental Shelf is a vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs…"); 16 U.S.C. 1801 (Magnuson Stevens Fishery Conservation and Management Act), *available at* http://www.gpo.gov/fdsys/pkg/USCODE-2012-title16/pdf/USCODE-2012-title16-chap38-subchapI.pdf ("The Congress finds and declares the following: …The fish off the coasts of the United States, the highly migratory species of the high seas, the species which dwell on or in the Continental Shelf appertaining to the United States, and the anadromous species which spawn in United States rivers or estuaries, constitute valuable and renewable natural resources. These fishery resources contribute to the food supply, economy, and health of the Nation and provide recreational opportunities…A national program for the development of fisheries which are underutilized or not utilized by the United States fishing industry, including bottom fish off Alaska, is necessary to assure that our citizens benefit from the employment, food supply, and revenue which could be generated thereby…It is therefore declared to be the purposes of the Congress in this Act—…to promote domestic commercial and recreational fishing under sound conservation and management principles…to encourage the development by the United States fishing industry of fisheries which are currently underutilized or not utilized by United States fishermen, including bottom fish off Alaska…"); 46 U.S.C. 55601 (Energy Independence and Security Act), *available at* http://uscode.house.gov/view.xhtml?path=/prelim@title46/subtitle5/partD/chapter556&edition=prelim ("The Secretary of Transportation shall establish a short sea transportation program and designate short sea transportation projects to be conducted under the program to mitigate landside congestion or to promote short sea transportation. (b) Program Elements.-The program shall encourage the use of short sea transportation through the development and expansion of-(1) documented vessels; (2) shipper utilization; (3) port and landside infrastructure; and (4) marine transportation strategies by State and local governments."); and 46 U.S.C. 50302 (Merchant Marine Act, as amended), *available at* http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title46-section50302&num=0&edition=prelim ("With the objective of promoting, encouraging, and developing ports and transportation facilities in connection with water commerce over which the Secretary of Transportation has jurisdiction, the Secretary, in cooperation with the Secretary of the Army, shall -(1) investigate territorial regions and zones tributary to ports, taking into consideration the economies of transportation by rail, water, and highway and the natural direction of the flow of commerce; (2) investigate the causes of congestion of commerce at ports and applicable remedies; (3) investigate the subject of water terminals, including the necessary docks, warehouses, and equipment, to devise and suggest the types most appropriate for different locations and for the most expeditious and economical transfer or interchange of passengers or property between water carriers and rail carriers; (4) consult with communities on the appropriate location and plan of construction of wharves, piers, and water terminals; (5) investigate the practicability and advantages of harbor, river, and port improvements in connection with foreign and coastwise trade; and (6) investigate any other matter that may tend to promote and encourage the use by vessels of ports adequate to care for the freight that naturally would pass through those ports.").

[11] *See* National Ocean Policy Implementation Plan, April 2013, *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_implementation_plan.pdf , Pages 3 ("This Plan describes specific actions that translate the goals of the National Ocean Policy into on-the-ground change to address key challenges, streamline Federal operations, save taxpayer dollars, and promote economic growth.") and 6 ("This Plan responds to such challenges by focusing and coordinating action among Federal agencies under their existing authorizations and budgets, and by providing the tools we need to ensure a robust, sustainable ocean economy. It also promotes better science and information to support economic growth, more efficient permitting and decision-making, and healthier and more resilient marine ecosystems that will continue to support jobs, local economies, and a skilled and diverse ocean workforce.").

Consistent with the Coalition's previous request for regional goals that promote job creation, economic growth, infrastructure revitalization, and access,[12] the Mid-Atlantic RPB in turn should identify and conduct formal and meaningful engagement on proposed economic goals and related actions and performance indicators, including the development of a regional economic development plan. Aided and informed by the close engagement of existing and potential future commercial and recreational user groups, the plan should identify and prioritize needs and outcomes for economic data and information, clearly specify how such needs will be met, and outline in detail how Mid-Atlantic RPB activities will achieve identified economic goals, actions, and performance metrics.

In addition to establishing economic goals, and to help instill confidence that economic issues will be adequately addressed, any goals ultimately adopted should either not be numbered or should be numbered in a manner that reflects the significance and priority of promoting jobs and economic growth.

Taking such actions will help ensure that the promotion of economic activity and growth of the region's blue economy are adeqautely addressed in the Mid-Atlantic RPB's activities.

INITIAL GEOGRAPHIC FOCUS

The draft framework proposes that the regional planning effort's "primary geographic focus area…at this time" should be the region's state and federal ocean waters, noting that while it "does not anticipate including in its planning efforts the major bays and estuaries…where necessary the MidA RPB will draw connections and coordinate with estuarine and terrestrial areas for planning purposes…" The draft framework adds that the Mid-Atlantic RPB "will consider further refining the geographic focus as goals and objectives are formed, as informed by public input."[13]

The Coalition encourages the Mid-Atlantic RPB to leave management of inland resources to existing state and federal bodies and processes and to exclude such areas from an initial or subsequent geographic focus. To the extent that the Mid-Atlantic RPB nevertheless addresses upland activities, it is imperative that those who live, work, and employ individuals in such areas be informed and engaged at the earliest possible moment regarding the Mid-Atlantic RPB's existence and intention to explore potential supposed links between their areas and ocean and coastal waters.

The Mid-Atlantic RPB should further specify whether (and if so, how), under the proposed framework, it would address bays and estuaries not considered "major" in the identification of the initial geographic focus area. It should also detail how it would "where necessary…draw connections and coordinate with estuarine and terrestrial areas for planning purposes."

PRINCIPLES

To guide regional ocean planning in the Mid-Atlantic, the draft framework proposes the following nine principles: [14]

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[12] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 1 on Ideas for Initial Regional Ocean Planning Goals and Geographic Focus at September 2013 Mid-Atlantic RPB Meeting).

[13] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 4, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

[14] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Pages 5-6, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

- **Principle 1 (Recognize interconnections)**: The MidA RPB will facilitate an approach to managing ocean resources that recognizes and considers the interconnections across human uses and interests, marine species and habitats, and coastal communities and economies
- **Principle 2 (Compatibility of multiple interests)**: The MidA RPB will coordinate in making information available to support economic development and ecosystem conservation so that multiple interests can co-exist in a manner that reduces conflict and enhances compatibility
- **Principle 3 (Improving resilience)**: The MidA RPB will consider the risks and vulnerabilities associated with past, present, and predicted ocean and coastal hazards (e.g., erosion, extreme weather, and sea level rise) and predicted changes to temperature and ocean acidification to protect Mid-Atlantic ocean and coastal communities, users, and natural features
- **Principle 4 (Sound science)**: The MidA RPB will consider sound science and traditional knowledge in decision-making
- **Principle 5 (Adaptive management)**: The MidA RPB will apply a flexible and adaptive approach in accommodating changing environmental conditions, advances in science and technology, and new or revised laws and policies
- **Principle 6 (Consistency with existing laws)**: MidA RPB actions will be consistent with Federal laws, regulations, Executive Orders, and treaties, and with State laws, regulations, Executive Orders, and treaties where applicable
- **Principle 7 (Coordination and government efficiency)**: The MidA RPB will serve as a forum to increase inter-jurisdictional coordination to facilitate efficient and effective management of Mid-Atlantic ocean uses and resources consistent with regional needs. Such coordination will extend to partners and issues in adjacent uplands, in the Northeast and South Atlantic, and international waters to the east
- **Principle 8 (Transparency and engagement)**: MidA RPB processes and products will benefit from meaningful public input, be designed to be easily understood by all, and allow stakeholders to participate and understand when and how decisions are reached that affect their lives
- **Principle 9 (Intrinsic value)**: The MidA RPB will respect the intrinsic value of the ocean and its biodiversity, at the same time recognizing humans as part of the ecosystem and dependent on the health of the ecosystem for our own well-being

In addition to suggested revisions to the proposed principles, the Coalition recommends the addition of the following two new principles on Advisory Role and Economic Value:

Advisory Role

As discussed in the Introduction, while we acknowledge the pre-regulatory structure that already exists under the National Ocean Policy/RPB construct, the Coalition believes that the work of the Mid-Atlantic RPB should be advisory only and non-binding in nature. Consistent with the National Ocean Policy Implementation Plan's emphasis on the flexibility of regions to determine the scope, scale, and content of marine planning in a manner that "reflect[s] their unique interests, capacity to participate, and ways

of doing business,"[15] the Mid-Atlantic RPB should accordingly utilize such flexibility to resolve that its actions will be advisory and non-binding by adopting the following overarching principle:

> ***Principle (Advisory role)****: Mid-Atlantic RPB actions and decisions will be advisory in nature and shall not be considered as binding on governmental entities.*

Economic Value

While human uses and interests and support for economic development are referenced in draft Principles 1 and 2, consistent with the Coalition's previous comments,[16] a new principle addressing the importance of Mid-Atlantic job creation, economic growth, and infrastructure revitalization should be established. The rationale for such a principle is underscored by proposed Principle 9's focus on the ocean's intrinsic value and biodiversity. To that end, the Coalition recommends the addition of the following principle:

> ***Principle (Economic value)****: The MidA RPB will respect the economic value and potential of the ocean, recognizing the critical roles that ocean resources, current and future ocean uses, and revitalized marine infrastructure can play in promoting economic and job growth and the enhanced quality of life that follows.*

In addition to suggesting the above two new principles, the Coalition also offers comments on the following principles proposed by the Mid-Atlantic RPB:

Transparency and Engagement

Effective and transparent stakeholder and public engagement is necessary to ensure well-informed Mid-Atlantic RPB activities that do not lead to unintended consequences. To that end, and consistent with the Coalition's previous requests,[17] the proposed principle should be revised as follows:

> *MidA RPB processes and products will benefit from meaningful public input, be designed to be easily understood by all, and allow stakeholders to participate and understand when and how decisions are reached that affect their lives. The Mid-Atlantic RPB will ensure opportunities for a meaningful and formal role for stakeholders as equal partners in the development of processes, products, and engagement mechanisms, and will communicate all such opportunities widely and transparently.*

Sound Science

As to proposed Principle 4, and consistent with the Coalition's previous requests,[18] in order to help ensure the application of sound science in Mid-Atlantic RPB activities, the Mid-Atlantic RPB should

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[15] *See* National Ocean Policy Implementation Plan, April 2013, *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_implementation_plan.pdf , Page 22.

[16] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 1 on Ideas for Initial Regional Ocean Planning Goals and Geographic Focus at September 2013 Mid-Atlantic RPB Meeting).

[17] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 2 on Stakeholder Engagement at September 2013 Mid-Atlantic RPB Meeting).

[18] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 3 on Data and Information at September 2013 Mid-Atlantic RPB Meeting).

clarify that sound science and traditional knowledge will be applied, rather than considered, and gathered and used in accordance with relevant data quality laws, regulations, and standards.

The proposed principle should therefore be revised to read as follows:

> *The MidA RPB will apply sound science and traditional knowledge in its activities. The use of any data that is utilized will be compliant with all relevant federal data quality laws, regulations, and standards.*

Adaptive Management

In order to ensure that Mid-Atlantic RPB activities can adequately account for changing economic conditions in a manner that will address needs for job creation and economic growth, consistent with the Coalition's previous comments,[19] proposed Principle 5 should be revised to state that a flexible and adaptive approach will be utilized to accommodate changing "economic conditions."

To that end, the principle should be revised to read as follows:

> *The MidA RPB will facilitate a flexible and adaptive approach to accommodate changing environmental and economic conditions, advances in science and technology, and new or revised laws and policies.*

Coordination and Government Efficiency

With regard to proposed Principle 7, the Mid-Atlantic RPB should clarify that coordination efforts meant to achieve governmental efficiencies would be intended to benefit all existing and potential future uses in the Mid-Atlantic region, including fishing and boating, conventional and renewable energy, ports, shipping, and other forms of waterborne transportation and commercial and recreational activity.

Efforts to achieve better coordination across government agencies should include formal and meaningful engagement with the regulated community and relevant agencies in a manner that provides sufficient opportunities to partner with, and obtain the input, advice, and consensus, of the region's commercial and recreational interests.

In addition, with the proposed initial geographic focus limited to the region's ocean waters, the Mid-Atlantic RPB should remove the reference to addressing coordination with "partners and issues in adjacent uplands."

Proposed Principle 7 should therefore be revised as follows:

> ***Principle 7 (Coordination and government efficiency)****: The MidA RPB will serve as a forum to increase inter-jurisdictional coordination to facilitate efficient and effective management of all existing and potential future Mid-Atlantic ocean uses and resources. Such coordination will extend to partners and issues in the Northeast and South Atlantic and international waters to the east*

[19] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 2 on Ideas for Initial Regional Ocean Planning Goals and Geographic Focus at September 2013 Mid-Atlantic RPB Meeting).

Formatting of Principles

Lastly, any principles ultimately adopted should either not be numbered or should be numbered in a manner that reflects the significance and priority of advisory role, consistency with existing laws, transparency and engagement, economic activity, and sound science.

DRAFT GOAL 1: PROMOTE OCEAN ECOSYSTEM HEALTH AND INTEGRITY THROUGH CONSERVATION, PROTECTION, ENHANCEMENT, AND RESTORATION[20]

Commercial and recreational interests have a direct stake in healthy ocean and coastal ecosystems and support sound, informed, and science-based policies that support them. A number of federal laws are already in place that directly and indirectly address the protection of ocean and coastal ecosystems.

Such laws include the Coastal Zone Management Act, Clean Water Act, Clean Air Act, National Environmental Policy Act, Magnuson-Stevens Fishery Conservation and Management Act, Oil Pollution Act, Endangered Species Act, Marine Mammal Protection Act, Outer Continental Shelf Lands Act, Coral Reef Conservation Act, National Marine Sanctuaries Act, Antiquities Act, and National Historic Preservation Act, among others.

In seeking to promote ecosystem conservation, protection, enhancement, and restoration, the Mid-Atlantic RPB must ensure that its actions are consistent with its pledge not to create new mandates and do not serve to further cloud the regulatory landscape for the region's existing and future user group communities.

To that end, the Coalition urges the Mid-Atlantic RPB to revise Draft Goal 1 to read as follows:

DRAFT GOAL 1: HEALTHY OCEAN ECOSYSTEMS

The Coalition also has the following comments on objectives under Draft Goal 1.

Objective 1: Understanding, Protecting, and Restoring Key Habitats[21]
Enhance understanding of Mid-Atlantic ocean habitats and physical, geological, chemical, and biological ocean resources through improved scientific understanding and assessments of the effects of ocean uses. Foster collaboration and coordination for protection and restoration of critical ocean and coastal habitats.
Example action: Map and characterize canyon habitats in the Mid-Atlantic region. Identify Federal, State and Tribal habitat protection and restoration initiatives to leverage partnerships that maximize the opportunity for success.

To the degree that ecosystem assessment efforts are undertaken, such studies should not be limited to the "effects of ocean uses." Rather, any ecosystem assessment should also address naturally occurring processes and changes in order to adequately account for the state of ocean habitats and resources independent of human activity.

[20] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 7, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.
[21] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 7, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

Proposed Objective 1 should therefore be revised as follows:

> *Enhance understanding of Mid-Atlantic ocean habitats and physical, geological, chemical, and biological ocean resources through improved scientific understanding and assessments of naturally occurring processes and changes and the effects of ocean uses. Foster collaboration and coordination for protection and restoration of critical ocean and coastal habitats.*

In addition to proposed goals and objectives, the draft framework includes "example actions" that "could be taken by the MidA RPB to achieve the draft goals and objectives for illustrative purposes."[22] For proposed Objective 1, the draft framework includes an example action to "[m]ap and characterize canyon habitats in the Mid-Atlantic region."

Data and maps that are collected, developed, and used properly can be of great utility to government, scientists, ocean and coastal user groups, and the public. However, any mapping or characterizations conducted pursuant to this or any other objective must be developed through a transparent public process, held to the highest data quality standards, and updated and adapted to suit evolving information and public policy needs. Otherwise, such efforts could introduce new uncertainties for commercial and recreational groups that lead to unnecessary regulatory hurdles or obstacles to access. For example, agency use of data or maps that are incomplete, untimely, or not applied as intended could lead to adverse regulatory impacts.

In addition, prior to undertaking any mapping or characterization effort, the Mid-Atlantic RPB should first assemble relevant existing scientific data and analysis to ascertain its ability to conduct the proposed initiative.

For any proposed mapping or characterization activity, the Mid-Atlantic RPB should provide clear guidance and protocols that apply to the data to be collected and used (including minimum requirements with relevant federal and state data quality laws, standards, and protocols). The development of any maps or studies must also be: (1) subject to an opportunity for formal and meaningful stakeholder and public engagement (including all existing and future user groups); and (2) followed by continuous opportunities to update any maps or studies and the prompt incorporation of any updated data.

As to the proposed example action to "[i]dentify Federal, State and Tribal habitat protection and restoration initiatives to leverage partnerships that maximize the opportunity for success," promoting the use of existing non-regulatory mechanisms to support ecosystem health would be consistent with the Mid-Atlantic RPB's pledge not to create new mandates and help ensure that the regulatory landscape for the region's ocean and coastal user community is not further clouded.

In seeking to leverage any such initiatives, however, the Mid-Atlantic RPB must be cognizant of limited agency staff and financial resources and ensure that such resources are not diverted away from statutorily-authorized purposes. The Mid-Atlantic RPB should also clearly state how it would leverage identified partnerships, including detailed descriptions of projected costs and funding sources, and ensure that any proposed support for such partnerships is subject to sufficient opportunities for formal and meaningful stakeholder and public engagement.

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[22] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 6, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

Objective 2: Accounting for Ocean Ecosystem Changes and Increased Risks[23]
Facilitate enhanced understanding of and take into account in decision-making current and anticipated ocean ecosystem changes in the Mid-Atlantic. These include ocean-related risks and vulnerabilities associated with ocean warming (including sea level rise, coastal flooding/inundation), ocean acidification (including effects on living marine resources), and changes in ocean wildlife migration and habitat use.
Example actions: Coordinate the collection and understanding of information needed to adjust human use activities in certain ocean areas in response to changing migratory pathways of marine life. Coordinate information sharing regarding sea level rise and ocean acidification in order to inform management of living marine resources and coastal communities and industries dependent on them.

To achieve Objective 2, the draft framework includes example actions to coordinate the collection and understanding of information needed to "adjust human activities in certain ocean areas in response to changing migratory pathways of marine life," as well as coordinate information-sharing related to sea level rise and ocean acidification to "inform" management of living marine resources and coastal communities.

It should not be prejudged or otherwise assumed that adjustments to human use activities will be necessary to address changing migratory pathways of marine life. Furthermore, decision-making authority pertaining to the management of human activities and living marine resources and coastal communities rests with those entities that are statutorily authorized to do so.

The Mid-Atlantic RPB should therefore clarify that its role related to Objective 2 will be limited to coordinating information gathering and sharing efforts and not include decision-making activity.

Proposed Objective 2 should thus be revised as follows:

> *Facilitate enhanced understanding of current and anticipated ocean ecosystem changes in the Mid-Atlantic. These include ocean-related risks and vulnerabilities associated with ocean warming (including sea level rise, coastal flooding/inundation), ocean acidification (including effects on living marine resources), and changes in ocean wildlife migration and habitat use.*

Objective 3: Valuing Traditional Knowledge of the Ecosystem[24]
Pursue greater understanding and acknowledgment of traditional knowledge along with other cultural values, and incorporate such knowledge and values in the ocean planning process.
Example action: Include traditional ecological knowledge and consideration of local cultural values in regional capacity assessment.

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[23] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 7, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.
[24] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 7, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

Incorporation of traditional knowledge and other cultural values in the management of Mid-Atlantic ocean and coastal resources and activities must be left to the discretion of entities statutorily authorized to do so. Proposed Objective 3 should therefore be revised as follows:

> *Pursue greater understanding and acknowledgment of traditional knowledge along with other cultural values, with such knowledge and values incorporated as relevant authorities deem appropriate.*

As to the accompanying proposed example action, the Mid-Atlantic RPB should clarify that any proposed efforts to gather information pertaining to traditional knowledge or cultural values for a regional capacity assessment will be subject to formal and meaningful stakeholder and public engagement opportunities.

Finally, for draft Goal 1, the Coalition recommends the addition of the following new objective:

Objective 4: Valuing User Group Knowledge of the Ecosystem
Pursue greater understanding and acknowledgment of the knowledge held by commercial and recreational user groups, with such knowledge and values incorporated as relevant authorities deem appropriate.
Example action: Include user group knowledge in regional capacity assessment.

To ensure that any Mid-Atlantic RPB activities adequately incorporate ecosystem knowledge held by the region's existing and future potential commercial and recreational interests, the Coalition recommends that the Mid-Atlantic RPB include the new proposed Objective 4 outlined above.

Commercial and recreational users are among those who know marine ecosystems best, and obtaining and incorporating their knowledge would be a critical component in the development of well-informed and sound Mid-Atlantic RPB activities and products.

DRAFT GOAL 2: PLAN AND PROVIDE FOR EXISTING AND EMERGING OCEAN USES IN A SUSTAINABLE MANNER THAT REDUCES CONFLICTS, IMPROVES EFFICIENCY AND REGULATORY PREDICTABILITY, AND SUPPORTS ECONOMIC GROWTH[25]

Mid-Atlantic RPB efforts that seek to address existing and emerging ocean uses must do so in a non-regulatory manner that is consistent with the mandates of existing statutes and regulations, leaving ocean and coastal resource management decision-making to existing and statutorily-established entities, mechanisms, and processes that are authorized by law to address such matters. Proceeding otherwise could lead to adverse effects on existing and future ocean and coastal commercial and recreational interests in the Mid-Atlantic, thwarting efforts to improve efficiency and regulatory predictability and support economic growth.

In that regard, the draft framework's note on Draft Goal 2 states that "various sectors and concerns" would be considered in an "integrated, holistic, and collaborative manner" in later phases of the ocean

[25] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 8, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

planning process, with the Mid-Atlantic RPB intending to "provide the means for decision-makers to implement their programs and authorities in an integrated way."[26]

As discussed throughout the Coalition's comments, the draft framework should be revised to clarify that Mid-Atlantic RPB decisions and products will be advisory in nature only and not considered binding on governmental entities.

Furthermore, the reference to planning and providing for emerginig ocean uses in a "sustainable" manner should be further defined, as "sustainable" has different potential meanings among individuals, communities, and organizations. In defining "sustainable," the Mid-Atlantic RPB should at minimum be clear that the goal is to foster a sustainable regional economy as well as sustainable ecosystem productivity.

Mid-Atlantic commercial and recreational interests could benefit from efforts to improve efficiency and regulatory predictability and support economic growth. However, as the Coalition has previously stated[27] and as discussed in the Introduction and below, such efforts must not discriminate between uses and should be undertaken for the benefit of all existing, emerging, and future activities.

To the extent that the Mid-Atlantic RPB does not proceed in a non-discriminatory manner that examines all existing and potential future uses and resources, the Mid-Atlantic RPB should clearly state that any decision not to address a particular use is not an indication of opposition to such use and should not be used or interpreted by any agency in any manner that would restrict or prohibit that use.

Recent events such as the Bureau of Ocean Energy Management's announcement of its intention to move ahead with the establishment of a framework for the review of proposed oil and gas, renewable energy, and marine mineral geological and geophysical surveys in waters offshore states -- including Delaware, Maryland, and Virginia -- underscores the need to account for all existing and potential uses and ocean resources when addressing Mid-Atlantic marine activities.[28]

Objectives 1-9: National Security, Ocean Energy, Commercial and Recreational Fishing, Ocean Aquaculture, Maritime Commerce and Navigation, Offshore Sand Management, Non-Consumptive Recreation, Tribal Uses, and Critical Ocean Infrastructure

In furtherance of Draft Goal 2, the Mid-Atlantic RPB proposes to address national security, ocean energy (citing renewable energy in the example action item), commercial and recreational fishing, ocean aquaculture, maritime commerce and navigation, offshore sand management, non-consumptive recreation, tribal uses, and critical ocean infrastructure (citing submarine cables and pipelines as examples).[29]

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[26] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 8, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

[27] *See* Appendix (Nov. 18, 2013 Letter to Mid-Atlantic RPB and Public Comment Session 1 on Ideas for Initial Regional Ocean Planning Goals and Geographic Focus at September 2013 Mid-Atlantic RPB Meeting).

[28] *See* U.S. Bureau of Ocean Energy Management Press Release, "BOEM Completes Environmental Review for Geologic and Geophysical Survey Activities Off the Atlantic Coast," Feb. 27, 2014, *available at* http://www.boem.gov/press02272014/.

[29] *See* Draft Mid-Atlantic Regional Ocean Planning Framework, Page 8, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

As part of any effort to improve efficiency and regulatory predictability and support economic growth, and to ensure that such activities benefit all existing, emerging, and future Mid-Atlantic user groups, the Mid-Atlantic RPB should include a specific action that addresses existing inefficiencies by identifying and cataloguing flaws in the current system in terms of regulatory agencies and their ability to work with one another.

The development of any such review and recommendations should be developed based on formal and meaningful engagement with existing, emerging, and future Mid-Atlantic user groups and relevant agencies.

As discussed in the Introduction, it is critical that the Mid-Atlantic RPB and framework recognize and acknowledge the need to address all regional environmental and economic issues simultaneously. RPB member discussion at the September 2013 inaugural in-person meeting and the text of the subsequently released draft framework suggest that the Mid-Atlantic RPB will focus on certain activities (i.e. facilitation of renewable energy projects, aquaculture permitting, and sand and gravel activity) that may reflect the consensus of many RPB members – but not the consensus of all concerned stakeholders.

The Coalition takes issue with an approach that focuses on some issues and not others; since individual uses and activities do not occur in a vacuum and decisions as to one use or a limited set of uses will invariably impact other uses, simultaneous consideration of all existing and potential future uses is required.

To ensure that Mid-Atlantic RPB activitities adequately account for all existing, emerging, and future Mid-Atlantic user groups, the Mid-Atlantic RPB should first conduct a comprehensive economic inventory and assessment of all existing uses and emerging and potential trends in Mid-Atlantic offshore economic activity.

In doing so, the Mid-Atlantic RPB should closley engage the region's existing and future commercial and recreational interests to properly scope and define the assessment to meet regional goals and priorities that are developed through broad stakeholder consensus. Among other things, the economic inventory and assessment should document how commercial and recreational interests will be identified for purposes of engagement, how performance metrics will be developed and measured to ensure that economic goals are being met, and the process under which any decisions not to address certain uses will be made.

The Mid-Atlantic RPB must proceed in a very deliberate, comprehensive, and measured manner that is cognizant of the economic environment that could be affected by its activities. In addition to mitigating the risk of adverse economic consequences from Mid-Atlantic RPB activities, conducting the recommended economic inventory and assessment at the outset will also present an opportunity to support and strengthen engagement with the user group community. For future uses that may not be contemplated in the initial economic report, built-in mechanisms that provide opportunities for updates must also be identified.

Furthermore, in conducting all its activities, working in close partnership with the region's existing and future commercial and recreational community, the Mid-Atlantic RPB should thoroughly examine the potential economic impacts, aspects, and tradeoffs of alternative uses to inform a truly comprehensive

process. Doing so will help ensure that all potential outcomes of the Mid-Atlantic RPB's work are economically feasible and sustainable and built on consensus-based regional goals.

CONCLUSION

While the Coalition appreciates the opportunity to provide comments on the draft framework, additional information is needed to allow all those with interests in the region to provide the Mid-Atlantic RPB with informed comments.

Specifically, given the draft framework's ambiguities, the absence of specific, concrete proposed actions and sequencing of activities, the lack of public access to a final Mid-Atlantic RPB Charter, and the need for the development of economic goals and related actions and performance indicators, the draft framework should be revised and re-released in order to allow for informed, formal, and meaningful stakeholder and public engagement.

In addition, structural mechanisms that provide a formal means for commercial and recreational interests to adequately partner with and advise the Mid-Atlantic RPB on its future activities should be in place before the Mid-Atlantic RPB moves any further ahead.

The Coalition looks forward to continued engagement with the Mid-Atlantic RPB to help ensure that this process does not adversely impact the region's existing and future potential commercial and recreational interests, and the jobs and communities that they seek to support.

Sincerely,

Brent D. Greenfield
Executive Director
National Ocean Policy Coalition

APPENDIX

November 8, 2013

Ms. Maureen Bornholdt
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Submitted Electronically via MidAtlanticRPB@boem.gov

RE: Mid-Atlantic Regional Planning Body Activities

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

The National Ocean Policy Coalition ("Coalition") is an organization of diverse interests representing sectors and entities that support tens of millions of jobs, contribute trillions of dollars to the U.S. economy, and seek to ensure that actions under the National Ocean Policy are implemented in a manner that best benefits the National interest, including protection of the commercial and recreational value of the oceans, marine-related natural resources, and terrestrial lands of the United States.

At its inaugural in-person meeting in September, the Mid-Atlantic Regional Planning Body ("RPB") discussed the development of stakeholder engagement mechanisms, goals and principles, data and information sources, timelines, and an RPB Charter. As it considers next steps for these vital areas, the Coalition provides the comments below for the RPB's consideration.

I. User Group Engagement

In 2012, the six states located in the RPB's geographic area generated over $3 trillion in economic output. To ensure that the RPB's activities are well-informed and do not lead to unintended consequences, it is critical that the region's existing and future potential economic contributors have meaningful opportunities to directly and formally engage the RPB at every stage. Public comment periods, listening sessions, surveys, a single "ombudsman" seat on the RPB for non-government

interests, and liaison committees that interact with third parties are not sufficiently meaningful to ensure a collaborative outcome aimed at securing the buy-in, support, and consensus of concerned regional economic stakeholders. Limiting user group engagement to such insufficient mechanisms increases the likelihood that any resulting RPB products may unnecessarily harm the region's economy, communities, and livelihoods.

The Coalition therefore respectfully reiterates its request that the RPB -- before it conducts further activities -- provide commercial and recreational interests with a meaningful opportunity to participate directly on the RPB or at minimum through a formal Stakeholder Advisory Committee ("SAC") established under the Federal Advisory Committee Act ("FACA"). Proceeding otherwise will further erode confidence in this process and increase the likelihood that it ultimately results in adverse impacts.

Lack of resources is not a compelling reason to avoid creation of a Federal Advisory Committee ("FAC"). As defined in 5 U.S.C. App. 2, § 3, a FAC is any committee, board, commission, council, conference, panel, task force, or other similar group, which is established by statute, or established or utilized by the President or by an agency official, for the purpose of obtaining ***advice or recommendations*** for the President or one or more agencies or officers of the Federal Government (but excluding any committee that is comprised wholly of officers or employees of the Federal Government). Having the Mid-Atlantic Regional Council on the Ocean serve as a conduit between a liaison committee and the RPB in an attempt to avoid FACA laws is ill-advised and will not serve to meet the needs of a diverse stakeholder group.

In the event that the RPB continues to pursue the establishment of a liaison committee, user groups and the public must first be provided with an adequate opportunity to review and comment on its proposed establishment, structure, and selection process.

II. Goals and Principles

As the Coalition stated at the RPB's September meeting, goals for the Mid-Atlantic region should promote job creation, economic growth, infrastructure revitalization, and access for both existing and future uses. All regional stakeholders, including commercial and recreational interests, must have meaningful opportunities to shape these goals.

To account for the fact that certain areas represented on the RPB support all forms of offshore energy production, energy-specific references should also not embrace one form of production over another. The exclusion thus far of references to certain types of energy exploration and production activities is troubling. In addition, the RPB must clarify the meaning of "responsible" in describing certain uses and "values" in examining existing and proposed uses of the ocean, since any activities that follow applicable laws, regulations, and best practices can be considered responsible.

As to the initial idea for a principle to "[u]se best existing and new ocean data to provide shared scientific foundation for ocean planning and improve decision-making," the RPB should also make clear that any data used must be grounded in sound science and compliant with all relevant federal data quality laws, regulations, and standards.

III. Data and Information

As stated above, data and information used by the RPB must be based on sound science and compliant with all relevant federal data quality laws, regulations, and standards. In addition, any data and information that is utilized should include the socioeconomic component and must account for all of the region's potential economic uses. Up-to-date and relevant data for all potential commercial and

recreational uses, as identified by all stakeholders in the region, must be available before the RPB or individual RPB member entities engage in activities or make decisions concerning access to or use of the region's resources. Moving forward in the absence of such data will set the stage for additional unintended conflicts and consequences.

In addition, in the event that a Mid-Atlantic regional ocean assessment is conducted, it must be guided by priorities and objectives that are developed based on meaningful stakeholder engagement and the input and advice that results from such engagement.

IV. Operational Considerations

As mentioned at the outset, mechanisms for the formal and direct engagement of commercial and recreational interests should be in place before the RPB conducts further activities, including discussions about potential goals, objectives, and timelines.

In addition, timelines and decisions related to goals, objectives, and actions must be based on the availability and application of sound science, data, and information, and ensure that all groups and the public at large have adequate time and opportunity to review and inform any such timelines and decisions before they are adopted. Also, limited agency resources must be considered, and great care must be taken to ensure that agency core missions and existing focus areas are not hindered by the pursuit of new actions under this initiative.

Decisions and timelines must also be realistic and account for the fact that existing and future potential Mid-Atlantic ocean and coastal resource users already commit significant amounts of time and resources to navigate through a wide array of governmental statute-driven processes in order to operate or obtain approval for proposed actions.

Timelines must also be developed based on the time that is needed to identify, consider, and implement goals and any related actions that are ultimately agreed upon following significant user group and public engagement efforts. Practical and achievable timelines cannot be ascertained before such engagement has taken place and such goals and related actions have been identified.

As to the RPB's Charter, it should provide for direct commercial and recreational sector and local government RPB membership. At minimum, the Charter should require the establishment of a Stakeholder Advisory Committee established under the Federal Advisory Committee Act.

In addition, the Charter should state that any decision not to address a particular use is not an indication of opposition to such use, and that such a decision is not to be interpreted or used by any entity in a manner that would in any way restrict or prohibit such use. The RPB should also clearly state that in cases where a particular use is not addressed by the RPB, agencies remain free to make decisions about such an activity without being bound by the contents of any RPB products.

Lastly, the Charter should also provide answers to unresolved issues, such as the terms and processes under which funding might be accepted by outside groups, how marine planning would be "carried out consistent with and under the authority of existing statutes, regulations, and authorized programs" that involve diverse purposes, scopes, and activities (and which activities, regulations, statutes, and programs are implicated), and specifically how agencies would be expected to "adhere to the plan and/or other [RPB] products" in subsequent agency actions. Answers to these questions are necessary for affected stakeholders to further assess the potential implications of this initiative for their activities and communities.

The Coalition is committed to staying engaged in the RPB's activities in the Mid-Atlantic and appreciates your consideration of our comments.

Sincerely,

Brent D. Greenfield
Executive Director
National Ocean Policy Coalition

MID-ATLANTIC RPB MEETING, PUBLIC COMMENT SESSION 1 (IDEAS FOR INITIAL REGIONAL OCEAN PLANNING GOALS AND GEOGRAPHIC FOCUS)

My name is Brent Greenfield, and I am pleased to make the following comments on behalf of the National Ocean Policy Coalition regarding the ideas put forth for initial Mid-Atlantic regional ocean planning goals and geographic focus. While more extensive comments on user group engagement will be made following the stakeholder engagement discussion, the following suggestions are prefaced with this caveat.

Although appreciated, opportunities such as today's meeting and last month's webinar cannot substitute for the information and perspective that would be gained through the formal engagement of commercial and recreational interests through direct representation on the Regional Planning Body or, at minimum, a formal Stakeholder Advisory Committee.

By proceeding in the absence of such engagement, even at this early stage, the Mid-Atlantic regional ocean planning process is threatening to inadequately reflect the input and perspectives of the regions' most significant existing and future potential economic contributors and result in unintended and adverse consequences.

With that as context, the initial draft goals should be modified in at least several respects.

First, in addition to detailing the meaning of "responsible," the goal to facilitate responsible renewable energy development should be revised to state "facilitate responsible energy development." This is necessary to reflect that certain areas represented on this body support offshore conventional and other types of energy activities, as mentioned this afternoon, as well as renewable energy development. In Virginia, for example, there is bipartisan support both at the Statehouse and in Congress for both types of development. For the same reason, the sub-bullet for the first principle that references "enhancing efficiencies in renewable energy siting" should be revised to "enhancing efficiencies in energy siting."

In addition, the goal to "ensure access for existing and traditional uses" should be revised to state "ensure access for existing, traditional, and future potential uses." This modification is needed to acknowledge the importance of ensuring that the region can obtain the significant economic and societal benefits that could result from access to new as well as existing commercial and recreational activities.

Finally, especially given the continued challenging economic environment, goals to promote opportunities for job creation and economic growth while maintaining existing jobs, as well as to promote infrastructure revitalization, should be added to the list.

As to the principles, in addition to the recommendation just made, the final bullet should be revised to state that the use of the "best existing and new ocean data" will require utilization of sound science and compliance with federal data quality laws and regulations.

With regard to the process and timeline for further developing and finalizing regional goals, such timelines must be based on the availability of sound science, data, and information, and provide commercial and recreational interests with a sufficient and reasonable opportunity to actively and

directly participate in providing guidance and advice. More detailed comments on the proposed 5-year timeline will be provided during the public comment session on operational considerations.

Thank you for the opportunity to comment.

MID-ATLANTIC RPB MEETING, PUBLIC COMMENT SESSION 2 (STAKEHOLDER ENGAGEMENT)

My name is Brent Greenfield, and I am pleased to make the following comments on behalf of the National Ocean Policy Coalition regarding Mid-Atlantic RPB stakeholder engagement.

According to the most recent federal data, the Mid-Atlantic states comprised of Delaware, New Jersey, New York, Maryland, Pennsylvania, and Virginia generated over $3 trillion in economic output in 2012. As RPB activities could result in impacts to some of this regions' most significant economic contributors, it is vital that these and other critical interests that could generate additional economic output in the future not be shut out of the process and formal engagement opportunities.

An adequate seat at the table for user groups should mean more than just an opportunity to comment, attend a listening session, or complete a survey. Rather, the very groups who could be impacted by actions that might be taken by this body should be given a meaningful and active voice and role in this group's activities, with their input helping to guide a truly collaborative process and outcome.

Efforts to achieve a collaborative process and outcome can be enhanced and furthered if consensus means that such activities have the support and backing of the commercial and recreational interests that support or seek to support jobs and economic activity in the region. These groups represent the human elements that could be impacted, and they too should have a seat at the table with their governmental counterparts and be directly represented on this body.

In the event that the regrettable decision to exclude non-government representatives from RPB membership is left unchanged, other mechanisms for user group engagement including the establishment of a formal Federal Advisory Committee should be implemented *before the RPB conducts any further activities*.

While well-intended, efforts to create something short of a formal Federal Advisory Committee, such as the establishment of a Stakeholder Liaison Committee that would communicate with a 3rd party rather than the RPB itself, would be insufficient to ensure an outcome that adequately reflects a collaborative, consensus-based result and the critical input and perspectives of the commercial and recreational communities.

The RPB's stakeholder working group has noted that the RPB currently lacks the capacity to support a formal Federal Advisory Committee, and that the RPB "must ensure that the stakeholder engagement strategy chosen does not trigger" the Federal Advisory Committee Act. In this case, the RPB must embrace rather than avoid the applicability of the Federal Advisory Committee Act.

To be sure, the challenges of operating with limited resources are understandable. However, if circumstances are such that the RPB lacks the capacity to establish a formal Stakeholder Advisory Committee under the Federal Advisory Committee Act, the RPB seemingly lacks the ability and should not endeavor to engage in this effort.

Thank you for the opportunity to comment.

MID-ATLANTIC RPB MEETING, PUBLIC COMMENT SESSION 3 (DATA AND INFORMATION)

My name is Brent Greenfield, and I am pleased to make the following comments on behalf of the National Ocean Policy Coalition regarding the Mid-Atlantic Regional Council on the Ocean's Data Portal and upcoming regional ocean assessment as capacities to support regional ocean planning.

Data and information used by this body, including any regional ocean assessments or specific components of such assessments, must be based on sound science, comply with strict integrity safeguards, laws, protocols, and requirements, include the socioeconomic component, and ensure that all of the region's potential economic uses and resources are accounted for. This must include data for those uses and resources that although not currently being utilized could be put to use in the future.

As one example, and as mentioned yesterday, there is bipartisan support in Virginia at both at the Statehouse and in Congress for conventional as well as renewable energy development off the Virginia coast. Seismic data for conventional energy resources in this area is based on data that was collected in the 1980's, and access is now being sought to obtain new seismic data using advanced technologies.

Thus, data must not be utilized to inform RPB or individual agency activities unless and until timely and relevant datasets for *all* potential commercial and recreational uses are available.

One final point is that the working group's report on MARCO products and services mentions that a regional ocean assessment "should be guided by and reflect ocean planning priorities and specific ecosystem management objectives for the region..." Such priorities and objectives should be developed based on meaningful stakeholder engagement and the input and advice that results from such engagement.

Thank you for the opportunity to comment.

MID-ATLANTIC RPB MEETING, PUBLIC COMMENT SESSION 4 (OPERATIONAL CONSIDERATIONS)

My name is Brent Greenfield, and I am pleased to make the following comments on behalf of the National Ocean Policy Coalition regarding operational considerations related to the regional ocean planning timeline and associated products and the model RPB Charter.

As stated yesterday, by proceeding in the absence of direct commercial and recreational representation on the RPB or at least an opportunity for formal engagement through a Stakeholder Advisory Committee, even in discussions about things like *potential* goals, timelines, and actions, the Mid-Atlantic regional ocean planning process is already threatening to inadequately reflect the input and perspectives of the regions' most significant existing and future potential economic contributors and result in unintended and adverse consequences.

Like the discussion about goals and geographic focus, stakeholder engagement, and data and information, the discussion about timelines and associated products would benefit tremendously from this type of formal engagement, and such mechanisms should be in place before these discussions continue.

With that as context, it is also important to note that existing and future potential users of ocean and coastal resources in the Mid-Atlantic already must navigate a wide array of state and federal programs to carry out their existing or proposed activities. At the same time, they are confronting challenging economic circumstances that also demand their constant attention, time, and resources.

Timelines and decisions related to goals, objectives, and actions must account for these circumstances and be based on the availability and application of sound science, data, and information.

In addition, and as stated previously, if commercial and recreational interests are not directly represented on the RPB and circumstances are such that the RPB lacks the capacity to establish a formal Stakeholder Advisory Committee, then the RPB seemingly lacks the ability and should not endeavor to undertake the development of a formal regional ocean plan or other products whose use could result in impacts to commercial and recreational interests and the jobs and communities that they support or seek to support.

Any timeline for Mid-Atlantic regional ocean planning must take this into account, as well as ensure that the public at large and all groups have adequate time and opportunity to review and provide input on RPB materials in advance of meetings and actions.

Timelines must be developed based on the time that is needed to identify, consider, and implement goals and any related actions that are ultimately agreed upon following significant user group and public engagement efforts. Practical and achievable timelines cannot be ascertained before such engagement has taken place and such goals and related actions have been identified.

As to the draft model Charter, in addition to providing for direct commercial and recreational sector membership, local officials should also be provided with opportunities to serve directly on the RPB. With regard to commercial and recreational interests, at minimum, the Charter should provide for formal and direct engagement through a Federal Advisory Committee.

The Charter should also make clear that any decision not to address a particular use in the region is not an indication of opposition to such use occurring in the region, and that such a decision is not to be used or interpreted by any agency in a manner that would in any way restrict or prohibit such use from being authorized to take place in the region.

Other areas that the draft Charter need to address include the following:

- The terms and processes under which funding would be accepted by outside groups;
- How exactly marine planning would be "carried out consistent with and under the authority of existing statutes, regulations, and authorized programs," and which activities, regulations, statutes, and programs are implicated; and
- How agencies would "adhere to the plan and/or other [RPB] products"

Thank you for the opportunity to comment.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:50 AM
Subject: Re: TNC Comments on Draft MidA Planning Framework
To: Jay Odell <jodell@tnc.org>
Cc: "MidAtlanticRPB@boem.gov" <MidAtlanticRPB@boem.gov>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 5:05 PM, Jay Odell <jodell@tnc.org> wrote:
Please see attached document containing The Nature Conservancy's comments on the Draft Mid-Atlantic Regional Ocean Planning Framework.

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April 14, 2014

Maureen A. Bornholdt
Bureau of Ocean Energy Management
Federal Co-Lead

Gwynne Schultz
Maryland Department of Natural Resources
State Co-Lead

Gerrod Smith
Shinnecock Indian Nation
Tribal Co-Lead

Dear Ms. Bornholdt, Ms. Schultz and Mr. Smith,

Thank you for the opportunity to comment on the Draft Mid-Atlantic Regional Ocean Planning Framework (Draft Framework). The Nature Conservancy applauds the Mid Atlantic Regional Planning Body (MidA RPB) for taking this important step in the process of formulating a regional ocean plan for the Mid-Atlantic. Overall, the Conservancy believes the Draft Framework represents a strong set of guideposts for a robust ocean planning process. Below, we present recommendations to strengthen and clarify some key components of the document so that it can most effectively guide the ocean planning effort moving forward.

Most importantly, we urge the MidA RPB to commit to developing a Mid-Atlantic regional ocean plan by 2016. The Draft Framework language stating that the RPB will "consider developing a forward-looking ocean plan" is equivocal and non-committal. While we appreciate the benefits that such planning activities will have in facilitating increased agency coordination and stakeholder engagement, the completion of a multi-objective regional plan will ensure the most effective management of the Mid-Atlantic's diverse ocean uses. We submit that a coordinated ocean plan is needed to help ensure that current and future goals for diverse ocean stakeholders are met. We are concerned that absent a commitment to develop a plan, the MidA RPB will struggle to maintain resources and relevance to stakeholders.

A number of questions have been raised regarding the planning boundary for the MidA RPB Ocean planning effort, particularly whether to include Chesapeake Bay, Delaware Bay, Long Island Sound and the many lagoons ("back bays") between the mainland and the region's barrier islands. Stakeholders have repeatedly recognized the critical dependence of many marine resources on estuarine habitats and the need to coordinate with existing institutions in such coastal and estuarine waters. However, it appears to us that a consensus began to emerge at the Listening Sessions, and we conclude that effective regional ocean planning does not require one hard planning boundary. In fact, a one-size-fits-all boundary may undermine effective planning efforts. With additional public dialogue during work plan development, the MidA RPB can develop flexible boundaries that respect existing institutions while addressing unmet needs where appropriate. For example, the MidA RPB should not duplicate or attempt to coordinate actions to reduce nutrient loading to Chesapeake Bay, but would likely want to consider impacts of

offshore development to the Port of Baltimore and the impacts of potential offshore oil spills on critical coastal habitats. Likewise, coastal sand mining and beach replenishment is an obvious nexus for coordination between the MidA RBP and state coastal zone management agencies. In addition, we recommend the following:

- The vision should be more succinct. While we agree with the essential elements described in the vision proposed in Draft Framework, we submit that it will resonate more effectively with the public if were shorter. We suggest: "A Mid-Atlantic ocean where stewardship supports a healthy and resilient ecosystem that provides multiple benefits for present and future generations."

- Principle 4 should state that the MidA RPB will be "guided by the best available science and incorporate traditional knowledge in decision-making."

- Principle 5 should clarify what is meant by "adaptive management". We suggest: "The MidA RPB will continually monitor and evaluate progress toward meeting established plan objectives and use the information gained to modify and adapt plan actions."

- Principle 7 should additionally refer to the need to avoid duplication of efforts among agencies. Increased federal and state agency efficiency is one of the key aims of the National Ocean Policy and establishment of RPBs that can be accomplished through increased coordination.

- Objective 1 under Ocean Planning Goal 1 should explicitly address marine species and ecological functions in addition to habitats.

Again, we appreciate this opportunity to comment on the MidA RBP Draft Framework and thank you for considering the Conservancy's recommendations. Please contact me to follow up with questions (jodell@tnc.org, 413/687-3014). The Draft Framework is a promising step towards planning for a healthy, sustainable ocean ecosystem in the Mid-Atlantic. We look forward to supporting development of a Regional Ocean Plan that meets diverse objectives for people and nature.

Sincerely,

Jay Odell
Director, Mid-Atlantic Marine Program

cc: Nancy Kelley, TNC Long Island Chapter Director
Barbara Brummer, TNC New Jersey State Director
Richard Jones, TNC Delaware State Director
Elizabeth Gray, TNC Maryland State Director
Michael Lipford, TNC Virginia Executive Director
Christopher Clapp, TNC Marine Scientist, New York
Patricia Doerr, TNC Director of Marine and Coastal Programs, New Jersey
Brian Boutin, TNC Director of Conservation Programs, Delaware
Steve Bunker, TNC Director of Conservation Programs, Maryland
Nikki Rovner, TNC Director of State Government Relations, Virginia

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:50 AM
Subject: Re: Recommendations for the Mid-Atlantic Regional Planning Body re: the Draft Mid-Atlantic Regional Ocean Planning Framework
To: "Chase, Alison" <achase@nrdc.org>
Cc: "MidAtlanticRPB@boem.gov" <MidAtlanticRPB@boem.gov>, "maureen.bornholdt@boem.gov" <maureen.bornholdt@boem.gov>, "gschultz@dnr.state.md.us" <gschultz@dnr.state.md.us>, "wabush1@aol.com" <wabush1@aol.com>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 5:20 PM, Chase, Alison <achase@nrdc.org> wrote:

Attached please find two letters regarding the Mid-A RPB's *Draft Mid-Atlantic Regional Ocean Planning Framework* – a longer, more detailed set of comments and a shorter letter that highlights just a few select issues. Please note that while some groups have signed on to both letters, others have chosen to sign on to just one of the letters.

Please feel free to contact me with any questions on these documents at 212.727.4551.

Sincerely,

Ali Chase

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American Littoral Society ● Blue Ocean Institute ● Chesapeake Bay Foundation ● Citizens Campaign for the Environment ● Clean Ocean Action ● Coastal Research and Education Society of Long Island ● Concerned Citizens of Montauk ● Conservation Law Foundation ● Delaware Nature Society ● Friends of the National Ocean Policy ● Greenpeace ● Institute for Ocean Conservation Science ● Loxahatchee Group, Sierra Club ● Maryland Academy of Sciences at The Maryland Science Center ● Maryland Coastal Bays Program ● Miami2Maine ● Natural Resources Defense Council ● New Jersey Sierra Club ● Ocean Conservation Research ● The Ocean Foundation ● Operation SPLASH ● Riverhead Foundation for Marine Research and Preservation ● Surfrider Foundation ● TerraScapes ● Virginia Chapter Sierra Club ● Wildlife Conservation Society

April 15, 2014

Mid-Atlantic Regional Planning Body Co-Leads:

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Submitted electronically

Re: *Draft Mid-Atlantic Regional Ocean Planning Framework*

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

Thank you and the other Mid-Atlantic Regional Planning Body (MidA RPB or RPB) representatives for developing and leading the public outreach process to seek comment on the *Draft Mid-Atlantic Regional Ocean Planning Framework* (Framework).[1] Many of us were able to attend one or more of the listening sessions and are appreciative of the RPB members' attendance and openness to feedback, as well as encouraged by the willingness on behalf of all involved to engage in constructive dialogue about the ocean planning process. We present the below recommendations to you on behalf of our organizations

[1] *Available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework/.

and our millions of members and activists and welcome the opportunity for additional dialogue with you on these topics.[2]

I. The RPB should prioritize ocean health and adopt ecosystem-based management as the foundation of its work.

The MidA RPB should state the fundamental importance of protection and enhancement of ocean health. For this reason, we strongly support Draft Ocean Planning Goal 1 to "Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration"[3] and request that the Framework be revised to note that this goal must be attained in order to achieve the document's second stated goal of providing for existing and future sustainable ocean use, since many of our existing ocean uses, including fishing, tourism and recreation, rely on healthy ocean habitats and wildlife.[4] Similarly, we are encouraged to see that the Framework's draft vision statement – "A Mid-Atlantic ocean where safe and responsible use and stewardship support healthy, productive, resilient, and treasured natural and economic ocean resources that provide for the wellbeing and prosperity of present and future generations"[5] – reflects the importance of functioning ecosystem services, both for this and for future generations. However, as suggested at some of the listening sessions, we recommend it instead read "… and all natural and sustainable economic resources that provide…"

The paramount importance of ensuring healthy ecosystems is highlighted in ecosystem-based management (EBM),[6] which we see as essential to the attainment of this planning process. Several important elements of EBM are found in the Framework, including:

- Principle 1,[7] which recognizes the complexity of interconnections between and among ocean uses;
- Principle 9,[8] that notes "The MidA RPB will respect the intrinsic value of the ocean and its biodiversity, at the same time recognizing humans as part of the ecosystem and dependent on the health of the ecosystem for our own well-being";

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[2] Please note that these recommendations build off of the comments several of our organizations submitted to the MidA RPB on October 8, 2013 and updated with additional signers on November 4, 2013. *See*, NRDC, et al. Letter re: The Mid-Atlantic Regional Planning Body's Inaugural Meeting and Draft Documents to: Maureen Bornholdt, Gwynne Schultz, and Gerrod Smith. 8 October 2013.

[3] Framework *at* 6.

[4] *Ibid*, *at* 8.

[5] *Ibid*, *at* 5.

[6] EBM is "an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors. Specifically, ecosystem-based management:

- emphasizes the protection of ecosystem structure, functioning, and key processes;
- is place-based in focusing on a specific ecosystem and the range of activities affecting it;
- explicitly accounts for the interconnectedness within systems, recognizing the importance of interactions between many target species or key services and other non-target species;
- acknowledges interconnectedness among systems, such as between air, land and sea; and
- integrates ecological, social, economic, and institutional perspectives, recognizing their strong interdependences."

McLeod, K.L., J. Lubchenco, S.R. Palumbi, and A.A. Rosenberg. 2005. *Scientific Consensus Statement on Marine Ecosystem-Based Management, available at* http://www.compassonline.org/science/EBM_CMSP/EBMconsensus.

[7] Framework *at* 5. We recommend the following italicized edits to Principle 1:"The MidA RPB will facilitate an approach to managing ocean resources that recognizes, *considers and protects* the interconnections across human uses and interests, marine species and habitats, and coastal communities and economies."

- Principle 2,[9] which presses for coordinated decision-making; and
- Principles 4 and 5,[10] which stress the importance of using the best available science and adaptive management.

We recommend that you expand the treatment of adaptive management in the Framework from one of simple flexibility to one that will regularly assess the effectiveness of decisions and revise them, as we learn more about our ocean and uses. We further recommend that you develop a series of ecological indictors and use them to regularly assess the natural system's baseline health in order to better understand the changing environmental conditions and the impacts from increased human activities.

We urge the MidA RBP to retain the above principles and to add the precautionary approach as an additional principle. The precautionary approach, as articulated in the *Final Recommendations of the Interagency Ocean Policy Task Force* (Final Recommendations), notes: "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[11]

We support the Framework's focus on the need to provide for existing and future sustainable use.[12] The Mid-Atlantic region is a diverse region with many competing uses, but the Mid-Atlantic Regional Council on the Ocean (MARCO) members all share a stated desire to "Promote the identification and protection of important ocean habitats, including sensitive and unique offshore areas;" "Collaborate on a regional approach to support the sustainable development of renewable energy in offshore areas;" and "Prepare Mid-Atlantic communities for the effects of climate change on coastal and ocean resources."[13] The Mid-Atlantic regional ocean plan should focus on shared objectives and the region's most pressing ocean uses, like offshore wind development. The regional ocean plan should not include offshore oil and gas exploration and development.

We also recommend that draft objective 7 to Draft Ocean Planning Goal 2 regarding non-consumptive recreation[14] identify a desire that this work not only improve coordination of these uses with existing and future industrial ones, but also state the importance of protecting and preserving current non-consumptive recreational uses.

II. The RPB should ensure that ecosystem protections result from its work.

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[8] *Ibid*, *at* 6.

[9] *Ibid*, *at* 5. We suggest the following italicized language be added to Principle 2: "… to support economic development and ecosystem conservation so that multiple interests can co-exist in a manner that *provides for sustainable use*, reduces conflict and enhances compatibility."

[10] *Ibid*, *at* 5. In Principle 4, we recommend substituting "The MidA RPB will incorporate best available science …" for "The MidA RPB will consider sound science …"

[11] *See*, Final Recommendations *at* 49, *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf.

[12] Sustainability can be defined as the capacity to endure and remain diverse and productive over time, without diminished quality of life due to degradation of human or environmental health or adverse effects on social conditions. The World Commission on Environment and Development in 1987 defined sustainability as the ability to "meet the needs of the present without compromising the ability of future generations to meet their own needs." Several additional proposed definitions are provided in comments several of our organizations submitted to the MidA RPB on October 8, 2013 and updated with additional signers on November 4, 2013. *See*, NRDC, et al. Letter re: The Mid-Atlantic Regional Planning Body's Inaugural Meeting and Draft Documents to: Maureen Bornholdt, Gwynne Schultz, and Gerrod Smith. 8 October 2013.

[13] Mid-Atlantic Regional Council on the Ocean Proposed Products and Services for use by the Mid-Atlantic Regional Planning Body *at* 1, *available at* http://www.boem.gov/Environmental-Stewardship/Mid-Atlantic-Regional-Planning-Body/3_-MARCO-Products-and-Services-9-16-13.aspx.

[14] Framework *at* 9.

We agree with the RPB's stated commitment to develop a regional ocean assessment "to provide baseline information for ocean planning … that takes into account current trends and forecasts about changing ocean uses and ecosystems."[15] The regional ocean assessment should identify the most important places and the networks of areas that we need to protect in order to ensure that the ecosystems continue to function and are resilient in the face of new challenges like ocean acidification and climate change. Currently, despite the extent of ecologically and economically valuable offshore habitat within the region, there is only one offshore habitat area set aside for any year-round protection – a tilefish gear-restricted area in Norfolk Canyon.[16] No critical habitat designations for the protection and recovery of endangered or threatened species within the Mid-Atlantic's offshore waters exist. [17] The RPB has an opportunity to rectify this situation. We must safeguard areas important for spawning, breeding, feeding and migrating ocean fish and wildlife and ensure that the various impacts of ocean uses – alone and in concert – do not threaten the system's health or the variety of uses, like surfing, boating, fishing, paddling and bird watching, which rely on these resources.

As such, we believe that achieving draft objective 1 to Draft Ocean Planning Goal 1 – "*Understanding, protecting and restoring key habitats*" – is essential to a successful final ocean plan.[18] We encourage the RPB to also think beyond habitat protections[19] to ensure continued ecological functioning and restore threatened and endangered species.

We agree with the Framework's identified geographic scope[20] that the planning effort focus on the open ocean waters where little planning work has been accomplished relative to the bays and estuaries; however, we stress the need to factor in the ecological and use connections between the bays and estuaries. For example, as renewables offshore are addressed, it will become necessary to look at the impact of this siting on bays and estuaries as transmission and servicing connects these facilities to shore.

III. The RPB should further highlight the need for robust stakeholder and public engagement.

We appreciate the Framework's stated intent to "Provide participation by ocean stakeholders and the public" and to "Consult scientists, technical, and other experts in conducting regional ocean planning and developing ocean planning products."[21] To emphasize this point, we believe that the paramount importance of public participation needs to be identified further and recommend splitting Principle 8[22] into two components, with the first section focused on the need for the RPB to be transparent, and a second, new principle directed at securing frequent and meaningful stakeholder engagement that goes beyond simply soliciting feedback at select points within the RPB planning process. The MidA RPB and,

[15] *Ibid*, *at* 4. *See*, also *at* 2: "Compile a regional assessment of ocean uses, natural resources, and economic and cultural factors to provide a comprehensive understanding and context for ocean planning."
[16] *See* National Marine Fisheries Service, *Amendment 1 to the Golden Tilefish Fishery Management Plan* (2009), *available at* http://www.nero.noaa.gov/nero/nr/nrdoc/09/09tileGRAclose.pdf.
[17] Chasis, S. and C. Bower. "Legal Mechanisms and Opportunities to Advance Ocean Habitat Protection in the Mid-Atlantic," *Sea Grant Law and Policy Journal*, Vol. 6, No. 1 (2013), *available at* http://nsglc.olemiss.edu/sglpj/vol6no1/7-Chasis.pdf.
[18] Framework *at* 7.
[19] The example action to objective 1 – "Map and characterize canyon habitats in the Mid-Atlantic region. Identify Federal, State and Tribal habitat protection and restoration initiatives to leverage partnerships that maximize the opportunity for success" – should be expanded to encompass more than the submarine canyons. Framework *at* 7.
[20] *Ibid*, *at* 4.
[21] *Ibid*, *at* 2.
[22] *Ibid*, *at* 6.

in particular, MARCO have encouraged public and stakeholder engagement[23] in the process thus far and this attention should be mirrored in the Framework.

Identifying the importance of stakeholder outreach and engagement would also help ensure that the RPB dedicates resources to support a robust public outreach process. As previously noted, the listening sessions have been useful mechanisms for encouraging support for the process; with added attention to outreach efforts and advertising, future efforts would pull in an even greater cross section of the general public to advise creation of a strong ocean plan. Further, we believe that the scientific community has much to offer this process and continue to urge the establishment of a MidA RPB science advisory panel to advise this body on technical matters and to provide regular and meaningful advice at all stages of the planning process.[24]

IV. The Framework should state the RPB will develop a final ocean plan by 2016.

Our organizations strongly urge you to commit to the development by 2016 of a final ocean plan based on our preceding recommendations.[25] Currently, the Framework only notes that the RPB will "consider" development of an ocean plan;[26] without a final document that lays out next steps, it remains unclear how all of the information gathered during this process will ultimately result in better ocean management. Development of a final plan is expressly called for in the Final Recommendations, the document which, together with Executive Order 13547 (Executive Order),[27] establishes the RPB's existing structure and authority: "Regional planning bodies would function as convening and planning bodies that comprise Federal, State, and tribal representatives responsible for implementing existing authorities to create a process, *and ultimately a plan*, to better apply such existing authorities to achieve agreed upon regional goals and objectives."[28] Moreover, federal RPB members are required under the Executive Order, to the fullest extent consistent with applicable law, to "participate in the process for coastal and marine spatial planning and comply with [National Ocean] Council certified coastal and marine spatial *plans*, as described in the Final Recommendations and subsequent guidance from the Council."[29] Finally, the final *National Ocean Policy Implementation Plan*, released a year ago, clearly states that: "Regional Planning Bodies will develop marine plans."[30]

A plan should identify – both spatially and in narrative form – the measures that will be taken to protect marine ecosystem health and ensure sustainable uses of the ocean. It would also identify activities and actions that are inconsistent with the RPB's goals. It should state the actors and existing regulatory

[23] We look forward to seeing how the Stakeholder Liaison Committee continues to develop and to being engaged in its work.
[24] *See*, for example, NRDC, et al. Letter re: Public and Stakeholder Engagement in the Mid-Atlantic Regional Planning Body Process to: Maureen Bornholdt, Sarah Cooksey, and Gerrod Smith. 30 May 2013.
[25] *See*, also, NRDC, et al. Letter re: The Mid-Atlantic Regional Planning Body's Inaugural Meeting and Draft Documents to: Maureen Bornholdt, Gwynne Schultz, and Gerrod Smith. 8 October 2013.
[26] Framework *at* 4.
[27] Executive Order 13547, *available at* http://www.whitehouse.gov/the-press-office/executive-order-stewardship-ocean-our-coasts-and-great-lakes.
[28] Final Recommendations at 62, *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf. Emphasis added.
[29] Executive Order 13547, Sec. 6(a)(ii), *available at* http://www.whitehouse.gov/the-press-office/executive-order-stewardship-ocean-our-coasts-and-great-lakes. Emphasis added.
[30] *National Ocean Policy Implementation Plan Appendix* (April 2013), *at* 25. The Appendix "presents the actions that Federal agencies *will take* to achieve the outcomes described in the Implementation Plan." *Id*. *at* 1, *available at* http://www.whitehouse.gov//sites/default/files/national_ocean_policy_ip_appendix.pdf. Emphasis added.

mechanisms that will be used to operationalize the plan's objectives. The Final Recommendations express this as:

> [Coastal and marine spatial planning or CMSP] is intended to improve ecosystem health and services by planning human uses in concert with the conservation of important ecological areas, such as areas of high productivity and biological diversity; areas and key species that are critical to ecosystem function and resiliency; areas of spawning, breeding, and feeding; areas of rare or functionally vulnerable marine resources; and migratory corridors. *Enhanced ecosystem services and benefits can be attained through CMSP because they are centrally incorporated into the CMS Plan [coastal and marine spatial plan] as desired outcomes of the process and not just evaluated in the context of individual Federal or State agency action.* CMSP allows for a comprehensive look at multiple sector demands which would provide a more complete evaluation of cumulative effects. This ultimately is intended to result in protection of areas that are essential for the resiliency and maintenance of healthy ecosystem services and biological diversity, and to maximize the ability of marine resources to continue to support a wide variety of human uses.[31]

Once there is an approved final document, federal RPB members are required to abide by and implement the plan, thus ensuring that regional goals are acted on.

Having a plan does not obviate the ability to revisit and adapt the plan as new ocean data are compiled and circumstances demand. To this end, we believe that it is critical that the final plan identify performance measures, benchmarks and indicators to be used to evaluate the plan's effectiveness.[32]

We appreciate your work and the opportunity to comment and engage in the Mid-Atlantic's coordinated ocean planning process to develop a plan that protects, maintains and restores the health of the Mid-Atlantic's valuable ocean and coastal resources for now and for the future. We look forward to reviewing the summary document of comments raised at the listening sessions and to continuing to work with you on this landmark and essential endeavor.

Sincerely,

Ali Chase
Policy Analyst
Natural Resources Defense Council

Matt Gove
Mid-Atlantic Policy Manager
Surfrider Foundation

[31] Final Recommendations *at* 44, *available at* http://www.whitehouse.gov/files/documents/OPTF_FinalRecs.pdf. Emphasis added.

[32] Final regional ocean plans are required to include ways to monitor and evaluate success in achieving stated goals. Specifically, the Final Recommendations at 64 call for "Performance measures [that] would assess both conservation and socio-economic objectives of the [regional ocean plan]. Measures of conservation may include, but are not limited to, indicators of ecosystem health such as the status of native species diversity and abundance, habitat diversity and connectivity, and key species (*i.e.*, species known to drive the structure and function of ecosystems)."

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President
Operation SPLASH

Dave Wilson
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Maryland Coastal Bays Program

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April 15, 2014

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Ms. Gwynne Schultz
Senior Coastal and Ocean Policy Advisor
Maryland Department of Natural Resources
580 Taylor Avenue, E2
Annapolis, Maryland 21401

Submitted electronically

Re: *Draft Mid-Atlantic Regional Ocean Planning Framework*

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

Thank you and the other Mid-Atlantic Regional Planning Body (MidA RPB or RPB) representatives for the opportunity to comment on the *Draft Mid-Atlantic Regional Ocean Planning Framework* (Framework).[1] We appreciate all of your efforts to work together more efficiently and to proactively plan for long-term ocean solutions to the many challenges facing our ocean and coasts, from pollution to loss of habitat to increasing and sometimes competing industrial uses.

[1] *Available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework/.

We support the MidA RPB's development of a final coordinated ocean plan to identify ocean areas that are appropriate for sustainable use and habitat and wildlife protection. The Framework should result in a final plan which identifies the measures that will be taken to protect marine health and ensure sustainable uses of the ocean. The RPB should also commit to monitoring and assessing the final plan's effectiveness. The plan should be updated as we learn more about our ocean and uses.

A final plan should prioritize healthy Mid-Atlantic ocean and coasts so that they can continue to provide food, jobs and recreation. The Mid-Atlantic's ocean resources support hundreds of thousands of jobs, with the tourism and recreation sector representing almost three-quarters of these.[2] These jobs rely on clean coastal waters and beaches and healthy and abundant fish and wildlife. Further, a healthy fishing industry depends on a healthy ocean and, in 2011, more than 2.4 million recreational anglers took 16 million fishing trips in the Mid-Atlantic region.[3] Specifically, we strongly support Draft Ocean Planning Goal 1 to "Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration" and recommend that this goal be prioritized in the Framework.[4]

Similarly, we support the vision statement that calls out the need for healthy ocean resources to "provide for the wellbeing and prosperity of present and future generations"[5] and Principle 9, which notes "The MidA RPB will respect the intrinsic value of the ocean and its biodiversity, at the same time recognizing humans as part of the ecosystem and dependent on the health of the ecosystem for our own well-being."[6]

We believe that achieving draft objective 1 to Draft Ocean Planning Goal 1 – "*Understanding, protecting and restoring key habitats*" – is essential to a successful final ocean plan.[7] We encourage the RPB to also think of what needs to be done beyond habitat protections[8] to ensure continued ecological functioning and restore threatened and endangered species. We must safeguard areas important for spawning, breeding, feeding and migrating ocean fish and wildlife and ensure that the various impacts of ocean uses – alone and in concert – do not threaten the system's health or the variety of uses, like surfing, boating, fishing, paddling and bird watching, which rely on these resources.

We appreciate the opportunity to engage in the Mid-Atlantic's coordinated ocean planning process to develop a plan that protects, maintains and restores the health of the Mid-Atlantic's valuable ocean and coastal resources for now and for the future.

Sincerely,

---

[2] National Oceanic and Atmospheric Administration. ENOW Data 2011. *Available at* http://www.csc.noaa.gov/ENOWDataWizard/index.jsp?RegionList=-4&vYears=2011. Please note that employment numbers and percentage of jobs due to tourism and recreation and living resources would be higher if the data accounted for the self-employed. Jobs numbers include part-time and seasonal employees.

[3] National Marine Fisheries Service. 2012. *Fisheries Economics of the United States, 2011*. *Available at* http://www.st.nmfs.noaa.gov/Assets/economics/documents/feus/2011/FEUS%202011-Revised.pdf. Please note that the results from this survey cannot be directly compared to the ENOW data; the analyses use different data and models. Please note that the NMFS report includes self-employed fishermen.

[4] Framework *at* 6.

[5] *Ibid*, *at* 5.

[6] *Ibid*, *at* 6.

[7] *Ibid*, *at* 7.

[8] The example action to objective 1 – "Map and characterize canyon habitats in the Mid-Atlantic region. Identify Federal, State and Tribal habitat protection and restoration initiatives to leverage partnerships that maximize the opportunity for success" – should be expanded to encompass more than the submarine canyons. Framework *at* 7.

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Diane Ives
Coastal Waterways Chair
Sierra Club – Long Island

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:50 AM
Subject: Re: Recommendations for the Mid-Atlantic Regional Planning Body re: the Draft Mid-Atlantic Regional Ocean Planning Framework
To: "Chase, Alison" <achase@nrdc.org>
Cc: "MidAtlanticRPB@boem.gov" <MidAtlanticRPB@boem.gov>, "maureen.bornholdt@boem.gov" <maureen.bornholdt@boem.gov>, "gschultz@dnr.state.md.us" <gschultz@dnr.state.md.us>, "wabush1@aol.com" <wabush1@aol.com>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 6:49 PM, Chase, Alison <achase@nrdc.org> wrote:

Attached please find a letter from the scientific community that supports an ecosystem-based and science-based approach to ocean planning in the Mid-Atlantic.

Please feel free to contact me with any questions on this letter at 212.727.4551.

Sincerely,

Ali Chase

Alison Chase
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April 15, 2014

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Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

Both the U.S. Commission on Ocean Policy and the Pew Oceans Commission[1] called on the nation to embrace an ecosystem-based management (EBM) approach to protecting our valuable ocean resources; as a natural progression of the Commissions' efforts, we urge you and the other members of the Mid-Atlantic Regional Planning Body (MidA RPB or RPB) to adopt EBM as the foundation in your work to develop a coordinated ocean plan for the Mid-Atlantic. Endorsed by the nation's leading scientists, EBM considers the entire ecosystem, including people, and recognizes the interconnectedness of elements within the ecosystem in order to ensure its continued health and resilience.[2] EBM is critical to the development of a plan that will protect ocean health and allow for sustainable development.

---

[1] U.S. Commission on Ocean Policy. 2004. *An Ocean Blueprint for the 21st Century, available at* http://govinfo.library.unt.edu/oceancommission/documents/full_color_rpt/welcome.html.; Pew Oceans Commission. 2003. *America's Living Oceans: Charting a Course for Sea Change, available at* http://www.pewtrusts.org/our_work_report_detail.aspx?id=30009.

[2] As defined by more than 220 scientists and policy experts in the *Scientific Consensus Statement on Marine Ecosystem-Based Management*, ecosystem-based management is "an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors. Specifically, ecosystem-based management:

- emphasizes the protection of ecosystem structure, functioning, and key processes;
- is place-based in focusing on a specific ecosystem and the range of activities affecting it;
- explicitly accounts for the interconnectedness within systems, recognizing the importance of interactions between many target species or key services and other non-target species;
- acknowledges interconnectedness among systems, such as between air, land and sea; and
- integrates ecological, social, economic, and institutional perspectives, recognizing their strong interdependences."

McLeod, K.L., J. Lubchenco, S.R. Palumbi, and A.A. Rosenberg. 2005. *Scientific Consensus Statement on Marine Ecosystem-Based Management, available at* http://www.compassonline.org/science/EBM_CMSP/EBMconsensus.

We are pleased to see that several aspects of the *Draft Mid-Atlantic Regional Ocean Planning Framework* (Framework) reflect this approach, including Principle 1 which states, "The MidA RPB will facilitate an approach to managing ocean resources that recognizes and considers the interconnections across human uses and interests, marine species and habitats, and coastal communities and economies" and Principle 2 which stresses the need for coordinated decision-making "to support economic development and ecosystem conservation so that multiple interests can co-exist in a manner that reduces conflict and enhances compatibility."[3] We urge you to retain and focus on these elements in your work. Adaptive management[4] is an equally important concept and should be expanded beyond that of "apply[ing] a flexible and adaptive approach in accommodating changing environmental conditions, advances in science and technology, and new or revised laws and policies," as stated in Principle 5, to include efforts to assess the effectiveness of decisions and revise them, as needed.

We are encouraged that the Framework adopts EBM's core tenet that the health of the ecosystem be protected so that it can continue to provide the resources people want and need. Both the Framework's draft vision statement – "A Mid-Atlantic ocean where safe and responsible use and stewardship support healthy, productive, resilient, and treasured natural and economic ocean resources that provide for the wellbeing and prosperity of present and future generations"[5] – and the proposed ocean planning goal to "Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration" [6] clearly note the fundamental importance of a functioning ecosystem. To further underscore this point, we recommend prioritizing the ocean planning goal. It is critical that the RPB develop a final Framework, Regional Ocean Assessment, and a final regional ocean plan that identifies and protects ecologically important areas and services so that they will continue to provide for us in the future.

Using the best available science is key to achieving EBM and will help the plan acknowledge and address the fundamental changes in ecosystem structure and function that we are observing throughout the region as a result of chronic overfishing, coastal habitat disappearance, and climate change impacts. A great deal of real-time data from observing systems is being collected and can help advise your work. We support the Framework's emphasis on sound science as Principle 4[7] and encourage you to use members of the scientific community as resources to help determine ways to appropriately account for the cumulative impacts of ocean uses and to ensure ecosystem resilience in these dynamic times.

Thank you for your work to help protect our ocean for this and future generations. We look forward to engaging with you on this endeavor.

Sincerely,

[3] Framework, *at* 5, *available at* http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework/.
[4] *Ibid*, *at* 5.
[5] *Ibid*, *at* 5.
[6] *Ibid*, *at* 6.
[7] *Ibid*, *at* 5.

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From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:51 AM
Subject: Re: MidAtlantic RPB framework comments from VA Chapter Sierra Club
To: Eileen Levandoski <eileen.levandoski@sierraclub.org>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 7:42 PM, Eileen Levandoski <eileen.levandoski@sierraclub.org> wrote:
Hello,

Attached please find additional comments from the Virginia Chapter Sierra Club on the draft MidAtlantic Ocean Planning framework. Thank you for this opportunity to comment.

Eileen Levandoski, Assistant Director
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Follow us on twitter.com/VASierraClub.

April 15, 2014

Mid-Atlantic Regional Planning Body Co-Leads:

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Southampton, NY 11969

Submitted electronically to MidAtlanticRPB@boem.gov

Re: *Draft Mid-Atlantic Regional Ocean Planning Framework*

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

Thank you and the other Mid-Atlantic Regional Planning Body representatives for the opportunity to comment on the *Draft Mid-Atlantic Regional Ocean Planning Framework.*

The Virginia Chapter Sierra Club would like to add additional comments to those we submitted in a joint letter originating from NRDC. Specifically, we have two additional concerns. They're are as follows:

1. The September 13, 2013 report, *Mid-Atlantic Regional Council on the Ocean Proposed Products and Services for use by the Mid-Atlantic Regional Planning Body*, was explicit in speaking about "the effects of climate change" and the need to focus on renewable energy sources, like ocean wind power. Extraction of oil and gas was not mentioned. These messages were somewhat diluted in the subsequent *Draft Mid-Atlantic Regional Ocean Planning Framework*. In this report the term "climate change" is not used,

although key elements of climate change are identified ["will consider the risks and vulnerabilities associated with past, present, and predicted ocean and coastal hazards (e.g., erosion, extreme weather, and sea level rise) and predicted changes to temperature and ocean acidification to protect Mid-Atlantic ocean and coastal communities, users, and natural features."]. "Climate change" (which encompasses both natural and anthropogenic variability and trends) is the accepted term in the scientific community and should not be deleted for convenience. The report cites the need for renewable projects not as a primary objective as in the earlier report but as one example of ocean energy ["Example action: Coordinate data collection for environmental assessment to inform development of new offshore renewable energy projects."].

2. There is ambiguity about the intended meaning of "ocean energy" ["Facilitate greater collaboration around ocean energy issues in the Mid-Atlantic."]. Is ocean energy solely related to the kinetic energy of marine winds (wind power) and ocean currents and waves or is it meant to also include any energy extracted from the ocean environment, for example, outer continental shelf oil drilling. For many reasons, oil drilling should not be part of the offshore energy mix, e.g., acceleration in climate change due to the burning of these fossil fuels, historical oil spills in the ocean that have had devastating, long-term impacts on the marine environment and coastal communities, etc. It should be made clear that the focus is on renewable energy projects.

Thank you again for this opportunity to comment. We look forward to continuing our work together on developing ocean plans for our beloved Atlantic Ocean.

Very truly yours,

Eileen Levandoski
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259 Granby St., Suite 250
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From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:51 AM
Subject: Re: Backup Comment letter - draft framework
To: Sarah Winter <Sarah@littoralsociety.org>
Cc: "MidAtlanticRPB@boem.gov" <MidAtlanticRPB@boem.gov>

Thank you for re-submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 8:56 PM, Sarah Winter <Sarah@littoralsociety.org> wrote:
Please find attached a second copy of the American Littoral Society's comment letter on the draft Framework. I was concerned my initial file may be damaged and wanted to send a backup in case you cannot read the first file I sent earlier this afternoon. I switched out the letterheads in case that was the issue. My apologies for the duplicative emails.

Best Regards,
Sarah Winter Whelan

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April 15, 2014

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Re: Mid-Atlantic Draft Framework Comments

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith,

Thank you for providing this opportunity to comment on the Mid-Atlantic Regional Planning Body's (RPB) *Draft Mid-Atlantic Regional Ocean Planning Framework* (Draft Framework)[1] including the in person opportunities during the RPB's Draft Framework listening sessions. We appreciate the RPB's interest in hearing the suggestions and concerns of those attending the listening sessions.

The American Littoral Society (Society) is a national, membership based coastal conservation organization dedicated to promoting the study and conservation of marine life and its habitats. Since 1961 the Society has empowered people to care for the coast through advocacy, conservation, and education. We are based on Sandy Hook, New Jersey, with offices in Jamaica Bay and Delaware Bay. We believe our fifty years of connection to the Mid-Atlantic, its natural resources and coastal communities provides us with insights to share as the region's ocean planning process begins. On behalf of our thousands of members based within the Mid-Atlantic, we offer these comments.

On July 19, 2010, our nation established its first ever National Stewardship Policy (National Ocean Policy) to ensure that "the ocean, our coasts, and the Great Lakes are healthy and resilient, safe and productive, and understood and treasured so as to promote the well-being,

[1] Mid-Atlantic Regional Planning Body, Draft Mid-Atlantic Ocean Planning Framework (Framework) (December 2013), *available at*: http://www.boem.gov/Draft-Mid-Atlantic-Regional-Ocean-Planning-Framework.

prosperity, and security of present and future generations[.]"[2] The National Ocean Policy (NOP), spurred to completion by the Deepwater Horizon disaster, was the culmination of two blue ribbon bipartisan panels' unanimous recommendations and the Interagency Ocean Policy Task Force's in depth review of ocean policy and robust public engagement efforts.

At its core, the National Ocean Policy is about better coordination and collaboration between the numerous federal agencies with existing management authority over our nation's ocean, coastal and Great Lakes resources to strengthen ocean governance and decision making to ensure healthy, productive and resilient marine ecosystems for this and future generations. That is the very premise that the Mid-Atlantic Regional Planning Body must carry into its regional ocean planning process. We offer these detailed comments in support of the RPB's future work to ensure it meets this goal.

I. The RPB must more broadly consider the connection bays and estuaries have to open ocean waters.

The coastal bays and estuaries of the Mid-Atlantic are iconic natural resources known throughout the region as places to recreate, fish, boat and live. They are also economic drivers for much of the Mid-Atlantic states' ocean economies. The Mid-Atlantic RPB's Draft Framework currently states that the RPB's geographic focus will include "the ocean waters of the region" but not "the major bays and estuaries."[3] The Draft Framework does state that as ***necessary*** the RPB will "draw connections and coordinate with estuarine and terrestrial areas for planning purposes."[4]

The RPB should not consider the connections between bays, estuaries and the open ocean "where necessary" but rather where natural or even where appropriate. Necessary implies a forced separation that runs counter to the very ecosystem-based principles of ocean planning and the National Ocean Policy. We urge the RPB to consider a more fluid interaction between the RPB's geographic focus and how the RPB can best integrate the impacts the bays and estuaries have on this region and the ocean planning process. We encourage the RPB to set up direct lines of communication with the appropriate National Estuary Programs -- Barnegat Bay Partnership, Delaware Center for the Inland Bays, Long Island Sound Study, Maryland Coastal Bays Program, NY/NJ Harbor Estuary Program, Partnership for the Delaware Estuary, along with the Chesapeake Bay Program – and seek their expertise and input on how the bays and estuaries might influence and be influenced by the RPB's work.

As the Environmental Protection Agency states, "[t]housands of species of birds, mammals, fish, and other wildlife depend on estuarine habitats as places to live, feed, and reproduce. And many marine organisms, including most commercially-important species of fish, depend on estuaries at some point during their development."[5] In fact, this dependency on estuaries by so many species of fish and wildlife for protection and spawning has garnered estuaries the term

[2] Exec. Order No. 13547, 75 Fed. Reg. 43,023 (July 19, 2010).
[3] Framework at 4.
[4] *Id*.
[5] U.S. Environmental Protection Agency, Basic Information about Estuaries, *available at*: http://water.epa.gov/type/oceb/nep/about.cfm.

"nurseries of the sea."[6] By the numbers, "[e]stuaries and coastal waters provide essential habitat for over 75 percent of the commercial fish catch and 80-90% of the recreational catch of fish."[7] Commercial and sport fishing alone "contribute $111 billion yearly to the nation's economy[.]"[8]

With healthier bays and estuaries, a healthier ocean and marine ecosystem will exist to support resilient coastal communities, fisheries and marine wildlife, and ocean economies. Given the Draft Framework's Principle 1[9] is to recognize interconnections across uses and interests, species and habitats and coastal communities and economies and Draft Ocean Planning Goal 1[10] is to promote ecosystem health and integrity, it is in the RPB's best interest to create a clear path in the Framework and subsequent work plan for considering the region's coastal bays and estuaries.

II. The Draft Framework must enhance its plans for stakeholder engagement and public participation.

Stakeholder engagement and public participation is crucial to successful marine planning. Every document tied to the National Ocean Policy highlights this fact. The *Final Recommendations of the Interagency Ocean Policy Task Force* emphasize the "importance of frequent and robust stakeholder, scientific and public engagement throughout the planning process."[11] The *Final National Ocean Policy Implementation Plan* calls "robust stakeholder engagement and public participation … essential to ensure that actions are based on a full understanding of the range of interests and interactions…[.]"[12] The National Ocean Council's *Marine Planning Handbook* confirms "engagement and substantive participation of stakeholders and the public" a "cornerstone of marine planning[.]"[13]

The U.S. Institute for Environmental Conflict Resolution (ECR), an independent federal agency, has spent much time considering how to specifically engage stakeholders in the marine planning context. We strongly encourage the RPB to consider the ECR's white paper, *Principles for Stakeholder Involvement in Coastal and Marine Spatial Planning*[14] as a resource to help the RPB move forward with stakeholder engagement and public participation efforts. In particular, we would point the RPB to the ERC's work on "stakeholder engagement planning" that encourages a stakeholder assessment, stakeholder planning and feedback on that planning.

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[6] *Id.*
[7] Restore America's Estuaries, Top 10 Estuary Facts, *available at*: http://www.estuaries.org/top-10-estuary-facts.html (last visited April 15, 2014).
[8] *Id*.
[9] Framework at 5.
[10] Framework at 6.
[11] Interagency Ocean Policy Task Force, Final Recommendations of the Interagency Ocean Policy Task Force, Exec Summary, p7-8, *available at*: http://www.whitehouse.gov/administration/eop/oceans.
[12] National Ocean Council, National Ocean Policy Implementation Plan (April 14, 2013), p. 23, *available at*: http://www.whitehouse.gov/administration/eop/oceans/implementationplan.
[13] National Ocean Council, Marine Planning Handbook (July 2013), p. 5, *available at*: http://www.whitehouse.gov//sites/default/files/final_marine_planning_handbook.pdf.
[14] U.S. Institute on Environmental Conflict Resolution, Principles for Stakeholder Involvement in Coastal and Marine Spatial Planning (December 2011), *available at*: http://www.ecr.gov/pdf/StakeholderPrinciplesCMSP.pdf.

This may seem like a lot of planning for a planning process, but without the public or stakeholders you jeopardize the marine planning process. By planning for engagement and involvement you create an agreement between stakeholders and on how the RPB will engage and include the efforts of stakeholders. This reduces the likelihood of misunderstandings and paves the way toward truly collaborative relationships.

Our attention to stakeholder engagement and public participation is keen even at the Draft Framework stage because it is as integral to the planning process as the plan the RPB will create. We appreciate that the Draft Framework acknowledges that "partnerships with stakeholders will be critical to the success of this planning effort."[15] A RPB and stakeholder relationship with mutual trust and respect is critical to ensure that Mid-Atlantic ocean planning is an inclusive, transparent, and engaged process: as stakeholders, whether we have management authority or not, we are all invested in the process and the enhanced outcomes we want to see stem from ocean planning.

As such, we suggest that Principle 8, now "Transparency and engagement" be split into two principles, one on transparency and a second focused solely on stakeholder engagement and public participation. We also suggest the RPB add a third ocean planning goal focused on creating or ensuring a robust stakeholder engagement and public participation plan or, at the very least, create an objective under one of the existing two ocean planning goals specifically tied to stakeholder engagement and public participation. By creating a new goal for stakeholder engagement, you ensure that engagement is translated from the principle level of an essential quality of marine planning to a goal that will have action based components to ensure the RPB fulfills its responsibility to stakeholders and the public.

We appreciate the opportunity to provide these comments and look forward to working with the RPB as the ocean planning process moves forward to develop an ocean plan that protects, maintains and restores the Mid-Atlantic's vibrant and diverse natural resources.

Sincerely,

Time Dillingham
Executive Director

[15] Framework at 2.

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:52 AM
Subject: Re: Comments and Administrative Record on National Ocean Policy / Garden State Seafood Association
To: Greg DiDomenico <gregdi@voicenet.com>
Cc: BOEM MidAtlanticRPB <MidAtlanticRPB@boem.gov>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 9:16 PM, Greg DiDomenico <gregdi@voicenet.com> wrote:

Attached are our comments on the on Mid-Atlantic Regional Planning Body's Draft Regional Ocean Planning Framework.

Included in the attached documents are additional comments we have made throughout the development of NOP.

In addition is a document entitled MAFMC Ecosystem and Habitat Workshop, on page 51 you will find a summary of our presentation.

Greg DiDomenico
Executive Director
http://www.gardenstateseafood.org/

Proceedings of the Mid-Atlantic Fishery Management Council's Habitat-Ecosystem Workshop

Virginia Beach, VA
December 13-14, 2010

Edited by David Packer

U.S. Department of Commerce
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Gary Locke, Secretary of Commerce

National Oceanic and Atmospheric Administration
Jane Lubchenco, Ph.D., Administrator of NOAA

National Marine Fisheries Service
Eric C. Schwaab, Assistant Administrator for Fisheries

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A copy of this report may be obtained from:

Office of Habitat Conservation
NMFS, NOAA
1315 East West Highway
Silver Spring, MD 20910

CONTENTS

EXECUTIVE SUMMARY

The Mid-Atlantic Fishery Management Council's (MAFMC's) Habitat-Ecosystem Workshop was held December 13-14, 2010 in Virginia Beach, VA. The workshop was organized by the MAFMC in partnership with the NMFS Office of Habitat Conservation, the NMFS Office of Science & Technology, and the NMFS Northeast Regional Office. Participation and attendance at the workshop reached nearly 100 people, with participants from the MAFMC, NOAA, New England and South Atlantic Fishery Management Councils (NEFMC, SAFMC), Atlantic States Marine Fisheries Commission (ASMFC), states, regional governance bodies (governors' regional association, Mid-Atlantic Regional Council on the Ocean [MARCO]), environmental organizations, fishing industry, and the public. The one and a half day workshop featured 27 presentations grouped by three panels (policy/management, science, and stakeholder), with each panel designed to identify the roles of the individual attendees, beginning with introductory talks followed by technical presentations and panel discussions. Topics were identified to advance collective efforts to enhance, protect, and restore habitats and ecosystems, with extensive discussions on new policies (the President's National Ocean Policy), broader perspectives (ecosystem approaches based on regional priorities), new tools (coastal and marine spatial planning, integrated ecosystem assessments), and new partnerships (related to ocean energy, national marine sanctuaries, etc.).

The goal was to identify projects and opportunities for the MAFMC to move toward the forefront in utilizing the latest habitat and ecosystem science, policy, and management to provide healthy mid-Atlantic fisheries. The primary target for the discussions was the Council membership, who obtained perspective from the presentations on what is available from the various offices, programs, research, etc. that will help the Council to do its job better. The workshop established and strengthened partnerships to extend these benefits to other mid-Atlantic activities with shared interests, beginning with NOAA, other federal and state agencies, environmental and industry NGOs, and constituents. Because coastal and marine resources and the habitats that support them are important to many groups in the mid-Atlantic region for many reasons, the Council will use its specific role in the fishery management process to forge broader discussions about coastal and marine ecosystems, current and projected human activities, and the full array of resource management approaches and tools available to improve habitat and ecosystem health in the mid-Atlantic.

The primary outcome of this workshop was to identify proposed projects and actions for the Council to implement which more fully incorporate habitat science, ecosystem-based fishery management, and coastal and marine spatial planning into the Council's management efforts. Each speaker identified what they saw as the next steps in developing possible proposals and projects with Council involvement, and the panel discussions helped to reiterate and highlight those ideas. Below are the top recommendations from each of the three panels.

Top Recommendations from the Policy/Management Panel

- The MAFMC should review the National Ocean Policy for opportunities with the nine priority objectives.
- Continue/expand these discussions to include groups/issues not represented at this workshop, and learn from other efforts elsewhere; pursue opportunities for other sectors/groups to share roles as host, convener, and facilitator. Identify pilots and opportunities for specific action to fulfill the intent established at this workshop, using existing resources.
- Invest in the process and context of essential fish habitat (EFH) reviews with a view beyond the MAFMC's immediate Magnuson-Stevens Act (MSA) regulatory requirements to designate EFH in its fishery management plans (FMPs). Continue discussing coastal and marine spatial planning (CMSP).
- Participate in the NOAA Deep-Sea Coral (DSC) Research and Technology Program's northeast/mid-Atlantic research priorities workshop/fieldwork planning for 2013-15. Exercise MSA discretionary authority to designate DSC protection zones, use EFH and habitat areas of particular concern (HAPCs) as tools for DSC management, and designate a primary point of contact for coral-related issues. Monitor bycatch and habitat impacts of fishing on DSCs.
- Work with regional NOAA/NMFS Restoration Center (RC) staff in their regional prioritization efforts to identify priority watersheds and waterbodies for habitat restoration; work with regional RC staff and local partners in the mid-Atlantic to develop funding proposals and projects of mutual interest to the Council and RC; explore the possibility of becoming a formal partner with the RC in response to their FY 2012 solicitation for partnerships; work with the RC to develop outreach products that address the importance of habitat restoration for federally managed species; advocate the importance of assessing and understanding the link between nearshore and estuarine habitats, diadromous fish species, and federally managed species.
- Develop a regional Marine Protected Area (MPA) network for the mid-Atlantic, and once formed, integrate MPAs with the Integrated Ocean Observing System (IOOS) and work with the North American MPA Network (NAMPAN) to develop "condition reports" for the sites. Partner with the National MPA Center

(NMPAC) to continue/complete ocean mapping of human uses/activities in the mid-Atlantic. Take advantage of training opportunities on adaptation to climate change, developing MPA networks, CMSP, etc. offered by NMPAC and NOAA's Office of National Marine Sanctuaries. Take advantage of the NMPAC's information clearinghouse on MPA resources and databases to help inform the Council's work on spatial management.

- Coordinate with the National Ocean Service and NMFS to convene a workshop on canyon/seamount habitat in the mid-Atlantic/New England regions to assess the status of resources, state of knowledge, threats, and conservation alternatives available through the MSA and other authorities; support surveys/research to address questions regarding the diversity, distribution, and abundance of species living in canyon/seamounts.
- Become familiar with the state Coastal and Estuarine Land Conservation Program (CELCP) leads in the region and funding opportunities under the program; review state CELCP plans to identify shared priority habitats/landscapes; contact state CELCP leads to share information on additional fisheries priority habitat.

Top Recommendations from the Science Panel

- NMFS and MAFMC should develop criteria to prioritize stocks and geographic locations that would benefit from habitat assessments; NMFS habitat and stock assessment scientists should work together with fishery managers to initiate demonstration projects that incorporate habitat data into stock assessment models.
- Maintain the dialogue between NMFS and the Council to develop science products that meet the needs of the Council; e.g., develop/update the 5-year research priorities submitted to the NMFS Science Center Directors reflecting ecosystem/habitat science needs identified by the Council or improve the protocol for providing Northeast Fisheries Science Center (NEFSC) habitat-science support to the MAFMC.
- The Council should continue to seek recognition on the Regional Planning Body, participate to the fullest extent possible in the CMSP process, and work with state/local partners in protecting fish habitat.
- The MAFMC should evaluate options for the designation of spatial management units as the basis for development of integrated management plans for defined ecoregions.
- Better connect science/management activities of the Chesapeake Bay Fisheries Goal Team, ASMFC, and MAFMC.
- Convene a NOAA habitat mapping consortium/meeting, organized by the NOAA North Atlantic Regional Team and hosted by the NMFS/NEFSC James J. Howard Marine Sciences Laboratory, and include representatives of the NOAA Chesapeake Bay Office (NCBO), MAFMC, NEFSC, etc.
- Improve communication pathways/networks to include all sectors with influence over land and marine habitats and develop better visualization tools describing ecosystems, their inter-relationships, and the specific outcomes that can result from applying ecosystem approaches to management; fully integrate modeling, observations, research, and monitoring to facilitate scenario testing and tradeoff discussions.
- Establish the resilience of the ecosystem and keystone populations in the ecosystem as the goal of ecosystem science/management in the mid-Atlantic. Encourage government and academic scientists to openly collaborate with the fishing community to perform the science required to identify processes in the mid-Atlantic ecosystem that promote the resilience of keystone populations and ecosystem.
- Establish a research set-aside program focused on the goals of ecosystem science and management.
- Educate the public and stakeholders about the complexity of the mid-Atlantic ecosystem.

Top Recommendations from the Stakeholder Panel

- In partnership with MARCO, compile GIS information on offshore areas, and share habitat information, particularly on the submarine canyons; exchange data/information through the online MARCO Mapping and Planning Portal; coordinate on developing management objectives and creating the Mid-Atlantic's Regional Planning Body and defining roles for the Fishery Management Councils; continue discussions of enhanced mechanisms for MAFMC participation in MARCO processes in order to incorporate the needs of the commercial/recreational fishing communities.
- The MAFMC Science and Statistical Committee's Ecosystem Subcommittee should provide the MAFMC with scientific advice to support/inform development of the Council's ecosystem level goals/policies; identify/describe scientific advice that the MAFMC could use to address/incorporate ecosystem structure/function in its FMPs and quota specification process to ensure the Council's management practices effectively account for ecological sustainability; describe scientific information that the MAFMC could consider so as to anticipate/respond to shifts in ecological conditions/processes in its management programs; summarize what other regions/countries are doing to incorporate EBFM principles in their management

plans/programs; describe how ecosystems principles could be used by the MAFMC in the long-term to evolve its single/multi-species FMPs into a regional EBFM plan.

- Coordinate development of EBFM approaches and habitat issues with adjacent Fishery Management Councils, states, and ASMFC, and hold workshops. All parties should participate in the Department of Interior's North Atlantic and South Atlantic Landscape Conservation Cooperatives.
- However, the MAFMC should carefully consider the tradeoffs of adopting EBFM and CMSP approaches compared to current fisheries management approaches, and understand and prepare for some of the needed changes to organizational structure before embarking on EBFM.
- Utilize the EFH Omnibus Amendment developed by the NEFMC/MAFMC as a policy vehicle for expanded habitat protection and a process that provides public input for decision-making.
- The SAFMC will share its existing EFH policy statements, and the MAFMC/SAFMC should collaborate on developing or linking future ecological models where species may overlap jurisdictions; the SAFMC will also cooperate on including updated information for future South Atlantic Fishery Ecosystem Plan revisions for mid-Atlantic managed species occurring in south Atlantic waters.
- The Councils/regions should share information on activities and policies pertaining to offshore energy development, marine aquaculture, and marine habitat identification and conservation for diadromous species.
- Conduct a regional CMSP process that is open and transparent and based on sound science.
- Interview remaining "old-time" fishers to piece together a picture of what once was in order to protect what we have and restore what we've lost in terms of fish, invertebrates, and hard bottom habitats; protect/restore those hard bottom habitats and focus not on the substrate but on the growth that provides habitat.
- Recognize that cold water azooxanthellate corals are important to fish populations wherever they now occur or did occur, including all shallow/deep waters, and are highly vulnerable to physical disturbance of any kind, so they need to be identified/protected via the MSA's discretionary authority. Strongly consider transportable reef units sited in areas with abundant growth to gather natural set corals for later transplant.
- The ASMFC and MAFMC should strengthen communication between their habitat program staff and committees; identify projects for funding by the Atlantic Coastal Fish Habitat Partnership, Southeast Aquatic Resources Partnership, and other National Fish Habitat Partnerships; develop joint habitat educational materials; collaborate on essential fish habitat designations; develop and adopt common habitat policies (i.e., Resolution 89-IV); partner to build on existing efforts to develop a coast-wide fish habitat Geographic Information System.

As the national and regional habitat-ecosystem initiatives outlined in this workshop move forward, the Council is also impelled to move forward on these issues. The workshop showed opportunities the Council can pursue across a wide spectrum of agencies, venues, and disciplines. Some of the opportunities will be easily achievable while others present longer-term commitments; some involve working with existing programs to identify data and research needs for the mid-Atlantic region and may build on the Council's existing initiatives, particularly those involving ocean governance and ecosystem management. The Council has already taken the initiative of incorporating ecological considerations into their current fishery management plans and is beginning the transition into ecosystem management by appointing an Ecosystem Subcommittee of the Council's Scientific and Statistical Committee. The Ecosystem and Ocean Planning Committee of the MAFMC will be taking the next steps by categorizing the opportunities presented in this workshop and developing a list of priorities and an action plan for consideration by the full Council.

INTRODUCTION

Thomas B. Hoff, Senior Ecologist, Mid-Atlantic Fishery Management Council, Dover, DE

This Habitat-Ecosystem Workshop was proposed by the Mid-Atlantic Fishery Management Council's (Council) new Executive Director, Dr. Chris Moore, in August of 2010. His proposal originated in discussions he had with Tom Bigford, Chief, Office of Habitat Conservation/Habitat Protection Division, and Dr. Moore's interest in re-invigorating the Council's work on habitat and ecosystem issues.

As a result, the Council staff worked closely with National Marine Fisheries Service (NMFS) staff in the Region and Headquarters to design an ecosystem workshop that had a broad agenda and a number of invited participants. The workshop was designed with the understanding that coastal and marine resources and the habitats that support them are important to many groups in the mid-Atlantic region for a variety of reasons and furthermore that the Council could use its specific role in the fishery management process to forge broader discussions about coastal and marine ecosystems, current and projected human activities, and resource management approaches and tools available to improve habitat and ecosystem health.

The workshop was developed around 27 presentations over 1½ days. Specific workshop topics were identified to advance collective efforts to enhance, protect, and restore habitat and ecosystems including new policies (the President's National Ocean Policy), broader perspectives (ecosystem approaches based on regional priorities), new tools (coastal and marine spatial planning, integrated ecosystem assessments), and new partnerships (related to ocean energy, coastal managers, national marine sanctuaries, offshore aquaculture, or others). The presentations were grouped into panels designed to generate discussion and allow for Council interaction with the panelists. The panels included policy/management, science, and stakeholder. Nearly 100 people participated in or attended the workshop. Participants completed an evaluation questionnaire and most respondents stated they were very satisfied with the workshop. Numerous respondents advocated for an additional workshop with additional agencies involved. One of the most telling pieces of feedback came from a senior agency scientist who felt the workshop was "the most useful meeting I participated in all of 2010."

A primary outcome of this workshop was to identify proposed projects and actions for the Council to implement which more fully incorporate habitat science, ecosystem-based fishery management, and coastal and marine spatial planning into the Council's management efforts. Each speaker was encouraged to identify what they saw as the next steps in developing possible proposals and projects with Council involvement, and the panel discussions helped to reiterate and highlight those ideas. Those steps are highlighted in the box that begins each speaker's paper in this report.

In his wrap-up statements for this workshop the Council Chairman, Rick Robins, charged the Ecosystem and Ocean Planning Committee to provide the blueprint to move the Council forward on habitat-ecosystem issues. That Committee will meet in February 2011 with that sole intent. They will review the evaluation questionnaires, prioritize the speaker's suggestions, decide whether to hold another workshop, and provide guidance on projects for possible Council involvement.

WELCOME AND INTRODUCTORY REMARKS

Gene Kray, Chair, Mid-Atlantic Fishery Management Council/Ecosystem and Ocean Planning Committee, Dover, DE

Good afternoon. It is my distinct pleasure to welcome you to the first Mid-Atlantic Fishery Management Council Habitat and Ecosystem Workshop. My name is Gene Kray and I chair the Ecosystem and Ocean Planning Committee for the Council. When I was first appointed to the Council in 2003 this Committee was called the Habitat Committee. Shortly thereafter we saw the need to expand the breadth of what we were doing and it became the Ecosystem Committee. Two years ago we saw the focus widening again and it became The Ecosystem and Ocean Planning Committee. You could say that the title of the committee evolved, somewhat like what Steve Murawski said with his colleagues when he described the ecosystem approach to fishery management as an "evolution not a revolution".

We believe that we are now at a time when the science and policy issues are ready to be explored and to see how they can come together for the benefit of the various species that we manage, as well as our stakeholders in this process. The major purpose of this workshop is to convene with our partners at the National Oceanic and Atmospheric Administration (NOAA), the Atlantic States Marine Fisheries Commission (ASMFC), the Councils to the north and south of us and our stakeholders to develop a road map for the Council to follow as we look at our fishery management plans. There are obviously many questions to be addressed: Should we look at what can be accomplished in the short-term (one to three years), or as my distinguished colleague Tom Hoff describes it, "picking off the low hanging fruit?" The answer to that is yes. It has been suggested that we might look at summer flounder, since of all of the mid-Atlantic species, we believe that it is the most data rich and likely to be the most susceptible to man's impacts in the estuaries that we manage. We shall see. We of course hope that we select a species or grouping of species that we can use as a stepping stone in our plans for all of our managed fisheries in the long-term.

Another question might be: How much and what kind of data do we need and who can help us with this approach? We hope to have an answer to that question at the conclusion of this workshop.

This workshop was planned as an opportunity for the Council to engage in a discussion with the panelists and the Council. As you can see we have a very robust agenda. As time is available we will invite questions or comments from the public.

I want to thank our steering committee for all of their efforts in putting the plans for this workshop in place. Their names are listed in the agenda. There were many hours of conference calls, emails and individual phone calls involved in this process. I also want to thank our distinguished speakers and panelists who are going to guide our thinking as we deliberate and debate the issues that will provide the Council with clear direction as to how we can incorporate ecosystem-based principles and considerations into our fishery management plans.

Finally I want to thank our Chairman, Rick Robins and Executive Director, Chris Moore for their vision and support in giving us the tools to make this workshop happen.

In conclusion, I want to point out that a summary of these proceedings will be published in a "Technical Memo" by NOAA and will be available to all participants and guests attending this workshop before we put the plans in place for the second workshop on Habitat and Ecosystems in the spring or summer of 2011.

OVERVIEW OF THE NATIONAL OCEAN POLICY AND COASTAL AND MARINE SPATIAL PLANNING FRAMEWORK

Jessica Kondel, Acting Regional Coordinator, NOAA/Coastal and Marine Spatial Planning Program, Silver Spring, MD

On July 19th, 2010, President Obama acted upon the final recommendations of the Ocean Policy Task Force and signed an Executive Order adopting a new National Policy for the Stewardship of the Oceans, Our Coasts, and the Great Lakes. This is truly a historic moment for our oceans as for the first time in our nation's history we have a comprehensive National Ocean Policy.

America's rich and productive coastal regions and waters support tens of millions of jobs and account for a significant portion of the national economy. They also host a growing number of commercial, recreational, scientific, energy, and security activities, and provide a wealth of natural resources and ecological benefits. Human uses of the ocean are expanding at a rate that challenges our ability to manage significant and often competing demands.

To counter the increased demands for our ocean and coastal resources, we need a more integrated, comprehensive, ecosystem-based, flexible, and proactive approach to planning and managing uses and activities. Without this, we risk more user conflicts, increased costs and delays from planning and regulatory inefficiencies, and the potential loss of critical economic, ecosystem, social, and cultural services for present and future generations. While many existing permitting processes for the ocean, coasts, and the Great Lakes include aspects of coordinated planning, most focus solely on a limited range of sector-by-sector, statute-by-statute management tools and outcomes.

To facilitate making comprehensive ecosystem-based management of our ocean, coast, and Great Lakes resources a reality, the President's Executive Order accomplishes four important things:

1. For the first time, establishes a National Ocean Policy for the Stewardship of the Ocean, Coasts, and Great Lakes, including a set of overarching principles to guide ocean management decisions.

2. Creates an interagency National Ocean Council (NOC) formed of 27 federal entities, to provide sustained, high-level, and coordinated attention to advance the National Ocean Policy.

3. Prioritizes nine key categories for action that seek to address the most pressing challenges facing the ocean, our coasts, and the Great Lakes.

4. Establishes a flexible Framework for effective Coastal and Marine Spatial Planning (or CMSP) to address conservation, economic activity, user conflict, and sustainable use of ecosystem services.

At present, we regulate human activities in our oceans, coasts, and Great Lakes at the federal level with over 140 statutes, regulations, and policies. New regulation is not the answer. Instead, we have to change our approach to recognize that there is only one ocean, and that we need to learn to use it without using it up.

The National Ocean Policy and ecosystem-based CMSP do not create new layers of bureaucracy, instead, they call for coordination among existing management regimes to ensure that community stakeholders can participate in managing their own coasts in a fair and open forum. By requiring government agencies to work together to engage stakeholders, we will grow toward fair and open management so that all stakeholders can have a seat at the table to participate fairly in planning.

Because no two regions are exactly alike, there is not a one-size-fits-all recipe for CMSP. Each region and its stakeholders will have the opportunity and responsibility to tailor the process, ensuring that all interests and ocean, coastal, and Great Lakes users are adequately represented. This bottom-up approach will ensure that CMSP serves and responds directly to community needs. The nine Regional Planning Bodies (RPBs) established under the National Ocean Policy are designed to mirror the geography of ocean, coast, and Great Lakes ecosystems and existing regional governance structures, so that communities can work together toward developing solutions that make sense for issues they share in common with one another.

The National Ocean Policy and its CMSP Framework envision a regionally-based, collaborative planning process in which key agencies and stakeholders have a meaningful voice and responsibility in identifying goals and objectives for their regional waters and in designing a CMS Plan that allows the desired assortment of uses that reflects those goals. Stakeholder and public participation will occur throughout the development of regional CMS Plans. As a result, when a project is proposed and considered in light of the regional CMS Plan, many of the stakeholder and public concerns have already been addressed. The NOC will also provide guidance and oversight of regional CMSP initiatives.

The underpinning of the National Ocean Policy and the CMSP Framework is science. We have data and information, but not all of it is accessible or in a useable format for CMSP. The solution is better integration which will require governments, industries, academics, and others to partner together to 1) identify priorities for research in a coordinated fashion; 2) explore decision support tools to assess trade-offs associated

with managing for multiple uses and conserving the ability of ecosystems to sustainably produce services; and, 3) begin development of national and regional information systems and data portals to assist with CMSP. This will include ensuring nationally consistent derived data products from region to region. Scientific data and information generated by the Fisheries Management Councils (FMCs) will be an important part of the national and regional information systems designed to support CMSP decision-making.

As veterans of a similar process, the experienced voice of the FMCs will bring immediate depth to the CMSP process, which is why the CMSP Framework recognizes that their involvement in CMSP is critical. In addition to their expertise and science, FMCs also have statutory authority to develop management and protection measures for fisheries, habitat, and corals. These authorities will also help define the roles that FMCs play in CMSP. NOAA supports and encourages the eight FMCs to continue to actively consult with the existing regional governance organizations and work with state partners and other regional groups on the potential organization and membership of RPBs. The Framework directs the NOC to prepare guidance for RPBs in meeting these consultative requirements which has not yet been developed. Ultimately, the RPB will apply this guidance to determine the best outcome for their particular circumstances. NOAA will be actively involved in the development of this guidance given its relationship to and understanding of FMCs and their processes under the Magnuson-Stevens Fisheries Conservation and Management Act (MSA).

As we move forward with the implementation of CMSP some questions remain. However, what we do know is that CMSP will facilitate sustainable economic growth in coastal communities by providing greater efficiencies and predictability for economic investments in ocean and coastal-based businesses. This should result in reduced costs and conflicts among competing uses. CMSP should also improve ecosystem health and services by better planning human uses together with the conservation of important ecological areas (areas of spawning, breeding, and feeding), areas of rare or functionally vulnerable marine resources, and migratory corridors. CMSP will also provide opportunities for community and citizen participation in transparent planning processes that will determine the future of the ocean, coasts, and Great Lakes.

Key Question: Pennsylvania is listed as a mid-Atlantic state and has representation on the MAFMC. Would it be imperative that Pennsylvania be included as part of the Regional Planning Bodies (RPBs)?

Answer: The RPB would likely need representation from all of the states to qualify as an RPB.

Key Question: Will the MAFMC be a member to the RPBs?

Answer: The MAFMC and other Councils will not be direct members at this point. The RPBs will be required to establish coordination mechanisms with the relevant Councils. The Councils will have a consultative role in the process. The MAFMC has requested a seat on the staff, working group, and Executive Board levels of the Mid-Atlantic Regional Council on the Ocean (MARCO), since existing regional structures may be the foundation for RPBs.

Key Question: If the decisions from the MAFMC are inconsistent with the RPB, what happens?

Answer: The MAFMC would be required to notify the RPB. A dispute resolution mechanism has yet to be determined. RPB's will not usurp existing authorities.

Key Question: When will the RPB's be in place?

Answer: The National CMSP Workshop is expected to be in May, and the RPBs should form soon after that.

POLICY/MANAGEMENT PANEL

CONNECTING OPPORTUNITIES IN THE MID-ATLANTIC

Pat A. Montanio, Director, NOAA/National Marine Fisheries Service, Office of Habitat Conservation, Silver Spring, MD

Major Recommendations

- The MAFMC should review the National Ocean Policy for opportunities with the nine priority objectives. The strategic action plans for each objective are available in mid-2011 at: <http://www.whitehouse.gov/blog/2011/01/24/open-comments-ntl-ocean-policy-strategic-action-plans> offer entrees into regional ecosystem protection and restoration, ecosystem-based management, coastal and marine spatial planning, and other national coastal and ocean priorities. Our regional discussions should help us identify opportunities for success in the mid-Atlantic and beyond. Similarly, we have much to learn from other efforts elsewhere.
- This workshop highlighted many NOAA programs with potential connections to managing the mid-Atlantic regional ecosystem. Let us commit to working with other workshop attendees and others not present but who share our interests. Other federal agencies, each state, the private sector (industry and environmental groups), separately and through joint efforts, offer opportunities to leverage and succeed.

"Overfishing was the challenge of the 20th century; the challenge for the 21st century will be habitat degradation," according to Dr. Robert Diaz from the Virginia Institute of Marine Science. More specifically, our challenge is to maintain suitable coastal and marine habitats not only for healthy fisheries but also for other ecosystem services – recreation, water quality, shoreline protection – all while ocean uses and stressors are increasing and our fiscal resources are limited. Besides our historic roles, our evolving portfolio extends to offshore energy, invasive species, and climate change; the latter includes sea level rise and ocean acidification. These challenges implore us to preserve, restore, and improve habitat conditions so the mid-Atlantic can provide the full range of economic and societal benefits.

The National Ocean Policy offers a fresh reminder of the complex web of statutes, regulations, and policies that govern the use of our coasts and oceans. The growing number of groups and partnerships offer new opportunities to improve natural resource management through coordination and collaboration. We are fortunate to have this workshop, hosted by the Mid-Atlantic Fishery Management Council and attended by so many partners, which will serve as a valuable step forward for the mid-Atlantic regional ecosystem.

A review of statutes, threats, and opportunities reveals the importance of joining forces for our common interests. Partnerships offer opportunities to leverage our assets, including expertise and funds. In the mid-Atlantic we have a strong assemblage of state, federal, and joint efforts that offer the promise of greater collaboration. Existing and new opportunities cover the full sweep of NOAA capabilities (many also presenting at this workshop) and extend to other agencies and the private sector. We will be strongest by moving forward together.

This workshop serves as a timely introduction for us, our agencies, and our shared objectives. The National Ocean Policy offers one umbrella under which we can and must rally. Individual efforts in coastal management, fishery management, energy, transportation, environmental protection, and other arenas are now expected to intersect, perhaps even merge. No one agency or group has been vested with a lead. No one partner can succeed alone. It is our collective responsibility to organize and plan for shared success. I also look forward to continuing these discussions. I hope others among us will consider hosting the next chapter in this effort. Sharing those roles will remind us that these discussions, and all benefits from our success, extend beyond the MAFMC and fishery management. We have a real opportunity to improve the management of – leading to improving the condition of – our shared mid-Atlantic ecosystem.

NATIONAL PERSPECTIVES ON THE MAFMC'S HABITAT/ECOSYSTEM APPROACHES

Thomas E. Bigford, Chief, NOAA/National Marine Fisheries Service, Office of Habitat Conservation/Habitat Protection Division, Silver Spring, MD

Major Recommendations

- Continue and expand these discussions to include groups and issues not represented at the December 2010 workshop in Virginia Beach, including protected resources, state coastal programs, defense, telecommunications, and ocean energy.
- Pursue opportunities for other sectors or groups to share the roles as host, convener, and facilitator so the MAFMC need not carry an undue burden and their issues are not perceived as receiving undue attention. As two options, consider the opportunity to work with ASMFC's Habitat Committee on a joint meeting in April 2011 and any options to partner with the Mid-Atlantic Regional Council on the Ocean (MARCO).
- Identify pilots for specific action in 2011 to fulfill the intent established at the Virginia Beach workshop, using existing knowledge, staff, and funds as we shift from business as usual to an ecosystem approach.

The December 13-14, 2010, workshop convened by the MAFMC represents an unprecedented opportunity to push beyond traditional fishery management and toward regional management of multiple sectors in a shared ecosystem. The December workshop represents one step toward President Obama's aspirations in his July 2010 National Ocean Policy (NOP). An increased emphasis on ecosystem approaches echoes several goals of that NOP and will also position the MAFMC to apply the latest fishery management techniques. Working together in an unprecedented partnership, other industries, agencies, and groups with interests in mid-Atlantic waters and coasts can expect a more robust and collaborative arena than seemed possible before the President's policy changed expectations. The Council must be commended for its earnest first step: now each participant and others wishing to join must accept the challenge and help us move collectively toward a more integrated, ecosystem-based approach to managing mid-Atlantic waters and resources. Elsewhere around the nation's coasts, the MAFMC's vision and its far-reaching trust in fellow ecosystem managers mark an encouraging step toward a new ocean management regime.

These glimpses of a new era reflect other recent activities. As examples, the emphasis by NOAA/NMFS on habitat science in 2009-2010 inspired publication of the Habitat Assessment Improvement Plan in 2010 and culminated in the first-ever National Habitat Assessment Workshop in St. Petersburg, Florida in May 2010 (published as NOAA Technical Memorandum NMFS-F/SPO-112 in November 2010). Bracketed around that effort has been encouraging work on an "integrated ecosystem assessment" (IEA) synthesis and analysis of natural and socio-economic factors related to regional ecosystem management goals. Again reflecting direction in the NOP, IEAs promise to infuse habitat into population dynamics debates, with the potential to increase the utility of models used to manage marine resources for harvest and other ecosystem benefits. And the National Fish Habitat Action Plan, represented regionally by the Atlantic Coast Fish Habitat Partnership, offers a fresh approach to resource management with an emphasis on habitat and a marked de-emphasis on conventional spatial boundaries. Talk about regional approaches to coastal and marine spatial planning offer a unified frame for combining these efforts, again reflecting the NOP and benefitting many who are working in the mid-Atlantic. Finally, to ease our transition into this new paradigm, we have the 2010 release of the draft "Coastal and Marine Ecological Classification Standard" (CMECS) developed by NOAA and NatureServe as a new national standard to classifying coastal and marine spatial systems, including those in the mid-Atlantic of special interest at the December workshop. The NOAA/NMFS Northeast Fisheries Science Center (NEFSC) is already applying CMECS conventions to its data holdings in Hudson Canyon. These renewed commitments to regional collaborations, uniform standards, and visions offer the prospect of achievements and successes that previously would not have been possible.

While much of the group enthusiasm exhibited at the December workshop was unprecedented, it was clear that like-minded individuals have been shifting toward these ecosystem approaches for some time. For example, it was encouraging to hear frequent reference to "Ecosystem-based Fishery Management for the Northeast Continental Shelf" (FS-2010-02) as a fundamental change from traditional fishery management to integrated plans for discrete, spatially explicit, ecological regions. Obviously, practitioners in the northeast already have realized the logic and inevitability of this transition from species-based management to a more holistic space-based approach.

I applaud continued efforts in these directions and with broader groups of regional resource managers. I encourage us as individuals and the respective agencies, industries, and resources we represent to push onward. We have much to do in 2011!

These important steps toward a promising future will require our immediate and focused attention. New staff and funds are unlikely, so we need a collective commitment to shift existing resources from past approaches to our new vision. This transition will not come swiftly, but it is inevitable. We can ease the process by reflecting new ecosystem approaches in our stock assessments, essential fish habitat (EFH) identifications and designations, and other efforts and by partnering with those groups who specialize in our priority needs, e.g., coastal and ocean observations in support of regional ecosystem management by the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS).

HABITAT PRIORITIES AND COUNCIL OPPORTUNITIES FROM A NOAA/NMFS REGIONAL PROGRAM

Peter Colosi, Assistant Regional Administrator, NOAA/National Marine Fisheries Service, Northeast Regional Office, Habitat Conservation Division, Gloucester, MA

Major Recommendations

- Invest in the process and context of essential fish habitat (EFH) reviews. Do so with a view beyond the MAFMC's immediate Magnuson-Stevens Act regulatory requirements to designate EFH in its fishery management plans. View it as an investment. While designation will help us manage habitat impacts associated with fishing gear and waterway development activities, it is also an opportunity for the Council to expand into an ecosystem-based design for EFH designations that can benefit fishery management. This can result in more accurate and precise application of EFH in fishery management in terms of the ecological drivers of productive capacity of fish resources. In this regard, this Council could be one of the first to incorporate ecosystem-based components into its EFH work. It can expand our influence with more precision and focus for fishery management, and result in greater influence in the consideration for living marine resource conservation among the various interests in the ocean development arena and the broader ocean use discussion.
- Continue discussing coastal and marine spatial planning (CMSP). NMFS is in this discussion also and will continue partnering with you. We in the Northeast Regional Office (NERO) are involved with the Mid-Atlantic Regional Council on the Ocean (MARCO), the Northeast Regional Ocean Council (NROC), Ocean Special Area Management Plan (Ocean SAMP) coordination with states, and soon will be involved in the Ocean Policy Task Force Regional Planning Bodies for CMSP. It is our job and yours to integrate fish and the longstanding history of fisheries into the considerations of CMSP and the development of marine spatial planning tools.
- It's the Council's insight that counts when framing its habitat agenda. Stay grounded in the perspective of your mandates, and see what opportunities there are for the Council to better manage fishery resources for a healthy fishing industry.

The NMFS Northeast Regional Office is pleased to be a part of this workshop. We're here to discuss NERO Habitat's profile and share ideas on how the Council may utilize "habitat" to do its job of managing fishery resources within the setting of broader ocean utilization. As one of the charges of the workshop, NMFS NERO hopes to help identify opportunities for the MAFMC to utilize the latest habitat and ecosystem science, policy, and management to provide healthy mid-Atlantic fisheries. This is fitting because the living marine resources and the habitats that support them are important to a wide range of stakeholders in the mid-Atlantic. In this respect, the Council is to be commended for the genesis of this forum. It has long been resourceful and innovative, and it recognizes the broader ocean use community and its influences on fisheries.

Who is the NMFS/NERO Habitat Conservation Division?

The Habitat Division is among a suite of NMFS/Northeast Regional Office programs such as Protected Resources, Sustainable Fisheries, Grants, and Statistics that cover the northeast U.S. coast from Maine through Virginia. Collectively these programs carry out NMFS's strategic goals. The Habitat Division portfolio is comprised of the three broad areas of habitat fishery management, habitat protection, and stewardship/engagement.

Habitat fishery management

This is the Habitat Division section that guides the Council in incorporating the characterization of essential fish habitat (EFH) in the development of fishery management plans for federally managed species. EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." The EFH designations are utilized in fishery management plans to address and minimize habitat impacts on EFH caused by fishing gear through pertinent management measures that are established by regulation. These, in concert with fishery catch and effort measures help to manage fish stocks at sustainable levels of harvest and productivity.

The Habitat Division integrates its EFH work into the work of both the MAFMC and New England Fishery Management Council (NEFMC). The Division is a member of various Council committees, and helps coordinate habitat and science integration into Council efforts. The Division advises Council committees on the consultations we undertake on development projects. Periodically the Division provides services and products such as EFH training, a non-fishing

habitat impacts primer, and EFH assessment tools and resources.

Habitat protection

Habitat Protection involves marine coastal and waterway development activities. This is where the Division brings our Council EFH designations forward to consult with federal and state permitting agencies to assure that we avoid and minimize habitat impacts to NOAA trust resources. Consultation actions include hydropower, navigational dredging, coastline infrastructure, energy development (e.g., hydrokinetic turbines), deep water port facilities, etc. Notable examples include working with the NOAA Chesapeake Bay Office and other agencies on preventing the introduction of non-native Asian oysters into Chesapeake Bay, and the protection of 100 acres of cobble habitat for juvenile cod in Winthrop Bay, Massachusetts from dredging. Some of our primary statutes include the Magnuson-Stevens Act, Endangered Species Act, Marine Mammal Protection Act, the Fish and Wildlife Coordination Act, and the National Environmental Policy Act.

Our consultations require the permitting agencies to characterize and evaluate proposed actions with respect to disturbance and impact to EFH. We then issue conservation recommendations to the permitting agency that are designed to protect EFH and other living marine resources. The permitting authorities with whom we consult include the U.S. Army Corp of Engineers, the U.S. Fish and Wildlife Service, the Bureau of Energy Management Regulation and Enforcement (BOEMRE), the Federal Energy Regulatory Commission (FERC), the EPA, Coast Guard, and the states.

On a side note, there is a nice history here of the Division's association with the MAFMC where we have raised issues concerning development actions that posed a threat to the fishery resources of the Council and to the recreational and commercial fishing industry. We are glad to see a resurgence of this interest from the Council's Ecosystems and Ocean Planning Committee, the same Committee that gave rise to this forum. This resurgence of coordination is particularly relevant considering the increased interest in ocean renewable and traditional energy development. A key in this arena is project siting that would be done in such a manner as to preserve traditional fisheries and ecosystem integrity for fish resources amidst the competing societal needs for broad ocean use. (This, of course, has been a driver for astute marine spatial planning.)

Stewardship/engagement

This represents a significant expansion in the Division's portfolio, and is generally where the Division steps outside its regulatory role to engage in the many collaborative discussions that can set the structures for ocean use and marine spatial planning. The Division must be involved in order to be conversant and to remain relevant.

There are many forums that the Habitat Conservation Division is participating in, including forums involving energy development in the northeast. For example, BOEMRE is conducting collaborative task force discussions for ocean-based wind power facilities siting and development across our region, and recently the governors of New York, Delaware, Maryland and New Jersey have signed a joint consortium for the promotion of energy development which will stimulate proposals for new marine energy projects.

There are also regional councils on ocean management, e.g., the Mid-Atlantic Regional Council on the Ocean (MARCO) and the Northeast Regional Ocean Council (NROC). Several of the northeastern states have developed or are in the process of developing ocean special area management plans, and with the recent release of the National Ocean Policy, there will be more collaborative ocean based forums.

The long-standing collaborative aspects of our fish-based forums in the northeast round out the stewardship forums which are available for engagement. The Atlantic States Marine Fisheries Commission (ASMFC) and the more recent Atlantic Coastal Fish Habitat Partnership (ACFHP) are good examples of stewardship opportunities in which many of us here in this workshop have long been engaged.

Key Question: With respect to the consultation process, do you see opportunities for the Council to strengthen its influence on projects which impact fisheries?

Answer: The Council has the ability to consult with NMFS under EFH and Magnuson statutes. There are examples in New England where the Army Corps of Engineers has denied permits based on Council involvement. NMFS Northeast Regional Office personnel are willing to provide support to the Council and work with the Council to identify and inform them of projects which may impact fisheries.

Key Comment: Brian Hooker, of the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), recommended direct and/or informal engagement between BOEMRE and the Council as offshore energy issues move forward.

NOAA'S APPROACH TO DEEP-SEA CORAL RESEARCH AND MANAGEMENT IN THE MID-ATLANTIC REGION

Chih-Fan Tsao, Thomas F. Hourigan, David Packer, NOAA/National Marine Fisheries Service, Office of Habitat Conservation, Silver Spring, MD

Major Recommendations

- Participate in the Deep-Sea Coral Research and Technology Program's northeast/mid-Atlantic research priorities workshop and fieldwork planning for 2013-15. The Council's participation is critical to ensure the fieldwork informs the Council's management needs. The workshop is planned for spring 2011.
- Exercise discretionary authority to designate deep-sea coral protection zones. The New England Fishery Management Council (NEFMC) is actively exploring the use of the MSA Section 303(b) authority to designate deep-sea coral zones for its fisheries, including those in areas that are managed cooperatively with the MAFMC, so this effort can be precedent-setting.
- Use essential fish habitat (EFH) and habitat areas of particular concern (HAPCs) as tools for deep-sea coral management. Several fishery management councils in the U.S. have designated biogenic habitats, such as deep-sea coral and sponge areas, as EFH and HAPCs. This is a tool at the Council's disposal for use in managing fishing impacts and ensuring consultation on potential non-fishing impacts on deep-sea coral and sponge habitats.
- Monitor bycatch and habitat impacts of fishing. Strengthened monitoring of fishing impacts will help fine-tune management measures designed to reduce gear interactions with corals.
- To enable effective and efficient collaboration between MAFMC and NOAA on these and other deep-sea coral endeavors, it would be beneficial for the Council to designate a primary point of contact for coral-related issues.

What are deep-sea corals?

The National Oceanic and Atmospheric Administration (NOAA) defines structure-forming deep-sea corals as any colonial, azooxanthellate corals generally occurring at depths below 50 m that provide vertical structure above the seafloor that can be utilized by other species. These include both deep reef-building stony corals (e.g., *Lophelia pertusa*), as well as individual branching colonies of corals (e.g., gorgonians and black corals). Found in all U.S. regions, these complex structures provide habitat for rich and diverse fish and invertebrate communities, including commercially important species. Because deep-sea corals are slow-growing, they are vulnerable to physical damage, especially damage caused by mobile bottom-tending gear.

Like deep-sea corals, sponges too can grow at a high density to form complex habitat and support benthic communities. Therefore, deep-sea sponges are included in the scope of NOAA's research and management efforts for deep-sea corals.

What does NOAA do to study and manage deep-sea coral ecosystems?

In 2010, NOAA released a "Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation." The plan describes goals, objectives and approaches that will guide NOAA activities over the next 10 years to further deep-sea coral science and conservation.

A central component of these activities is the Deep Sea Coral Research and Technology Program (DSCRTP), authorized by the Magnuson-Stevens Fisheries Conservation and Management Act (MSA Sec. 408). The program's mission is to provide sound scientific information needed to conserve and manage deep-sea coral ecosystems. The DSCRTP received its first funding in FY 2009 and currently supports three-year fieldwork operations in two U.S. regions at a time. The fieldwork efforts are developed in consultation with the regional Fishery Management Councils and typically include locating, mapping, and characterizing deep-sea coral habitats (e.g., using multibeam technologies and groundtruthing with remotely operated vehicles [ROVs] or submersibles) along with research to understand their ecology and document associated species. The DSCRTP is planning to conduct deep-sea coral fieldwork in the northeast U.S., including the Mid-Atlantic and New England Fishery Management Council regions, in 2013-15. Additionally, the DSCRTP funds smaller, non-fieldwork projects throughout the U.S. every year, and these projects range from developing computer models that predict suitable habitats for deep-sea corals, to analyzing fisheries data and thereby pinpointing locations of high coral bycatch.

In addition to the DSCRTP, many NOAA programs and offices engage in a variety of activities relevant to deep-sea corals. For NMFS Northeast Fisheries Science Center has been characterizing the benthic environment in and around Hudson Canyon since 2001. Also, NMFS is assisting with the New England Fishery Management Council's ongoing effort

to develop alternatives to designate deep-sea coral protection zones, using the discretionary authorities under MSA Section 303(b). Moreover, NOAA's Office of Ocean Exploration and Research is partnering with the Department of the Interior's Bureau of Ocean Energy Management, Regulation and Enforcement (formerly Minerals Management Service) and the U.S. Geological Survey (USGS) in a 2010-13 study to explore and study several mid-Atlantic canyons with an emphasis on deep-sea corals.

Further reading

Implementation of the Deep-Sea Coral Research and Technology Program 2008–2009. Report to Congress. February 2010.
<http://www.habitat.noaa.gov/pdf/pub_deep_coral_report_2010.pdf>

NOAA, Coral Reef Conservation Program. 2010. NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems: Research, Management, and International Cooperation. Silver Spring, MD: NOAA Coral Reef Conservation Program. NOAA Tech. Memo. CRCP 11.
< http://coris.noaa.gov/activities/deepsea_coral/>

Lumsden S.E., Hourigan T.F., Bruckner A.W., Dorr G. (eds.). 2007. The State of Deep Coral Ecosystems of the United States. NOAA Tech. Memo. CRCP-3. Silver Spring, MD.
< http://coris.noaa.gov/activities/deepcoral_rpt/>

Key Question: Please explain more about biomedical research on deep-sea corals? For research and production, are deep-sea corals being harvested?

Answer: Researchers are interested in deep-sea corals potentially because of special disease-fighting compounds that they may contain. Scientists are investigating the ability to replicate these compounds in the lab for both deep-sea corals and sponges. Right now the research is in its infancy, being conducted by a research team at Harbor Branch, FL. If in the future they will be commercially harvested, there should be a fishery management plan in place, which is the approach the South Atlantic and Pacific Islands Fishery Management Councils have taken.

Key Question: Do each of the NMFS Science Centers have their own multi-beam sensors and other equipment?

Answer: No, resources are limited, so some work is done by and on charter boats.

Key Question: Do we have both presence and absence information for corals in the northeast?

Answer: We only have presence information. We know little about those habitat characteristics which allow for suitable colonization and growth.

Key Question: If the Council were to consider adding deep-sea coral protection under the discretionary provisions of the MSA, would it be possible to utilize the information from the USGS study in the northeast prior to the 2013 and 2015 research cruises?

Answer: If requested for protection, the location and other information about deep-sea corals would be compiled by the DSCRTP and presented to the Council. This information would then available for the Council to utilize, and the deep-sea coral research team will work with the Council to meet this objective if it is the Council's wish.

Key Question: Are deep-sea corals acting as habitat for fisheries species, and is our gear affecting them?

Answer: Studies show differing degrees of habitat function in different regions. For example, in Alaska, 80% of commercially important rockfish species were observed in association with deep-sea corals. Other studies have shown a correlation between deep-sea corals and fisheries species. The current theory is that at the minimum, deep-sea corals provide complex habitat, and fish like complex habitat, but further research is needed to discern the specifics of this relationship. If the ecological relationships, locations, and gear impacts to deep-sea corals are a priority for the Council, it was recommended to the Council that they indicate these topics as research priorities to the Science Centers.

Key Question: Has funding been identified to continue research on deep-sea corals in the canyons?

Answer: The current plan is to provide approximately $800,000 per year for 3 years in FY13-15 for the mid-Atlantic and New England regions, depending on the budget.

Key Question: Have you conducted a study to determine the accurate age of the coral colonies?

Answer: While studies are limited in the northeast region, recent research conducted in the Pacific Islands found colonies up to 4,000 years old. In the south Atlantic region gold corals have been found that are up to 2,000 years old.

Key Question: How do you study coral distribution, bycatch, and impacts to corals from fishing?

Answer: Bycatch monitoring is one way to identify impacts to corals. Trawl surveys conducted by Science Centers also provide valuable information. Some reef-forming corals are identifiable in multibeam maps, but non-reef forming corals often do not show up. These non-reef forming corals are often found in relatively featureless areas, so it is critical that we identify their locations and distributions as well.

NOAA/NMFS'S HABITAT RESTORATION PRIORITIES IN THE MID-ATLANTIC

John Catena, Northeast Regional Supervisor, NOAA/National Marine Fisheries Service, Office of Habitat Conservation/Restoration Center, Gloucester, MA

Major Recommendations

- Participate with regional Restoration Center staff in our regional prioritization efforts to identify priority watersheds and waterbodies for habitat restoration.
- Work with regional Restoration Center staff and local partners in the mid-Atlantic to develop funding proposals and projects of mutual interest to the Council and the Restoration Center.
- Explore the possibility of becoming a formal partner with the Restoration Center in response to our FY 2012 solicitation for partnerships.
- Advocate the importance of assessing and understanding the link between nearshore and estuarine habitats, diadromous fish species, and federally managed species.
- Work with the Restoration Center to develop outreach products that address the importance of habitat restoration for federally managed species.

Introduction

Habitat restoration is a major tool that NOAA/NMFS uses to address the loss or degradation of fishery habitat. This presentation provides an overview of the NOAA/NMFS Restoration Center habitat restoration priorities in the mid-Atlantic region.

Restoration Center programs

NOAA/NMFS's Restoration Center manages a number of programs to restore fishery habitat throughout the United States. The goals of these programs are to rebuild fishery habitat lost to adverse impacts caused by wetland filling, diking, dam construction and other forms of development, oil spills, erosion, and other causes of degradation; to increase and sustain fish populations; and to increase public stewardship by engaging local citizens in habitat restoration. NMFS provides funding and technical assistance to carry out a wide array of habitat restoration activities to accomplish these goals. However, we look to the local community to carry on and sustain the activities once we have completed a project.

NOAA/NMFS's Community-based Restoration (CRP) and Open Rivers Initiative (ORI) Programs provide funds and technical assistance to local, state, and regional organizations for habitat restoration projects through national and regionally competitive solicitations that run throughout the course of the year. Project proposals are evaluated on the basis of their technical merit, feasibility, cost-effectiveness, and benefits to NOAA trust resources. We seek to leverage additional funding and stewardship through collaboration with other major funding organizations. Funding amounts for projects can vary from $50,000 to more than $500,000 per project. A major cornerstone of our CRP and ORI programs is collaboration through national and regional partnerships. We have established formal three-year partnerships with a number of national and regionally-based organizations to assist us in funding and implementing projects. These partnerships take advantage of NOAA/NMFS's and our partner's technical and administrative strengths and can streamline the application and funding process for local grant recipients. Typically the Restoration Center works with the national or regional partner to identify, fund, and oversee the implementation of habitat restoration projects that meet the particular partner's and NOAA/NMFS's goals. These partnerships are highly successful in leveraging both additional funding and technical expertise from both our formal partners and from other local, state, and regional organizations. Those national and regional partnerships relevant to the Northeast include Chesapeake Bay Trust, American Rivers, Trout Unlimited, Gulf of Maine Council on the Marine Environment, Restore America's Estuaries, The Nature Conservancy, and Fish America Foundation.

NOAA/NMFS received nearly $167 million from the American Reinvestment and Recovery Act (ARRA) in 2009 to restore coastal habitat and help jump start the economy by supporting thousands of jobs. In the northeast region we awarded $35 million to 11 projects in nine states from Maine to Virginia which were selected through a nationally competitive request for proposals. Funding amounts for these projects ranged from $750,000 to $10.6 million. ARRA funds have allowed the Restoration Center to implement larger scale projects in the northeast and other regions where we have not had that opportunity in the past and allowed for a much quicker transition to on the ground implementation as grant recipients did not have to search for multiple sources of funds to complete their projects. The selected ARRA projects address fish passage and dam removal, tidal wetlands restoration,

oyster restoration, and eelgrass restoration. For example, NOAA/NMFS is working with the Maryland Department of Natural Resources and American Rivers to restore fish passage to the Patapsco River in Maryland. Just over $4 million was provided to remove the Union and Simkins dams, with dam removal completed in 2010. Additional funding from this ARRA grant is now being used to monitor the ecological and physical responses to the dam removals and to design the removal of the Bloede dam, which is the first blockage on the river. Completion of these projects will open passage to 25 miles of mainstem habitat in the river and an additional 374 miles of habitat in tributaries to the Patapsco.

NOAA's Damage Assessment, Remediation, and Restoration Program (DARRP) seeks to restore natural resources injured by oil spills and hazardous waste discharges. The Oil Pollution Act of 1990 and the Comprehensive Environmental Response, Cleanup and Liability Act (or "Superfund" law) authorizes NOAA and other natural resource trustee agencies to claim damages for injuries to natural resources and to use those funds to restore the injured natural resources. In general, the program assesses and quantifies injuries to natural resources, seeks damages for those injuries from the responsible parties, implements restoration, and monitors progress to ensure restoration goals are met. Throughout the northeastern U.S. there are approximately 100 active sites where NOAA is working with co-trustees to assess injuries and restore injured natural resources. For example, NOAA, the U.S. Fish and Wildlife Service, and the states of Pennsylvania, Delaware, and New Jersey recently approved a $24 million settlement for the Athos oil spill which occurred in the Delaware River in 2004. These funds will be used for a variety of projects to restore fish passage, wetlands, degraded shorelines, and waterfowl habitat throughout the Delaware estuary.

Regional restoration priority activities

In the northeastern U.S., the Restoration Center funds and carries out a variety of habitat restoration projects to address degraded fishery habitat under the different programs described above. However, of primary importance in the mid-Atlantic region are projects to restore diadromous fish, tidal wetlands, and shellfish resources. Diadromous fish restoration projects in the mid-Atlantic typically target alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American shad (*Alosa sapidissima*), and American eel (*Anguilla rostrata*). Projects to restore these resources include dam removals, structural fish ladders, and other forms of fish passage including rock ramps and fish by-pass channels. Removal of un-wanted, obsolete dams that no longer serve a useful societal purpose is the Restoration Center's priority. However, in those situations where removal is not feasible, construction of other means of fish passage can be an acceptable alternative. All of these methods are intended to restore access to historic spawning and rearing habitat for these species. Thousands of blockages in rivers and streams throughout the region have been identified as one of the primary limiting factors to the successful restoration of these species. In addition to restoring access to historic spawning and rearing habitat, dam removal projects can also provide other ecological benefits such as improving water quality, restoring a more natural discharge of sediment, and improving resident fish and benthic invertebrate populations. Beyond their ecological benefits, dam removals can also remove a financial and safety liability for the local property owner, which often is a local municipality.

Tidal wetland restoration projects in the mid-Atlantic typically consist of reconnecting tidal hydrology to formerly impounded or filled wetlands and constructing "living shorelines" in areas experiencing wetland loss due to erosion and/or subsidence. Fill removal projects typically consist of excavating filled areas, regrading to intertidal elevations, planting native intertidal wetland vegetation, and creating tidal channels to connect the restored wetland to the adjacent waterbody. Living shoreline projects are a technique that has largely been used in the Chesapeake Bay region, but has also been employed in a limited fashion in other parts of the mid-Atlantic. The technique is an alternative, more ecologically friendly means of controlling shoreline erosion and minimizing further loss of shoreline habitat and degradation of the immediate nearshore habitat. Traditional hardened structures along the shoreline; e.g., seawalls, bulkheads, and rock revetments cause an abrupt transition in ecological zones and diminish the natural ecological value of a shoreline. Specifically, they increase loss of intertidal habitats, decrease the diversity and quality of habitats on both sides of the structure, and impede those natural processes that are necessary and beneficial for healthy aquatic ecosystems. Conversely, living shorelines typically use a combination of sand, intertidal wetland vegetation, and rock sills to maintain stability for the newly created intertidal shoreline. The goal is to retain much of the wind, tide, and storm-related wave protection of a hard structure, while maintaining some of the ecological values of natural shorelines.

Shellfish restoration in the mid-Atlantic is largely focused on oyster restoration with some limited efforts focused on hard-clam restoration on Long Island. NOAA/NMFS's oyster restoration funding consists of relatively large scale efforts in the Chesapeake Bay, working closely with the states of Maryland and Virginia. Limited funding for oyster restoration has also gone to other parts of the region including the Hudson-Raritan estuary and Delaware Bay. Techniques used to enhance local oyster populations is to create oyster reefs by planting oyster or other available shell to create a substrate for natural settlement of oyster spat. In

addition, funds are used to plant oyster "spat on shell" on oyster reefs where natural spawning populations are limited. Oyster restoration is a key priority for the Restoration Center in the mid-Atlantic because of the precipitous decline this resource has experienced relative to historic levels and the high ecological value oysters provide to the ecosystem, including serving as a habitat for other benthic and fish species and their ability to improve water quality.

To improve the Restoration Center's selection and performance of projects in order to ensure we are spending our limited funding in the most cost-effective manner, we are embarking on two new efforts. We are working across the region to develop geographic priorities for our fish passage, wetland, and shellfish restoration projects; i.e., identifying those watersheds and water bodies throughout the region where we believe our funding will have the most significant impact. Currently we are selecting and funding projects on an opportunistic basis in response to a number of request for proposals (RFPs) that are issued throughout the year. The goal of the prioritization effort is to assist us in geographically targeting our funding in a more strategic manner such that we are spending our funds to have the greatest benefit for NOAA trust resources. We are currently working with partners in the Chesapeake Bay region to identify the highest priority fish passage blockages throughout that region's watersheds. This effort will result in a list of priority diadromous fish passage projects and priority watersheds in the region.

Another effort to improve project selection and performance is the development of a regional integrated monitoring program. While we have been providing funds to monitor the ecological response to our restoration projects, we have not been doing so in a consistent fashion nor have we been feeding the results of those monitoring efforts in a consistent fashion back into program performance. The goals of the regional monitoring program are to assess project quality, assess the project's ecological effectiveness, improve future project implementation, address questions of regional significance and regional performance, and develop an information base to drive future priorities. For each of our project types a regional network of sites is being established that will be monitored in a consistent manner to address regionally important questions, the results of which will be integrated back into the program to influence program priorities and project selection and to improve restoration techniques.

Key Question: What organizations does the Restoration Center partner with?

Answer: The Restoration Center often works with the Army Corps of Engineers. Recently, the Restoration Center worked with the Corps on impacts to oysters in Chesapeake Bay.

Key Question: How are the size and cost of restoration projects determined?

Answer: In instances of damage remediation, settlements are determined through the damage assessment process. Damage is typically quantified through estimates of the acreage or populations impacted. The restoration project is then scaled to match the injury to the resource. The cost of the project is then calculated.

SUPPORTING MID-ATLANTIC HABITAT AND ECOSYSTEM PRIORITIES THROUGH THE NATIONAL SYSTEM OF MARINE PROTECTED AREAS

Lauren Wenzel, National MPA System Coordinator, NOAA/National Ocean Service, National Marine Protected Areas Center, Silver Spring, MD

Major Recommendations

- *Developing a regional MPA network for the mid-Atlantic*. The MPA Center is working to support regional coordination and networks of MPAs as resources permit through training and small grants. Networks can help protect a wide range of habitats needed by species at different life stages, and can provide opportunities for partnerships and sharing of resources. For example, Friends of Rookery Bay National Estuarine Research Reserve is leading an effort to develop a regional MPA plan for the southeast that will establish common priories and actions. A similar type of effort could be undertaken for the mid-Atlantic.
- *Conducting "condition report" workshops for selected MPAs.* The MPA Center has been working with the North American MPA Network (NAMPAN), a cooperative effort among MPA agencies in the U.S., Canada, and Mexico, to develop a "report card" format on MPA conditions, based on the Conditions Reports used by the Office of National Marine Sanctuaries. NAMPAN is interested in extending this effort to the Atlantic Coast, and is interested in identifying potential partners who wish to develop condition reports for their sites as both a monitoring and a communications tool.
- *Mapping human uses of the ocean*. The MPA Center has developed a participatory GIS methodology to map 30 major human activities across three sectors (industrial and military, fishing, and non-consumptive). These maps will contribute to improved management and planning for MPAs and other approaches to coastal and marine spatial planning. The MPA Center has completed human use mapping for some states, and is interested in partnering in the mid-Atlantic region to continue and complete ocean use mapping.
- *Integrating MPAs with the Integrated Ocean Observing System (IOOS)*. The MPA Center is working with the national IOOS program and its regional associations to identify issues for coordination between these two national systems, including how MPAs can be used as platforms for ocean monitoring, the range of observing and monitoring requirements at MPAs, and the ocean monitoring parameters and processes most important to monitoring environmental changes at the national scale. The MPA IOOS Task Team is interested in identifying key monitoring parameters for MPAs at the regional scale, and ways in which climate change monitoring can be better incorporated into regional and national observing systems.
- *Providing training*. The MPA Center has established a partnership with the Office of National Marine Sanctuaries (ONMS) to bring the international training expertise of the ONMS to a domestic audience. ONMS and MPA Center have the capacity to provide training on adaptation to climate change, developing MPA networks, coastal and marine spatial planning, and other topics.
- *Providing an information clearinghouse on MPA resources*. The MPA Center hosts several databases on MPAs and spatial management, including the MPA Inventory and the de facto MPA Inventory (includes areas conserved for reasons other than conservation, such as safety zones). The MPA Inventory is currently being expanded to include more data on MPA resources and authorities. This information is readily accessible, and can help inform the MAFMC's work on spatial management.

The National System of Marine Protected Areas (MPAs) is authorized by Executive Order 13158 to "develop a scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems and the Nation's natural and cultural resources." The national system was formally established with the completion of the "Framework for the National System of Marine Protected Areas of the United States of America" in November 2008, and the first sites joined the system in April 2009. It provides a mechanism for MPA programs across all levels of government to work together toward common conservation objectives. The system currently includes 254 federal, state and territorial MPAs covering an area of 175,000 square miles and will expand over time through an annual nomination process. In all, the system includes sites in 31 states and territories, plus additional offshore areas under federal jurisdiction; 4% of U.S. waters (0-200 nautical miles, including estuarine areas and the Great Lakes) are covered by the national system sites and every major ecoregion in the U.S. is represented in the national system. The national system has three goals: conserving and managing natural heritage, conserving and managing cultural heritage, and the sustainable production of marine resources.

As noted in the Framework, marine areas in the U.S. are threatened by "coastal and offshore

development, overfishing, a changing climate, natural events, and other sources, straining the health of marine ecosystems and the Great Lakes. Impacts to these intricately balanced environments include declining fish populations, degradation of…. vital habitats, threats to rare or endangered species, and loss of artifacts and resources that represent the diverse cultural heritage of the United States. The effects of these losses are significant and jeopardize the social and economic fabric of the nation." These threats are also present in the mid-Atlantic, together with the pressure for a wide range of existing and emerging ocean uses. MPAs are an important tool for conserving resources in the face of these pressures, and the national system can help existing MPA programs work together more effectively.

The majority (65%) of the total area of the national system is in either uniform or zoned multiple use sites that allow a variety of human activities, including fishing and other extractive uses. In contrast, about 27% of the area of the national system is considered no-take and prohibits the extraction or significant destruction of natural or cultural resources. Papahanaumokuakea Marine National Monument, a zoned no-take site that has eleven no-take zones covering approximately 44,000 square miles, makes up nearly all of the no-take area in the national system. Less than 1% of U.S. waters overall are no-take.

The National System of MPAs was established to both strengthen and expand protection of marine resources through MPAs. The system is working to support existing federal, state, and territorial MPA programs through technical assistance, training, and a new partnership with the National Fish and Wildlife Foundation to provide MPA Partnership Grants to national system members to work together on common conservation priorities. The national system will also support the protection of marine resources by informing decisions about the establishment of new MPAs by providing data, information and tools on ecologically important areas and human uses of the ocean. These efforts will be coordinated with the U.S. Ocean Policy, including the Coastal and Marine Spatial Planning Initiative.

In the mid-Atlantic, the national system contains 43 sites, with 34 sites managed by federal agencies; New Jersey, Maryland, and Virginia have nine state-managed sites in the system. The MAFMC and NMFS have nominated four MPAs under the Tilefish Management Plan to be members of the national system – Lydonia Canyon, Norfolk Canyon, Oceanographer Canyon, and Veatch Canyon. These are expected to become members of the national system in early 2011. The MPA Center has committed, through the Chesapeake Bay Executive Order, to work with the mid-Atlantic states to identify their interest in mapping ocean uses, and to continue to support existing MPA programs through the national system of MPAs.

Key Question: What are the main hurdles faced by MPAs?

Answer: There is a perception that MPAs are automatically no fishing or no take areas, but we know that's not the case. MPAs are set aside for a specific purpose, which does not always include bans on fishing. For example, an MPA with fishing access was recently created for tilefish. Only about 1% of MPAs in the U.S. are no take.

Key Question: Is there a resource for education and outreach on MPAs?

Answer: The MPA program has sponsored an edition of *Current*, a magazine for marine educators, and would be happy to share it.

NOAA'S NATIONAL MARINE SANCTUARY PROGRAM: OPPORTUNITIES TO SUPPORT MID-ATLANTIC AND NEW ENGLAND CANYON AND SEAMOUNT HABITAT CONSERVATION

Reed Bohne, Northeast and Great Lakes Regional Director, NOAA/National Ocean Service, Office of National Marine Sanctuaries, Savannah, GA

Major Recommendations

- The National Ocean Service and NMFS will coordinate with MAFMC and other interested organizations to convene a workshop on canyon and seamount habitat in the mid-Atlantic and New England regions to assess the status of resources, state of scientific knowledge, resource threats, and conservation alternatives available through the Magnuson-Stevens Fishery Conservation and Management Act, National Marine Sanctuaries Act, and other authorities.
- Support and encourage surveys and research to address fundamental questions regarding the diversity, distribution, and abundance of species living in canyon and seamount features in the mid-Atlantic and New England regions.

Recently there has been increasing interest in protecting and conserving the rich and diverse biological resources found in the submarine canyons and seamounts off the mid-Atlantic and New England coasts. The area which corresponds generally with the jurisdiction of the MAFMC is being evaluated for special protection under the Magnuson-Stevens Fishery Conservation and Management Act and other authorities. In 2009, the Governors of New York, New Jersey, Delaware, Maryland and Virginia addressed the importance of protecting these submarine features through their work under the Mid-Atlantic Regional Council on the Ocean (MARCO). A recent MARCO report noted:

> The varied ocean habitats of the mid-Atlantic region support a rich diversity of marine life. Some of the most remarkable ocean habitats in the mid-Atlantic region are its submarine canyons. These canyons are located 70-100 miles offshore along the edge of the continental shelf, and vary in size and length with some as deep as 10,000 feet and as large as the Grand Canyon. The canyons are physically complex with outcrops, steep slopes, varying substrates, and support a rich diversity of marine life… One of the Mid-Atlantic Regional Council on the Ocean's (MARCO's) goals is to ensure that key ocean habitats of the mid-Atlantic are protected from activities that threaten their sensitive and unique features, marine populations, and ecological processes.

In addition to the Magnuson-Stevens Act, NOAA offers opportunities to consider comprehensive protection, conservation, and management of areas such as canyon and seamount features through the National Marine Sanctuaries Act (NMSA). Established in 1972, national marine sanctuaries are designated to protect those areas of the marine environment which are considered to be of special national significance.

The Office of National Marine Sanctuaries currently manages 14 separate sites ranging in size from less than a square mile to over 139,000 square miles. Each sanctuary is governed by individual site regulations adopted to address the specific resources and threats of that particular site. While some sanctuaries focus primarily on shipwrecks or even particular species, all sites develop a management plan tailored to the specific resource conditions and needs of the area. Each management plan addresses the fundamental elements in support of NOAA's trustee responsibilities to conserve, protect, and enhance the biodiversity, ecological integrity, and cultural legacy within each sanctuary area. These key elements include: resource protection programs; science to understand ecological processes and monitor and predict change; education and outreach activities for national, regional, and local audiences; and, a strong commitment to local community and civic engagement in ocean governance at each national marine sanctuary.

Advisory Councils

Every sanctuary has established an Advisory Council comprised of citizens representing the diverse interests of the community whether they are recreational, commercial, scientific, educational, or business oriented. The Councils advise and help guide ongoing sanctuary management and future plans as devised through the sanctuary management plan process. Like the Fishery Management Councils the sanctuary Advisory Councils ensure that the interests of the stakeholders are well represented, and that they have an independent and influential voice in both the management of sanctuary resources and the decisions affecting relevant conservation policies and practices.

Advisory Councils have been particularly active in the last few years in advocating for expansions of a number of existing sanctuaries. They have encouraged NOAA and their Congressional representatives to consider boundary expansions at the Gulf of the Farallones, Cordell Bank, Thunder Bay, and the Monitor sanctuaries. Other federal, state, local and non-governmental interests have proposed new sanctuary areas in many regions of the country. In the mid-Atlantic region the Sanctuary Program is evaluating proposals that have been submitted for a possible site in the Chesapeake Bay, and a site or sites that protect mid-Atlantic canyon areas.

Mid-Atlantic and New England canyon and seamount proposal

In 2010, a request to consider mid-Atlantic and New England canyon and seamount areas for possible sanctuary designation was submitted to NOAA by seventeen marine scientists predominantly from northeast and mid-Atlantic universities. The request identified fifteen submarine canyons from Norfolk Canyon in the mid-Atlantic north to Heezen Canyon off Georges Bank in New England. They also listed four New England seamount features further offshore for consideration. The letter emphasized that:

> Today we recognize how extraordinary and vulnerable these canyons and seamounts are and recent marine spatial planning efforts have highlighted these areas for protection. As human uses of the sea expand ever deeper, we suggest it is time to again consider the inclusion of submarine canyons and seamounts off the northeast United States in the network of National Marine Sanctuaries.

In response to the letter, NOAA Administrator Jane Lubchenco encouraged the scientists to work closely with the New England and Mid-Atlantic Fishery Management Councils and further stated that:

> Your letter specifically recommends that NOAA's Office of National Marine Sanctuaries (ONMS) and National Marine Fisheries Service (NMFS) collaborate to consider these potential areas. I fully support this recommendation. ONMS staff will continue to work with NMFS in evaluating your proposal. They will inform you as to the next steps regarding whether to initiate more formal and public consideration of canyons and seamounts as potential locations for sanctuary designation, fishery closures, or other actions.

Sanctuary review and recommendation

The procedures for designating new National Marine Sanctuaries are described in regulations (15 CFR Part 922) implementing the provisions of the National Marine Sanctuary Act. The regulations specify the steps required to list an area for potential consideration and the extensive process which follows the provisions of the National Environmental Policy Act for public review and evaluation prior to designation. NOAA has not at this time made a decision to list the New England and mid-Atlantic canyons and seamounts described in the request as a potential area or areas for sanctuary designation. As indicated in the letter from NOAA Administrator Lubchenco, preliminary consultations within the Agency to evaluate the merits of protections through the Sanctuaries Act or Magnuson-Stevens Act have been initiated. NOAA intends to work closely with the New England and Mid-Atlantic Fishery Councils, MARCO, the academic community, and non-governmental interests to assess the appropriate measures necessary to ensure that the valuable and vulnerable resources of canyon and seamount communities are properly conserved.

The President's National Ocean Policy establishes a framework for comprehensive and coordinated approaches to supporting ecosystem protection and restoration in areas such as the submarine canyons of the mid-Atlantic region. These features have been highlighted in recent marine spatial planning efforts for the region. NOAA plans to integrate assessment of these habitats with the emerging regional coastal and marine spatial planning initiatives in partnership with MARCO to consider use of possible sanctuary or fishery authorities for improved conservation of canyon resources.

Key Question: When there is a petition or request for a sanctuary designation, what is the usual timeline?

Answer: Once it's been formally initiated, it typically takes 4-6 years to complete the process and bring a sanctuary online. The procedures for sanctuary creation are currently being reevaluated, and that process needs to play out before any new areas will be considered.

Key Question: What is the status of the Monitor National Marine Sanctuary?

Answer: The Monitor National Marine Sanctuary has had initial scoping meetings for potential expansion. There are suggestions to encompass other shipwrecks in the area. If an expansion is enacted, it would be completed as a separate process in addition to the standing Monitor National Marine Sanctuary plan. That expansion would not be part of the ongoing National Environmental Policy Act (NEPA) process to update the current Monitor National Marine Sanctuary plan. The Sanctuary Program would consult with the Council at the very beginning of the process for considering expansion, particularly if there were impacts to fisheries.

Key Question: What are the differences between designating protections through the Magnuson-Stevens Act or as a sanctuary? Does the Council have the final say in the Sanctuaries Act for developing fishing regulations?

Answer: The Magnuson-Stevens Reauthorization Act provides a number of tools to accomplish the goals of the protected area. The main distinction is that under the Sanctuaries Act all activities that may impact the resources can be managed and regulated. Also, programmatically there is permanence to a sanctuary – through dedicated staff, educational programs, research, and enforcement. These can act to supplement the authorities in the Magnuson-Stevens Act. The final authority for fishing regulations would lie with the Secretary of Commerce, so the sanctuaries work with the Councils early and often to avoid elevation.

Key Question: Regarding the proposal to initiate the process for establishing a sanctuary in Chesapeake Bay, what is the timeframe and where is the proposed area?

Answer: The proposal identified Mallows Bay on the Potomac, as a number of WWI vessels were sunk there. This is the largest concentration of shipwrecks in the U.S. The process is in the beginning stages; the Sanctuary Program has not yet formally initiated the process.

CONNECTING STATE COASTAL LAND CONSERVATION PRIORITIES WITH FISHERY HABITAT CONSERVATION PRIORITIES

Elaine Vaudreuil, Manager, NOAA/National Ocean Service, Office of Ocean and Coastal Resource Management, Coastal and Estuarine Land Conservation Program, Silver Spring, MD

Major Recommendations

- MAFMC staff and NMFS regional habitat conservation should get to know the state Coastal and Estuarine Land Conservation Program (CELCP) leads in the region. Their contact information can be found at: < http://coastalmanagement.noaa.gov/land/media/celcpstateleadcontacts.pdf>
- Council staff should review state CELCP plans to identify shared priority habitats or landscapes, and, if desired, contact state CELCP leads to share information on additional fisheries priority habitats, if not addressed in the plan.
- CELCP staff should notify the MAFMC and NMFS regional offices of funding opportunities under the program.

The objective of this presentation is to give the Council an overview of the Coastal and Estuarine Land Conservation Program (CELCP) and identify potential connections between fishery habitat conservation priorities and habitats or areas that have been identified as priorities by coastal states for long-term conservation. Coastal states and Fishery Management Councils are likely to have a lot of common habitat interests in coastal watersheds and estuaries, from tidal and forested wetlands to vegetated shoreline buffers. This presentation identifies ways the MAFMC may engage with the CELCP.

Overview of the Program

•The purpose of the CELCP is to protect lands with significant ecological, conservation, recreational, historic, and aesthetic values or lands that are threatened by conversion, giving priority to those projects that can be effectively managed and protected, have significant ecological value, are under imminent threat of conversion, and mitigate the impacts of coastal population growth

•The CELCP was established in 2002 and transitioned from an earmarked to a fully competitive program in 2007.

• The Program received $20 million in FY 2010 appropriations and the President's budget request for the CELCP for FY 2011 is $25 million.

•Since its inception, the Program has funded more than $200 million in conservation projects in 28 states and territories, protecting a total of more than 50,000 acres.

•Projects can vary significantly in the types of habitats or features they protect. They frequently feature tidal and freshwater wetlands, dunes or barrier islands, large forested coastal tracts, vegetated shoreline buffers, habitats suitable for restoration, waterfront open space and/or access for non-motorized watercraft, etc.

How the Council might get involved with the Program

•Get to know a state's priorities for coastal land conservation – read their CELCP plan.

•Get to know a state's CELCP lead. Contact the state CELCP lead if you'd like to discuss, coordinate; or, if the plan is in draft, submit comments.

•If you have a property or area in mind, contact the CELCP lead to understand the state's process for nominating projects and find out if there might be a public entity or non-governmental organization (NGO) partner interested in pursuing the project.

•Consider writing letters of support for project proposals that support the Council's habitat conservation priorities.

Key considerations for participating

A variety of key considerations for participating in CELCP acquisition projects include the timeline for project proposals and funding (in a typical year), the requirement for willing seller transactions only, and public ownership and permanent protection of lands acquired through the Program for long-term conservation. Additional information on the detailed requirements for acquisition projects (and information for potential project applicants) can be found on the CELCP website at <http://coastalmanagement.noaa.gov/land/> under the links for "Funding Opportunities" and "For Recipients."

Key Question: What is the annual funding level?

Answer: The Program receives $80-100 million in proposed projects; of that, they typically are able to fund $20-25 million.

POLICY/MANAGEMENT PANEL DISCUSSION WITH COUNCIL

Rapporteur: **Joe Nohner,** NOAA/National Marine Fisheries Service, Office of Science & Technology, Silver Spring, MD

Summation

The discussion focused on specific actions the MAFMC could take to ensure sustainable fish populations and a robust fisheries economy, emphasizing the significance of EBFM and habitat to achieving these goals. In the current funding environment, it is necessary to weigh future benefits against current needs carefully. The MAFMC should be strategic in supporting and collaborating to maximize benefits at both time scales. In order to influence the production of priority science for the Council and provide the tools necessary for improved EBFM and habitat conservation, there were a number of recommendations from the discussion.

It was suggested that the Council identify key decision processes. The Council was advised to begin writing letters on behalf of projects which were beneficial to the Council's interests. Lou Chiarella (NMFS/Northeast Regional Office, Habitat Conservation Division; speaking for Peter Colosi), advised that this strategy has been a successful strategy for the NEFMC. The NEFMC, for example, tends to write letters for large conservation and restoration projects that would have significant beneficial impacts. It would also be possible to write letters raising concerns about projects which pose a threat to fisheries resources. Lou Chiarella offered to be a point of contact for information on such projects should the Council request it, and offered to provide information on projects which come to his attention or those which the Council expresses interest in.

It was also recommended that the Council build upon activities and processes which they already utilize. For example, it was recommended that designation and consultations for EFH and habitat areas of particular concern (HAPCs) is an area in which the Council could have more input through letters to the NMFS Regional Office (Lou Chiarella).

One suggestion was prioritizing the inclusion of habitat information into stock assessments and to factor habitat limitations into fisheries management. The suggestion built upon the observation that habitat condition is generally decreasing, and thus population baselines and predictions may be overestimates. In order to account for considerations such as this, stock assessments which include habitat-specific life history rates (e.g.; mortality, growth), habitat-specific sampling protocols (e.g., refining estimates based on habitat type), and other improvements to the understanding about how habitats and ecosystems affect population dynamics should be a priority for the Council. By highlighting these science needs and incorporating available habitat information, the Council might better maximize fisheries production.

Offshore habitat issues were highlighted as a broad and growing concern. After the presentation on deep-sea corals and comments from the audience, it was clear that more information about the distribution of corals in both nearshore and offshore environments was needed. The impacts of corals and other structures on fish communities, fish population dynamics, and ultimately fisheries productivity require more study.

In the short term, it was recommended that the Council utilize partnerships with the various management and science groups throughout the region for collaboration in new projects, collecting and synthesizing information, and leveraging existing funds to accomplish the habitat and ecosystem science objectives of the Council. Such collaborations, built upon mutual interests within the same geographic area, are rare but necessary. In the long term, it was recognized that the Council should identify and support the development of new resources to implement ecosystem-based management and habitat conservation.

A recurring point in the discussion was that habitat conservation, marine protected areas, and other ecosystem based fishery management approaches should and do focus on providing sustained, productive fisheries and jobs based off of those fisheries.

Conclusions

•The panel recommended that the Council identify decision processes in NMFS management and express their support for projects which align with the Council's objectives. Possible examples for such decisions are the identification of key areas for restoration and EFH or HAPC consultations.

•The panel recommended that the Council write letters on behalf of projects of interest. Lou Chiarella, NMFS/Northeast Regional Office, offered to provide information on projects which could be targeted for Council support.

SCIENCE PANEL

NMFS HABITAT ASSESSMENT IMPROVEMENT PLAN (HAIP) – AN OVERVIEW

Thomas Noji, NOAA/National Marine Fisheries Service, Northeast Fisheries Science Center, Director, James J. Howard Marine Sciences Laboratory, Highlands, NJ

Major Recommendations

- NMFS, along with the Fishery Councils, should develop criteria to prioritize stocks and geographic locations that would benefit from habitat assessments.
- NMFS habitat and stock assessment scientists should work together with fishery managers to initiate demonstration projects that incorporate habitat data into stock assessment models, perhaps focusing on well-studied species.

The National Marine Fisheries Service published in 2010 a new planning document, the "National Marine Fisheries Habitat Assessment Improvement Plan" (HAIP). Through this Plan, NMFS establishes the framework to coordinate its diverse habitat research, monitoring, and assessments and to guide the development of budget alternatives and increased support for habitat science. The HAIP was written by a team of scientists from NMFS headquarters offices and Science Centers. It represents input from a variety of NMFS staff engaged in habitat science, stock assessments, and resource management at the six Science Centers and Regional Offices, the Office of Science and Technology, the Office of Habitat Conservation, and science program managers at each Science Center.

The goals of the HAIP are to:

•assist NOAA in developing the habitat science necessary to meet the mandates of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act and the economic, social, and environmental needs of the nation;

•improve our ability to identify EFH and HAPCs;

•provide information needed to assess impacts to EFH;

•reduce habitat-related uncertainty in stock assessments;

•facilitate a greater number of "Marine Fisheries Stock Assessment Improvement Plans" (SAIPs);

•contribute to assessments of ecosystem; and

•contribute to ecosystem-based fishery management (EBFM), integrated ecosystem assessments (IEA's), and coastal and marine spatial planning (CMSP).

Habitat can be characterized and described by the physical, chemical, biological, and geological components of the ocean environment. Habitat science is the study of relationships among species and their environment. Habitat science is not synonymous with ecosystem science, but habitats form the structural matrix of ecosystems, and an understanding of geospatial associations of species and their habitats can be one of the first steps in producing integrated ecosystem assessments. Notably, habitat science has received relatively little programmatic support compared to that received for other major disciplines (e.g., stock assessment science), and yet habitat information is needed in almost every NOAA program.

A habitat assessment is the process and the products associated with consolidating, analyzing, and reporting the best available information on habitat characteristics relative to the population dynamics of fishery species and other living marine resources. Indicators of the value and condition (or status) of habitat can be developed through a habitat assessment by understanding the relationships between habitat characteristics, the productivity of fishery species, and the type and magnitude of various impacts.

The HAIP defines three Tiers of Excellence for Habitat Assessments:

Tier 1 – Assess habitat associations for all life stages of Fish Stock Sustainability Index (FSSI) stocks using existing data.

Tier 2 – Upgrade habitat assessments to a minimally acceptable level for all FSSI stocks and life stages, which will require new or expanded data collection and research initiatives. This effort includes the production of habitat maps, determination of habitat-specific biomass or abundance, consideration of temporal and spatial variability in habitat use, and development of habitat theory and proxies to apply to data-poor stocks.

Tier 3 – Determine habitat-specific vital rates by life stage to quantify relationships between habitats and fishery production. This effort explicitly incorporates habitat and ecosystem considerations into stock assessments, develops habitat sensitivity and recovery indices to improve risk assessments and plans for protection and restoration, and develops baselines for IEA's.

From the HAIP questionnaires, NMFS scientists, resource managers, and Science Center program managers identified the following as major obstacles to producing and using credible habitat assessments:

•lack of habitat-specific abundances;

•insufficient staff to collect, process, analyze, and model habitat data;

•insufficient research on environmental effects;

•insufficient research on multispecies effects; and

•lack of habitat-specific biological information.

Key Question: The MAFMC created an Ecosystem Subcommittee, and one of the long-term terms of reference is identifying how we might transition toward EBFM. Eventually there is going to be the question of data needs and identifying the process for obtaining data. How can the Council work with the NEFSC on the prioritization side and what specific opportunities are there for the NEFSC to have more interactions with managers?

Answer: It's important to have more meetings like this and to make sure these dialogues and discussions continue as various levels. Having these sorts of forums is very important because you get the right people in the room; but it's even more important to follow up with some tangible actions. The fact that the Council changed the name of the Subcommittee is good because the Council recognizes that "habitat" in its most complex form becomes "ecosystem." The ecosystem is a matter of scale; the ecosystem approach really does begin with the aggregation of habitat information. Also, some of the programs and funding mechanisms at certain levels need to be well coordinated and we're seeing that within NOAA; for example, when you see the nine priorities of the Nation Ocean Policy. These are well coordinated in some larger programs, but that coordination doesn't stop at the federal level and some of that has to go down to the state and community levels also.

NMFS SCIENCE IN SUPPORT OF NEW MANAGEMENT INITIATIVES: PERSPECTIVES FROM HEADQUARTERS

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Major Recommendations

- NMFS supports an ecosystem-based approach to fisheries management, and seeks to develop and provide tools to accomplish this goal. NMFS strongly encourages the efforts of the MAFMC to build an ecosystem approach and recommends maintaining a dialogue to develop science products that meet the needs of the Council. One potential mechanism to accomplish this would be to develop and update the 5-year research priorities submitted to the NMFS Science Center Directors reflecting ecosystem and habitat science needs identified by the Council.
- NMFS supports the Council's acknowledgement of the importance of marine, estuarine, and riverine habitat to fish stocks and their ecosystems, and recommends a renewed effort to work with state and local partners in protecting fish habitat.
- NMFS recommends that the Council continue to seek recognition on the Regional Planning Body and that the Council participates to the fullest extent possible in the coastal and marine spatial planning process in order to maximize its impact on the process.

NMFS supports both traditional and new scientific approaches to providing sustainable fisheries and ecosystems. By incorporating ecosystem and climate change information into fisheries science, NMFS seeks to provide more accurate information for the resources we have the responsibility to manage. The National Ocean Policy helps to guide NOAA and NMFS science, and the Priority Objectives are highly relevant to the MAFMC. The Priority Objectives highlight a renewed emphasis on ecosystem-based fisheries management (EBFM). Given these objectives and the guidance of the Magnuson-Stevens Reauthorization Act, there is a need to determine how fisheries science and management fits into EBFM through Coastal and Marine Spatial Planning (CMSP). NMFS Science addresses these questions to support improved fisheries management support.

The cornerstone science product for NMFS management is the stock assessment. Across all Fishery Management Councils, NMFS needs to increase the number of stock assessments, reduce uncertainty in assessments, and incorporate ecosystem considerations into those assessments. The Stock Assessment Improvement Plan (SAIP) provided an inventory and analysis of stock assessments to determine needs going forward, and identified Tier 3 stock assessments as the goal for all fish stocks. Tier 3 stock assessments utilize equilibrium or non-equilibrium production models aggregated both spatially and over age and size. This inclusion of spatial and habitat information in stock assessments is important to minimize uncertainty and maximize accuracy. The number of stocks for which NMFS has produced an adequate assessment is increasing in large part due to the creation and use of the Expand Annual Stock Assessments (EASA) budget line. With $51 million in FY11, the EASA budget has increased the number of stocks with adequate assessments to nearly 140. This funding also supports research programs underpinning stock assessments such as Fisheries and the Environment (FATE), habitat assessments, and advanced sampling technology to improve surveys.

The application of EBFM will yield better fisheries science and management by accounting for the cumulative impacts of multiple concurrent factors such as pollution, coastal development, overharvest, predator-prey dynamics, and other ecosystem factors. NMFS has developed the integrated ecosystem assessment (IEA) framework to improve the study and management of the resources in the entire ecosystem. Science needs for EBFM include ocean observing systems, systematic reporting on the status of marine and coastal ecosystems through IEAs, ecosystem research plans which link human activities to ecosystems, and decision support tools that support adaptive approaches to human ecosystem uses. Successful EBFM will enable NMFS to restore fish populations, control invasive species, maximize ecosystem services, and restore species and the habitats upon which they depend.

The Ecosystem Principles Advisory Panel, which convened as a result of the 1996 Magnuson-Stevens Reauthorization Act, concluded that conservative single species management is the starting point from which to move toward EBFM. The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 builds toward the EBFM goal through the implementation of annual catch limits (ACLs). ACLs rely on reliable and accurate stock assessments, fisheries-independent surveys, and advanced technology to improve or enable surveys in untrawlable habitat. Improving NMFS's technical capacity

maximizes the accuracy of assessments and ACLs. These improvements enable the Councils to achieve the goal of setting ACLs as close to the Allowable Biological Catch (ABC) as possible without risking overfishing. It is important to include ecosystem considerations such as available habitat and impacts to reproduction and population dynamics in assessments and predictions for fisheries production.

Functioning habitat is essential to supporting a robust and healthy ecosystem, and is critical for successful fisheries. NMFS is focusing on providing improved and more usable habitat science to improve stock assessments, inform CMSP, and aid in the siting of renewable energy, aquaculture, and Marine Protected Areas. It is essential to have better information on the quantity, quality, and impact of fish habitat. The Habitat Assessment Improvement Plan (HAIP) is analogous to the SAIP, and is a plan to build resources for a habitat assessment and monitoring program to complement and support improved fisheries science. The HAIP and the National Habitat Assessment Workshop identified a number of habitat science goals, including funding pilot projects, prioritizing habitat assessment needs, improving the quality and usefulness of habitat assessments, and producing stock assessments that utilize habitat science. The long-term goal is to develop stock assessments with habitat data, tying species specific rates of production to habitat. Such improvements would result in greater accuracy and precision, providing increased confidence in ACLs, and benefitting the fisheries that we manage.

Climate change poses a serious threat to fisheries. Climate change may impact fisheries through changes to fish habitats, stock locations and dynamics, fishery allocations, communities and economies relying on fisheries, increased threats to vulnerable species, changing use and efficacy of protected habitats, and increased threats from invasive species. Studies suggest that the sea level could rise in the mid-Atlantic by as much as 0.3 m by end of the century, altering productive habitats. The National Climate Service Set (NCS) was established to provide scientific information addressing the causes of these problems. Specifically, the NCS's objectives are improved understanding of the changing climate system, integrated assessments of current and future states of the climate, mitigation and adaptation choices supported by climate science, and a climate-literate public that understands vulnerabilities to a changing climate and makes informed decisions. NMFS science seeks to build from NCS data products by determining how climate change will impact the fisheries NMFS manages. A recent study in the northeast, sponsored by NMFS's FATE program, identified changes in the distribution of populations for 24 of 36 species. Species shifted their distributions northward and down in the water column, presumably as a response to ocean warming. Critical issues facing NMFS include how to incorporate information such as this into stock assessments, how to conduct assessments differently to address shifts in populations or resources, and how to consider this information in management.

Integrated Ecosystem Assessments (IEAs) are the cornerstone tool for NOAA's implementation of EBFM. IEAs are a synthesis and quantitative analysis of information on relevant physical, chemical, ecological and human processes in relation to specified ecosystem management objectives. An IEA is a means to put a framework to EBFM approaches, allowing us to begin to quantify priorities for ecosystem and discern tradeoffs for different management decisions. Contingent upon FY11 funding, the northeast shelf IEA will conduct a region-wide stakeholder scoping session, work with Fishery Management Councils, industry, non-governmental organizations, and others to incorporate and prioritize objectives to implement an EBFM approach. Through this process, IEAs develop a means to bring ecosystem considerations into management responsibilities.

NMFS must balance current and future fisheries management needs. Increasing the number of days-at-sea funded by NOAA for stock assessments is a top priority in accomplishing NMFS's core science objectives. In 2011, NMFS may need to repurpose significant funds to mitigate declining survey days-at-sea. In addition to these surveys, the NMFS Office of Science and Technology supports about $8 million annually in projects that develop a deeper understanding of marine fisheries and the ecosystems that support them. NMFS is investing in new techniques for stock and habitat assessments to increase the efficiency, accuracy, and precision of science provided to fisheries managers. Developments in advanced sampling technology enable assessments in hard-to-sample habitats and increase the efficiency of current surveys. FATE's research puts such information in the context of environmental variability and addresses environmental impacts to productivity. The Comparative Analysis of Marine Ecosystem Organization further develops these ecosystem considerations, investigating ecosystem dynamics and building predictive models to inform decisions. Through the Ocean Acidification program and collaborations with the National Climate Service, NMFS seeks to build context and understanding for long-term challenges facing fisheries management. NMFS science seeks to utilize both cutting edge ecosystem science and traditional stock assessment science to address current management objectives, supporting a move toward improved ecosystem-based fisheries management.

Key Question: Where are the funding sources for marine mammal work, and what about sea turtles?

Answer: There are other funding lines which are addressing marine mammals, and there's quite a robust research program. For sea turtles, there's recently been a National Research Council (NRC) study on sea turtle

population assessment methods; what we're trying to do is support some research on assessment methods that are closely tied to what the NRC recommendations were. Basically we're trying to base our assessments more on at sea surveys rather than beach surveys as has been traditionally done, which was one of the major recommendations coming out of the NRC.

Key Question: It appears that a considerable amount of time, funds, and staff are going toward studies and "paper" products, rather than addressing such pressing issues as sea level rise. More consideration should be given to being proactive with these priorities, and coming up with actual mitigation strategies and practical solutions, and towards better utilizing funding and resources.

Answer: It's always a balancing act. We're trying to balance our core science of doing and supporting stock assessments versus emerging issues. Climate change is something that we're going to have to deal with; it's inevitable. With climate change, it can either be addressed through mitigation or adaptation. NMFS does not deal with the mitigation aspects of climate change, but NMFS is concerned with adaptation and if we know that sea level rise or climate change is going to affect habitats then we have to take that into account in terms of our scientific assessments and management. We're already losing habitat to sea level rise in other areas; we may also see that in the mid-Atlantic quite soon so we can't afford to get too far behind on those issues. But point well-taken about the need to balance between/among priorities.

Key Question: Discuss the uses of regional observing systems such as Integrated Ocean Observing System (IOOS) and the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS).

Answer: Typically when climate scientists talk about observing systems they're talking about the global systems; for example, the global CO_2 observing networks, the Argo profile floats in the deep ocean, etc. But the information that comes from the global observing networks may not help us regionally. We need to know how it's going to affect us here in the mid-Atlantic, what's it going to do to circulation, to sea level rise, etc., that's where the regional observing systems are going to be effective and feed into our science.

Key Question: Why was EBFM left out of the last reauthorization of the Magnuson-Stevens Act?

Answer: The challenge with EBFM is developing operational frameworks that fully account for all of our ecosystem processes, and that is a difficult thing to do. Some examples: the Ecosystems Principles Advisory Panel made a recommendation to develop fisheries ecosystems plans for all the Fishery Management Councils, there is the IEA framework, there are a number of different frameworks or approaches that one could use. If we're eventually able to migrate toward one of those approaches, there could be more comfort in terms of putting EBFM explicitly into the Magnuson-Stevens Act.

SPATIAL CONSIDERATIONS FOR ECOSYSTEM-BASED MANAGEMENT ON THE NORTHEAST U.S. CONTINENTAL SHELF

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Major Recommendations

- We recommend that the MAFMC evaluate options for the designation of spatial management units as the basis for development of integrated management plans for defined ecoregions. The proposed ecological units cleanly delineate the main area of responsibility of the council in the Mid-Atlantic Bight although for some migratory species under council authority, coordination with other management authorities (notably the ASMFC and the NEFMC) will be necessary. A transition strategy can be defined that first adopts place-based management as the ultimate goal for the Council and then begins to assess how existing management plans can be adjusted to accommodate broader ecosystem objectives. These extended plans would then ultimately be absorbed into a fully integrated Ecosystem-Based Management Plan for the Mid-Atlantic Bight.

The recent signing of an Executive Order establishing a new National Ocean Policy for the nation lends special urgency to adopting the basic tenets of ecosystem-based management: 1) a commitment to establishing spatial management units based on ecological rather than political boundaries; 2) consideration of the inter-relationships among the parts of the ecosystem and with the physical environment; and, 3) the recognition that humans are an integral part of the ecosystem. To address this first need, we assembled a set of physiographic, oceanographic, and biotic (lower trophic level) variables to identify ecological production units on the northeast U.S. continental shelf. The physiographic variables considered in this analysis include bathymetry and surficial sediments. The physical oceanographic and hydrographic measurements include satellite-derived estimates of sea surface temperature, annual temperature span, and temperature gradients. We also employed ship-board estimates of surface and bottom temperature and salinity in spring and autumn based on NEFSC research vessel surveys. The biotic measurements considered include satellite-derived estimates of chlorophyll *a* and primary production, and chlorophyll gradients. Temperature and chlorophyll gradients are included to identify frontal zone positions.

We employed a principal components analysis (PCA) to examine the multivariate structure of the data and as a prelude to classification of ecological production units. We then used a K-means cluster analysis on the principal component scores to define our spatial units. We identified seven major cluster units. The clusters represent major ecological production units on the shelf including (1) Eastern Gulf of Maine-Scotian Shelf, (2) Western-Central Gulf of Maine, (3) Inshore Gulf of Maine, (4) Georges Bank-Nantucket Shoals, (5) Intermediate Mid-Atlantic Bight (6) Inshore Mid-Atlantic Bight and (7) Continental Slope (Cape Hatteras to Georges Bank). These spatial units are considered to be open and interconnected, reflecting oceanographic exchange and species movement and migratory pathways.

We can further consolidate some ecological subareas to reflect movement patterns of exploited species from both the shelf-break region and the immediate nearshore regions to the adjacent shelf areas. These regions would then be considered special zones associated with the adjacent shelf regions. We can further retain the option for special management considerations to be implemented in both nearshore and shelfbreak areas in a nested array to reflect the distribution of ecologically sensitive species, areas of high biomass and species richness, and the confluence of multiple human use patterns in nearshore regions. Following this approach, we specify four major ecological zones including (1) the Western-Central Gulf of Maine, (2) the Eastern Gulf of Maine-Scotian Shelf, (3) Georges Bank-Nantucket Shoals, and (4) the Mid-Atlantic Bight. For mapping purposes we have included estuaries and embayments with the nearshore regions but note that it may be desirable to identify these areas separately as yet another nested layer in the overall spatial structure.

Consideration of the place of humans in fishery ecosystems and its implications for shaping spatial management units is no less important in devising

effective strategies for EBFM and for gaining acceptance of this concept within fishing communities. The connection between humans and the geography of the sea has been well documented in the northeastern United States, providing important perspectives on how we might integrate the human dimension into spatial management within the general context of EBFM. To assess general concordance between our proposed ecological subregions and human use patterns (with a focus on fishing activity), we mapped the distribution of fishing effort by vessel size, gear type, and port of origin. The observed distribution patterns reflect important social considerations on how, when, and where fishers operate as well as constraints imposed by logistical factors and management requirements. Not surprisingly, small vessels with more limited fishing ranges are often characterized by distribution patterns predominately in one of the proposed ecological units. Increasing vessel size and mobility is reflected in more spatially diverse fishing patterns and occupation of multiple ecological subunits. We find that fishing patterns also often follow major boundaries of our ecological subunits, reflecting topographical and productivity features that are often not represented by more conventional stock areas used under present management regimes.

An analysis of operational fishery units defined by species catch composition, seasonal and spatial fishing patterns, and gear type also finds strong correspondence between the proposed ecological subunits and the spatial extent of these fishing assemblages. The confluence between ecological structures related to productivity patterns and spatial fishing strategies does suggest the potential utility of the ecoregions defined in this study as management units for EBFM.

These considerations hold important implications not only for defining potential management units for EBFM but for identifying both ecologically important areas and regions of critical importance for fishing communities. Decisions in marine spatial planning will hinge on demonstrating the importance of spatially defined regions of joint human and ecological concern.

In conclusion:

• ecological subunits of the northeast continental shelf can be effectively defined based on physiographic, oceanographic, and lower trophic variables;

•the number and size of the major spatial management units ultimately chosen will involve tradeoffs involving interchange among areas (smaller units involve more interchange);

• hierarchical spatial management structures can be defined to reflect distribution of vulnerable species, biomass and biodiversity, human use patterns, and management requirements; and

•these mapping exercises highlight areas of importance to fisheries and can be used to represent fisheries interests in marine spatial planning.

Key Question: Is the idea to change our management plans from different areas and instead come up with fewer plans based on spatial management units?

Answer: The idea is to actually build on the plans and establish a different framework; right now we're pretending these things are separate and they're really not in many ways. There have been tremendous advances in management and stock assessment methodologies that help us to understand many of the vulnerabilities of many species, and we should take advantage of that and build it into what we're doing. But, if we're going to do EBFM, it's important to remember that the properties of the ecosystem are not the same thing as the properties of its parts. Right now we're trying to manage the properties of its parts and pretending that they're not interacting and that there are no connections among them. Looking at it from an ecosystem point of view means we're trying to re-establish this whole concept from a different perspective and move it forward. So what's being done now is simply incomplete, and going forward it should be done in a way that's simpler and takes advantage of ecosystem properties that are more stable and predictable than all the individual parts. We want to take advantage of that greater stability so as to have greater predictability and starting from that higher level, and then ultimately we'll have to make allocation decisions based on a species basis because that, of course, is what really makes a difference to the fishers.

Key Question: Place-based management may be simple for benthic species, but how will it work for species like spiny dogfish that has a wide distribution and crosses many of the proposed management areas/units, and simultaneously may also have inter-annual variation in its distribution?

Answer: That's an important and critical issue. There are many species that move through the different areas, but without minimizing the difficulties, we do know a lot about their spatial and temporal distribution through our NEFSC surveys, through commercial fishing vessel trip reports, etc. So it is possible to use that information and apportion the amount of time the species spends in the different areas and also figure out how much production they're both contributing to and removing through predation. There is a certain amount of year-to-year variation we have to live with when we manage them on a stock basis; for example, recruitment. But looking at the broader patterns of the distribution and the times and places where these species are using the data from the commercial fisheries and our NEFSC surveys, there's a lot to go on and we can begin to get an idea of how we could apportion the production among the different parts.

Key Question: You say the choice of the actual spatial management units is the prerogative of the management agencies. This will sooner or later lead to realignment of Council responsibilities by state and/or by species. How will changing the management scheme work?

Answer: In this talk there is a transition strategy that tries to address this issue. The idea is to take baby steps and for a while we'll stay with what we have but then begin to look at connections between the species and stocks that we manage both within a management plan and between management plans and look for interactions among them that we need to take into account. Whether they're fishery interactions with their bycatch problems that aren't fully being resolved now or whether it's biological interactions like predator/prey interactions, those will be taken into account. We'll also begin to lay a firm foundation in terms of looking at climate influences and environmental influences in a systematic way. That's already being done in part in some of the management plans but we want to do it in a more systematic way. This will get people more comfortable with the idea that ultimately we're going to manage in terms of ecological units instead of stock units, and that's where we're ultimately headed.

STRENGTHENING SCIENCE TO IMPROVE HABITAT PROTECTION AND RESTORATION IN CHESAPEAKE BAY

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Major Recommendations

- Explore opportunities to better connect the science and management activities of the Chesapeake Bay Fisheries Goal Team, Atlantic States Marine Fisheries Commission, and MAFMC.
- Convene a NOAA habitat mapping consortium/meeting, organized by the NOAA North Atlantic Regional Team and hosted by the NMFS/NEFSC James J. Howard Marine Sciences Laboratory, including representatives of the NOAA Chesapeake Bay Office (NCBO), MAFMC, NEFSC, Hudson River National Estuarine Research Reserve, The Nature Conservancy, and others.
- Improve communication pathways and networks to include all sectors with influence over land and marine habitats and develop better visualization tools describing ecosystems, their inter-relationships, and the specific outcomes that can result from applying ecosystem approaches to management.
- Fully integrate modeling, observations, and research to facilitate scenario testing and tradeoff discussions.

The Chesapeake Bay is the nation's largest estuary and its network of streams, creeks, and rivers hold tremendous ecological, cultural, economic, historic, and recreational value for the region and its citizens. But the Bay and its tributaries remain in poor health, with polluted water, stressed populations of fish and shellfish, degraded habitats and landscapes lost to development. The health of the Bay is closely linked to the health of the Atlantic coastal region where the interplay of estuarine, coastal, oceanic, and atmospheric processes shape the Northeast Continental Shelf Large Marine Ecosystem (<http://www.lme.noaa.gov/index.php?option=com_content&view=article&id=53:lme7&catid=41:briefs&Itemid=72>). Protection and restoration of critical Chesapeake Bay habitats such as tidal wetlands, marshes, shorelines, forests, submerged aquatic vegetation (SAV), open water, oyster reefs, beaches and dunes, and islands directly influences the health and productivity of Atlantic coastal living resources. This is particularly true for fishery resources with life histories that require and/or utilize both estuarine and oceanic habitats, including menhaden, striped bass, American eel, river herring, shad, horseshoe crab, spiny dogfish, flounder, bluefish, and black sea bass.

On May 12, 2009 President Obama issued Executive Order 13508 on Chesapeake Bay Protection and Restoration, declaring the Chesapeake Bay a "national treasure" and ushering in a new era of federal leadership, action, and accountability. The purpose of the Executive Order is "to protect and restore the health, heritage, natural resources, and social and economic value of the nation's largest estuarine ecosystem and the natural sustainability of its watershed." The Executive Order directed federal agencies to define environmental goals for the Chesapeake Bay, develop a strategy to protect and restore the watershed, and design and implement annual action plans to achieve meaningful environmental outcomes. The strategy reflects an unparalleled effort by the federal government to restore clean water, recover habitat, sustain fish and wildlife, conserve land, increase public access, expand citizen stewardship, develop environmental markets, respond to climate change and strengthen scientific knowledge. To implement this strategy, the NOAA Chesapeake Bay Office (NCBO) is supporting six important elements to strengthen science:

1. Providing habitat characterization and assessment.
2. Understanding fisheries status and trends.
3. Improving observational platforms and real-time monitoring.
4. Delivering data tools and applications.
5. Enhancing models and ecosystem forecasting.
6. Implementing Ecosystem Approaches to Management.

Providing habitat characterization and assessment

NCBO is collecting, processing, and analyzing multi-beam bathymetry, side-scan sonar, video, and sediment grab data to create benthic habitat characterization spatial data products to support native oyster restoration, essential fish habitat, and other resource assessments and management (<http://www.chesapeakebay.noaa.gov/acoustic-seafloor-mapping>). Bathymetric differences can be used to evaluate oyster reef morphology and to compare the utility of different reef materials. Habitat characterization surveys will serve as a spatial baseline for monitoring the performance of oyster reef restoration projects and help establish benchmarks on which other restoration projects can be evaluated.

Understanding fisheries status and trends

NCBO manages a multispecies fisheries science program aimed at improving knowledge of single species and ecosystem level dynamics as they relate to fisheries management. This program considers the cumulative impacts on fisheries from various sources, including multiple factors such as pollution, coastal development, harvest pressure, predator/prey and other ecological relationships, and watershed management. Recent studies funded through this program have considered the impact of mycobacteriosis on striped bass and quantified the contribution of the Chesapeake Bay as a nursery for the coastal menhaden stock.

NCBO is also considering emerging issues such as the possible ecological impacts of non-native blue catfish which could be affecting Bay and coastal species such as blue crab, shad, and river herring.

In addition, NCBO is working with the Smithsonian Environmental Research Center to quantify fish utilization of natural and restored shoreline and shallow water habitats, including different types of shoreline armoring (<http://www.cop.noaa.gov/stressors/resourcelanduse/current/msrp.aspx>).

Improving observational platforms and real-time monitoring

NCBO operates and maintains the Chesapeake Bay Interpretive Buoy System (CBIBS), a network of nine buoys along the mainstem of Chesapeake Bay and selected tributaries (<http://www.buoybay.org>). The buoys provide real-time weather and water observations for use by scientists, managers, and citizens. CBIBS is also a component of Chesapeake Bay Observing System and the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS).

NCBO is also working with partners to enhance ecosystem forecasting capabilities in the Chesapeake Bay including harmful algal blooms and hypoxia. In addition, sensors are being tested and deployed on buoys to detect movements and migrations of fish species, including Atlantic sturgeon. This technology should prove particularly useful when a buoy is deployed at the mouth of Chesapeake Bay in the spring of 2011.

Delivering data tools and applications

NCBO is developing an Oyster Data Tool which is a geo-referenced oyster data base that enables spatial visualization of all facets of oyster management (population surveys, harvest, disease, bathymetry, habitat, and restoration activities). The tool allows managers to pull up information for a given oyster bar/project using their web browser to display the data on maps and generate reports. For example, the tool allows temperature, salinity, and bathymetry data to be overlaid on a map with oyster restoration and disease data. This integration and visualization of data will help make decisions on targeting of new restoration and facilitate evaluation of past projects. The vision is to expand this database to include information on a range of other species and restoration activities.

Enhancing models and ecosystem forecasting

The Chesapeake Bay Fisheries Ecosystem Model (CBFEM) is a trophic model of the Chesapeake Bay developed using Ecopath with Ecosim (EwE) software. The model helps scientists and others understand the Chesapeake Bay ecosystem. Explorations using CBFEM have focused on interactions between menhaden and striped bass (and other predators), potential effects of hypoxia on fisheries species, and the habitat-mediation effects of submerged aquatic vegetation on blue crab stocks.

The Chesapeake Atlantis Model (CAM), currently under development, is based on the Atlantis software developed by the Australian Commonwealth Scientific and Industrial Research Organization (CSIRO). This model is an approach for conducting formal management strategy evaluation — a simulation that accounts for tradeoffs in performance across a range of management objectives. CAM will incorporate spatially explicit information about the biological, geochemical, and physical forcings of the Bay and its tributaries, the effects of different user groups, and dynamically tracks the interaction of these factors over time. This modeling approach allows exploration of the ecosystem effects of environmental changes, policy options, and management strategies. For example, CAM will help project scenarios such as the likely ecosystem effects of eelgrass loss or loss/gain of marsh habitat, increasing/decreasing nutrient input, and increasing population size along the coasts of the Chesapeake.

Implementing ecosystem approaches to management

In 2006, NCBO published "Fisheries Ecosystem Planning for Chesapeake Bay" (<http://chesapeakebay.noaa.gov/images/stories/pdf/FEP_FINAL.pdf>) to provide strategic guidance for ecosystem-based approaches to fisheries management and information on the function and structure of the Chesapeake Bay ecosystem. This comprehensive planning document and prototype fisheries ecosystem plan (FEP) was developed in response to key recommendations by the NMFS Ecosystem Principles Advisory Panel. The FEP describes components of the Chesapeake Bay ecosystem and formulated recommendations for management and research required to develop EBFM plans.

Since then, NCBO has helped form a new Sustainable Fisheries Goal Implementation Team (Fisheries GIT) under the Chesapeake Bay Program. This new group marks the first time that fisheries

management has been an official part of the Chesapeake Bay Program's management structure. There were groups in the past that coordinated fisheries management baywide, but they were only loosely affiliated with the CBP, leaving the impression that they were still primarily state-by state efforts. The Fisheries GIT is composed of the state fisheries managers from around the Bay and is currently chaired by the director of the NCBO. The Fisheries GIT draws together a diverse group of managers and scientists to improve management and recovery of oysters, blue crab, menhaden, striped bass, and alosines. It focuses on advancing EBFM by using science to make informed fishery management decisions that cross state boundaries and improve regional fishery management collaboration. Institutions represented on the Fisheries GIT include the NCBO, Virginia Marine Resources Commission, Maryland Department of Natural Resources, Potomac River Fisheries Commission, Atlantic States Marine Fisheries Commission, District of Columbia Division of Fish and Wildlife, and MAFMC.

Current priorities of the Fisheries GIT include improving the communication between land use planning and decision-making and fisheries managers to reduce impacts to fish and habitat.

Key Question: Is blue channel catfish considered an invasive species, and for oysters, is the restoration focus on native oysters or Asian oysters?

Answer: Yes, the blue channel catfish is considered invasive because it was introduced in the James and Rappahannock Rivers as a trophy sportfish in the 70s and 80s and it's moved into other tributaries of the Bay. For oysters, the policy decision was to retain the focus on native oyster restoration and not introduce Asian oysters.

Key Question: How far reaching are your efforts to stem farm runoff, paper mill runoff, etc. into the Bay from the upper watersheds?

Answer: EPA is the lead for water quality in the Bay and under the President's Executive Order, the focus on water quality improvement has become much more rigorous. Implementing the provisions of the Clean Water Act that deal with establishing loads for the watersheds and allocating those loads for the upper watershed states have been done and now those states have developed Watershed Implementation Plans (WIPs) for implementing the load reductions.

Key Question: How do we fill in data gaps and proceed with effective management of non-commercial species? Also, what about species like oysters that are critical not only as a commercial species, but they're also a keystone ecological species?

Answer: The first question involves work on habitat characterization and species utilization; we are trying to fill in the data gaps on those non-commercial species. We would eventually like to include more EBFM in Chesapeake Bay, including the spatial component, but right now we're focused more on indices of ecosystem health and that's the tool we're using. For oysters, theoretically, the re-establishment of successful oyster reefs that are kept in sanctuary or kept for their ecological value and not commercially exploited – we will see a change in species diversity and ultimately better understand the ecological services those species provide for higher up the food chain. Overall, this shows why we might want to move toward spatial management because the reality is that there's too much that can fall between the cracks, and when we have management plans aimed at individual species we don't have strict rules that tell us when you need to have a management plan for an individual species. But if you move towards EBFM where you have a component of spatial management, then we have a way of protecting other parts of the ecosystem and can do it in a way that both meets the needs of protecting harvested species so that we have greater sustainability for them but also focus on biodiversity that would protect a much broader spectrum of the ecosystem.

HABITAT SCIENCE AT THE NORTHEAST FISHERIES SCIENCE CENTER

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Major Recommendations

- Incorporate more habitat information in the fisheries management process.
- Prioritize species and habitats whose management would benefit most from additional habitat-specific information.
- Establish an improved protocol for providing Northeast Fisheries Science Center habitat-science support to the MAFMC.

The James J. Howard Marine Sciences Laboratory began operations in 1961 as the Sandy Hook Marine Laboratory directed by Dr. Lionel A. Walford, and was part of the Department of the Interior's Bureau of Sport Fisheries and Wildlife. The laboratory was incorporated into the new National Oceanic and Atmospheric Administration (NOAA) within the U.S. Department of Commerce in 1970. Facilities at the Howard Laboratory include an extensive seawater system capable of providing up to 350 gallons per minute. The seawater system supports research in 11 seawater labs and a 32,000 gallon aquarium, with a focus on growth, feeding, reproduction, migration, and other life habits and behavior of coastal marine species. A control room contains computers for configuring, controlling and monitoring the lighting and seawater systems. Several dedicated laboratory suites are available to support research on analytical chemistry, trace-metal chemistry, organic chemistry, and microbiology. Further, the Howard Laboratory houses the Lionel A. Walford Library, which is noted for its extensive collection of fisheries-related archives and journals.

Most of the NOAA staff at Sandy Hook is part of the Northeast Fisheries Science Center's Ecosystems Processes Division (EPD). The mission of the Division is to understand the effects of environmental variability and human disturbances on fish and shellfish productivity relative to habitat, with a focus on the Northeast Shelf. Our job is to conduct ecosystem-based research and assessments of living marine resources, to promote the recovery and long-term sustainability of these resources, and to generate social and economic opportunities and benefits from their use.

The Division operates through four branches. The Oceanography Branch conducts studies on the physical environment and plankton populations in order to understand how these ecosystem components influence the distribution and abundance of fish and shellfish. The Coastal Ecology Branch focuses on assessing the condition of habitats important for these living marine resources. The Behavioral Ecology Branch elucidates important ecological processes and habitat requirements of fish in all life history stages. The Marine Chemistry Branch focuses on understanding biogeochemical effects of habitats on fish and uses chemical methods for stock identification.

The Division's current research priorities are:

•effects of climate change, ocean acidification, and human activities (e.g., renewable energy production) on coastal habitats and fisheries;

•coastal and marine spatial planning including mapping and assessment of fish habitat condition;

•habitat-dependent processes and fish life histories in support of resource management modeling.

Major initiatives currently being conducted by the Division include:

•lead of a 5-year climate research plan;

•one of only three Centers of Expertise for ocean acidification;

•GIS habitat mapping to create a habitat atlas for northeast coastal and marine ecosystems;

•broad-scale habitat investigations at the Hudson Canyon and on Georges Bank;

•ecological investigations on summer flounder, winter flounder, and other species;

•deep-sea coral surveys and ecology; and

•habitat modeling with foci on the synthesis of diverse sets of data to describe both pelagic and benthic habitats in support of fisheries stock assessment and management.

The Division provides several services to local, regional, national, and also international clients. For example, we work with community groups on shellfish restoration, with the New England and Mid-Atlantic Fishery Management Councils on the designation of essential fish habitat, with other federal agencies on the threats to deep-sea coral communities, and with North American and European partners on the effects of climate change. Our research is conducted through field monitoring and surveys from the northern tip of Maine to Cape Hatteras, NC, as well as through field and laboratory experiments and analyses of environmental samples.

Most of Ecosystems Processes Division's permanent staff of about 50 researchers, technicians, and support personnel are located at Sandy Hook, with

other staff located at laboratories in Narragansett, RI and Woods Hole, MA. In addition, every year the Division engages volunteers, academic interns, and contract employees to assist us with our research.

For more information about the Ecosystems Processes Division and research activities, please contact the Division Chief, Dr. Thomas Noji, Thomas.Noji@noaa.gov. Also, please see our public websites:

<http://sh.nefsc.noaa.gov> for the James J. Howard Marine Sciences Laboratory;

<http://www.nefsc.noaa.gov/epd> for the EPD;

<http://www.nefsc.noaa.gov> for the NEFSC.

Key Question: Does your scientific assessments consider predation on, as well as natural mortality of, eggs and larvae, for example?

Answer: We would consider those factors that affect mortality rates as critical components of the habitat and that would include the environmental variables that cause predator-prey overlap, the structural features that influence the interaction strengths, and the nature of those predators. So we do include species interactions when we talk about habitat. We've looked at this before at the scale of an estuary and examined predator-prey interactions and actually tried to quantify mortality in winter flounder. It could be done offshore but it's expensive to do. It could be done in process studies that focused on key spawning grounds in order to understand them from a process point of view and then how variability within the environment; e.g., climate change, and finer scale local forcing could affect those processes and lead to inter-annual variability.

Key Question: Is there a way that the results of your research can lead to an action plan that could, for example, bring a managed species back or rebuild a stock to a more sustainable level for harvesting?

Answer: There's the decision-making that goes beyond the science. Our job is to provide the best science that we can and any science advice and information as requested.

WHAT MAKES SOME PARTS OF THE OCEAN STICKY TO FISH? OCEAN OBSERVING FOR MARINE HABITAT SCIENCE AND ECOSYSTEM MANAGEMENT

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Major Recommendations

- Establish the resilience of the ecosystem and keystone populations in the ecosystem as the goal of ecosystem science and management in the Mid-Atlantic Bight. This is a different goal than the central goal of single species fisheries management which is to maximize the abundance of exploitable stocks. Preserving resilience requires managing variance and diversity rather than maximizing the mean. Resilience is provided by different forms of "storage." For single species populations this storage takes the form of habitat and age class diversity. For ecosystems it is provided by species diversity and the functional redundancy that results from it. Identifying and managing the diversity of habitats and the connections between them that promote resilience to ecosystem keystone populations and others that provide functional redundancy to the ecosystem is central to ecosystem based management.
- The physical and biological data required for space based ecosystem science and management are spatially fine-grained but regional in extent. For water column features it must also be very fine-grained in time. These kinds of data are expensive to collect and there appears to be a lot of redundancy in the data collection and analyses being performed in the region. The Council needs to strongly encourage open data and information sharing along with collaborative monitoring efforts in the region. The regional Integrated Ocean Observing System (IOOS) is providing a great deal of information about critical pelagic processes. A collaborative, well-organized effort to identify the bottom data available; to merge it, identify the gaps, and then to systematically address those gaps needs to be strongly encouraged by the MAFMC. These data should be merged with the regional IOOS into an open access portal(s).
- A research set-aside program focused on the goals of ecosystem science and management needs to be established in the region. While there are other parties with stakes in the ecosystem, the fishing community has the most extensive practical ecological knowledge of the ecosystem. Government and academic scientists should be encouraged to openly collaborate with the fishing community to perform the science required to identify processes in the Mid-Atlantic Bight ecosystem that promote the resilience of keystone populations and the ecosystem as a whole.
- Education of the public and stakeholders about the complexity of the ecosystem is absolutely critical for effective ecosystem management.

Marine organisms have evolved in an aqueous environment, with a high viscosity, high heat capacity, and solute concentrations similar to those in the spaces of their living cells. The organisms are exposed to motions and environmental conditions in the sea that are dramatically slower and less variable than similar motions and conditions in the atmosphere. Furthermore, since the density of seawater is only slightly less than the density of living tissues, drag rather than gravity is the dominant force controlling movements in the sea. The oceans are inhabited by nearly neutrally buoyant organisms that grow in direct contact with the "hydrosphere" throughout life cycles that usually include egg and larval stages a few millimeters long and adults with body sizes that can range from 10's of centimeters to meters. Rates of metabolism, growth, survival, dispersal, and reproduction in marine organisms are tightly coupled to many scales (millimeters to 1000s of kilometers; seconds to decades) of variability in the water column as well as the seabed as the organisms make the dramatic habitat transitions usually required to complete their life cycles. In contrast, early development in most terrestrial animals is internal (or external, as well as aquatic in amphibians and some insects), and juveniles and adults are exposed to the atmosphere over a range of body sizes an order of magnitude smaller than marine organisms. Terrestrial organisms are largely constrained to two spatial dimensions by gravity and have evolved elaborate mechanisms to decouple metabolism and other physiological rates from the short-term variability of the atmosphere. Despite these profound differences we often use terrestrial frameworks to think about and investigate the ways marine organism use and are affected by their habitats. We treat seascapes as analogues of landscapes; as two-dimensional matrices of habitat patches with slow spatial dynamics. We use our own experiences as terrestrial organisms inhabiting

landscapes to draw inferences about the constraints seascapes impose on the forms and ecologies of marine organisms, often overlooking the dynamic water column processes that define habitats even for organisms strongly associated with the seabed. Further, even when we do recognize that the vital rates of marine organisms and dynamics of their populations are strongly regulated by the ocean's "hydrosphere", the absence of data describing the dynamics and structure of the water column at ecologically relevant space-time scales has made it difficult to consider the ocean's fluid explicitly in the design and analyses of relationships between species and their habitats in the sea.

Now, however, the state-of-the-art Integrated Ocean Observing System (IOOS) monitors and models the physical and primary production dynamics of the ocean at the broad spatial scale as well as the fine time scales required to understand the ways water column processes affect the vital rates of marine organisms and dynamics of their populations. IOOS is an intergovernmental/interagency effort focused on the development of ocean observing and forecasting systems. IOOS themes range from public health and safety to marine operations and natural resource conservation. As part of the U.S. IOOS program, partners in the mid-Atlantic region along the U.S. east coast have developed a regional scale ocean observing network. The footprint of the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS; <http://www.maracoos.org/>) stretches along 1000 km of coastline from Cape Hatteras, NC to Cape Cod, MA and offshore to the continental shelf break. MARACOOS uses a multi-platform approach to characterize the fine scale structure and dynamics of the coastal ocean. The platforms include U.S. and foreign satellites in space, a network of high-frequency (HF) radars deployed along the shore, and a fleet of robotic gliders flying beneath the ocean's, surface (<http://rucool.marine.rutgers.edu/index.php/COOL-Data/COOL-Data.html>). Satellites provide time series maps of surface temperature, chlorophyll-A, and other ocean color products describing light absorption and backscatter. Ensemble clustering is applied to the satellite information to objectively identify and visualize water masses and the surface fronts between them. The HF radar network provides hourly surface current measurements from the edge of the continental shelf into estuaries. These current measurements can be processed to show near-real time and statistical forecasts of horizontal surface flows, upwelling and downwelling dynamics, and the evolution of surface fronts. Robot gliders that carry sensors measuring temperature, salinity, chlorophyll-A, and particle backscatter describe seasonal to inter-annual changes in the vertical structure of the ocean. Satellite, HF radar, and glider data are assimilated into an ensemble of numerical circulation models (UMD-HOPS, NYHOPS, ROMS) that are evaluated by comparing model realizations to field measurements. MARACOOS data and model forecasts provide spatially and temporally explicit descriptions of the physical forcing, flows of materials, and primary productivity that structures and regulates the Mid-Atlantic Bight ecosystem. In addition to an extensive data archive, MARACOOS makes these data freely available in real time via Internet portals managed by trained operational oceanographers. Developments in high speed wireless communications and Internet infrastructure now permit real time virtual collaboration between marine habitat and ecosystem ecologists in the field and operational oceanographers with expertise in IOOS data streams and forecasts. Access to IOOS data and expertise allows ecologists to easily consider processes in the water column as well as on the seabed in studies of the life history processes that ultimately determine recruitment and the dynamics of populations of ecologically and economically organisms in the Mid-Atlantic Bight ecosystem.

Over the past six years we have been developing an approach to integrate IOOS remotely sensed data and short-term model forecasts into regional scale habitat studies. Our approach has included the development of distribution based habitat models for resource species that are also ecologically important in the mid-Atlantic ecosystem, as well as adaptive surveys designed to measure habitat specific distributions and life history processes rates for these species. We are nearing completion of a NOAA Fisheries and the Environment (FATE) funded project in which we have used multivariate and single species modeling to evaluate the power of IOOS data to describe distributions of organisms with different vertical habitat preferences in the mid-Atlantic region using abundance data collected on NEFSC center bottom trawl surveys. In analyses targeted at species important in the Mid-Atlantic Bight food web, we have found that our models, built using remotely sensed surface measurements, explain more of the abundance variation for pelagic species (longfin inshore squid and butterfish, ~73%) than demersal species (spiny dogfish and summer flounder, ~50%). However, bottom habitat variables (e.g., rugosity and depth) and surface pelagic features measured by IOOS remote sensing (e.g., surface fronts, vertical and horizontal current velocities) were equally important for all species, while *in situ* shipboard measurements of water column stability and structure were more useful for modeling pelagic species. All species were associated with specific surface current flows, regions of upwelling, and/or surface fronts identified with IOOS remote sensing, indicating that pelagic processes affecting energy costs of movement, prey production, and prey aggregation influenced distributions of the animals regardless of their vertical habitat preferences. We found that most of our IOOS-informed habitat models had greater explanatory power and out-of-sample prediction capabilities than previously published models built using the same analytical technique, but without the benefit of access to IOOS data streams.

We have begun to extend our IOOS-informed habitat studies in two directions. In one project recently funded by the NOAA/NEFSC Cooperative Network we are collaborating directly with members of the Garden State Seafood Association to use the ecological knowledge of fishers to refine our habitat models in an effort to develop tools to reduce the bycatch of butterfish in the longfin inshore squid fishery. The goodwill required for this close collaboration between the fishing industry, government, and academic scientists was developed in IOOS regional association meetings that serve as "neutral ground" for many stakeholders with diverse and sometimes competing interests in the services of the ecosystem. In another project we are using archived IOOS data along with NEFSC bottom trawl survey data for summer flounder adults and NEFSC Marine Resources Monitoring, Assessment, and Prediction (MARMAP) summer flounder survey data for eggs to identify the characteristics of their spawning grounds in the mid-Atlantic region. Our preliminary analyses indicates that autumn spawning may be concentrated outside the mouths of several large estuaries where processes of nutrient enrichment from estuarine outflows and coastal upwelling, high phytoplankton productivity, and processes of particle concentration along water mass convergences may create pelagic habitats promoting the survivorship and growth of summer flounder larvae. Furthermore we have been using MARACOOS assimilative circulation model nowcast and short-term forecasts to adaptively route surveys investigating habitat quality for fish larvae. On these cruises we have collected large numbers of summer flounder larvae that appear, based on estimates of larval age and particle tracking in surface currents measured with HF radar, to be derived from a specific spawning ground identified in the analysis of summer flounder spawning grounds described above. While this study is still in its infancy, we believe our IOOS-informed approach that combines regional scale habitat analysis and modeling with adaptive process based field studies will allow us to develop broad scale habitat models that couple ontogenic habitats and important life history processes for this and other species in the mid-Atlantic region. This is just the kind of approach required for effective space-based ecosystem management.

We believe our IOOS-informed approach to habitat science will be most useful for the development of tactical tools for ecosystem assessment and management. There are several pathways toward the development of habitat science in the service of ecosystem management in the region. The first of these is to develop single species models focused on ecosystem keystone species indentified in ecosystem modeling efforts in the northwest Atlantic (e.g., Link et al. 2008, 2010). The rationale behind this approach is that the identification and conservation of habitats maintaining the resilience of ecosystem keystone populations should be translated across a level of ecological organization to promote the resilience of the ecosystem as a whole. By resilience we mean the tendency of populations and ecosystems to return relatively rapidly to healthy states after significant perturbation (see Levin and Lubchenco 2008). One potential flaw with this approach is that rapid changes in climate are producing rapid changes in the distributions of animals, particularly in regions of faunal transition like the Mid-Atlantic Bight (see Nye et al. 2009; Sorte et al. 2010). If this is the case the identity of ecosystem keystones may also be changing and thus approaches targeted at a few individual species could fail to meet the goal of promoting ecosystem resilience. What is most intriguing about our study of summer flounder spawning grounds is that the hydrographic processes and structures we have identified that may promote nutrient enrichment, concentration, and larval delivery are the same "ocean triad" of processes that appear to define important spawning grounds for pelagic species in the eastern Pacific Ocean and Mediterranean sea (see Bakun 1996; Agostini and Bakun 2002). Thus we may be able to shift focus from habitat studies of individual keystone species toward investigations of "keystone habitats" where physical and biological processes in the water column and on the seabed promote the survival of critical life history stages of many species rather than just a few. This habitat processes-based approach will be essential if the ecosystem is changing rapidly due to climate change. But no matter what approach we take, habitat science in support of ecosystem assessment and management will require close, honest and open collaboration between physical and chemical oceanographers, habitat ecologists and ecosystem scientists, as well as fisherman who, arguably, have the most intimate and practical understanding of the ecosystem as a whole.

Further reading

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Key Question: For harvestable species that co-occur in time and space with bycatch: with all your habitat analyses, can you come up with a risk analysis to actually target areas or habitat in both time and space that will allow fishers to maximize harvest of the harvestable species but avoid the bycatch? For example, while fishing for squid, many fishermen know when and where to fish certain areas in order to avoid the bycatch of butterfish.

Answer: This is a difficult problem but we're trying as much as possible to be practical about this and to learn from the fishermen; first, what habitat is from the fisherman, then what is possible because the overlap between butterfish and squid is remarkable when you handle the trawl data. But we recognize the value of using the fishermen's knowledge as they have been on the ocean every day and they're good ecologists, so we want to introduce them to the data, sit in the room with them, maybe go out on the boat with them, and actually sit down and try to tackle this problem together. Our current research approach might not work but there are other approaches having to do with real-time reporting or the autocorrelation between catches, bycatches, and time and space that would be appropriate. But we'll all learn from each other and I think that the relationships that we develop will useful for other projects in the future.

SCIENCE PANEL DISCUSSION WITH COUNCIL

Rapporteur: **David Packer,** NOAA/National Marine Fisheries Service, Northeast Fisheries Science Center, Ecosystems Processes Division, James J. Howard Marine Sciences Laboratory, Highlands, NJ

Key Question: We do have some opportunities both on a large scale and local scale for incremental steps toward EBFM – can you discuss those starting points toward progress?

Answer: We start with internal capacity. This goes back to organizational dynamics – getting familiar with what others are doing in your Agency is a first step. And within NOAA over the years a lot of what you've heard about integrated coastal ocean mapping, for example, has gone a long way towards bringing various parts of the Agency together. The various technical capabilities of the Agency are starting to come together, in the context of cross-Agency integration/coordination, and as the technology improves we can apply some of these capabilities across our missions so that we can start to develop products that are useful to a wide variety of applications. But also it's as simple as identifying a time and place for some of this capacity that exists within NOAA in the mid-Atlantic to get together and talk about some of the projects we might do together. In other words, bring together the various capabilities of the Agency across its major line offices, not just NMFS, but the National Ocean Service, National Weather Service, etc. and perhaps hold a workshop that pulls together all this capacity and do a little more hands on match-up of the mapping capability and the survey capability, etc.

But in addition, the single biggest change is for us to say that ultimately we're going to have management plans for ecological regions. We want to replace single species or stock management plans with integrated plans for ecological regions, which alone would put us on the path toward EBFM. It's not a simple process. The basic outcome is that there are a range of nested spatial and temporal scales that are important in terms of the ecology of these systems and we're trying to define the larger scales first as potential management units. So, you have a handful of areas that you develop an integrated management plan for – but then within that recognize that there's much finer and richer spatial detail that you're going to want to take into account. John Manderson's presentation gives some nice examples of finer scale oceanographic processes that are quite important to the ecology of the region. The NEFSC has tried to lay out one possible roadmap for actual implementation. It's a starting point for a discussion which will be shaped and melded by the needs of the Councils. EBFM is coming, and we must start laying the groundwork now, and get ahead of the curve.

Key Question/Comment: I agree that some habitats are indeed essential and these habitats will be essential for a lot of species, but what is never clarified is: when are they essential? There are key times when these fish use these habitats, and it's generally predictable. This is important, for example, for the bycatch issue: if you could tell us or map when and where to fish or not to fish in order to avoid the bycatch, that would be a powerful tool. So, one step that may be helpful in terms of going from single species management to EBFM is that whenever a Center scientist does a stock assessment, for example, they then also do a visual simulation map of the general migratory patterns of that stock or species throughout the year and, if also possible, from larvae to adult. This becomes your best representation of how that fish migrates in the region throughout the year, and you then do that for the other stocks in the region and eventually overlap them all. Thus, taking a single species assessment and overlapping that with another or other single species assessments so you can visualize those species interactions both spatially and temporally would be very useful.

Answer: Essentially what you're saying is that you need those products that would help you do your jobs better, so the better we can identify those products, the better we can tinker with our various models and visualizations – the latter is essentially what you are describing. Visualizations which can take you from static maps and written text that describe the status of the stocks to true interactive maps that could better show the spatial and temporal movements of species. It's not true ecosystem evaluation, it's more like a multispecies approach, but it's a good beginning, and it is important because the fisheries themselves, of course, also operate on spatial and temporal scales. The challenge for us is to come up with these kinds and types of products that would help you, and we've already started working on producing these types of products: some are prototypes, some are under development, some are being researched, and some are just ideas at this point in time.

Key Question: The take home message, particularly from Mike Fogarty's presentation, appears to be that the most important step we can take here is to lay the groundwork for spatial management units, and it appears that we already have the tools to do that now. It's just a matter of directing staff to make it a priority as a Council. The question is: why

aren't we doing that? Can Mike Fogarty share what steps the New England Fishery Management Council (NEFMC) is already taking in this regard?

Answer: First, Rick Robins has been very proactive in establishing a new Ecosystem Subcommittee within the MAFMC's Science and Statistical Committee (SSC), and that's an important step forward. In the NEFMC, their SSC was asked to develop a white paper for the NEFMC on ways to go forward toward EBFM. This was presented in November, 2010 to the NEFMC and it will be published in Commercial Fisheries News; the latter will get the information about how to move toward EBFM more into the hands of the fishing community. In addition, the NEFSC web page has a new website (<http://www.nefsc.noaa.gov/ecosys/>) about ecosystem considerations that's really geared toward getting this information into the hands of stakeholders. But from the NEFSC's point of view, the MAFMC, NEFMC, and the ASMFC are all our "clients" and we provide them with the scientific underpinning to all this. The NEFSC wants to be in a position to meet the requests and needs from both Councils and the Commission. But to reiterate, the bottom line is that the spatial issue is really at the heart of all of this.

Key Comment: The white paper that's being referenced is a product of a workshop held by the NEFMC's SSC. That will be reviewed and considered by the MAFMC's Subcommittee of the SSC as they begin to provide the Council with advice. But if that is really the essential forward step needed to advance EBFM, and that's the consensus of the SSCs from both Councils, then that is going to require a coordinated approach because now you're really getting into spatial management and obviously there's going to be a lot of details that have to be considered, not simply in the context of the MAFMC's SSC or the MAFMC itself, but in a broader context. So I would anticipate that type of advice to be coming out of the MAFMC's Subcommittee as they go through their terms of reference.

STAKEHOLDER PANEL

PERSPECTIVES FROM THE MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN (MARCO)

Greg Capobianco, Director, Ocean and Great Lakes Program, New York State Department of State, Albany, NY

Major Recommendations

- Compile GIS information on offshore ocean areas, and share specific information on habitats that we have a mutual interest in protecting, particularly the offshore canyons. The exchange of data and information through the online MARCO Mapping and Planning Portal will help to coordinate regulatory and planning activities based on the best available science, and will help identify information gaps.
- Coordinate on developing overarching management objectives and a path forward for the creation of the Mid-Atlantic's Regional Planning Body, and defining roles for the two Fishery Management Councils.
- Continue discussions of enhanced mechanisms for MAFMC participation in MARCO processes in order to incorporate the needs of the commercial and recreational fishing community into our future work.

Increasing national attention is being paid to the need for broader partnerships and more comprehensive approaches to protect our ocean ecosystems. The Governors of the mid-Atlantic states (NY, NJ, DE, MD, VA) created the Mid-Atlantic Regional Council on the Ocean (MARCO) to improve regional coordination among the five states to address shared ocean issues that cross our borders, to avoid unintentional conflicts across state lines, and to create more reliable regulatory processes. The creation of MARCO is intended to respect and not duplicate important efforts already underway through existing interstate partnerships in the region. Rather than focus on a specific geographic area or management issue as those partnerships do, MARCO is a regional collaboration that seeks to address the ocean environment across all five states as a whole ecosystem, through the principles of ecosystem-based management.

The "Mid-Atlantic Governors' Agreement on Ocean Conservation," which created MARCO, identified initial priorities for collaborative action among the five MARCO states. MARCO continues to be led by a core team of state leads from the coastal management programs, known as the MARCO Management Board, who are responsible for advancing these priorities. The MARCO Management Board is focusing primarily on two of the priorities identified in the Governors' Agreement, and has added a third priority. For each priority, one of the MARCO Management Board members will lead the formation of a state-federal work group and the development of a work plan to advance the priority area in 2011-2012.

The first MARCO priority is to coordinate the protection of important habitats and sensitive and unique offshore areas on a regional scale. The mid-Atlantic region is home to areas – like the offshore canyons – that provide the critical underpinnings for the health of the ocean ecosystem and support our commercial and recreational fisheries. MARCO's current focus in the area of habitat protection is coordination and collection of information that will help identify the best ways to protect the attributes that make these habitats unique. Working with federal partners and other organizations, we have developed an online portal that displays geospatial information to aid in identifying regionally-important habitats. Over time, we will add to and refine the portal's underlying data, and develop new portal applications that can be used by MARCO, other decision makers, and the public.

To protect important habitats, the states will identify the impacts that impair ecosystem function, and then identify the appropriate regulatory tools to ensure those impacts are avoided. Through MARCO we will be seeking the engagement of federal entities and stakeholders with an interest in the canyons, to ensure that we leverage all existing resources and authorities, and take the holistic perspective that ecosystem-based management requires. The MARCO management board has followed with great interest the work of the New England Fishery Management Council to protect canyon habitats in the northwest Atlantic. Eventual protection measures in the mid-Atlantic will build from the regulatory authority of NMFS and the two Fishery Management Councils, as well as the states' authority through the Coastal Zone Management Act and the states' coastal management programs.

The second MARCO priority is to support the sustainable development of renewable energy in offshore areas. Given the state of technology, most commercial development interest in offshore renewable

energy focuses on wind. Siting offshore wind projects in a responsible way, however, requires understanding the potential impacts on the environment as well as on existing uses, like commercial and recreational fishing, and refining regulatory processes accordingly. In particular, we are seeking a more regionally consistent and compatible approach to the collection of information, through the development of shared survey and monitoring protocols. Through MARCO we also plan to develop standards for the siting of offshore wind turbines that will apply region-wide. The collection of information on existing uses and the development of siting standards will likely be of interest to NMFS and the MAFMC, given the possible effects of wind development on commercial and recreational fishing.

The federal government also is interested in advancing a regional framework that will address habitat protection and renewable energy development goals. This past summer, President Obama initiated a national framework for coastal and marine spatial planning (CMSP) that is regionally-driven, with oversight provided by new "Regional Planning Bodies," or RPBs. The constitution of these RPBs will include state, federal, and tribal representatives. It is most likely that MARCO will play a strong, influential role in coordinating the mid-Atlantic states' involvement in the work of the Mid-Atlantic Regional Planning Body. MARCO states already have been involved in developing plans for potential funding in Fiscal Year 2011 that would have advanced CMSP and provided additional support for stakeholder outreach.

Because of the significance of the new federal ocean framework and its relevance to MARCO's habitat and energy priorities, the MARCO Management Board has added CMSP as a new work priority for MARCO. The online MARCO Mapping and Planning Portal, one of the first collaborative products that has resulted from MARCO and the first such portal produced by a regional ocean partnership, is one of the key tools that will help advance CMSP in the mid-Atlantic. Made possible by financial support from the Virginia Coastal Zone Management Program and collaboration with state and federal agencies and other partners, the portal allows state, federal, and local decision-makers and the public to map and analyze regional ocean and coastal data. Developing the portal is the first step in collecting and analyzing the data necessary for making informed decisions on habitat protection and energy development through CMSP.

The MARCO Management Board values the input of the fishing community and is keenly interested in developing mechanisms for NMFS and the MAFMC to engage in MARCO activities and products. In June of 2009, the MARCO states hosted the first Mid-Atlantic Governors' Ocean Summit, held in lower Manhattan. This Summit combined an official release ceremony for the Governors' Agreement with a day-long set of meetings that brought together state and federal agency partners to immediately begin conversations on advancing the four priorities. In December of 2009 the MARCO states convened some of the region's key stakeholders to discuss the Governors' Agreement and to generate positive momentum and commitments for action. Following on these meetings and subsequent conversations, the MARCO Management Board has identified a number of recommendations and opportunities for enhanced partnership with the MAFMC and NMFS, as described above.

Key Question: MARCO seems poised to provide regional structure that could influence regional planning. Do you envision a role for regional fishery management organizations such as the MAFMC and ASMFC?

Answer: There certainly could be a role for fishery management bodies, with a structure that improves regional efforts rather than adding a layer of duplication. Right now MARCO is focusing on the full range of ocean uses and users. Wind power has our immediate attention since that new industry could affect existing stakeholders within and adjacent to the mid-Atlantic region.

Key Question: With respect to membership, were adjacent states such as North Carolina asked to join MARCO? If not partners, could others serve as close partners?

Answer: Virginia's coastal program approached North Carolina to share information but in the end North Carolina was not included. Through other means, such as regional and coast-wide fishery management organizations, North Carolina does have an active voice. Connections to adjacent states, north and south, and organizations are crucial to our success. We need to maintain open lines of communication between regions. To improve the prospects of success, MARCO should consult with the states, councils, interstate commission, and other interested, regional partners before any actions are taken.

START BY DOING WHAT'S NECESSARY; THEN DO WHAT'S POSSIBLE; AND SUDDENLY YOU ARE DOING THE IMPOSSIBLE – FRANCIS OF ASSISI

Jason S. Link, NOAA/National Marine Fisheries Service, Northeast Fisheries Science Center, Woods Hole Laboratory, Woods Hole, MA, and Chair, Ecosystems Subcommittee, MAFMC /Science and Statistical Committee

Major Recommendations

- Work with the MAFMC (especially the Council's Ecosystems and Ocean Planning Committee) to provide the MAFMC with scientific advice to support and inform the development of the Council's ecosystem level goals, objectives, and policies.
- Identify and describe scientific advice that the MAFMC could use to address and incorporate ecosystem structure and function in its fishery management plans and quota specification process to ensure that the Council's management practices effectively account for ecological sustainability.
- Describe scientific information that the MAFMC could consider so as to anticipate or respond to shifts in ecological conditions (e.g., climate change and other externalities) or processes in its management programs.
- Summarize what other countries and regions are doing to incorporate ecosystem-based fishery management principles in their management plans and programs.
- Describe how ecosystems principles could be used by the MAFMC in the long-term to evolve its single-species and multi-species fishery management plans into a regional ecosystem-based fishery management plan.

Sometimes there's a perception that doing ecosystem-based fisheries management (EBFM) is too intractable, is too ill-defined, and is too difficult to attempt. What I note here is that there are obvious steps that can be taken as we move towards such implementation. There is a clear need to transition from how we manage fisheries now, to an intermediate step, to a fuller, more, integrated system perspective. It is recognized that the MAFMC has well over a dozen fishery stocks to manage (and many more if coordination with the NEFMC and ASMFC is considered). Currently they are managed in a group of half a dozen or so plans, but the individual stocks are essentially not managed with any explicit consideration of ecological, environmental, habitat or related such concerns. Most stocks are being managed classically via the typical fisheries advice (fishing mortality instantaneous rate and biomass) and effectively in isolation from other stocks. The goal is to have management of all such stocks considered simultaneously, for a given spatial area, and cognizant of the effects of other ocean-use sectors on fisheries and the effects of fisheries on other ocean-use sectors. This would be done with a fully integrated and coordinated set of factors in one, ecosystem-based plan for an appropriate region.

Yet it is recognized that to meet current mandates while moving towards the more "systemic" approach will require a transition set of plans. One way to do this transitional step is to consider a set of significant issues affecting related stocks and then attempt to develop plans that have a broader range of considerations for species as they interact. These proposed plans would contain joint management recommendations as coordinated for appropriate groups of stocks rather than treating those stocks in isolation (even if under the same plan cover). Here I provide several examples of such issues that could be addressed.

As the title of this talk, quoted from St. Francis, implies, we need to start with what is necessary. The following lists some proposed issues that have been identified as germane, needed by the MAFMC to provide the best management of these stocks available, and potentially useful for the mid-Atlantic region to move towards EBFM. The issues presented here are meant to be exemplary and by no means represent the full range of factors that should be considered, but likely are some of the more prominent issues facing the stocks and this region for which the MAFMC is responsible. The example issues are also linked to those stocks that are known or strongly suspected to be affected by them:

•evaluate any potential effects of climate for all MAFMC managed stocks;

•evaluate any potential effects of predatory removals on mackerel, longfin inshore and northern shortfin squid, butterfish;

•evaluate and identify specific/localized habitat requirements for black sea bass, scup, tilefish, Atlantic surfclam, ocean quahogs, and summer flounder;

•explore areas/regions/features of interest for all stocks; and

•explore tradeoffs among full system and total fisheries production potential for all stocks.

It is clear that these example issues are important. But that begs the question: can we possibly do anything about them in the near future? That is, are there any

data, tools, or approaches that are available *now* that can help to address these issues? The answer is yes.

For instance, to evaluate any potential effects of climate we can use what are mainly empirical approaches from the NEFSC bottom trawl survey and observer data, along with some Intergovernmental Panel on Climate Change (IPCC) downscaling, extended stock assessment models (ESAMs), and bio-physical models that are extant. To evaluate any potential effects of predatory removals we can apply a wide range of ESAMs, minimal realistic models (MRMs), and multispecies (MS) models. To evaluate and identify specific/localized habitat requirements, we can use a range of habitat models and empirical studies, particularly as they are informed by fisher observations. To explore areas or regions or features of interest, we can employ coastal and marine spatial planning (CMSP), additional types of habitat models, the ecosystem status report (ESR), and continue to hold interactive, focused stakeholder workshops. To explore tradeoffs among full system and total fisheries production potential, we can utilize information in the ESR, employ management strategy evaluation (MSE) approaches using aggregate, food web, and end-to-end models, and hold focused stakeholder workshops. The point being that the scientific and informational capacity is extant to begin to address these issues. Further, the organizational and governance structures may admittedly need to adapt to these novel streams of information, but we can largely utilize existing structures and processes to begin to transition towards addressing these EBFM issues.

One of the simpler ways to begin the implementation of such a transition would be to develop joint plans that have coordinated and modified information. For instance, to evaluate any potential effects of climate one could develop and use adjusted biological reference points (BRPs) and associated risk analyses (RAs) that consider the effects of potential or realized environmental effects on stocks as they influence the estimation of standard decision criteria. Similarly, to evaluate any potential effects of predatory removals, one could additionally consider using adjusted BRPs and RAs that have been estimated while being cognizant of species interactions. To evaluate and identify specific or localized habitat requirements, one could perhaps develop habitat reference points (Hab RPs/SASI) or similarly adjusted BRPs and RAs for stocks conditioned upon habitat considerations. To explore areas or regions or features of interest, one could utilize refined MSPs, extant environmental impact assessments (EIAs), or various zoning (of ocean uses) approaches. To explore tradeoffs among full system and total fisheries production potential, ultimately one would need a coordinated fisheries ecosystem plan or ecosystem-based fisheries management plan (FEPs/E-BFMPs) that would be the document from which the MAFMC's goals and priorities would not only be stated, but used as the source for implementation. Obviously, executing such an implementation strategy is going to take time, many iterative steps, and will not be without its challenges. Yet doing so is in fact now quite feasible and the tools to do so are already in existence. That is arguably the main point of this short communiqué; that, although challenging, we can start taking steps to implement EBFM.

The MAFMC has already signified its intent to do so via the Ecosystems and Ocean Planning Subcommittee and a comparable supporting Subcommittee of the SSC. The terms of reference for the SSC's Ecosystem Subcommittee are provided in the "Major Recommendations" box, above; the point is that the MAFMC is demonstrating progressive thinking in instituting these groups. Furthermore, it is quite a positive development that by doing what is necessary and possible, we may end up doing what was heretofore thought impossible.

Key Question: How much time would be involved in progressing from where we are now to the more complex and promising ecosystem management approaches?

Answer: Some approaches can be implemented now or very soon. A key factor in fishery management is the MAFMC's annual management priorities. A regional approach could establish agreement to balance options and establish priorities. I understand that's a central product of this workshop.

Key Question: Where are we in terms of the sophistication of our understanding of predator-prey relationships?

Answer: The NEFSC has an enormous database on that subject and are beginning to consolidate it into a useful form. As an example of one application – we can now consider predator consumption by a given managed species, such has *Loligo* squid, and consider that function as another "fleet" in assessment models. We have a lot less data for consumption by mammals and birds.

DISCOVERING REEF: POSSIBILITIES OF ACCELERATED AND PERMANENT REEF FISH RESTORATION

Captain Monty Hawkins, Owner/Operator, Party Boat Morning Star, Ocean City, MD

Major Recommendations

- Interview remaining old-timers to piece together a picture of what once was. Insights will highlight the need to protect what we have and restore what we've lost. Listen attentively and use charts dating to the era for perspectives on:
  - species that once fouled nets and hooks but are now rare, e.g., deadman's sponge;
  - fish populations that have moved from inshore habitats to offshore, with similar impacts on fleet movements and effort and be vigilant for shifts over the years and decades; e.g., extirpation of red hake within 20 nautical miles of shore, white marlin was once caught 4 to 8 miles out and now 60 is caught plus miles, and scup having been a major fishery but now has been absent for 40 years; and
  - insights from fishing techniques and navigation devices used to indicate former reef footprint, even use of rudimentary equipment like a weighted grapple on steel cable to locate rocky patches by feel.
- Protect remnant hard bottom habitats either with paper protections/regulations or with large boulders.
- When contemplating an action to protect or restore habitat, focus not on the substrate but on the growth that provides habitat. Any rock will work fine – concrete rubble too. Eventually, engineered concrete units to maximize fishery production in a given area could be built.
- Strongly consider transportable reef units sited in areas with abundant growth to gather natural set corals for later transplant.
- Recognize that cold water azooxanthellate corals are important to fish populations wherever they now occur or did occur, including all waters.
- The term "high energy environment' is a scapegoat. There are many corals growing in 25 feet of water and fantastic assemblages in 40 feet of water in the Mid-Atlantic Bight.

As a party boat captain, my observations of fine-scale habitat change are in no way reflected in current habitat science for the region. Absent fishing, reef-fish abundance would be determined by reef-habitat abundance. A clear baseline for habitat restoration can be developed from both historical accounts and current recreationally and commercially important fish abundances on remnant habitats.

Our challenge is to leave a legacy of improved habitat and vastly improved fisheries. Though many have already thrown in the towel, we know structured habitat with vertical relief is valued by many mid-Atlantic stocks. It's very simple to replicate; just roll rocks off a barge.

Recent discussions about the mid-Atlantic ecosystem, prompted by the MAFMC but not limited to fishing, offer glimpses of new approaches to these old problems. Fishers' observations should be considered when industry brings telecommunication cables and wind turbines to these waters.

Anecdotes are always and forever insufficient. I encourage you to view video evidence presented to the Council's Ecosystem Committee, including:

•Nick Caloyianis reef footage: <http://www.youtube.com/watch?v=G3nGYeXvkxE&feature=related>; YouTube keyword search: Mid-Atlantic Reef Natural Reef.

•Monty Hawkins video from 2004: <http://www.youtube.com/watch?v=n77WF9XQRJM&feature=related>; YouTube keyword search : Common Seafloor Habitats.

•Video Presentation to MAFMC Ecosystem Workshop December 14, 2010: <http://www.youtube.com/watch?v=-cMC8JVa2Bk>; YouTube keyword search: Maryland Corals or Nearshore Reef MAB.

Those videos and other information demonstrate that:

•cold water azooxanthellate corals reefs exist in near-shore shallow waters of the Mid-Atlantic Bight;

•those reefs are clearly essential fish habitat (EFH), though these reefs and reef species have yet to be considered as such;

•though classed as non-reef forming, clearly these cold water corals do form reef and vital reef habitat for federally managed species;

•stern-towed fishing gears have physical impacts to mid-Atlantic habitats that decrease the reef footprint and diminish ecosystem services, including fish production;

•our continued lack of understanding about these habitats and reef ecology will prevent true reef fish restoration;

•the importance of seafloor habitat restoration must be recognized; present restoration priorities involving

coastal wetlands and estuaries are important too, but habitat issues extend across the continental shelf and beyond; and,

•we must replenish reef habitat if we expect to rebuild stocks. Management based on catch-restrictions alone cannot recreate historical abundances of fish.

Reef protection, restoration, and manufacture can create reef fish abundances beyond any known historical value. Amazing success awaits.

Key Question: From your observations in the mid-Atlantic, can you offer any comments on threats warranting our special attention?

Answer: Chemicals may be an issue but we need to consult an expert. Tires remain a concern since even those deployed as ballasted structure for artificial reefs can break free from the reef and destroy bottom habitat until removed, often by cash-strapped state marine fisheries agencies. While the tire reef experiment failed, hard surfaces can attract corals and other settling animals.

Key Question: Could artificial reefs improve regional ecosystem health?

Answer: Perhaps. There are strong arguments on both sides of that question. There is more reef fishing now than in the recent past, sometimes attributed to the addition of artificial reefs to shelf waters. There are seven licensed sites: two in Maryland waters and five in the adjacent federal zone, and there are more tautog now than a decade or so ago. Although it seems logical that bottom trawlers and dredgers would avoid rock or reefs to conserve their gear, observations support some concern that bottom-tending gear has flattened some areas. Corals and other habitat types are now evident as remnants of what could have been more diverse habitats. Restoring those areas could be vital to rebuilding some species, especially habitat-dependent populations of red hake and black sea bass.

REGULATORY REQUIREMENTS THAT EXCEED OUR KNOWLEDGE OF THE OCEAN ENVIRONMENT AND THE IMPACT ON THE PUBLIC

Greg DiDomenico, Executive Director, Garden State Seafood Association, Trenton, NJ

Major Recommendations

- Be wary of how CMSP may duplicate fishery management under the Magnuson-Stevens Act. We needn't recreate processes that work well.

The Garden State Seafood Association is concerned that aspects of Coastal and Marine Spatial Planning may ultimately undermine domestic fisheries management. Congress created the Magnuson-Stevens Fishery Conservation and Management Act (MSA) in 1976 to manage U.S. marine fishery resources within the EEZ and throughout the range of a given managed species (See 16 U.S.C. 1801 et seq.). It is unclear to members of the commercial fishing industry how federally-approved fishery management plans, developed by regional Fishery Management Councils and approved by the Secretary of Commerce will be considered should these plans be deemed inconsistent with the principles of CMSP. The councils are actively working to address CMSP issues within their jurisdiction, including gear usage, habitat impacts, time/area closures, by-catch, and the need to conserve marine resource populations for the longer term, including protected and harvested species plus their habitat. These efforts must not be frustrated by an expanded bureaucracy that complicates the open regional council planning process with a separate dispute resolution process that may dilute scientific information serving as the basis for management decisions.

The National Ocean Council (NOC) would be the commanding entity regarding final decisions on regional plan consistency, plan compliance, dispute resolution, and any associate penalties for non-compliance. The NOC will be advised by a governance body that could be susceptible to political pressures which reward those entities with seats on the national committee.

While GSSA agrees with many characteristics of a national CMSP program, we are especially concerned with adopting an ecosystem-based approach. That approach has in recent years become politically correct and fashionable yet never implemented. In fact, aggressive efforts failed to include a mandatory requirement in the 2006 MSA reauthorization. The legitimate reasons for that failure form the basis of our opposition, namely: the concept is overly broad, sufficient scientific information to meet measurable objectives is lacking, and the idea is often connected to the precautionary principle, which is also poorly supported by information.

First, ecosystem-based management is not clearly defined in the CMSP, the National Ocean Policy, or the Interim Report of the Interagency Ocean Policy Task Force even though it constitutes a core component of both programs. There are many references to EBM requirements and broad-based EBM principles but no clear definition. Thus, constituents are left to their own perceptions regarding how the Administration intends to use CMSP and EBM to: manage and regulate the protection of key species that are critical to ecosystem function and resiliency; improve species adaptation; achieve healthier and more productive environments; and restore, protect, and maintain protected species populations, ecosystems, and biological diversity. In some examples of EBM the intent is to manage the ecosystem to the microbial level. In other instances, resources such as protected species are given greater consideration and support than harvested species. The inability of Congress and agencies to manage all resources based on the same principles cuts squarely against the argument for a formal, balanced, science-based EBM plan. Thus, we have little faith the EBM approach embodied in the CMSP will address needed changes but simply be more of the same dysfunction.

Second, the CMSP contains many references regarding the need for sound science as the basis for EBM but offers little in the way of an actual plan to inform decision-making. Arguably, the lack of scientific information and funding required to procure it has frustrated similar efforts in the past. The only attempt to address the gathering of scientific information is contained in the CMSP work plan which allows for the Regional Planning Body to consult with scientists and technical experts about myriad topics but apparently with little understanding of the scope, timing, and cost of these data needs.

Based on the timelines provided in the CMSP work plan and the lack of additional funding we believe regional planning will prevail even as CMSP efforts proceed. Also, there is no specific funding mechanism provided in the CMSP to enable state/federal agencies to conduct the necessary scientific research to support the plan. Thus, they are left to do more with less yet also support a new complicated system that is supposedly "built on this foundation of sound science." From an industry perspective the math is simple – less

money for science means less data, less data means more precaution, more precaution means less fishing, less fishing means fewer jobs, less revenues, and less food harvested by domestic fishermen resulting in increased seafood imports and an unbalanced trade deficit. The expansive concept of EBM and lack of scientific information (and funding for scientific research) leads to our final concern – the application of the precautionary approach as the guide for decisions where adequate data are lacking. The precautionary approach fosters a disincentive for managers to seek, secure, and spend manpower and funding to gather scientific data if conservative decisions can be made simply by invoking precaution. This should not be the guiding doctrine of the CMSP.

CMSP documents suggest we already have "…vast stores of natural and social science information about ocean, coastal and Great Lakes ecosystems and their uses." Despite this apparent wealth of science we continue to struggle with current efforts to manage marine resources absent basic scientific information. The condition of hundreds of finfish, marine mammal, and sea turtle stocks are unknown and regional Fishery Management Councils are now required to meet new MSA scientific standards with little new information. GSSA wonders: How a new layer of government with greater data requirements will perform if the necessary scientific information is currently missing at the most basic levels of resource management?

Key Question: How do the topics discussed at this workshop relate to coastal and marine spatial planning? Are we discussing the right topics with the appropriate people?

Answer: Collectively we are not doing CMSP now but we are touching on similar issues both individually in our own arenas and together as a group. No mandates have been surrendered but roles could shift. New industries are adding complexity and new partners may bring new ideas. Heavy government representation at this workshop needs to be balanced with more speakers from other sectors, including states and industries.

PREPARATION MEETS OPPORTUNITY FOR MID-ATLANTIC HABITAT CONSERVATION

Jay Odell, The Nature Conservancy, Mid-Atlantic Regional Program, Richmond, VA

Major Recommendations

- Near-term: The Essential Fish Habitat Omnibus Amendment that is being jointly developed by NEFMC and MAFMC provides a policy vehicle for expanded habitat protection and a process that provides for substantial public input as decisions are shaped and made. Additionally, the Councils have a new tool under the Magnuson-Stevens Act (Section 303(b)(2)), discretionary authority to protect deep-sea corals that urgently need protection. It is likely that the mid-Atlantic region contains substantial cold water coral resources at depths as shallow as 15 meters, in addition to those well documented offshore of Maryland (e.g., *Astrangia poculata* and new records for *Leptogorgia virgulata*). These habitats are well known to support high densities of MAMFC managed species such as black sea bass and tautog. Regardless of depth, deep-sea coral habitats are highly vulnerable to physical disturbance of any kind and their damage and loss has potentially serious and difficult to reverse ecological and economic impacts. Conversely, their identification and protection would provide lasting benefits.
- Long-term: A regional CMSP process can help the ocean use and conservation sectors to more precisely develop their individual and shared goals and subsequently develop a plan that best meets multiple objectives. It should be no surprise that, despite stereotypes, fishermen and environmental groups have many common interests. Some valuable and important ocean use sectors such as sand mining, shipping, transportation, and energy development can be sustained in severely degraded ocean ecosystems, but biodiversity conservation, fishing, and some forms of tourism cannot. A CMSP process that is conducted openly and transparently and based on sound science can provide managers with choices for better alignment of human uses with their most ecologically and socio-economically compatible places to provide lasting benefits for people and nature.

National context

Marine resource use sectors such as fishing, offshore energy development, recreation, sand and gravel extraction, tourism, and shipping are economic engines that support coastal communities and our Nation. The U.S. ocean economy provides more jobs and more economic output than the entire farm sector (USCOP 2004). Ocean management today is divided among over 20 different federal agencies that oversee more than 140 different and often conflicting and competing laws affecting marine resources (Crowder et al. 2006), with many additional state and local authorities and laws. As a result, our ocean is managed sector-by-sector, with little attention to trade-offs between management choices made by separate agencies and cumulative impacts to coastal and marine ecosystems and resource users.

On June 12, 2009, President Barack Obama released a memorandum affirming that "the United States needs to act within a unifying framework under a clear national policy, including a comprehensive, ecosystem-based framework for the long-term conservation and use of our (ocean, coast, and Great Lakes) resources." The Interagency Oceans Policy Task Force (IOPTF) subsequently developed a draft national ocean policy with coastal and marine spatial planning (CMSP) as a foundation for a "comprehensive, integrated, ecosystem-based approach that addresses conservation, economic activity, user conflict, and sustainable use."

Mid-Atlantic context

After extensive public engagement including six regional listening sessions that drew over 1,900 people and collection and review of about 5,000 written comments, the IOPTF issued final recommendations. On July 19, 2010 President Obama issued an Executive Order that established the first ever National Policy for Ocean Stewardship, adopting the recommendations, including a national CMSP framework (CEQ 2010). The CMSP framework calls for Regional Planning Bodies (RPB) to create and implement CMS Plans for the mid-Atlantic and eight other regions. These developments and several other factors have combined to create extraordinary enabling conditions for significant advances in mid-Atlantic habitat conservation and ecosystem-based management approaches.

The mid-Atlantic has the most abundant and easily developed offshore wind energy resources in the U.S. (NWF 2010) and energy companies have been intensively working with mid-Atlantic states and the federal Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) for the last few years to identify potential development areas. A large scale build-out of offshore wind energy in this region may provide significant benefits but also poses ecological and socio-economic risks that will need to be carefully considered and mitigated as appropriate. The need for new state and federal policy, institutional capacity, data and methods to address planning and

management for a new industrial ocean use was a major driver for the new National Ocean Policy and CMSP, and for the formation of the Mid-Atlantic Regional Council on the Ocean (MARCO). MARCO was initiated by Coastal Zone Management Program Directors and other key staff and formed by agreement of the Governors of Virginia, Maryland, Delaware, New Jersey, and New York in June 2009. The five states agreed to work together to identify regional goals and to take actions that address the mid-Atlantic region's most pressing ocean conservation and management challenges (MARCO 2009).

For over three decades, MAFMC has used its authorities under the Magnuson-Stevens Fisheries Conservation and Management Act (MSA) to manage the region's recreational and commercial fisheries in federal waters. This work included evaluation of stock assessment and fishery data and setting harvest rules, seasons, and allocations to meet the individual and shared goals of states. The combined efforts of NMFS, MAFMC, and others have led to considerably better understanding of ecosystem structure and function, accumulated over the years and documented in fishery management plans and other documents. Implementation of the new overharvest provisions provided when the MSA was reauthorized in 2006 by MAFMC has begun, to good effect; based on legal definitions, overfishing is not occurring in any MAFMC managed stock and most stocks are not overfished. It should however be noted that the quantity and quality of available information for all MAMFC managed "forage" species (smaller pelagics such as *Ilex* and *Loligo* squid, Atlantic mackerel, and butterfish) is insufficient to determine whether these populations are overfished. This problem – lack of adequate funding for stock assessment and analysis for federally managed species, is not unique to the mid-Atlantic region.

During most of the past decade, the MAFMC was not perceived as being proactive or effective relative to habitat conservation concerns. However, with new leadership for both staff and Council, the MAFMC has recently demonstrated substantially increased attention to the critical role of habitat in supporting fisheries production and protecting it from fisheries impacts, as provided for or required under the MSA. In addition to this very encouraging development, the Council is also now facilitating dialogue between diverse stakeholders about new approaches to improving ecosystem health in the mid-Atlantic.

For over a decade science and policy experts have pointed to the urgent need for a more holistic, ecosystem-based approach for ocean management, but the transition from theory to practice has been slow. The fragmentation of ocean management agencies at both state and federal levels has been an impediment to progress, and in particular the division of the expertise and regulatory authority held by habitat/coastal zone and fisheries management agencies has been problematic. Therefore, the growing communication between MARCO and MAFMC, a recent resolution by MAFMC in support of MARCO and their plans for collaboration in a CMSP context offer hope for creation of an operational framework for ecosystem-based management in the mid-Atlantic region. Successful implementation of regional CMSP pursuant to the new National Ocean Policy will require strong leadership by representatives of the regional Fishery Management Councils along with state and federal agencies, tribes, and local governments.

There are strong incentives and benefits for federal Fishery Management Council representatives to help lead the RPBs responsible for CMS Plan development. New uses of the ocean such as offshore wind energy development or aquaculture could potentially reduce access to traditional fishing areas and such conflicts and impacts may be avoided or minimized through a CMSP process. It has often been noted by fishers and others during fishery management plan amendment processes that although non-fishing impacts to fisheries resources (e.g., coastal habitat loss and damage) reduce populations of harvest species and fishing opportunity, fishery management entities such as MAFMC have very little ability or authority to regulate and abate such impacts. A robust CMSP process may provide a new venue for highlighting and addressing these concerns – managing the mid-Atlantic as one place as opposed to separately, use by use.

New data and tools

Effective CMSP and ecosystem-based management approaches require multiple map layers indicating or estimating the distribution of valuable ecological and socio-economic resources as well as the distribution and intensity of current and future human uses of coastal and marine resources. Ideally, these data should describe and predict human interactions with coastal and marine ecosystem features in places (latitude and longitude), depths and times (i.e., four dimensions). Although there are substantial unmet data needs (e.g., marine mammal and sea bird migration paths, benthic habitat maps), ocean stakeholders and resource managers in the northeast region of the U.S. are fortunate to have substantial CMSP data and modeling resources currently available or in development.

The Northeast Fisheries Science Center (NEFSC) has led efforts to collect spatially referenced data on the distribution, abundance, and trophic dynamics of marine resources for over four decades and in the last several years made those data available in diverse formats, developed ecosystem state condition indicators, and created spatially explicit models to predict regional scale ecosystem responses to management choices (e.g., Fogarty 2005; EAP 2009; Smith and Link 2010; Link et al. 2010). Other federal agencies including the U.S. Geological Survey (USGS), the U.S. Fish and Wildlife Service (USFWS) and BOEMRE have also produced a wealth of CMSP

relevant data, and their efforts are ongoing. If plans to produce an Integrated Ecosystem Assessment (IEA) are implemented, the IEA would provide a huge leap forward in understanding the region's ecological structure and function to inform and improve CMSP and ecosystem-based management processes (Levin et al 2009). Recently, new collaborations between NEFSC and Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) staff are leveraging real time integrated ocean observing system data to produce some of the first pelagic habitat models that predict the spatial and temporal locations of critical spawning areas and other ecosystem features (see John Manderson's presentation, above).

Protection of deep-sea corals is a particular concern for conservation organizations and others, yet they are in general very poorly mapped. However NOAA's Office of Habitat Conservation in partnership with other federal partners and academics has recently made substantial progress in compiling and interpreting existing information that will be very useful for modeling coral distribution and focusing upcoming surveys (Packer et al. 2007). While these data are almost entirely restricted to deep water near and within the shelf-slope break, limited video survey data reveals extensive coral patch habitats adjacent to the Maryland coast, extending seaward from less than ten miles off the beach (see Monty Hawkins's presentation, above). High resolution acoustic or video surveys have not yet been conducted to test the hypothesis that similar nearshore coral patch habitat occurs adjacent to other mid-Atlantic states, but it seems unlikely that it would be restricted to Maryland.

The Nature Conservancy recently completed a marine ecoregional assessment for the northwest Atlantic, from Cape Hatteras, NC to the Bay of Fundy. This assessment is intended to support CMSP and regional ecosystem-based management (EBM). In order to support and advance these goals, this assessment integrates information about multiple species and their habitats from many different federal, state and academic sources. The results summarized in the report include maps and data on concentrations of high biodiversity and critical species-specific areas for refuge, forage, and spawning, and also some of the limited available spatial data for human uses such as shipping lanes, port facilities, and fishing effort. This assessment is designed to be used by diverse stakeholders to inform diverse decisions, and to be freely available online for public use (Greene et al 2010).

Organizing and summarizing the large amount of available information and data to make good decisions requires robust decision support tools (DST), particularly if diverse stakeholders are to be engaged in the planning process. One example of a DST is the Swept Area Seabed Impact (SASI) model developed by NEFMC staff and partners to support habitat conservation decisions made pursuant to the ongoing Essential Fish Habitat Omnibus Amendment (see Chris Kellogg's presentation, below). The Mid-Atlantic Regional Council on the Ocean (MARCO) recently developed the online Mid-Atlantic Mapping and Planning Portal to allow state, federal, and local decision-makers and the public to visualize, query, map, and analyze ocean and coastal data (see Greg Capobianco's presentation, above). To fully support a CMSP process, the portal will need to evolve to include more sophisticated decision support features, including the ability for ocean users and managers to create spatial management scenarios and evaluate how well they meet goals held by diverse ocean resource stakeholders (Fox et al 2010).

Progress will be made through partnerships – collaborative projects that take advantage of the complementary skills, resources, and world-views held within academia, diverse government agencies, ocean stakeholders, and non-profits. The coincidence of all the factors noted above provide an urgent opportunity to learn from history, to leverage past efforts and to move forward with new coordinated science and policy to help ensure that the public's coastal and marine habitats continue to support life and produce the material and aesthetic goods and services that people want and need for generations to come.

Further reading

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Key Question: How can we balance state and federal rights in regional ecosystem management?

Answer: We have a mix of approaches represented at this workshop, a mix that might offer examples of the complex nature of our challenge. MARCO is a regional body comprised only of states. That approach might be more appropriate than a national body such as the National Ocean Council. There are other arenas such as energy that might warrant other management structures.

ATLANTIC STATES MARINE FISHERIES COMMISSION HABITAT PROGRAM, ECOSYSTEM APPROACHES, AND COLLABORATION OPPORTUNITIES

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Major Recommendations

The ASMFC and MAFMC should:

- Strengthen communication between their habitat program staff and committees.
- Hold joint meetings and workshops focused on EBFM.
- Identify projects for funding by the Atlantic Coastal Fish Habitat Partnership, Southeast Aquatic Resources Partnership, and other National Fish Habitat Partnerships.
- Develop joint habitat educational materials.
- Collaborate on essential fish habitat designations.
- Develop and adopt common habitat policies (i.e., Resolution 89-IV, revisit and update).
- Partner to build on existing efforts to develop a coast-wide fish habitat Geographic Information System.

The Atlantic States Marine Fisheries Commission (ASMFC or Commission) was formed by the 15 Atlantic coast states in 1942 and subsequently chartered in 1950 as an Interstate Fisheries Management Commission by Congress, in recognition that fish do not adhere to political boundaries. The current mission of the Commission is "to promote the better utilization of the fisheries, marine, shell and anadromous, of the Atlantic seaboard by the development of a joint program for the promotion and protection of such fisheries, and by the prevention of physical waste of the fisheries from any cause." The Commission's vision is "healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015." The Commission serves as a deliberative body, coordinating the conservation and management of the states' shared nearshore (within three miles of shore) fishery resources – marine, shell, and anadromous – for sustainable use. Commission authority, aside from that provided in the initial congressional charter, derives largely from the Atlantic Striped Bass Conservation Act (1984), and the Atlantic Coastal Fisheries Cooperative Management Act (1993). The latter Act mandated that the Secretary of Commerce in cooperation with the Secretary of Interior "...shall develop and implement a program to support the interstate fishery management efforts of the Commission." The program was mandated to include activities to support and enhance state cooperation in: collection, management, and analysis of fishery data; law enforcement; *habitat conservation* [emphasis added]; fishery research, including biological and socioeconomic research; and fishery management planning. For detailed information regarding the ASMFC Habitat Program, including resolutions, documents from the Habitat Management Series, and other materials, visit the ASMFC web site at <http://www.asmfc.org/>.

Atlantic States Marine Fisheries Commission Habitat Program

The Commission's Habitat Program originated in 1980 with formal resolutions adopted to address habitat-related issues (Stephan et al. 1999, see Appendix 1 of that document for complete text of all resolutions). The initial resolution dealt with harmful estuarine impacts of chlorine use in sewage treatment operations, requesting review of federal and state policies. For the next decade, additional resolutions addressed habitat issues such as ocean dumping (1987, 1993), oil spills (1989), federal Fishery Management Council habitat policies (1989), toxic materials in artificial reefs (1990), dam construction (1993) and federal legislation protecting estuarine habitat (1993).

Habitat was included inconsistently in fisheries management planning done under the Interstate Fisheries Management Program (Stevenson 1997). While many of the early Fishery Management Plans (FMPs) contained useful biological and life history data, they lacked specific habitat information and habitat management recommendations. The initial striped bass (Maryland Department of Natural Resources, Tidal Fisheries Division 1981) and river herring (ASMFC 1985) management plans were the first to significantly address habitat. Since 1990, plans include more specific habitat-related information and recommendations. The winter flounder FMP (Howell et al. 1992) and horseshoe crab FMP (Schrading et al. 1998) are the only Commission FMPs to include

habitat-related compliance criteria which member states are obligated to implement under the Atlantic Coastal Fisheries Cooperative Management Act.

The Commission's Habitat Program was further refined with the development of a formal habitat policy through passage of Resolution 89-VI (see Stephan et al. 1999, page 24). The resolution acknowledges that the ASMFC "recognizes the need for a cooperative effort to address critical habitat issues effecting the health of marine resources," and resolved that the ASMFC "...supports the efforts of the Mid-Atlantic Fishery Management Council to implement and refine an acceptable and effective model habitat policy and intends to participate in a cooperative effort to share the document with other Councils for discussion and eventual consolidation into a single, unified Council habitat document." A Habitat Committee (HC) was appointed by the Commission Chair in December, 1991. The HC was charged with the development of program goals and objectives. These centered on two goals: policy formulation and analysis, and communication and education, which were contained in an Initial Statement of Policy and Activities, Habitat Program (ASMFC 1992). Habitat provisions within FMPs were further refined through the publication of guidance for the preparation of FMP habitat sections and source documents (Stephan et al. 1998), and the Habitat Program's initial Strategic and Management Plan (Stephan et al. 1999). The first Habitat Coordinator for the program was hired as a part-time position beginning in 1993 (Stephan et al. 1999).

Current guidance for the ASMFC Habitat Program is contained in the Habitat Program Five-Year Strategic and Management Plan, 2009-2013 (ASMFC 2009; also available on the ASMFC web site). The current mission of the HC is "to work through the Commission, in cooperation with appropriate agencies and organizations, to enhance and cooperatively manage vital fish habitat for conservation, restoration, and protection, and to support the cooperative management of Commission managed species (ASMFC 2009)." Program components consist of the Habitat Committee appointed by the Commission chairman, an Artificial Reef Committee, and a staff Habitat Coordinator (currently vacant). Although the initial HC membership included Commissioners and limited federal agency and Fishery Management Council representatives, the current HC membership consists of representatives from the fifteen member states, representatives from five key federal agencies (Army Corps of Engineers, Environmental Protection Agency, U.S. Fish and Wildlife Service, NMFS, and National Ocean Service), and two non-governmental organizations (Environmental Defense Fund and The Nature Conservancy). The HC reports to the Commission's Interstate Fisheries Management Program Policy Board.

The ASMFC Habitat Program goals are currently as follows:

•identify important habitat areas for managed species;

•effectively protect, restore, and enhance Atlantic coastal fish habitat through fisheries management programs and partnerships, such as the Atlantic Coastal Fish Habitat Partnership (ACFHP);

•build and support partnerships with fishery and non-fishery management agencies, researchers, and habitat stakeholders to leverage regulatory, political, and financial resources;

•educate ASMFC Commissioners, stakeholders, and the general public about the importance of protecting, restoring, and enhancing habitat to achieve successful fisheries management;

•implement performance metrics to focus efforts and monitor progress of the Habitat Program;

•engage local governments in habitat protection, restoration, and enhancement programs; and,

•promote development of effective fish passage approaches and projects through state and federal collaboration.

The Habitat Program, working through staff and the HC, has achieved significant accomplishments. These include: establishing and supporting the Atlantic Coastal Fish Habitat Partnership (first two projects funded 2010); coordinating artificial reef activities (Artificial Reef Committee); developing a Submerged Aquatic Vegetation Policy (Stephan et al. 1997); preparing Habitat Sections of ASMFC FMPs; staff serving on the South Atlantic Fishery Management Council Habitat and Environmental Protection Advisory Panel and Chesapeake Bay Habitat Suitability Quantitative Ecosystem Team; producing Habitat Source Documents (part of ASMFC Habitat Management Series publications, on web site; e.g., see Greene et al. 2009); producing and distributing Habitat Hotline Atlantic newsletter; hosting numerous workshops; producing other educational materials (accessible from the web site); and establishing an ASMFC Fish Passage Working Group. The latter group arose from an HC sponsored workshop, and has thus far produced a resolution for the Commission on Fish Habitat Connectivity, a Passage Efficiency Policy, and a Layman's Guide to Passage Technology for ASMFC Species.

ASMFC ecosystem-based fishery management

The ASMFC initially became involved in an ecosystem-based fishery management (EBFM) approach to stock assessment through the hosting of a multispecies workshop in 2002 (ASMFC 2003) and through subsequent development of a multispecies virtual population assessment model (ASMFC 2005). The HC also had promoted an ecosystem approach through the habitat sections of FMPs, through the Habitat Management Series reports, and by facilitating the establishment of a National Fish Habitat Partnership (Atlantic Coastal Fish Habitat Partnership).

In 2010, the Interstate Fisheries Management Program Policy Board tasked the ASMFC Management and Science Committee (MSC) with the development of a proposal for formally incorporating ecosystem considerations into the Commission's interstate fisheries management process. The MSC is leading a team comprised of selected Commissioners, the chair of the Multispecies Management Committee, chair of the HC, and chair of the Assessment Science Committee to develop the proposal. The HC was also charged to work with the federal Fishery Management Councils to develop ecosystem approaches for collaboration. To this end, the Commission sponsored an Ecosystem-Based Fishery Management workshop in August, 2010. Workshop objectives were to consider external approaches to EBFM; identify ASMFC ecosystem priorities, determine next steps; and, review and modify the draft EBFM strategy.

The participants received presentations on EBFM approaches employed by the New England Fishery Management Council's Scientific and Statistical Committee, South Atlantic Fishery Management Council, and Chesapeake Bay Program. Participants also conducted exercises to prioritize ASMFC tasks related to EBFM, and reviewed the initial draft goals, objectives, and components of a potential EBFM approach, which employed an example for American shad developed from the existing ASMFC FMP and amendments. This work is ongoing, with priorities and next steps defined into two categories as follows:

Management and Policy

•develop Commission policy regarding ecosystem based approach to fisheries management;

•form a working group of Commission and Council representatives who will work towards developing compatible, cooperative approaches to EBFM; and,

•evaluate implications of how management measures for one species may affect other managed species.

Ecosystem Science

•Improve/adapt data collection and research to support EBFM strategies;

•expand multispecies virtual population analysis (MSVPA) to other suites of predators and prey, and use models to evaluate environmental influences on these species; and,

•describe ecosystem structure and function, habitats, species assemblages, and socioeconomic patterns across the management region.

The draft strategy, revision of which is ongoing, includes three objectives: 1) identify steps to incrementally transition the interstate FMPs to incorporate ecosystem considerations; 2) modify the existing assessment and management process to consider ecosystem effects on stock and fishery dynamics, and also consider fishery effects on ecosystems; and, 3) establish realistic expectations for incorporation of ecosystem principles based on available data, resources, and analytical tools.

The Habitat Committee and ASMFC Habitat Program staff see the opportunity for much future collaboration with the Mid-Atlantic, New England, and South Atlantic Fishery Management Councils as all move forward with measures to conserve, protect, and restore riverine, estuarine, and marine habitats and refine ecosystem-based approaches to fishery management. The ASMFC appreciated the opportunity to participate in the MAFMC's workshop, and anticipates further productive collaborations in the future.

Further reading

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Key Question: Fish passage for diadromous species seems like an important part of a regional approach in the mid-Atlantic. What are some key steps?

Answer: We need more and better data so we can improve our models and assessments. We need an inclusive approach to resource management. For example, when managing diadromous species such as river herring, we need a coast-wide approach that includes utility service company personnel. Industry experts can help us develop best practices guidance. One challenge is calculating efficiency; we can count the number passing through a dam but need to know how many arrive at a designated upstream habitat.

Key Question: How can the MAFMC get more involved? Are there roles for others?

Answer: The MAFMC and ASMFC have many shared processes, goals, programs, and constituents. That's probably true for other regional industry sectors. Scarce dollars can be leveraged by them and with others, as the Council and Commission are already doing. This workshop helps to establish a dialog that extends beyond fishery management and toward ecosystem-based approaches. We can also improve education and marketing efforts so the public learns about the value of river herring and the need for action. West coast salmon offers a lofty model. Striped bass is a good success story along the Atlantic coast but hopefully we can improve efforts to restore herring and shad. The Susquehanna system showed an increase followed by a decline in the latter two, perhaps constrained by striped bass predation and offshore bycatch. More work is needed to identify contributing factors. Generally, we need improved information on how each species uses habitat types throughout its life. The network modeling done on blueback herring in North Carolina could inform us. We need to manage on a system-by-system basis; i.e., riverine instead of coastwide assessments. We also need to manage from a riverine perspective or a regional basis as we move offshore.

PROGRESS ON HABITAT CONSERVATION AND ECOSYSTEMS-BASED FISHERIES MANAGEMENT BY THE NEW ENGLAND FISHERY MANAGEMENT COUNCIL

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Major Recommendations

- Carefully consider the tradeoffs of adopting EBFM approaches compared to current fisheries management approaches.
- Understand and prepare for some of the needed changes to organizational structure before embarking on EBFM.
- Coordinate development of EBFM approaches with adjacent Fishery Management Councils, states, and the ASMFC.

The following summary draws largely on the work of Michelle Bachman and the New England Fishery Management Council's (NEFMC's) Habitat Plan Development team in reference to habitat protection measures and on a paper, Ecosystem-Based Fishery Management for New England Fishery Management Council, prepared for the NEFMC by O'Boyle at al. (2010).

The New England Fishery Management Council began its EFH Omnibus Amendment 2 in 2005 with two main goals. The first was to review and update EFH designations for all managed species. Because there is not adequate information on how specific types of habitats or specific habitat locations contribute to the productivity of managed stocks, the EFH descriptions are fairly general. In most cases, the spatial distribution of EFH is based largely on the spatial distribution of the species/lifestage to which the designation applies. As might be expected, there is a high degree of overlap in the EFH designations of the various species managed by the NEFMC.

The second major goal of EFH Omnibus Amendment 2 was to optimize the minimization of adverse effects across fishery management plans (FMPs). This requires both a method for estimating adverse effects, and a strategy for minimizing those effects, which led to the development of the Swept Area Seabed Impact (SASI) model. The SASI model is a geo-referenced analytical tool that estimates the adverse effects (Z) of fishing on seabed structures by combining fishing effort data, seabed substrate and energy data, and gear-specific habitat vulnerability parameters.

Previous EFH evaluations conducted for NEFMC FMP actions were ad-hoc, and could not be compared across plans in a straightforward manner. One important way in which the SASI model improves upon previous adverse effect analyses is to compare the magnitude of adverse effects across different fishing gear types and FMPs. This comparison can be made because all fishing effort is converted into area swept units, regardless of whether trawl, dredge, or fixed gears are being evaluated. In addition, a single range of susceptibility and recovery values were selected to parameterize the model, no matter which gear type was being evaluated, so the magnitude of Z_{∞} estimates can be compared across gears. Also economic values can be incorporated into the model to evaluate the practicability of minimization measures.

The SASI model is scheduled to for a peer review in February 2011.The NEFMC expects to develop and approve EFH designation and impacts minimization alternatives as well as deep-sea coral protection measures in late 2011 as part of the Habitat Omnibus Amendment 2.

Ecosystems-Based Fishery Management and Ecosystems-Based Management

The NEFMC's Scientific and Statistical Committee completed a background paper in November 2010 outlining a strategy to implement EBFM over the next three to five years (O'Boyle et al. 2010). The paper outlines a transition strategy and proposed next steps. As part of the strategy, three approaches to implementing EBFM were identified. The first 'incremental approach' outlines how existing fisheries management plans can be modified to address the needs of EBFM. The second 'holistic approach' provides a broader 'ecosystem basis' for management through employing constraints imposed by overall ecosystem productivity to guide an allocation strategy of species – specific catches. The third 'blended' approach employs multispecies models to inform current stock assessment and management. The implementation strategy starts with the 'incremental' approach, moves through the 'blended approach' and achieves full implementation of the 'holistic approach' within three to five years. The current nine fishery management plans would be replaced by two EBFM plans, one for the Gulf of Maine and the other for Georges Bank.

An EBFM Plan will require the NEFMC to identify 1) areas or "ecosystem production units" that are based upon ecosystem processes that would be the focus of management, including the Western-Central Gulf of Maine, Eastern Gulf of Maine-Scotian Shelf, Georges Bank-Nantucket Shoals, and the Mid-Atlantic Bight

(see presentation by Fogarty et al., above); 2) ecosystem components being impacted by fishing in these area and mitigation of prioritized risks; 3) conceptual and operational objectives including indicators and reference points; 4) management actions to mitigate impacts (specific and cumulative); and, 5) assessment activities to monitor progress against the objectives.

Challenges

The transition to EBFM must acknowledge the on-going requirements of fisheries management while at the same time developing the building blocks for EBFM with full and transparent stakeholder involvement, and consideration of the social values of the marine resources. NEFMC institutions (i.e., processes and procedures) would need to be designed to address the implications of cumulative ecosystem impacts of fishing. Institutional changes required by EBFM depend on the form of EBFM that the NEFMC decides to implement. Some of the many challenges in transitioning to EBFM are:

1. Moving from FMPs defined by species and stocks to biological or socio-cultural definitions of ecosystems.
2. Resolving jurisdictional issues with states and with the MAFMC in the Mid-Atlantic Bight.
3. EBFM may require the NEFMC to consider activities that it does not directly regulate and to broaden public input into its EBFM process.
4. Single species management has led to the establishment of constituents with historical interests in particular fisheries which will heighten the difficulties and the potential disagreements that may arise in setting objectives and making trade-offs. The Council may have to change some of its consultative processes, as well as build on creating a participatory and transparent governance process.
5. Major shifts in management approaches (including the implementation of a number of catch share programs) have required significant changes in the way fishermen and fishing communities operate and relate with the marine environment and with each other.
6. The NEFMC plan development process may be too cumbersome for developing EBFM Plans, making it difficult to include the full range of expertise needed. A number of changes to the NEFMC's plan development process, including to fishery oversight or species committees, advisory panels, plan development teams, the SSC and the SAW or other assessment processes (e.g., Transboundary Resources Assessment Committee or TRAC), are probably needed.
7. Under current national guidelines, reference points such as minimum stock size and maximum fishing mortality thresholds must be defined for each stock to the extent possible and each stock must be managed to achieve these reference points within fixed time periods. It will be necessary to configure ecosystem reference points consistent with these guidelines.

Overall, the implementation of full EBFM in the northeast region has significant consequences for what the NEFMC has to achieve and how it organizes itself to achieve these.

Further reading

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Key Question: How are the impact data generated and does this reflect a single year or multiple years? Are they confirmed with groundtruthing?

Answer: The data reflect mean impacts over a three-year time period and are generated by the model based on effort data and habitat vulnerability. The adverse impacts described by the model are qualitative in that the denominator is qualitative.

Key Question: How will the NEFMC's work, or our efforts to manage regional ecosystems more generally, evaluate impacts in terms of Magnuson-Stevens Act National Standard 8 – impacts to communities?

Answer: Communities are important, as represented by a variable inserted by the new social scientists on the NEFMC's SSC.

Key Question: There once was some discussion about opening up some currently closed areas and closing currently open areas. Has that been further discussed?

Answer: Potential action alternatives have not yet reached the NEFMC for action but it is clear our analytical tools will enable the NEFMC to evaluate those types of options. It is generally common knowledge that some of the groundfish closed areas on Georges Bank score low in terms of habitat impacts, suggesting that re-opening those areas might not result in a significant increase in impacts from bottom fishing, for example.

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL HABITAT CONSERVATION, ECOSYSTEM COORDINATION, AND COLLABORATION

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Major Recommendations

- An initial step is sharing the existing EFH policy statements shown below. Other areas include evaluating linking between or collaboration on the development of future ecological models where species may overlap jurisdiction. To further the mutual cooperation, we could also cooperate on including updated information for future South Atlantic Fishery Ecosystem Plan revisions for mid-Atlantic managed species occurring in south Atlantic waters (e.g., bluefish, summer flounder).
- Some timely issues the Councils can continue to share information on is in developing activities and policies pertaining to offshore energy development or marine aquaculture. To expand the broader view of habitat and understanding impacts across regions there may be the opportunity to hold joint workshops on habitat issues with other east coast Councils and the ASMFC.
- One newer opportunity for collaboration may be in respective organization participation in the Department of Interior's North Atlantic and South Atlantic Landscape Conservation Cooperatives depending on the desired focus areas of each region. Finally, an area where regions can also share experiences and policy development is in marine habitat identification and conservation for diadromous species.

The South Atlantic Fishery Management Council (SAFMC), using the Essential Fish Habitat (EFH) Plan as the cornerstone, adopted a strategy to facilitate the move to an ecosystem-based approach to fisheries management in the region. This approach required a greater understanding of the south Atlantic ecosystem and the complex relationships among humans, marine life, and the environment including essential fish habitat. To accomplish this, a process was undertaken to facilitate the evolution of the Habitat Plan into a Fishery Ecosystem Plan (FEP), thereby providing more comprehensive understanding of the biological, social, and economic impacts of management necessary to initiate the transition from single species management to ecosystem-based management in the region.

SAFMC habitat and environmental protection policy

In recognizing that species are dependent on the quantity and quality of their essential habitats, it is the policy of the SAFMC to protect, restore, and develop habitats upon which fisheries species depend, to increase the extent of their distribution and abundance, and to improve their productive capacity for the benefit of present and future generations. For purposes of this policy, "habitat" is defined as the physical, chemical, and biological parameters that are necessary for continued productivity of the species that is being managed. The objectives of the SAFMC policy will be accomplished through the recommendation of no net loss or significant environmental degradation of existing habitat. A long-term objective is to support and promote a net-gain of fisheries habitat through the restoration and rehabilitation of the productive capacity of habitats that have been degraded, and the creation and development of productive habitats where increased fishery production is probable. The SAFMC will pursue these goals at state, federal, and local levels. The Council shall assume an aggressive role in the protection and enhancement of habitats important to fishery species, and shall actively enter federal, decision-making processes where proposed actions may otherwise compromise the productivity of fishery resources of concern to the Council.

EFH and EFH Habitat Area of Particular Concern (EFH-HAPC) designations translated to cooperative habitat policy development and protection

In addition to implementing regulations to protect habitat from fishing related degradation, the SAFMC in cooperation with NMFS actively comments on non-fishing projects or policies that may impact fish habitat. Appendix A of the Comprehensive Amendment Addressing Essential Fish Habitat in Fishery Management Plans of the South Atlantic Region (SAFMC 1998b) outlines the SAFMC's comment and policy development process and the establishment of a four-state Habitat Advisory Panel. Members of the Habitat Advisory Panel serve as the SAFMC's habitat contacts and professionals in the field. Advisory Panel members bring projects to the SAFMC's attention, draft comment letters, and attend public meetings. NMFS,

state and other federal agencies apply EFH and EFH-HAPC designations and protection policies in the day-to-day permit review process. With guidance from the Advisory Panel, the SAFMC has developed and approved EFH policy statements to provide the SAFMC and commenting partners a more rapid response to proposed activities which may impact essential fish habitat.

SAFMC EFH Policy Statements

With guidance from the Advisory Panel, the SAFMC has developed and approved the following habitat policy statements which are available on the Habitat and Ecosystem Section of the SAFMC website:

•Protection and Restoration of EFH from Marine Aquaculture:

<http://www.safmc.net/Portals/0/HabitatPolicies/SAFMCAquaPolicyFinalJune07.pdf>

•Protection and Enhancement of Marine Submerged Aquatic Vegetation:

<http://www.safmc.net/Portals/0/HabitatPolicies/SAFMCSAVPol.pdf>

•Protection and Restoration of EFH from Beach Dredging and Filling:

<http://www.safmc.net/Portals/0/HabitatPolicies/BeachPolicy.pdf>

•Protection and Restoration of EFH from Energy Exploration, Development, Transportation and Hydropower Re-Licensing:

<http://www.safmc.net/Portals/0/HabitatPolicies/SAFMCEnergyPolicyFinal05.pdf>

•Protection and Restoration of EFH from Alterations to Riverine, Estuarine and Nearshore Flows:

<http://www.safmc.net/Portals/0/HabitatPolicies/FlowsPolicy.pdf>

Moving to ecosystem-based management

The SAFMC adopted broad goals for ecosystem-based management to include maintaining or improving ecosystem structure and function; maintain or improving economic, social and cultural benefits from resources; and maintaining or improving biological, economic, and cultural diversity. Development of a regional FEP (SAFMC 2009a) provided an opportunity to expand scope of the original SAFMC Habitat Plan and compile and review available habitat, biological, social, and economic fishery and resource information for fisheries in the south Atlantic ecosystem. The SAFMC views habitat conservation at the core of the move to EBM in the region. Therefore, development of the FEP was a natural next step in the evolution and expands and significantly updates the SAFMC Habitat Plan (SAFMC 1998a), incorporating comprehensive details of all managed species (SAFMC, south Atlantic states, ASMFC, and NMFS highly migratory species and protected species) including their biology, food web dynamics, and economic, and social characteristics of the fisheries and habitats essential to their survival. The FEP presents more complete and detailed information describing the south Atlantic ecosystem and the impact of the fisheries on the environment. This FEP updates information on designated EFH and EFH-HAPCs; expands descriptions of biology and status of managed species; presents information that will support ecosystem considerations for managed species; and describes the social and economic characteristics of the fisheries in the region. In addition, it expands the discussion and description of existing research programs and research needs to identify the biological, social, and economic research needed to fully address ecosystem-based management in the region. The comprehensive scope of the FEP provides the SAFMC source information by fishery, habitat, or major ecosystem in their consideration of actions to address bycatch reduction, habitat conservation, consideration of prey-predator interactions, maintaining biodiversity, and spatial management needs. This FEP serves as a living source document of biological, economic, and social information for all fishery management plans (FMPs). Future environmental assessments and Environmental Impact Statements associated with subsequent amendments to Council FMPs will draw from or cite by reference the FEP.

The Fishery Ecosystem Plan for the south Atlantic region encompasses the following volume structure:

•FEP Volume I – Introduction and Overview of FEP for the South Atlantic Region;

•FEP Volume II – South Atlantic Habitats and Species;

•FEP Volume III – South Atlantic Human and Institutional Environment;

•FEP Volume IV – Threats to South Atlantic Ecosystem and Recommendations;

•FEP Volume V – South Atlantic Research Programs and Data Needs;

•FEP Volume VI – References and Appendices.

Spatial and ecosystem approaches to management

The SAFMC, to conserve species and protect habitat, has employed a wide range of area management actions in the region. Initial gear area regulations include banning the use of fish traps, roller rig trawls, drift gill nets, and bottom long lines (inshore). The SAFMC has also designated Special Management Zones which limit the use of efficient or damaging gear on permitted artificial reefs and more recently established Deepwater Marine Protected Areas which prohibit harvest of all snapper grouper species.

The SAFMC manages coral, coral reefs, and live/hard bottom habitat, including deep-sea corals, through the Fishery Management Plan for Coral, Coral Reefs, and Live/Hard Bottom Habitat of the South Atlantic Region (Coral FMP). Mechanisms exist in the FMP, as amended, to further protect deep-sea coral and live/hard bottom habitats. The SAFMC's Habitat and

Environmental Protection Advisory Panel and Coral Advisory Panel supported proactive efforts to identify and protect deep-sea coral ecosystems in the south Atlantic region. Comprehensive Ecosystem-Based Amendment 1 (CE-BA1) (SAFMC 2009b) established deep-sea coral HAPCs (C-HAPCs) to protect what is thought to be the largest continuous distribution (> 23,000 square miles) of pristine deep-sea coral ecosystems in the world. In addition, the CE-BA1 created areas within the C-HAPC for traditional fishing in limited areas which does not impact deep-sea coral habitat. The CE-BA1, supported by the FEP, also addresses non-regulatory updates for existing EFH and EFH-HAPC information and addresses the spatial requirements of the Final EFH Rule (i.e., GIS presented for all EFH and EFH-HAPCs).

South Atlantic Bight Ecopath Model

The SAFMC worked cooperatively with the University of British Columbia and the Sea Around Us project to develop a straw-man and preliminary food web models (Ecopath with Ecosim) to characterize the ecological relationships of south Atlantic species, including those managed by the SAFMC. This effort was envisioned to help the SAFMC and cooperators in identifying available information and data gaps while providing insight into ecosystem function. More importantly, the model development process provides a vehicle to identify research necessary to better define populations, fisheries, and their interrelationships. While individual efforts are still underway in the south Atlantic (e.g., Biscayne Bay) only with significant investment of new resources through other programs will a comprehensive regional model be further developed.

Building from a habitat to an ecosystem network to support the evolution

Starting with our Habitat and Environmental Protection Advisory Panel, the SAFMC expanded and fostered a comprehensive habitat network in our region to develop the Habitat Plan of the South Atlantic Region that was completed in 1998 to support the EFH rule. Building on the core regional collaborations, the SAFMC facilitated an expansion to a habitat and ecosystem network to support the development of the FEP and CE-BA as well as coordinate with partners on other regional efforts.

These efforts include participation as a member and on the Board of the Southeast Coastal Ocean Observing Regional Association (SECOORA) to guide and direct priority needs for observation and modeling to support fisheries oceanography and integration into the stock assessment process through the SouthEast Data, Assessment, and Review (SEDAR). Cooperation through SECOORA is envisioned to facilitate the following:

•Refining current or water column designations of EFH and EFH-HAPCs (e.g., Gulf Stream and Florida Current).

•Providing oceanographic models linking benthic-pelagic habitats and food webs.

•Providing oceanographic input parameters for ecosystem models.

•Integration of ocean observing system information into the stock assessment process in the south Atlantic region.

•Facilitating ocean observing system collection of fish and fishery data and other research necessary to support the SAFMC's use of area-based management tools in the region including, but not limited to, EFH, EFH-HAPCs, Marine Protected Areas, Deepwater Coral Habitat Areas of Particular Concern, Special Management Zones, and Allowable Gear Areas.

•Integration of ocean observing system program capabilities and research Needs into the South Atlantic Fishery Ecosystem Plan.

•Collaboration with SECOORA to integrate ocean observing system products on the SAFMC's Habitat and Ecosystem Internet Mapping System to facilitate model and tool development.

•Expanding Internet Map Server (IMS) and ArcGIS (Geographic Information System) services will provide permissioned researchers access to data or products including those collected/developed by south Atlantic ocean observing system partners.

In addition, the SAFMC serves on the National Habitat Board and, as a member of the Southeast Aquatic Resource Partnership (SARP), has highlighted the collaboration by including the Southeast Aquatic Habitat Plan and associated watershed conservation restoration targets into the FEP. Many of the habitat, water quality, and water quantity conservation needs identified in the threats and recommendations volume of the FEP are directly addressed by on-the-ground projects supported by SARP. This cooperation results in funding fish habitat restoration and conservation intended to increase the viability of fish populations and fishing opportunities which also meets the needs to conserve and manage EFH for SAFMC managed species or habitat important to their prey.

Initially discussed as a South Atlantic Eco-regional Compact, the SAFMC has also cooperated with south Atlantic states in the formation of a Governor's South Atlantic Alliance. This will also provide regional guidance and resources that will address state and SAFMC broader habitat and ecosystem conservation goals. The Alliance was initiated in 2006. An Executive Planning Team, by the end of 2007, had created a framework for the Governors South Atlantic Alliance. The formal agreement between the four states (NC, SC, GA, and FL) was executed in May 2009. The agreement specifies that the Alliance will prepare a "Governors South Atlantic Alliance Action Plan" which will be reviewed annually for progress and updated every five years for relevance of content. Alliance

mission and purpose is to promote collaboration among the four states, and with the support and interaction of federal agencies, academia, regional organizations, non-governmental organizations, and the private sector, to sustain and enhance the region's coastal and marine resources. The Alliance proposes to regionally implement science-based actions and policies that balance coastal and marine ecosystems capacities to support both human and natural systems.

One of the more recent collaborations is the SAFMC's participation as Steering Committee member for the newly establish South Atlantic Landscape Conservation Cooperative. Landscape Conservation Cooperatives (LCCs) are applied conservation science partnerships focused on a defined geographic area that inform on-the-ground strategic conservation efforts at landscape scales. LCC partners include Department of Interior agencies, other federal agencies, states, tribes, non-governmental organizations, universities and others.

Building Tools to support EBM in the south Atlantic region

The Council has developed a Habitat and Ecosystem Section of the website:
<http://www.safmc.net/ecosystem/Home/EcosystemHome/tabid/435/Default.aspx>
and, in cooperation with the Florida Wildlife Research Institute (FWRI), developed a Habitat and Ecosystem IMS:
<http://www.safmc.net/EcosystemManagement/EcosystemBoundaries/MappingandGISData/tabid/632/Default.aspx >.
The IMS was developed to support SAFMC and regional partners' efforts in the transition to EBM. Other regional partners include the NMFS Office of Habitat Conservation, other federal partners, south Atlantic states, local management authorities, universities, conservation organizations, and recreational and commercial fishermen. As technology and spatial information needs evolve, the distribution and use of GIS demands greater capabilities. The Council has continued its collaboration with FWRI in the evolution to ArcGIS services initially for essential fish habitat:
<http://ocean.floridamarine.org/SAFMC_EFH/>
and fishery regulations:
<(http://ocean.floridamarine.org/SAFMC_Regulations/>
and is developing ones for a permissioned service for fishery independent research as well one for ocean energy activities in the region (e.g., wind, wave, and current).

Ecosystem-based actions, future challenges, and needs

The SAFMC has implemented ecosystem-based principles through several existing fishery management actions including establishment of deepwater Marine Protected Areas for the snapper grouper fishery, proactive harvest control rules on species (e.g., dolphin and wahoo) which are not overfished, implementation of extensive gear area closures which in most cases eliminates the impact of fishing gear on essential fish habitat, and use of other spatial management including Special Management Zones. Pursuant to the development of the Comprehensive Ecosystem-Based Amendment, the SAFMC is taking an ecosystem approach to protect deepwater ecosystems while providing for traditional fisheries for the golden crab and royal red shrimp in areas where they do not impact deep-sea coral habitat. The stakeholder based process taps in on an extensive regional habitat and ecosystem network. Support tools facilitate SAFMC deliberations and with the help of regional partners, are being refined to address long-term ecosystem management needs.

One of the greatest challenges to the long-term move to EBM in the region is funding high priority research, including but not limited to, comprehensive benthic mapping and ecosystem model and management tool development. In addition, collecting detailed information on fishing fleet dynamics, including defining fishing operation areas by species, species complex, and season, as well as catch relative to habitat, is critical for assessment of fishery, community, and habitat impacts and for SAFMC use of place-based management measures. Additional resources need to be dedicated to expanding regional coordination of modeling, mapping, characterization of species use of habitats, and full funding of regional fishery independent surveys (e.g., Marine Resources Monitoring, Assessment and Prediction [MARMAP], Southeast Area Monitoring and Assessment Program [SEAMAP], and Southeast Fisheries Science Center Southeast Fishery-Independent Survey [SEFIS]) which are linking directly to addressing high priority management needs. Development of ecosystem information systems to support SAFMC management should build on existing tools (e.g., regional habitat and ecosystem GIS and ArcGIS services) and provide resources to regional cooperating partners for expansion to address long-term SAFMC needs.

The FEP and CE-BA complement, but do not replace, existing FMPs. In addition, the FEP serves as a source document to the CE-BA. NOAA should support and build on the regional coordination efforts of the SAFMC as it transitions to a broader management approach. Resources need to be provided to collect information necessary to update and refine our FEP and support future fishery actions including, but not limited to, completing one of the highest priority needs to support EBM: the completion of mapping of near-

shore, mid-shelf, shelf edge, and deepwater habitats in the south Atlantic region. In developing future FEPs, the SAFMC will draw on Stock Assessment and Fishery Evaluation (SAFE) reports which NMFS is required to provide the SAFMC for all FMPs implemented under the Magnuson-Stevens Act. The FEP, serving as the source document for CE-BAs, could also meet NMFS SAFE requirements if information is provided to the SAFMC to update necessary sections.

Further reading

South Atlantic Fishery Management Council (SAFMC). 1998a. Habitat Plan for the south Atlantic region. SAFMC, Charleston, SC.

South Atlantic Fishery Management Council (SAFMC). 1998b. Comprehensive Amendment addressing Essential Fish Habitat in fishery management plans of the south Atlantic region. SAFMC, Charleston, SC.

South Atlantic Fishery Management Council (SAFMC). 2009a. Fishery Ecosystem Plan for the south Atlantic region. Volumes I-V. SAFMC, North Charleston, SC.

South Atlantic Fishery Management Council (SAFMC). 2009b. Comprehensive Ecosystem-Based Amendment 1. SAFMC, North Charleston, SC.

STAKEHOLDER PANEL DISCUSSION WITH COUNCIL

Rapporteur: **Jim Armstrong,** Mid-Atlantic Fishery Management Council, Dover, DE

Key Question: With regards to the The Nature Conservancy's information "portal," will commercial and recreational fishermen's knowledge be incorporated into the model?

Answer: Yes, The Nature Conservancy is partnering with several universities and is developing a stakeholder working group to gather input on the importance of certain areas and address social and economic questions.

CLOSING REMARKS

John Boreman, Chair, Mid-Atlantic Fishery Management Council/Science and Statistical Committee, Dover, DE

Any science-based decision process in fisheries management needs to function with imperfect knowledge with respect to habitat-related information. Managers cannot afford the cost or the time to obtain every relevant piece of information there is about northeast shelf habitats before making judgments about the real or potential impacts of natural and anthropogenic events. Where key knowledge does not exist, a body of theory needs to be developed, much the same way that theory has evolved to support stock assessments (e.g., the von Bertalanffy growth and Ricker stock-recruitment models) — habitat science is lacking in this regard.

Habitat science should take advantage of new sampling and data handling technologies. Sampling tools such as moored and mobile sensor arrays, LiDAR (Light Detection And Ranging) and side-scanning sonar, and pop-up satellite tags can all be integrated with traditional sampling techniques to gain information about the relationship between habitat types and fisheries species productivity. Expanding partnerships between scientists and the fishing industry to sample fisheries species and their local environments is not only useful but necessary; fishermen possess a vast store of knowledge about natural history that scientists need to access and use in their single species, multi-species, and habitat- and ecosystem-based assessments. To support expanding data collection, suitable end-to-end data management architecture is needed to guide how the data are being collected, archived, and used in products useful to fisheries science and management, as well as the public at large.

As the body of theory and new sampling and data handling techniques are being developed, the focus of habitat science and the management it supports should be on what is immediately important to fishery stock assessments. Specifically, habitat effects on fisheries species productivity should be translated into mortality rates that can be readily incorporated into stock assessment models.

Habitat science is currently being conducted by a multitude of government agencies and organizations, so where does the MAFMC fit into the picture? Being on the receiving end of the information being generated by scientists and the fishing industry related to habitat and its relation to fisheries productivity, the MAFMC can serve as a habitat information clearinghouse by focusing efforts on coordinating the development and continually improving the packaging of the information so that it suits fisheries management needs, as is best exemplified by this workshop.

In addition, the MAFMC can support NMFS in its efforts to implement the recently developed Habitat Assessment Improvement Plan, and continue to refine terms of reference for stock assessments as more knowledge is gained about the relationship between habitats and fisheries species productivity. Most importantly, the MAFMC needs to ensure that habitat-(and ecosystems-) based management is undertaken within the existing bounds of scientific knowledge; both management and science need to evolve in tandem.

David H. Wallace, Wallace & Associates, Inc., Cambridge, MD

I would like to discuss two different groups or categories. The first group could be considered as the "regulators," that is, the Councils, ASMFC etc.; in other words, the people who create the policy. They all have to deal with the same problems involving habitat loss, whether natural or man-made, and with trying to go from single species management to multi-species management under EBFM. The latter is a challenge because there is such an enormous lack of knowledge about how such things as predator-prey relationships operate, and how all these species interact with the habitat. For example, I thought it was interesting what John Manderson had to say: that habitat is not just the bottom or bottom structure, but the overlying water as well. I had never considered that before, and I'm sure a lot of other people here today realized what a revelation that was, especially because we're always talking about impacts to the bottom, either natural or man-made.

So, the Councils are attempting to deal with these various habitat issues through closures or through the creation of protected areas. For example, the SAFMC has some very large habitat closures, especially for deep-sea corals. The SAFMC has always been at the forefront of having public participation and getting all the stakeholders to buy into the process. They've done a really good job of bringing together all the stakeholders, and they did this from the bottom up, not from top down management. On the other hand, the NEFMC has a number of habitat closures, and what's interesting is that a number of those closures were not the ones intended, but they were the results of political decisions, and not a biological or habitat decision. That's what happens when you're trying to push the system and trying to make it comply with laws or mandates from Congress.

The second group consists of people like Jason Link, the NMFS scientist, Jay Odell from TNC, an environmental organization, and the fishermen. They are particularly involved in three different issues: habitat, ecosystems, and coastal and marine spatial planning. CMSP doesn't fall under the auspices of the Councils but it's clear that this will have a significant impact on the Council system because it appears that the Regional Planning Bodies may not be the regional governance bodies and there's a good chance that the Councils are not going to have any real participation in this at all. Now, the National Ocean Policy establishes a framework for CMSP that is supposed to address user conflicts. My personal opinion is that conflict resolution is going to come to the fore when the Councils are faced with this notion that they are going to zone the ocean and they won't have any jurisdiction over this. This is going to have a significant impact when fisheries comes into conflict with other forms of ocean usage, especially energy development such as wind farms. So we have this interesting situation, and on a number of occasions today we've talked about trade-offs. The fact of the matter is we need to think about the trade-offs because they are going to be far more extensive than we now realize.

Rick Robins, Chair, Mid-Atlantic Fishery Management Council, Dover, DE

I would like to commend Gene Kray, Tom Hoff and the Steering Committee for planning and assembling such an impressive group of habitat and ecosystems experts to engage the Council in this workshop. I would also like to thank all of the panelists and participants for their presentations and contributions to the dialogue.

It is clear that the workshop has generated a lot of genuine excitement within the scientific community and, more broadly, both excitement and concern in the stakeholder community.

The workshop is extremely timely, for several reasons:

The National Ocean Policy will soon be moving from concept to implementation, resulting in the creation of a Regional Planning Body and vision for the mid-Atlantic region.

Offshore energy development promises to generate a steady stream of future initiatives that will require the Council's proactive and constructive engagement in the Coastal Marine Spatial Planning (CMSP) arena.

Public interest in the management and conservation of offshore marine habitats is growing and involves other management agencies and legislative authorities, as we saw recently with the proposal to consider protecting the offshore seamounts and canyons under the National Marine Sanctuaries Act.

As these national and regional initiatives move forward, it is clear that the Council has an important and expanding role to play with respect to the management of coastal and offshore habitats, and this workshop has revealed opportunities for Council engagement that are both timely and important.

At the same time, the Council has already taken an important first step to incorporating ecological considerations into our current fishery management plans and how to transition into ecosystem management by appointing an Ecosystem Subcommittee of the Council's Scientific and Statistical Committee.

The presentations were informative and thought provoking on a wide range of issues. Rather than recapping them, I would like to focus on next steps. As Pat Augustine reminded us throughout the workshop, actions are more important than meeting summaries. The presentations revealed opportunities that the Council can pursue across a wide spectrum of agencies, venues, and disciplines. Some of these opportunities are easily executed and others represent long-term opportunities and commitments. In a number of cases, we can work with existing programs to identify data and research needs for our region. Many of these opportunities build on the Council's existing initiatives, particularly with respect to ocean governance and ecosystem management. I believe the Council's role within the fast changing context of ocean governance goes well beyond simply describing and identifying essential fish habitat. Our challenges and opportunities associated with ocean governance will inevitably require a broader engagement with other agencies and stakeholders through the Regional Planning Body. Additionally, the scientific and technological developments that were highlighted in this workshop, including the application of fine-scale ocean observations to the management of fisheries interactions and the prospect of a coral assessment for the region, among others, present the Council with a range of opportunities to increase our understanding of the ecological connections between the marine environment, the fisheries that we manage as a Council, and the other activities and interests in the mid-Atlantic.

Finally, in terms of where do we go from here, I would suggest that the Council task the Ecosystem and Ocean Planning Committee with categorizing the opportunities presented in this workshop and developing a list of priorities and an action plan for consideration by the full Council by mid-2011.

PRESENTER BIOGRAPHIES

Thomas Hoff, Senior Ecologist, has worked for the MAFMC for nearly 30 years. He has been responsible for or worked on each of the Council's FMPs and has been the lead for habitat and ecosystem efforts. Prior to working for the Council he spent six years with two environmental consulting firms working on the Hudson River. He has B.S. (Zoology) and M.S. (Ecology) from Pennsylvania State University and a Ph.D. (Marine Studies) from the University of Delaware.

Gene Kray has been on the MAFMC for eight years and has chaired the Ecosystems Committee (now the Ecosystems and Ocean Planning Committee) for much of that time. He is a retired teacher and educational administrator, retiring from West Chester University, PA, in 1995. He has been a recreational fisherman for 65 years.

Jessica Kondel has worked for NOAA for over 10 years in various positions in California and DC, including serving as a NOAA Corps officer, Advisor to the Deputy Under Secretary for NOAA, and Fisheries Management Specialist. Currently she is the Acting Regional Coordinator for NOAA's Coastal and Marine Spatial Planning (CSMP) Program and is responsible for assisting with the NOAA-wide implementation of the CMSP Framework. She is responsible for coordinating NOAA's regional engagement with Regional Planning Bodies and other partners to develop and ultimately implement coastal and marine spatial plans.

Pat Montanio is Director of the NMFS Office of Habitat Conservation and a long-term NOAA employee focused on environmental policy. She oversees the conservation, protection, and restoration of oceanic, coastal, estuarine, and riverine habitats vital to our nation's marine fisheries and coastal economics. Programs include community-based restoration, Open Rivers, essential fish habitat, deep-sea corals, wetlands protection, coral conservation, and NOAA Chesapeake Bay Office. Previously, she held management positions in NOAA's Office of Response and Restoration and Office of Protected Resources. She holds a B.S. (Zoology) from the University of Maryland.

Thomas E. Bigford is Chief of the NMFS/Habitat Protection Division in the Office of Habitat Conservation, Silver Spring, MD. He directs marine, estuarine, and riverine programs to manage the essential fish habitat program, assure fish passage for diadromous species at hydropower and water diversion projects, develop policy for traditional and alternative energy issues, implement wetland policies, streamline permitting and licensing reviews, coordinate policy and science associated with human activities affecting living marine resources, and manage the Agency's coral program. He has 34 years of experience in research, management, and program direction including three years with EPA and 28 years with NOAA (19 years with NOAA headquarters and NOAA NMFS headquarters, and nine years with NOAA regional offices). He holds leadership positions with The Coastal Society and the American Fisheries Society. He has a B.S. (Fishery Biology) from Michigan State University, an M.S. (Zoology/Marine Biology) from the University of Rhode Island, and a Masters in Marine Affairs from the University of Rhode Island.

Peter Colosi is Chief of the NMFS/Habitat Conservation Division, Northeast Region, whose major activities include implementing essential fish habitat provisions and review of coastal development activities in order to protect habitats of living marine resources. His earlier NMFS assignments include seventeen years in fisheries management and later heading up a fishery policy analysis office. He received a B.A. (Biology) form Salem State University and an M.S. (Biology) from Northeastern University.

Fan Tsao, Deep-Sea Coral Research Specialist at the NMFS/Office of Habitat Conservation, coordinates NOAA's research and management activities related to deep-sea corals and sponges, including the implementation of the Deep Sea Coral Research and Technology Program. She has a Masters in Marine Affairs from the University of Washington.

John Catena is the Northeast Regional Supervisor for the NOAA/NMFS Restoration Center in Gloucester, MA. He is responsible for managing NOAA's habitat restoration programs throughout the northeastern U.S. from Maine to Virginia and supervises 15 professional and technical staff. He has been involved in managing, planning, and overseeing habitat restoration projects for over 15 years, with specific experience in the conceptual design, planning, and monitoring of tidal wetland, shellfish, riverine, and anadromous fish restoration projects including fish passage and dam removal projects. He received a B.S. (Marine Science) from the University of South Carolina in 1984 and an M.A. (Marine Affairs) from the University of Rhode Island in 1987.

Lauren Wenzel has worked for the National Marine Protected Areas Center for seven years, and serves as the Coordinator for the National System of Marine Protected Areas. Prior to joining NOAA, she worked on Chesapeake Bay restoration issues for the Maryland Department of Natural Resources. She has a B.A. from

Oberlin College and an M.S. (Natural Resources Policy and Management) from the University of Michigan.

Reed Bohne is Regional Director for the northeast and Great Lakes region of NOAA's Office of National Marine Sanctuaries. He has worked for the sanctuary program for 25 years and prior to his current appointment was Superintendent of the Gray's Reef National Marine Sanctuary in Georgia. He received his B.S. from the College of William and Mary and M.S. from the University of Michigan.

Elaine Vaudreuil manages the Coastal and Estuarine Land Conservation Program with NOAA's Office of Ocean and Coastal Resource Management, and led the development of NOAA's guidelines for this program in 2002. For the past 12 years she has also represented the Coastal Zone Management Program and National Estuarine Research Reserves in NOAA's strategic planning and budget formulation processes and other policy development under the Coastal Zone Management Act. She received a Master of Regional Planning from the University of North Carolina at Chapel Hill, specializing in land use planning and coastal management, and a Bachelor's in Urban and Environmental Planning from the University of Virginia.

Joe Nohner is a Knauss Sea Grant Fellow in the NMFS/Office of Science & Technology. He has been responsible, in part, for the implementation of the Habitat Assessment Improvement Plan and conducting an assessment of estuarine fish habitats for the National Fish Habitat Action Plan. He received a B.S. (Environmental Sciences) from Notre Dame and an M.S. (Aquatic Resources and Management) from the University of Michigan where he developed a GIS-based spawning habitat model for muskellunge.

Tom Noji completed his B.A. in the U.S. and did graduate work in Germany, receiving his Ph.D. (Biological Oceanography) from the University of Kiel in 1987. He worked as an oceanographic researcher at the University of Kiel and at the Institute of Marine Research in Bergin, Norway until 2001, and then became Director of NMFS/NEFSC's James J. Howard Marine Sciences Laboratory, Highlands, NJ and Chief of the Ecosystems Processes Division. He serves on several international, national, and regional advisory committees and has held graduate courses at Rutgers University (NJ). His own research includes oceanic plankton ecology, harmful algal blooms, benthic-pelagic coupling, oceanic carbon pumps, marine biogeochemical cycles, marine contaminant transport, habitat mapping and classification, and effects of broad-scale hydrographic changes on ecosystem processes.

Ned Cyr is Director of the NMFS/Office of Science & Technology. He joined NOAA in 1992. He was an International Affairs Specialist with NOAA's Office of International Interests, a Fisheries Biologist with the NMFS/Office of Protected Resources, Head of the Ocean Science and Living Resources Program of the Intergovernmental Oceanographic Commission of UNESCO, and Chief of the Marine Ecosystems Division in NMFS/Office of Science & Technology. His interests include fisheries oceanography, the effects of climate change on marine ecosystems, ecosystem approaches to fisheries management, the design and implementation of large-scale marine ecological observing systems, and international ocean science. He was Technical Secretary for the Living Marine Resources Panel of the Global Ocean Observing System, and Coordinator of the NMFS Ecosystem Principles Advisory Panel. He received his B.S. from the University of Notre Dame in 1985, and his Ph.D. (Marine Science) from the University of South Carolina in 1991.

Mike Fogarty is the Chief of the Ecosystem Assessment Program at the NMFS/NEFSC Woods Hole Laboratory, MA, where he has worked for 30 years. He received his M.S. and Ph.D. degrees from the University of Rhode Island. He has served on numerous national and international committees including the Global Ocean Observing System Steering Committee, the U.S. Global Ocean Ecosystem Dynamics Program Scientific Steering Committee (Chair 1997-2002), the Comparative Analysis of Marine Ecosystem Organization Scientific Board, and the Scientific and Statistical Committees of the MAFMC (past) and NEFMC (current).

Peyton Robertson has been with NOAA for the past 18 years, working on nonpoint source pollution, monitoring needs, coastal management, and ocean policy. In August 2007, he became the Director of the NOAA Chesapeake Bay Office (NCBO) in Annapolis, working to bring all of NOAA's capabilities to bear on the ecosystem management challenges of the Bay. NCBO provides state-of-the-art science, technical assistance and funding, and outreach and education to advance the restoration of the Chesapeake Bay ecosystem, increasing citizen stewardship throughout the watershed. He has a B.A. (Environmental Science) and a Masters (Urban and Environmental Planning) from the University of Virginia.

John Manderson is a Research Fisheries Biologist for the Ecosystems Processes Division at NMFS/NEFSC's James J. Howard Marine Sciences Laboratory, NJ. His research interests include applications of integrated ocean observing systems to marine habitat ecology and understanding the ways habitat specific processes are translated across spatial scales and levels of ecological organization to affect regional population and ecosystem dynamics. He received his Ph.D. (Natural Resources Conservation) from the University of

Massachusetts, Amherst. He currently serves on the steering committee for the Working Group on the Northwest Atlantic Regional Sea for the International Council for the Exploration of the Sea, as NEFSC liaison to the Mid-Atlantic Regional Association Coastal Ocean Observing System, and on the Science and Technical Committee for the Barnegat Bay Partnership.

David Packer, Marine Ecologist, works for the Ecosystems Processes Division at NMFS/NEFSC's James J. Howard Marine Sciences Laboratory, NJ and is currently on rotational assignment to the NMFS/ Office of Habitat Conservation in Silver Spring, MD. Prior to working for NMFS he worked for several other federal agencies including the National Park Service, National Forest Service, Bureau of Land Management, Smithsonian Institution, and the EPA Chesapeake Bay Program. His current and past research and policy work includes essential fish habitat, deep-sea corals, climate change literacy training, gravel mining in anadromous fish streams, salt marsh restoration, sedimentology, fish-benthos trophic interactions, and mollusk taxonomy. He also provides scientific information/advice to the MAFMC and NEFMC. He has a B.S. (Zoology) from Ohio State University and an M.S. (Oceanography) from the University of Maine.

Greg Capobianco has been with the New York State Coastal Management Program for 20 years working across the marine and Great Lakes districts to implement New York's Significant Coastal Fish and Wildlife Habitats Program. He has served as Project Manager for the New York Ocean and Great Lakes Ecosystem Conservation Council and now serves as Director of the New York Ocean and Great Lakes Program. He helped lead the formation of the Mid-Atlantic Regional Council on the Ocean (MARCO) and continues to serve as principal New York representative to MARCO. Currently he is leading an ocean planning initiative focused on identifying ocean habitats in need of greater protection and developing siting criteria for offshore renewable energy. He received his B.S. (Biology) from SUNY Albany.

Jason Link has been a Research Fisheries Biologist for the NMFS/NEFSC Woods Hole Laboratory, MA, for almost 15 years. He has led the Food Web Dynamics Program for many of those years and has recently helped to form and transitioned to the Ecosystem Assessment Program. Previously he worked on Gulf of Mexico and Laurentian Great Lakes fishery ecosystems. He is an adjunct professor at multiple regional universities and serves on and chairs several national and international working groups, review panels, and committees dealing with fisheries ecosystem issues. He received his B.S. from Central Michigan University and his Ph.D. from Michigan Technological University.

Capt. Monty Hawkins is owner/operator of the party boat *Morning Star*, Ocean City, MD. He has 30 years of party boat fishing experience in the mid-Atlantic and is self-educated. He believes rebuilding the region's reef fisheries is not possible until the role of seafloor habitat, especially its holding capacity and importance to fishery production, is understood and incorporated into management. He is the author of a weekly fish report and has written extensively to the management community.

Greg DiDomenico serves as the Executive Director of the Garden State Seafood Association (GSSA). GSSA is a trade association comprised of commercial fishermen, shore-based processors, commercial dock facilities, seafood markets, restaurants, and various industry support businesses from New Jersey. He has been an advocate for the New Jersey commercial fishing industry for six years. He is currently involved in fishery management plans for the MAFMC and NEFMC, where he acts as liaison between the scientists and fishing industry. He has been involved with the development of numerous scientific proposals involving several fish stocks, testing of alternative gear modifications, developing cooperative research, and has attended numerous stock assessments conducted by the NEFSC. Prior to joining GSSA, he was Executive Director of the Monroe County Commercial Fishermen's Association, where he analyzed fishery management plans for the Gulf of Mexico Fishery Management Council and the South Atlantic Fishery Management Council.

Jay Odell is the Director of The Nature Conservancy's Mid-Atlantic Marine Program. He works with partners to advance efforts to restore and conserve living marine resources, seeking solutions that work for people and nature. Prior to his work at TNC, he spent 13 years with the Washington State Department of Fish and Wildlife helping to lead stock assessments, harvest management, and intergovernmental relations with treaty tribes. He received a B.S. (Biology) from Evergreen State College in 1986 and an M.S. (Wildlife and Fisheries Conservation) from the University of Massachusetts, Amherst in 2003.

Wilson Laney is the South Atlantic Fisheries Coordinator for the U.S. Fish and Wildlife Service and is based at North Carolina State University in Raleigh, NC. He is in his thirtieth year with the US FWS, having worked for 10 years in the Ecological Services Division before moving to Fisheries in 1991. He has been intensively involved in the Atlantic States Marine Fisheries Commission (ASMFC) and South Atlantic Fishery Management Council (SAFMC) processes for nearly 20 years, and currently serves on the ASMFC Habitat, Management and Science, and Interstate Tagging Committees, in addition to a number of Technical Committees and Plan Review Teams. He

serves on six SAFMC committees, including Habitat and Environmental Protection, Ecosystem-Based Management, and Protected Resources. He has a B.S. (Biology) and an M.S. and Ph.D. (Zoology, Marine Science minor) from North Carolina State University.

Christopher Kellogg has worked for the NEFMC for nearly 30 years. He has been responsible for FMPs for groundfish, scallops, herring, and lobster. Currently he is the NEFMC's Deputy Director and supervises its technical staff. Before joining the NEFMC staff, he worked as a resource economist with the Massachusetts Division of Marine Fisheries. He has an M.A. (Economics) from the University of Delaware and an M.S. (Finance) from Brandeis University.

Roger Pugliese is Senior Fishery Biologist with the South Atlantic Fishery Management Council and has over 25 years facilitating development of FMPs ranging from Red Drum to Dolphin and Wahoo to habitat plans for Coral and Live Bottom Habitat and Pelagic Sargassum. He is responsible for the Council's spatial GIS, habitat conservation, and ecosystem coordination efforts and the development of the Council's Habitat Plan, as well as their Fishery Ecosystem Plan supporting their first Comprehensive Ecosystem-Based Amendment. He also serves on the Southeast Coastal Ocean Observing Regional Association (SECOORA) Board of Directors, the South Atlantic Regional Research Plan Development Team, is a member of the South Atlantic Landscape Conservation Cooperative Steering Committee and Southeast Aquatic Resources Partnership (SARP) Steering Committee, chairs the Southeast Area Monitoring and Assessment Program-South Atlantic (SEAMAP-SA) Committee and is a member of the South Atlantic Governor's Alliance Executive Planning Team.

James Armstrong has worked for the MAFMC for eight years. He is staff lead on the bluefish, spiny dogfish, and monkfish FMPs, and is also a GIS analyst and manages the Council's website. Prior to working for the Council he worked for four years as a stock assessment scientist for the North Carolina Division of Marine Fisheries. He has B.S. (Marine Biology) from the University of North Carolina at Wilmington and an M.S. (Fisheries and Wildlife Science) from North Carolina State University.

John Boreman is former Director of the NMFS/Northeast Fisheries Science Center and the NMFS/Office of Science & Technology. Since retiring from the federal government in 2008 he has been a member of the faculty in the Department of Biology at North Carolina State University and an Executive Management Consultant for natural resource agencies and organizations. He is the Chair of the MAFMC's Science and Statistical Committee. He is also serving as 1st Vice President of the American Fisheries Society. He received his B.S. from the SUNY College of Environmental Science and Forestry, and has M.S. and Ph.D. degrees from Cornell University.

David H. Wallace is proprietor of Wallace & Associates, Inc., a firm that has been dealing with fisheries issues for the last 30 years. His experience prior to forming his current company includes the position of Chief Operating Officer of a large vertically integrated fishing and seafood processing company as well as owner and operator of specialized seafood harvesting and processing operations. He is a current member of the Marine Fisheries Advisory Committee and the Marine Protected Areas Federal Advisory Committee. He is the Chair of the NEFMC's Habitat, Ecosystem, and Marine Protected Areas Advisory Panel and a member of the NEFMC's Skate Advisory Panel. He also serves on the MAFMC's Surfclam and Ocean Quahog Advisory Panel. He also served on the MAFMC's Habitat Advisory Committee until it was disbanded. He is a member of the American Fisheries Society and the Society of Naval Architects and Marine Engineers.

Rick Robins was appointed to the MAFMC in 2007 and has served as Chairman since 2008. He has served as an Associate Commissioner with the Virginia Marine Resources Commission since 2004 and chairs the Commission's Crab Management Advisory Committee. He is an avid recreational angler and owns a shellfish processing business on Virginia's Eastern Shore. He received a B.A. (Economics and History) from Washington and Lee University and an M.B.A. from the University of North Carolina at Chapel Hill.

ACKNOWLEDGMENTS

The genesis for this Habitat-Ecosystem Workshop was proposed by the Mid-Atlantic Fishery Management Council's new Executive Director, Chris Moore, before he even left the National Marine Fisheries Service. Conversations with Tom Bigford (NMFS-HQ) and Pete Colosi (NMFS-Northeast Regional Office) led to the desire to re-invigorate the Council's habitat and ecosystem efforts. This workshop would not have been possible without the assistance and dedication of numerous individuals. Tom Hoff (Council staff) coordinated with Tom Bigford and Pete Colosi initially on the best first steps to stimulate the Council's efforts and it was decided a workshop was the appropriate forum. As the workshop grew other individuals were added to form a Steering Committee: Gene Kray (Council member), Dave Packer (NEFSC), Joe Nohner (NMFS-HQ), and Kirsten Larsen (NMFS-HQ). In particular, a special thank you goes to the numerous presenters and authors who contributed their knowledge, experience, and time to draft this document. Finally, a huge acknowledgment goes to Tom Bigford, who assumed co-editing responsibilities and helped to make sense out of the widely divergent types and quality of manuscripts the authors provided in order to make this workshop publication a coherent, timely, and useful product.

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February 14, 2010

Mr. Michael Weiss
Council on Environmental Quality
722 Jackson Place NW
Washington, D.C. 20503

Dear Mr. Weiss:

Please accept these comments on behalf of the Garden State Seafood Association (GSSA). GSSA is comprised of commercial fishermen, shore-based processors, commercial dock facilities, seafood markets, restaurants, and various industry support businesses from New Jersey.

We are concerned the Regional Council Planning Process and Dispute Resolution Process proposed in the CMSP will ultimately undermine management of U.S. marine fish resources. Congress created the Magnuson-Stevens Fishery Conservation and Management Act (MSA) in 1976 to manage U.S. marine fishery resources within the EEZ and throughout the range of a given managed species (See 16 U.S.C. 1801 et seq.). It is unclear to members of the commercial fishing industry how federally-approved fishery management plans, developed by the Secretary of Commerce, Regional Fishery Management Councils in an open public process using the best scientific information available, will be considered should these plans not be deemed consistent with the principles of the CMSP.

The Secretary of Commerce and Regional Councils, pursuant to their authority under the MSA, are already conducting their own version of "marine spatial planning" which may be complicated by the addition of a new layer of government with ultimate decision-making authority. The Councils are actively working to address gear usage, impacts on habitat, time/area closures, bycatch reduction, and conservation of fishery and protected species populations. These efforts must not be frustrated by an expanded bureaucracy.

The National Ocean Council (NOC) would be the commanding entity regarding final decisions on regional plan consistency, plan compliance, dispute resolution, and any associate penalties for non-

compliance. The NOC, as specified in the Interim Report of the Interagency Ocean Policy Task Force (IOPTF), will be advised by a Governance Advisory Committee (GAC). The membership structure of the GAC is susceptible to political pressures which reward those entities in vogue with the existing administration.

The concept of CMSP is defined in the Interim Interagency Report as "a comprehensive, adaptive, integrated, ecosystem-based, and transparent planning process" (p.1). While we agree with many of these characteristics of a national program, we are especially concerned with implementing an ecosystem-based approach to CMSP. Ecosystem-based management (EBM) has, in recent years, become a politically correct and fashionable concept that has never been implemented in federal law. In fact, aggressive efforts to include this provision as a mandatory requirement in the recent reauthorization of the MSA failed. There are legitimate reasons for this failure and they form the basis of our opposition.

We believe the failure to realize implementation of national EBM due to the expansiveness of the concept, failure to acquire sufficient scientific information to meet measurable objectives, and concurrent application of the precautionary principle when such information is lacking. The combination of the above aspects forces the seafood industry, whose members are dependent on the ocean as a source of protein, to generally oppose required implementation of EBM as part of the CMSP.

First, the term ecosystem-based management is not clearly defined in the CMSP or even in the Interim Report of the Interagency Ocean Policy Task Force (IOPTF) though it constitutes a core component of both programs. There are many references to EBM requirements and broad-based EBM principles but no clear definition. Thus, constituents are left to their own perceptions regarding how the Administration intends to use CMSP and EBM to: manage and regulate the protection of key species that are critical to ecosystem function and resiliency; improve species adaptation; achieve healthier and more productive environments; restore, protect, and maintain protected species populations, ecosystems and biological diversity. In some examples of EBM the intent is to manage the ecosystem to the microbial level.

A perfect example of the complications facing EBM can be seen with protected species. Marine mammals, whales and sea turtles are not being managed using sound wildlife management principles. Rather, they are afforded extreme levels of protection beyond other elements in the food web. In the case of CA sealions the protection has resulted in an unbalanced ecosystem. Despite this situation little is being done to correct the problem and the sport and charter fishing industry, endangered salmon and brood stock sturgeon populations, and private boat and pier owners continue to suffer losses. The agency has implemented aggressive and widespread time & area closures and gear reduction through mitigation efforts with little scientific information, all of which are designed to reduce fishing effort. At what point are the trophic requirements of these growing protected species populations going to impact the yield of seafood products available to humans and will EBM rectify the situation?

The inability of Congress (and subsequently the Agency) to manage rather than protect these resources cuts squarely against the argument for a formal balanced, science-based EBM plan. Thus, we have little faith the EBM approach embodied in the CMSP will address needed changes but simply be more of the same dysfunction.

Second, the CMSP contains many references regarding the need for sound science (See p.3; p.8; p.13) as the basis for EBM but offers little in the way of an actual plan to gather the necessary information in

advance of informed decision-making. Arguably, the lack of scientific information and funding required to procure it has frustrated similar efforts in the past. The only attempt to address the gathering of scientific information is contained in the CMSP work plan which allows for the regional planning body to consult with scientists and technical experts about myriad topics (p.14-15) but apparently with little understanding of the scope, timing and cost of these data needs.

Based on the timelines provided in the CMSP work plan we believe regional planning will continue and be complete long before additional scientific information is achieved via regional private-public technology and science partnerships specified in the document (p.15). Also, there is no specific funding mechanism provided in the CMSP to enable state/federal agencies to conduct the necessary scientific research to support the plan. Thus, they are left to do more with less yet also support a new complicated system that is supposedly "built on this foundation of sound science." (p.2).

Clearly, the President's 2011 budget does not reflect a true commitment to science and supports our contention that the problems will continue and be exacerbated by a new EBM requirement. While the 2011 NOAA budget reflects a proposed increase of $36.6M for national "catch share" programs, there appears to be a net reduction in funding available for stock assessments and cooperative research. From an industry perspective the math is simple -- less money for science means less data, less data means more precaution, more precaution means less fishing, less fishing means fewer jobs, less revenues, and less food harvested by domestic fishermen resulting in increased seafood imports and an unbalanced trade deficit.

The expansive concept of EBM and lack of scientific information (and funding for scientific research) leads to our final concern – the application of the precautionary approach as the guide for decisions where adequate data are lacking (p.8). The CMSP even contains a provision by which the regional planning body can 'compensate' for lack of information and data. (p. 15) and continue with the decision-making process. We firmly believe the Precautionary Approach fosters a disincentive for managers to seek, secure and spend manpower and funding to gather scientific data if conservative decisions can be made simply by invoking precaution. This should not be the guiding doctrine of the CMSP.

The CMSP document suggests we already have "…vast stores of natural and social science information about ocean, coastal and Great Lakes ecosystems and their uses." (p.24). Despite this apparent wealth of science we continue to struggle with current efforts to manage marine resources absent basic scientific information. The condition of hundreds of finfish, marine mammal, and sea turtle stocks are unknown and Regional Fishery Management Councils are now required to meet new MSA scientific standards with little more in the way of new information. We wonder how a new layer of government with greater data requirements will perform if the necessary scientific information is currently missing at the most basic levels of resource management?

We do not understand what the Administration means by the requirement that CMSP will provide special attention to ensuring inclusion of "underserved communities" in the stakeholder advisory body (p.14). The term is not defined in the report nor is the extent to which these entities will be given deference and what that might entail. This suggests some politicizing of the advisory process. Thus, we register our concern about this unknown provision and request further clarification of this issue.

Sincerely,

Gregory P. DiDomenico
Executive Director
Garden State Seafood Association

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April 15, 2014

Ms. Maureen Bornholdt
Mid-Atlantic Regional Planning Body Federal Co-Lead
Bureau of Ocean Energy Management
1849 C Street, NW
Washington, D.C. 20240

Ms. Gwynne Schultz
Mid-Atlantic Regional Planning Body State Co-Lead
Maryland Department of Natural Resources
580 Taylor Avenue
Annapolis, MD 21401

Mr. Gerrod Smith
Mid-Atlantic Regional Planning Body Tribal Co-Lead
Shinnecock Indian Nation
PO Box 5006
Southampton, NY 11969

Submitted Electronically via *MidAtlanticRPB@boem.gov*

RE: Comments on Mid-Atlantic Regional Planning Body's Draft Regional Ocean Planning Framework

Dear Ms. Bornholdt, Ms. Schultz, and Mr. Smith:

Please accept these comments on behalf of the Garden State Seafood Association (GSSA). GSSA is comprised of commercial fishermen, shore-based processors, commercial dock facilities, seafood markets, restaurants, and various industry support businesses from New Jersey.

The National Policy for the Stewardship of the Oceans, our Coasts, and the Great Lakes sets forth a vision to ensure that our nation's oceans, coasts, and Great Lakes are healthy and productive for future generations. The National Ocean Policy Task Force was charged with developing the means to maintain healthy, resilient and sustainable oceans coasts and Great Lakes. This Task Force released a National Ocean Policy Implementation Plan on April 16, 2013 which more than adequately espouses a vision, goals and objectives required for responsible marine spatial planning.

Why, is the Mid-Atlantic Regional Ocean Planning Body espousing its own vision, principles, goals and objectives for marine spatial planning in the Draft Mid-Atlantic Regional Ocean Planning Framework (Draft Framework) when the blueprint for procedures has already been established?

One obvious danger in composing the Draft Framework for the Mid-Atlantic region is that its contents may not be consistent with the National Policy. One such example exists regarding geographic focus. The Draft Framework does not anticipate including in its planning efforts the major bays and estuaries of the Mid-Atlantic. However, this is inconsistent with the National Policy for the Stewardship of the Oceans, our Coasts, and the Great Lakes which specifically states that, "the geographic scope of the planning area for coastal marine spatial planning in the United States includes the territorial sea, the EEZ, and the Continental Shelf. The scope would extend landward to the mean high water line, specifically mentioning the inclusion of inland bays and estuaries, as significant ecological, social, and economic linkages between these areas with offshore areas.

Again, what exactly is the Draft Framework document describing in terms of goals, principles, and objectives that have not already been defined in the implementation plan of the National Ocean Policy?

The Draft Charter was distributed and discussed at length at the Mid-Atlantic Regional Planning Body's Inaugural Meeting last September. It includes many of the elements of the Draft Framework and was to be signed by all participating agencies and States essentially delineating the roles and responsibilities of the RPB members.

What is the status of the Draft Charter for the Mid-Atlantic Regional Planning Body?

The constituents don't need any more documents to edit. They want assurances that their voices will be incorporated into the marine spatial planning process. The Mid-Atlantic RPB has fallen short in providing any assurance that the affected parties will be an integral part of the decision making process. The lack of money to support formal advisory committees under the Federal Advisory Committee Act is a prime example of not taking public participation as a priority issue. Rather, the Mid-Atlantic RPB has resorted to a small working group (15-20 members) called a Stakeholder Liaison Committee, the objectives of which appear to serve as the formal outreach arm of the Mid-Atlantic RPB. This is totally inadequate when considering the importance of the tasks involved in coastal marine spatial planning that will affect many and varied constituency groups.

Why have a stakeholder AP that does not report to the RPB directly?

How is this consistent with Principle #8 for transparency and engagement?

Why does the RPB not include a member of the public?

Further eroding the public's confidence in a well-designed marine spatial planning process is the apparent lack of a substantial and secure funding base to maintain public engagement, but more importantly to populate the mid-Atlantic data portal, so necessary in the decision making process. We would like to have some assurance that policy and procedures are being developed for integrating all available data into the MARCO data portal, which is the foundation of the planning process. If there is a need for a Draft Framework document, we would like it to focus on constituency involvement and data acquisition and standards.

What are the assurances that the data portal can be funded adequately?

Regular and timely involvement of those who are working on the water, and those in the communities who benefit from the region's commercial and recreational fisheries, is crucial in developing an inclusive and comprehensive National, and Regional, Ocean Policy. We suggest that the Mid-Atlantic RPB provide the Mid-Atlantic Fishery Management Council (MAFMC) with regular updates.

Given all the administrative challenges, funding deficiencies, inadequate public process and clumsy bureaucracy, how will the Mid-Atlantic RPB meet its principal goal and objective of comprehensive and inclusive Ocean policy?

To further complicate this issue the industry and public are left wondering about definitions and goals contained in the draft policy and included in the Executive Order. For instance we are left wondering about the regulatory authority of the RPB, the responsibility of federal agencies to enforce and comply with National Ocean Policy.

What is meant by the term resilience and how will it specifically be measured and improved to achieve plan objectives?

How will all state and federal actions be deemed consistent with the National Ocean Policy?

What is meant by the phrase "adjust human activities in certain ocean areas in response to changing migratory pathways of marine life"?

Thank you for the opportunity to comment.

Gregory P. DiDomenico
Executive Director
Garden State Seafood Association

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212 West State Street
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Greg DiDomenico, Executive Director
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February 27, 2012

To: National Ocean Council

From: Greg DiDomenico, Executive Director
Garden State Seafood Association

RE: Comments on Draft National Ocean Policy Implementation Plan

Please accept these comments on Draft National Ocean Policy Implementation Plan ("Plan") on behalf of the Garden State Seafood Association (GSSA). The GSSA is a professional trade organization representing commercial fishing and fishing associated businesses in New Jersey and the mid-Atlantic region.

Stakeholder Input Process

First, while we appreciate the opportunity to submit written comments we note for the record the NOC and White House CEQ convened a "Stakeholder Briefing Call" on the afternoon of the very same day the NOC released the Plan. Unfortunately, no one on the call had time to read the 115-page document to engage senor officials in any substantive manner. The NOC did reconvene the call the following day but clearly there was still not sufficient time for the majority of interested parties to prepare for the discussion.

Secondly, we note the FINAL decision by CEQ to add a single seat to each Regional Planning Body (RPB) for the 8 Regional Fishery Management Councils (RFMCs) was not included in the Plan for public comment. In fact, CEQ made this FINAL announcement just 2 weeks later at the RFMC Coordinating Committee meeting in Silver Spring, MD. Here again, no time for comment to affect the CEQ decision.

We believe these two examples underscore our primary concern with the NOP process -- that it is neither open nor transparent and that the NOC has little real interest in stakeholder input. If this were not the case there would be no Federal Advisory Committee Act limitations; the RPBs would be open to full public involvement; and our comments would be given due consideration. This entire process undermines the Administration's policies on transparency and scientific integrity.

Adopt Ecosystem-Based Management

While this is a laudable goal and the RFMCs are making progress in many areas, a recommendation to adopt EBM cannot be achieved absent a vast amount of additional scientific information that will take decades to acquire. In addition, the amount of funding required to complete this task is beyond our current and foreseeable fiscal capabilities. Requiring EBM in the absence of these two critical elements results in a heavier reliance on the precautionary approach. Clearly, the precautionary principle is a required component of the NOP. In our opinion, such a major shift in the management process should require additional information and a process to collect it as a prerequisite, not the other way around.

Furthermore, this Administration proves time and time again that their interpretation of EBM in the context of protecting endangered or threatened species and marine mammals is not based on sound wildlife and management principles, a balanced approach to true conservation, or use of sound scientific data but rather -- on a strict philosophy of protectionism. We do not believe that affording particular species a higher degree of protection within an ecosystem is true EBM. In fact, in some ways it is the opposite and why we believe the Administration has a biased interpretation of EBM.

Obtain, Advance, Use, and Share the Best Science and Data

We support collecting and using the best possible science. However, as noted above, today we do not have the resources available to collect the information we need to simultaneously manage all the species which interact within a given region. In fact, funding levels are decreasing. For example, the Administration's FY2013 budget *reduces* funding substantially for key activities such as the control and monitoring of aquatic invasive species. How is this consistent with the Plan and efforts to advance our scientific understanding and capabilities?

Promote Efficiency and Collaboration

We support efficiency and collaboration but our primary concern with respect to streamlining existing statutory requirements (i.e. federal fishery management plans) is with Plan implementation.

The National Ocean Policy clearly states that "effective implementation would also require clear and easily understood requirements and regulations, where appropriate, that include enforcement as a critical component" (*See* NOP page 30). However, "This draft Implementation Plan creates no new regulations, however, within existing authorities, legal and regulatory barriers to full implementation of the National Ocean Policy will be identified and permitting processes will be streamlined." (*See* Plan page 4).

We interpret this uncertainty to mean that the Administration could impose new regulations where necessary in order to eliminate the "regulatory barriers" they identify, and to seek new legislation that would provide the statutory authority. We must convey our serious concerns with this approach.

Here are just a few citations from the Plan that provide further evidence the NOP appears to be a new regulatory program --

● "CMSP is an important tool for implementing EBM." It will lead to a more "certain decision-making process for managing activities in the ocean" (Page 4)

● "The NOC expects to complete and approve the final Implementation Plan in the Spring of 2012. Federal agencies will then implement its initial set of actions." (Page 6)

● "Existing regulatory requirements and programs that were developed based on a fundamentally different model may need to be modified" (Page 11)

● "…EBM approach supports adaptive, iterative management." And "various responses or actions may become necessary given the limits of existing regulatory or statutory authority." (Page 12)

● Find "opportunities to incorporate EBM principles into Federal laws, regulations, and policies" (Page 13)

● "Establish a process for adaptive resource management" (Page 15)

● "Review the interpretation and, as necessary, propose to strengthen content and/or application of Federal legislation…..to incorporate and better support climate change adaptation efforts." (page 39)

● The Plan proposes to identify "important marine areas for management or protection". This includes use of "national marine sanctuaries, national estuary programs, and national marine monuments." "Priority species" would be protected using "Essential Fish Habitat (EFH) Provisions including Habitat Areas of Particular Concern (HAPC)". ***Nowhere does the document suggest a role for the regional fishery management councils or affected industries as these management measures are imposed. (Pages 51-52)***

● This section discusses Coastal and Marine Spatial Planning and the role of the Regional Planning Bodies. It lays out a detailed process for creation of the nine Regional Planning Bodies, implementation of CMSP, creation of CMS Plans for each region, and the presentation of these plans to the National Ocean Council for certification. This is to be accomplished by 2019. (Pages 85-92)

<u>Strengthen Regional Efforts</u>

The final theme is for the Plan to strengthen regional, state and local ecosystem conservation efforts. We support this approach and encourage the NOC to support existing organizations, such as the RFMCs which have a proven track record on marine resource management.

However, we add a caveat here as well. We are extremely concerned that there is limited possibility for regional stakeholders to participate in the RPB process. We believe that as major stakeholders, the commercial fishing industry has much to offer the Mid-Atlantic RPB process yet we are not at the table. This is a major flaw in the NOP process.

RFMCs and Commercial Fisheries

It appears to the GSSA that the Draft Implementation Plan proposes creation of a new ocean resource management system. The Plan contains the statements that "fisheries can be better managed" and that the NOP "will improve future management decisions." (*See* Page 9). We are gravely concerned about the impacts of this process on the federal fisheries management and the RFMC process.

We note here that CEQ unilaterally decided the RFMCs will each have a single seat on the RPBs. However, in order to preserve FACA considerations, the CEQ also requires that the RFMC individual serving in this seat be a governmental representative. This is totally unacceptable to the GSSA and is further indication the NOC intends to override the transparent RFMC process.

It is our intent throughout this process to ensure that we preserve the integrity of the RFMCs and provide them with a full role in the RPB process. However, in light of this strong move by CEQ to allow but severely restrict the RFMC's we staunchly oppose the recommendation. We suggest the following: (1) revise the RPB process to remove FACA considerations and create a voluntary, transparent regional planning process to include the RFMCs and all legitimate stakeholders; and (2) revise the Plan to clarify there will be no new or modified federal regulations affecting federal fisheries management.

Thank you for the opportunity to comment on development of the Draft National Ocean Policy Implementation Plan.

Sincerely,

Greg DiDomenico

Greg DiDomenico
Executive Director

Cc: New Jersey Congressional Delegation

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 7:53 AM
Subject: Re: input on the Draft Mid-Atlantic Regional Ocean Planning Framework
To: Will Nuckols <will@whnuckolsconsulting.com>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 15, 2014 at 11:57 PM, Will Nuckols <will@whnuckolsconsulting.com> wrote:
Below are comments which compliment and supplement the input provided through comments and questions posed at the Annapolis, MD public listening session on February 24, 2014 by William Nuckols, Principal, W.H. Nuckols Consulting

1. **The proposal in the draft framework to, with exceptions, exclude areas such as bays and lands, and instead focus on open ocean marine areas is a significant misstep and would perpetuate the failure of coastal planning to work from an ecosystem approach.**

It seems clear that one of the failures of our efforts to responsibly and sustainable develop our coasts and oceans stems from artificial separations and boundaries that are usually the creation of legislatures and other bodies by law. This is apparent in the overlapping jurisdictions between a range of federal agencies, many of which lie in different federal departments and report to different Congressional Committees. The options are to significantly change the system in the federal executive and the Congressional Committee structure or to take a more realistic and pragmatic approach and determine how one can work with the existing system and minimize duplicate efforts and fill in gaps. The RPB process which would bring not just the federal agencies together, but also state actors and a range of stakeholder groups, could allow decision making on the future of our coasts and oceans to be made at the often heralded, but rarely achieved, ecosystem level. The draft framework proposed ignoring the physical connections between open marine waters and adjacent bays, estuaries and rivers and the land that impacts of of those water bodies – an option which fails to realize the process of bringing all relevant players together in the Mid-Atlantic Region. While for some, such as those focused on renewable offshore energy, this might at first seem like a welcome development as it would narrow the RPB's options and focus its limited resources on that one topic. But even the area of offshore energy development needs to consider where the power makes landfall, where and how it integrates with the grid, what populations centers will be served, and a host of factors that relate to conditions on land. Rather than developing a lengthy list of exceptions to the rule that the blue water is the optimal domain of the RPB, the RPB would be best served by explicitly stating that topic areas, rather then geographic boundaries, are the most likely to allow the RPB to utilize the greatest level of expertise from multiple agencies and stakeholders as decisions about the uses for our oceans and coasts are made.

2. Robust and frequent stakeholder input will result in the best decisions by the RPB.

Stakeholder input for all key steps in the decision making process will result in increases in the quality and quantity of data used in making ocean and coastal use decisions, and may result in reduced litigation from groups who would otherwise try to affect decisions at the end of the process. As Administrator Gina Mccarthy recently said when discussing power plan GHG emissions and EPA's moves to provide new guidance and regulation, having a draft decision and a final decision vary greatly is a good thing. It shows that input was sought and the agency reacted to that input in a substantive and meaningful way. Similarly the RPB should seek significant and frequent input from stakeholder groups and not be afraid of major, substantive revisions of draft planning products.

3. Bureaucratic steps such as further drafting and modifying missions statements, or other aspects of the framework are only valuable if they result in the development and utilization of an actual ocean plan.

I caution the RPB to not get lost in the search of a perfect process or a perfect framework document if those efforts endanger the development and utilization of a plan for the coasts and ocean in the Mid-Atlantic Region. Let adaptive management, rather than endless framework document revisions, be the mechanism for improvement, with the exception of major areas for change such as the scope of the plan and how stakeholders' input will be utilized. Put simply, don't sweat the small details if those details imperil the substantive work of the RPB.

I encourage the RPB to also review the complete comments I provided throughout the afternoon listening session in Annapolis, MD, and will happily respond to inquiries seeking clarification on those topics raised in person or above in writing in this submission.

I wish you great success as you move forward with your work.

Sincerely,

William H. Nuckols
Principal
W.H. Nuckols Consulting
National Harbor, MD
WWW.whnuckolsconsulting.com
Will@whnuckolsconsulting.com
443-994-1493

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Wed, Apr 16, 2014 at 9:10 AM
Subject: Re: Image Cape Story Beach, Virginia Beach 4.16.14
To: Brighton/Smith <cab5@cox.net>

Thank you for submitting comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Wed, Apr 16, 2014 at 8:56 AM, Brighton/Smith <cab5@cox.net> wrote:

Ship pushed towards shore in high winds - grounded in 15 feet of water

On Apr 9, 2014, at 11:24 AM, Brighton/Smith wrote:

Re: Draft Mid-Atlantic Implementation Framework for the National Ocean Policy

Given a close physical proximity to the sea, I appreciate that an Ocean Policy to manage current and emerging maritime activity is being formulated. Thank you for undertaking this ambitious project

As a long time resident of the Cape Henry section of Virginia Beach, I regularly witness human activity on the ocean and in the mouth of the Chesapeake Bay. From my shoreline perspective sovereign, maritime transport, commercial fishing and recreational activity all occur simultaneously in and around nature. Unfortunately, I have also observed consequences of that activity: Sea turtle and marine mammal strandings as well as lost fishing gear and debris on the shore.

To learn more about this planning initiative I signed up for the informational webinar and participated in the local listening session in Norfolk. As a newcomer to the process, I am not familiar with everything that has transpired in plan drafting and with limited knowledge, I am sharing my thoughts and submitting comments and questions on the draft Mid-Atlantic implementation framework for the National Ocean Policy.

Overall, I am very impressed with the framework being developed. A holistic approach to managing maritime activity is clearly needed. Preserving environmental integrity of the ocean as usage grows and evolves inherently ensures resiliency and economic potential. Consolidated efforts to share data and negate redundancies and contradictory regulations will provide a more efficient platform to manage activity.

My concerns and questions involve:

1. Departure from the original intent of the Executive Order (13547 – "Stewardship of the Oceans, our Coasts and Great Lakes") mandating the development of the National Ocean Policy

2. Engaging Industry in the process; and

3. Geographic extent

While recognizing the economic importance of our oceans and coasts, the executive order 13547 focuses on protection of our marine resources. The draft Mid Atlantic framework clearly addresses stewardship but departs somewhat from the original intent by shifting focus to economic growth, which begs the question: Is an economic development plan or a resource management plan being drafted? I would prefer that the original tone in the executive order be carried over into our regional implementation plan. That is, that economic integrity is preserved through measured conservation.

In developing this plan, industry involvement is needed, but pushing economic development is not the only way to achieve that. Has an advisory industry group been established? Given the international scope of maritime industries, its likely industry participants could bring worthwhile strategies adopted elsewhere to the table. It is well established that economic growth and environmental conservation are not mutually exclusive and corporate entities that rely on the ocean to fill their coffers need a safe clean environment. And, most recognize that sustainable efforts pay off, not just in the marketplace, but also in the cost of doing business. The benefits associated with eco-branding are being pursued through all business realms and companies like Maersk that operate in Norfolk participate in the sustainable initiatives (more info).

Lastly, the geographic extent of the plan should not exclude bays and estuaries. The human connection to the ocean is often through these waterways. Traffic funneling through the narrow mouth of the Chesapeake Bay is constricted. With Chesapeake Bay ports capable of handling gigantic post-Panamax vessels and LNG export and offshore energy and mining activity looming on the horizon, the ocean approach to and the mouth of the Bay could soon become very crowded and potentially dangerous. Much of the traffic passes through quickly, but a fair number of vessels anchor for days and sometimes weeks in the Bay. Over winter, on any given day, there have been 10 or so ships anchored off Cape Henry waiting for coal. In some years that number has doubled. At the very least, the mouth of the Chesapeake Bay should be included and the right to incorporate bays and estuaries should be reserved.
Thanks for your attention,

Carol Brighton
www.TidewaterCurrent.com

<cab_boem4.docx>

From: **MidAtlanticRPB, BOEM** <boemmidatlanticrpb@boem.gov>
Date: Tue, Apr 22, 2014 at 11:34 AM
Subject: Re: MARCO Stakeholder Liaison Committee - meeting summary and related materials
To: Kris Ohleth <kohleth@midatlanticocean.org>

Thank you for re-submitting this information including comments on the Draft Mid-Atlantic Regional Ocean Planning Framework. The MidA RPB will consider all comments received, and will post them on the website. The MidA RPB will revise the Draft Framework, and discuss it during its in-person meeting in the Spring. Please check the website (http://www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) for additional information.

On Tue, Apr 22, 2014 at 11:15 AM, Kris Ohleth <kohleth@midatlanticocean.org> wrote:
Dear Mid-Atlantic Regional Planning Body,

The Mid-Atlantic Regional Council on the Ocean (MARCO) recently hosted the first meeting of the Stakeholder Liaison Committee designed to foster meaningful and ongoing stakeholder involvement in the regional ocean planning process. A copy of the meeting summary and related materials was distributed to the MidA-RPB members on April 15, 2014. We are providing another copy in PDF format for posting on the RPB website and inclusion in the public record.

Sincerely,
Kris Ohleth

Kris Ohleth
Executive Director
Mid-Atlantic Regional Council on the Ocean (MARCO)
KOhleth@MidAtlanticOcean.org
(201) 850-3690

MARCO
MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN

MARCO Stakeholder Liaison Committee: Inaugural Scoping Meeting

This document summarizes discussions of the MARCO Stakeholder Liaison Committee at the group's inaugural meeting convened by the Mid-Atlantic Regional Council on the Ocean (MARCO) and facilitated by Meridian Institute in Washington, DC on March 10, 2014. Participant feedback and questions on the Draft Mid-Atlantic Regional Ocean Planning Framework and regional ocean planning generally can be found in Appendix A.

The members of the Stakeholder Liaison Committee (SLC) have been chosen as they are leaders in their respective communities. While it is MARCO's desire to facilitate dialogue and capture comments and thoughts from these stakeholders' communities through their respective SLC member, with respect to the comments and opinions contained in the Summary of MARCO Stakeholder Liaison Committee: Inaugural Scoping Meeting and Appendix A - MARCO Stakeholder Liaison Committee: Specific Comments and Questions, the individual SLC members did not first convene community-wide participation in generating comments on the Draft Framework. This is largely due to time constraints resulting from a relatively brief period between the meeting announcement and the in-person meeting. To that end, please accept these comments on the Draft Framework from SLC members as individual comments as opposed to comments from the entire community they represent. As the SLC becomes further established, they can provide comments on the ocean planning process that reflect their sector community-wide.

Introduction and Agenda Review

Gwynne Schultz, Chair of the MARCO Management Board, opened the meeting by welcoming participants. She introduced Ingrid Irigoyen, Meridian Institute, who facilitated the meeting, beginning with a round of introductions. A roster of Stakeholder Liaison Committee (SLC) members and a list of meeting participants can be found in Appendices B.1 and B.2. Ms. Irigoyen then reviewed the meeting agenda, available in Appendix C, as well as the meeting objectives:

- Introduce Stakeholder Liaison Committee members to Mid-Atlantic regional ocean planning and to the committee's proposed roles in informing the planning process.
- Provide founding members of the Stakeholder Liaison Committee an opportunity to help shape the committee process so that it most effectively meets the needs of stakeholders and provides meaningful input for regional ocean planning.
- Facilitate in-depth discussion and feedback about the initial draft products of the Mid-Atlantic Regional Planning Body (RPB), including the Draft Mid-Atlantic Regional Ocean Planning Framework.

Presentation and Discussion: Mid-Atlantic Regional Ocean Planning and the Role of the Stakeholder Liaison Committee

Sarah Cooksey, MARCO Management Board, opened the session by providing an overview of regional ocean planning in the Mid-Atlantic. She referred to slides, which can be found in Appendix D. During her presentation, Ms. Cooksey described Mid-Atlantic ocean planning activities, including a series of public listening sessions currently being held across the region in which stakeholders are invited to provide input about the Mid-Atlantic Regional Planning Body (MidA RPB)'s *Draft Mid-Atlantic Regional Ocean Planning Framework* (Draft Framework). Ms. Cooksey also described the MidA RPB's timeline for key next steps, including finalization of the Draft Framework and development of a workplan, regional ocean assessment, and possible ocean plan.

Ms. Cooksey explained the roles and functions of MARCO and the MidA RPB. She described a number of products and services in support of regional ocean planning that MARCO is providing, such as the MARCO Mid-Atlantic Ocean Data Portal (Data Portal) and a variety of stakeholder engagement mechanisms, including the SLC.

Meeting participants were then invited to share any questions or comments regarding regional ocean planning generally. During discussion, participants sought clarification about the regional ocean planning process, including the relationship between MARCO and the MidA RPB, the proposed content of a regional ocean assessment, and the timeline for moving forward. A number of participants voiced support for development of a regional ocean plan that takes into account current and future ocean uses, and for improved communication and coordination with ocean users and other stakeholders through the planning process. Participants also highlighted the importance of learning from existing ocean planning efforts and appropriate documentation of information and activities that result from the planning process. Participant feedback and questions on the Draft Mid-Atlantic Regional Ocean Planning Framework and regional ocean planning generally can be found in Appendix A.

The members of the Stakeholder Liaison Committee (SLC) have been chosen as they are leaders in their respective communities. While it is MARCO's desire to facilitate dialogue and capture comments and thoughts from these stakeholders' communities through their respective SLC member, with respect to the comments and opinions contained in the Summary of MARCO Stakeholder Liaison Committee: Inaugural Scoping Meeting and Appendix A - MARCO Stakeholder Liaison Committee: Specific Comments and Questions, the individual SLC members did not first convene community-wide participation in generating comments on the Draft Framework. This is largely due to time constraints resulting from a relatively brief period between the meeting announcement and the in-person meeting. To that end, please accept these comments on the Draft Framework from SLC members as individual comments as opposed to comments from the entire community

they represent. As the SLC becomes further established, they can provide comments on the ocean planning process that reflect their sector community-wide.

Presentation and Discussion: Shaping the Stakeholder Liaison Committee

Kris Ohleth, Executive Director of MARCO, then provided an overview of the proposed structure and function of the SLC. She referred to slides, which can be found in Appendix D, and a document entitled *Description of MARCO Stakeholder Liaison Committee*, in Appendix E. Ms. Ohleth explained the objectives of the SLC as being to provide input on regional ocean planning, act as a conduit and advisor for effective communication between MARCO and stakeholders, and serve as a resource for increased understanding and dialogue on ocean planning. She described proposed roles and responsibilities of the SLC members in representing a broad diversity of interests within their stakeholder groups; working with MARCO to improve communication, outreach, and information sharing; and helping to inform and shape the ocean planning process. Ms. Ohleth asked SLC members to provide guidance on how MARCO can best support their efforts in reaching out to their stakeholder groups and to ensure meaningful engagement of the SLC.

During discussion, SLC members sought further clarification about the flow of information between the SLC, MARCO, and the MidA RPB. Ms. Ohleth explained the role MARCO will serve in sharing information between the SLC and the MidA RPB, emphasizing that SLC members will review publicly available draft products and MARCO will provide SLC input to the MidA RPB in as direct a manner as possible. Membership on the SLC does not preclude SLC members or other stakeholders from engaging with and providing comments directly to the MidA RPB through existing public comment mechanisms. The added value of the SLC process is its role as a forum for discussion across stakeholder interests and with MARCO about regional ocean planning, providing in-depth input through MARCO to the RPB, and clarification of questions and discussion of concerns stakeholder may have going forward.

Participants suggested identifying on the SLC membership roster the stakeholder interest group that each SLC member is representing, as well as a creating a timeline of SLC, MARCO and MidA RPB activities and deadlines for public comment on draft products. It was suggested that at least two weeks' notice be given in advance of deadlines, to ensure sufficient time for SLC members to solicit stakeholder feedback. Participants recommended that individual MidA RPB members use their federal and state contact lists to further disseminate information about regional ocean planning-related meetings and activities. Several participants applauded the quality of the Data Portal and noted its utility as a tool to share information with stakeholders. They stressed the importance of tailoring data to meet specific sectorial needs. Participants were asked to help MARCO identify data gaps and provide feedback to enhance the Data Portal.

Presentation and Discussion: the Draft Mid-Atlantic Regional Ocean Planning Framework

Marty Rosen, MARCO Management Board, began the session by providing an overview of the Draft Framework, including the draft vision, principles, goals, objectives, and initial geographic focus. The Draft Framework can be found in Appendix F and the slides referred to during his presentation can be found in Appendix D. Mr. Rosen explained that the MidA RPB is currently gathering public input about the Draft Framework, will make refinements based on that input, and aim to finalize the Draft Framework at the next in-person MidA RPB meeting scheduled for May 2014. He explained that this would set in motion development of a workplan that would articulate activities to achieve the goals and objectives set forth in a final framework document. Additional efforts will include development of a capacity assessment, regional ocean assessment, and the possible development of a Mid-Atlantic regional ocean plan.

Ms. Irigoyen then facilitated discussion about each element of the Draft Framework. Participants emphasized the importance of understanding the environmental and economic interconnections between state and federal ocean waters, oceans and bays/estuaries, and the land and sea, and strongly encouraged ocean planners to include consideration of those interconnections in any regional ocean planning efforts. Participants recommended development of a product to show how the MidA RPB is complimenting, not duplicating, existing management efforts focused on bays and estuaries. The need for further clarification about the MidA RPB's intentions regarding bays and estuaries was emphasized.

Participants noted a need for further clarification of the MidA RPB's intentions in using several terms in the Draft Framework, including "ocean energy," "nautical information," and "adaptive management."

It was recommended that the MidA RPB work to anticipate and mitigate potential conflicts over ocean space and resources. And in its effort to find efficiencies, the MidA RPB should not inadvertently hinder existing efficiencies.

The importance of providing for the needs of long-standing ocean industries through the planning process was noted. Participants also urged the MidA RPB to consider ecosystem functioning, take into account the needs of wildlife, and include international stakeholders in its planning efforts. Several participants urged the MidA RPB to take into account issues and information about potential offshore oil and gas development through the planning process, and stated their support for including consideration of that issue in the development of a comprehensive regional ocean plan and other potential products.

A detailed account of specific points of participant feedback on the Draft Framework can be found in Appendix A.

Presentation and Discussion: the Mid-Atlantic Ocean Data Portal

Tony McDonald, Director of the Urban Coast Institute at Monmouth University and Principal Investigator for the team managing the Data Portal, provided an overview of the Data Portal. He referred to slides, which can be found in Appendix D. Mr. McDonald began by encouraging the SLC to continue helping ocean planners in the region determine ways to best engage the public and to identify data gaps and other improvements to the Data Portal. Mr. McDonald noted a continuing effort to make the Data Portal user friendly and encourage public usage. He pointed to specific features of the Data Portal that the public can use to identify data gaps, provide review and advice, and learn more about the data being displayed. Mr. McDonald then described the portal team's ongoing stakeholder outreach efforts and the team's development of a webinar series and online tutorial to help instruct and encourage public use. Further efforts to improve the Data Portal, including identifying communities of interest, reflecting seasonal and other time-specific data, and the possible development of 3D and 4D mapping, were also discussed.

During discussion, it was emphasized that public trust and confidence in the Data Portal tool are vitally important to its success, and provision of metadata and efforts to solicit stakeholder review of data for accuracy are key elements of building that trust. In response to a question, it was stated that making assumptions based on forecasted data would not be effective at this time. Mr. McDonald requested that the SLC help to further inform and encourage their stakeholder groups to use the Data Portal as a tool, review and provide data, and identify ways it could be improved over time. SLC members noted the importance of securing sustainable, long-term funding for the Data Portal.

Summary of meeting outcomes, next steps, and closing remarks

In closing, Ms. Irigoyen offered a summary of major outcomes and next steps. MARCO Management Board Members thanked participants for their input and shared their enthusiasm for having established the SLC as a forum for meaningful stakeholder discussion and input to inform regional ocean planning. Ms. Irigoyen then adjourned the meeting.

MARCO
Mid-Atlantic Regional Council on the Ocean

Appendix A
MARCO Stakeholder Liaison Committee: Specific Comments and Questions Offered During Inaugural Scoping Meeting on March 10, 2014

This document captures specific comments offered verbally by members of the MARCO Stakeholder Liaison Committee (SLC) during the group's inagurual meeting, convened by MARCO and facilitated by Meridian Institute in Washington, DC on March 10, 2014.

The members of the Stakeholder Liaison Committee (SLC) have been chosen as they are leaders in their respective communities. While it is MARCO's desire to facilitate dialogue and capture comments and thoughts from these stakeholders' communities through their respective SLC member, with respect to the comments and opinions contained in the Summary of MARCO Stakeholder Liaison Committee: Inaugural Scoping Meeting and Appendix A - MARCO Stakeholder Liaison Committee: Specific Comments and Questions, the individual SLC members did not first convene community-wide participation in generating comments on the Draft Framework. This is largely due to time constraints resulting from a relatively brief period between the meeting announcement and the in-person meeting. To that end, please accept these comments on the Draft Framework from SLC members as individual comments as opposed to comments from the entire community they represent. As the SLC becomes further established, they can provide comments on the ocean planning process that reflect their sector community-wide.

SLC Comments/Questions about Draft Mid-Atlantic RPB Framework

Draft Vision

(*No comment provided*)

Draft Goals

General Comments about Goals:

- I like them – it's a rational way to divide things up and recognize the importance of the uses and ecological health of the ocean.

Goal 1: *Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration.*

Comment:

- I struggle with these goals a little bit and the management of a public trust resource has high accountability. It's not just "conservation" or "management" –it's both. When I first read goal one I was struck that it solely focused on conservation. I struggle with that a bit and want both to be fully reflected. The conflict part of this is important and core to this process.

Goal 2: *Plan and provide for existing and emerging ocean uses in a sustainable manner that reduces conflicts, improves efficiency and regulatory predictability, and supports economic growth.*

Comments:

- We need to make sure that when we are doing this we take into consideration those industries that have been working on the water for a long time (e.g. shipping and fishing). We should do this, but not severely impact these industries.
- In Goal two, I would add "anticipate, and reduce conflict." A lot of the thinking will be for anticipating conflicts.
- Goal 2 is not just about improving efficiency, but not hindering existing efficiencies that are already working well.

Draft Objectives for Goal 1

Objective 1: *Understanding, protecting, and restoring key habitats*

Comment:

- I would just say that we should just expand it beyond habitat that it should take into account ecosystem functioning and wildlife.

Objective 2: *Accounting for ocean ecosystems changes and increased risk*

Comment:

- Are we avoiding water quality? The Mid Atlantic has such a strong estuarine influence. I didn't know if we were trying to avoid that? There are issues in respect to the impact receiving waters have on the shelf. There is also atmospheric deposition. All these issues are under "ecosystem changes" – I wouldn't say that rules out regional water quality issues.

Objective 3: *Valuing traditional knowledge of the ecosystem*

(*No comment provided*)

Draft Objectives for Goal 2

Objective 1: *Account for national security interests in the Mid-Atlantic*

(*No comment provided*)

Objective 2: *Facilitate greater collaboration around ocean energy issues in the Mid-Atlantic*

Comments:

- We are looking forward to having many more megawatts of wind power off the OCS.
- Could you give more background on what is meant by "greater collaboration around ocean energy issues?"
- Do you mean offshore wind? What about tidal energy?
- Should there be something to address fossil fuels and drilling?

Objective 3: *Foster greater understanding of the needs of the Mid-Atlantic fishers and fishing communities*

(*No comment provided*)

Objective 4: *Inform ocean aquaculture siting and permitting through greater coordination*

(*No comments provided*)

Objective 5: *Enhance coordination to ensure and update nautical information and navigation practices*

Comments:

- We need to ensure our routes remain open.
- On number five – what do you mean by "nautical information?" People think "charts" and that navigation practices means "speed and direction," but what else?
- When I see number 4, I see who it impacts. When I see five, this is a bigger piece and that talks about national economy. If our trade goes up our GDP goes up. That could be expanded on. It's not just shippers and traders, but its consumers as well.
- "Enhancing coordination," but with whom? There are a lot of different players – and lots of international players – whom may never be represented at this table. We need to keep this in mind.

Objective 6: *Facilitate enhanced coordination on the use of sand and gravel resources*

(*No comment provided*)

Objective 7: *Coordinate improved understanding of near-shore and offshore non-consumptive recreational uses*

Comment:

- These groups have a huge economic importance to the communities.

Objective 8: *Recognize and take into account important Tribal uses and submerged cultural resources*
(*No comment provided*)

Objective 9: *Facilitate greater understanding of the current and potential future location of submerged infrastructure*

Comment:

- When you call someone internationally it goes through a cable not a satellite.

Draft Principles

General Comments on the Principles:

- What can we do that deals with resilience?

Principle 1: *Recognizes and considers the interconnections across human uses and interest, marine species and habitats, and coastal communities and economies.*

Comment:

- In number one, "recognizing interconnections" is there anywhere the marine industry is recognized here? The betterment of trade as one of the principles is something we should be looking at. Trade really looks at protecting the marine environment. Is there any place we can put that in these principles?

Principle 2: *Coordinate in making information available to support economic development and ecosystem conservation so that multiple interests can co-exist in a manner that reduces conflict and enhances compatibility*

(*No comment provided*)

Principle 3: *Consider the risk and vulnerabilities associated with past, present, and predicted ocean and coastal hazards and predicted changes to temperature and ocean acidification*

(*No comment provided*)

Principle 4: *Consider sound science and traditional knowledge in decision-making*

(*No comment provided*)

Principle 5: *Apply a flexible and adaptive approach in accommodation changing environmental conditions, advances in science and technology, and new or revised laws and policies*

Comments:

- On number five – adaptive management – I have led some national academy efforts on adaptive management. I support this principle, but the concept is being dumbed down by overuse. If you commit to it, it is more than just being flexible and accommodating to changing issues. Adaptive management is assessing the effectiveness of your decisions and being willing to make changes in your decisions based on those outcomes. It is about rigorously assessing how it is working and being prepared to make those changes.
- We know the Panama Canal is scheduled for completion in 2015 and we know there will be more East Coast traffic. China is looking to build a canal in Nicaragua – how will that impact shipping? It will be important to know this.

Principle 6: *Actions will be consistent with Federal laws, regulations, Executive Orders and treaties, and with State laws, regulations, Executive Orders, and treaties where applicable*

Comments:

- It is important to clarify that this process will not be redundant. That our intent is to build off existing programs and laws. It will be helpful to clarify that and avoid duplication.
- I have a few questions about how these things will actually get done and under what authority. If you are doing habitat protection in federal waters – what authority will it be under? Will it be under MSA? There are number of uncertainties with how you are going to do this without replicating efforts. How will this effort tie to other efforts? Should we expect input from this body to other ongoing efforts?

Principle 7: *To increase inter-jurisdictional coordination to facilitate efficient and effective management of Mid-Atlantic ocean uses and resources*

(*No comment provided*)

Principle 8: *Process and products will benefit from meaningful public input, be designed to be easily understood by all, and allow stakeholders to participate and understand when and how decisions are reached*

(No comment provided)

Principle 9: *Respect the intrinsic value of the ocean and its biodiversity*

Comments:

- What is this principle is trying to capture?
- Is this more than just ecosystems services? That it has value solely because it exist?

Comments/Question about Ocean Planning Generally

Comments/Questions on Ocean Planning Process and Development of an Ocean Plan

- A case can be made for proceeding incrementally. Real progress can be made by increasing coordination between users and those with regulatory authority in the ocean.
- I think most people know that this is a manifestation of a national plan. If we are going to do a plan, could you tell me more of the state of play for what a plan might look like? How has it evolved?
- You need to document what you have learned here. One of the biggest issues is the retention of information over the long haul. You need to put it in one place and recognize that is not the end all be all. Say this is what we have learned, but continue to adaptively manage it. A plan does not necessarily mean regulatory structure. Clarifying who does what is something this group and the RPB can do.
- Coordination is great. We need to put it on a paper. The public assumes we are already coordinating. They want to know what will change with all this talking. There should be a deliverable by the end of the day. That was the vision from the Executive Order.
- There are examples where these processes have been effective, engaged stakeholders, have had good data analysis – we don't have to wait to a final regional plan to advocate improvements. Timing is critical. Once these things are cited it's too late to have an informed discussion. The more groundwork now the better.
- In regards to ocean planning – our groups are talking more and having more one on one discussions. We know who to talk to and this is a great benefit. That is a big component of ocean planning.
- I am all for incremental improvements, but that does not constitute a plan. I have been around this a long time. The basic thought from the two commissions is that we have not looked at our oceans in a holistic way. We were looking at everything by an activity by activity basis. We had no goal of what we wanted to achieve. If you think about it, a plan requires a vision of the future. A plan – while not spatially fixed map – has to have a dimension that resolves issues with spatial implications. The other that strikes me with these regional councils is that this ocean we are trying to plan for

does not belong to just the state, it belongs to all Americans. We need to think of this as a national interest. What happens when we reach a difference of perspective between the states? For example look at ocean energy – one state here is for fossil fuels the others are not. How do we see this planning effort provide creative thought for discussion if not resolution?

- Since you have asked for specific recommendations for what a plan should be – I am wondering if you looked at the Rhode Island or Massachusetts plan? They have done a plan and some basic mapping – it was not useless. Have you looked at what has already been done in the U.S.?
- One outcome of the planning process is to evaluate uses. The ocean today will not be the same in five to ten years. We will be learning throughout the process. And we need to look at each user's intent and how that impacts the ocean. We need to really get down to a specific scale.
- When we do comprehensive planning we run into issues with local and state governments. What are the authorities we will have to work with? How many authorities are there? How can we explain this to normal people? Who is making the decisions out there and on what? It would be useful for MARCO to answer these questions and it will be helpful for us in communicating to our groups.
- The regional ocean assessment – is it just biological? What are you looking at?
- There are days we discussed developing a plan, but it will always be outdated and need to be updated. We should be saying though that we are going to be making a plan and it's more of a question of what we need to include. The hesitation goes back to push back about misinformation around creating new authorities - which this effort will not do. We need a comprehensive plan for the RPB that indicates our intention for the future. I am afraid to say that because people will jump to the conclusion that we will be creating a new authority.
- On the RPB you have the states representatives, the Mid Atlantic fisheries council, the feds, and the tribes. How did the fisheries get involved?
- Are you looking for consensus from this group?
- Will FERC be involved?

Comments/Questions on Geographic Focus

- One of the things I would like accomplish is to have the states recognize that the ocean doesn't stop with your view from the shore. We need to think broadly about our role with the ocean.
- At the meeting in Annapolis one of the ladies mentioned that the focus would be on the state waters. Do we intend to go there?
- I feel that from a number of environmental groups it's helpful to include a number of the bays and estuaries – to the extent that you are tackling issues that will ultimately impact the inshore bays. There has been confusion with how the geographic part is phrased.

- One thing that was raised with developing offshore wind is the need to come on shore. You will need to factor the waters that it is moving through and look at the whole issue of siting.
- We need to document that we don't want to go into the bays and estuaries and we want to talk about how the ocean relates to the bays. Put it on a map so people can see the connection. A work product would be to show how MARCO is not overlapping with a bay program or how it is complimentary to those efforts.
- There is not a special reason to include the Long Island Sound if you do not include the Chesapeake.
- I thought NROC was planning in the Long Island Sound? Are there efforts for New York and Connecticut to plan in the Sound?
- In regard to Long Island Sound we need to interact with the NE RPB. Both those entities (NE and Mid A RPB) are involved in the Long Island Sound.
- When we draw the line between North Carolina and Virginia how do we draw out the line? Do we just go straight out? For the portal we don't need to get hung up on it, but you need to show where MARCO ends and the other jurisdictions begin.
- Currents and oil slicks don't care for state lines.
- We spent the latter half of last year putting a user survey and we left out the Chesapeake and the Sound. I don't know if that will inform your discussion or not.

Comments/Questions on Stakeholder Outreach

- We want recreational stakeholders and their opinions involved in this process.
- Regional ocean planning only works when you have an array of stakeholders at the table.
- I am not clear what stakeholders some people in attendance here are representing. I would like to know who is representing what sector of the industry. This would be a product that needs to be outlined or on the roster.
- In regards to getting the word out to our groups – if we are going to get feedback from the recreational sector we will need at least two weeks' time. The RPB is building a contact list with the public listening sessions and it would be very helpful for agencies to use their broader reach to advertise those meetings. People have commented they have only heard about these meetings (*in reference to public listening sessions*) from their specific user groups and not the feds.
- The average fishermen will want to know how this impacts him. Will it restrict where he can fish? It will be hard to address all these questions. I will be working to get answers back to the community that will address the most people.
- Will all of this be posted online so that the public can know what is going on?

Comments/Questions on MARCO-RPB Relationship

- You have the RPB, MARCO, and the SLC, who is on top of whom and where are we?
- I would like to follow up on the council's role and wanted to clarify if it is your expectation that the work products of the SLC will flow through the RPB? Will MARCOs role be of facilitating the SLC and communicating that output to the RPB? Would it be possible for the SLC to convene jointly with the RPB?
- Can someone clarify on what type of feedback this process will provide to MARCO and the RPB? What is the vision for what this process will be and what the output of the products will be?
- Can individual also comment directly to the RPB?
- In regards to feedback from the RPB to this group – if we come up with products will there be a feedback loop between these two groups?
- I think that having a list of the different people on the advisory committees and what these committees are on the RPB website and knowing how they will interact will be helpful. Will we address the other deliverables of the RPB? Like the charter?
- It was mentioned that MARCO might have a role on an ocean assessment? It would be nice to have a schedule of when MARCO, the SLC, and the RPB are meeting so we know when to have our information and comments in.
- Since MARCO says we will not address offshore drilling – are you saying that the SLC can still address this? Because we provide broader input to the RPB? The interesting thing about this regional ocean is that it has significant interest among the states, but it is also a federal interest. It's not Virginia's oil, it's the American people's. If this is an interest of the whole region – then it is important to know that the area where BOEM was talking about drilling is closer to Maryland and then Virginia Beach. Oil spills do not stop at a state boundary. If we cannot address this issue- how can the sectors address these conflicts? It doesn't make sense.
- One area of water quality we hope the RPB/MARCO can look at is marine debris and ocean acidification. We hope MARCO can appropriate that and are not sure if the RPB can rope that in.

Comments/Questions on Data Portal

- Will the portal focus on planning? Or will it be used as a decision tool? From a fisheries standpoint we are not ready for this as a data set. One of my objectives is to get fisheries data on the map.
- I wanted to ask if gap analysis is part of the portal initiative. Are you constantly identifying data gaps? This committee could play a constructive role forward in bringing their sectorial knowledge forward.
- In terms of mapping and characterizing – is there anything we can do after we identify an important place to ensure there is some protection in place?

- Are you working with the Coast Guard? How are you dealing with right whales and movable Magnuson-Stevens Act (MSA)?
- Are you going to have the capacity to do forecasting on this?
- I wanted to get clarification on the period of time of data collection? What is your timeframe?
- I want the information to be discerned by people who are using this. When clicking these images it looks like there are vessels everywhere and all the time. That first impression is so important.
- To what extent do you want us to push this information out there to general public?
- This is a tool to assist in the planning process, but it does not represent the plan.
- Are there enough resources for MARCO to collect data for each different group? There are 10,000 different types of recreational fishers. Are there resources for different portals for different sectors?
- Some of the funding came through regional partnership grants. Any indication that it will be cut?

MARCO
MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN

Appendix B.1

MARCO Stakeholder Liaison Committee

March 2014

Membership Roster

David Blazer
Director of Harbor Development,
Maryland Ports Administration
Email: dblazer@marylandports.com
(representing the ports community)

Donald Boesch
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Center for Environmental Science,
University of Maryland
Email: boesch@ca.umces.edu
(representing the marine science community)

Sarah Chasis
Senior Attorney and Director, Oceans Program
Natural Resources Defense Council
Email: schasis@nrdc.org
(representing the environmental conservation community)

Melissa Danko
Executive Director
The Marine Trades Association of New Jersey Foundation
Email: mdanko@mtanj.org
(representing the marine trades)

Jeff Deem
Recreational fisherman
Email: deemjeff@erols.com
(representing the recreational fishing community)

Matt Gove
Mid-Atlantic Policy Manager
Surfrider Foundation
Email: mgove@surfrider.org
(representing the ocean recreation community)

Eric Johansson
Executive Director
Tug and Barge Committee Port of NY/NJ
Email: cjohansson@sunymaritime.edu; safemariner@me.com
(representing the maritime navigation community)

Heather Jung
Manager of Government Affairs
The Business Council of New York State, Inc.
Email: heather.jung@bcnys.org
(representing the coastal tourism sector)

Sam Martin
Vice President of Operations
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Email: smartin@atlanticcapes.com
(representing the commerical fishing industry)

John McMurray
Captain
Charter Boat Operator, New York
Email: johnmcmurray@optonline.net
(representing the recreational fishing community)

Doug Pfeister
Senior Vice President
Offshore Wind DC
Email: doug@OffshoreWindDC.org
(representing the offshore wind power industry)

Rick Robins
Bernie's Conchs, L.L.C,
Email: richardbrobins@gmail.com
(representing the commercial fishing industry)

Nikki Rovner
Director of State Government Relations
The Nature Conservancy, Virginia Chapter
Email: nrovner@tnc.org
(representing the environmental conservation community)

Bob Wargo
President
North American Submarine Cable Association
Email: rw1791@att.com
(representing the submarine cables industry)

Heather Wood
Director of Environmental Affairs
Virginia Port Authority
Email: hwood@portofvirginia.com
(representing the ports community)

Susan Zellers
Executive Director
Marine Trades Association of Maryland
Email: susan@mtam.org
(representing the marine trades)

MARCO
MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN

Appendix B.2
MARCO Stakeholder Liaison Committee: Inaugural Scoping Meeting

March 10, 2014 • Washington DC

Meeting Participant List

Donald Boesch
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Center for Environmental Science, University of Maryland
Email: boesch@ca.umces.edu

Alison Chase
(alternate for Sarah Chasis)
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Natural Resources Defense Council
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Jeff Deem
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Matt Gove (via phone)
Mid-Atlantic Policy Manager
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Shawn Kiernan
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Rick Robins
Bernie's Conchs, L.L.C
(Council Chairman, Mid-Atlantic Fishery Management Council)
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Bob Wargo
President
North American Submarine Cable Association
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John Weber
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MARCO Management Board

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Peter Clouse (via phone)
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MARCO Portal Team

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Appendix C
MARCO Stakeholder Liaison Committee: Inaugural Scoping Meeting

Date **Monday, March 10, 2014**

Time **10:00am to 4:00pm**

Location: **1920 L St. NW, Suite 500, Washington, DC 20036**

Objectives:

- Introduce Stakeholder Liaison Committee members to Mid-Atlantic regional ocean planning and to the committee's proposed roles in informing the planning process.
- Provide founding members of the Stakeholder Liaison Committee an opportunity to help shape the committee process so that it most effectively meets the needs of stakeholders and provides meaningful input for regional ocean planning.
- Facilitate in-depth discussion and feedback about the initial draft products of the Mid-Atlantic Regional Planning Body, including the Draft Mid-Atlantic Regional Ocean Planning Framework.

Agenda

9:45 am **Coffee and refreshments provided**

10:00 am **Welcome, introductions, and agenda review**
Gwynne Schultz, MARCO Chair
Ingrid Irigoyen, Meridian Institute

10:20 am **Presentation and Discussion: Mid-Atlantic regional ocean planning and the role of the Stakeholder Liaison Committee**
During this session, MARCO Management Board members will provide a brief overview of Mid-Atlantic regional ocean planning, the relationship between MARCO and the Mid-Atlantic Regional Planning Body, the Mid-Atlantic Ocean Data Portal, and the full suite of planned stakeholder engagement efforts. This will be followed by brief discussion.

10:50 am **Presentation and Discussion: Shaping the Stakeholder Liaison Committee**

Following a brief presentation by MARCO Management Board members about the current thinking regarding the structure and functions of the Stakeholder Liaison Committee, participants will be asked to share their questions and ideas to help MARCO shape the committee process so that it most effectively meets the needs of stakeholders and provides meaningful input for regional ocean planning. During discussion, participants will be asked to keep in mind the major objectives that MARCO has identified for the committee:

- Provide direct input and feedback to MARCO about design and implementation of regional ocean planning in the Mid-Atlantic.
- Act as a conduit for information between stakeholders in the region and MARCO about regional ocean planning.
- Serve as a venue for increasing dialogue, understanding, and communication among stakeholders.

11:45 am **Lunch (provided)**

12:30 pm **Presentation and Discussion: the Draft Mid-Atlantic Regional Ocean Planning Framework**

The objective of this session is to share and discuss participant feedback about the Draft Mid-Atlantic Regional Ocean Planning Framework (draft framework). The session will begin with MARCO Management Board members offering a brief presentation of the purpose and content of the draft framework, followed by group discussion of each major element of the draft framework. During discussion, participants will not be asked to provide consensus advice, but rather to illuminate important questions, concerns, and perspectives that key stakeholder interests in the region have about the draft framework and foster increased cross-sectoral understanding.

2:00pm **Break**

2:15pm **Discussion: the Draft Mid-Atlantic Regional Ocean Planning Framework (continued)**

After a brief break, discussion of the draft framework will continue.

3:15 pm **Presentation and Discussion: The Mid-Atlantic Ocean Data Portal**

Tony MacDonald, Monmouth University

During this session, a presentation will be provided about the Mid-Atlantic Ocean Data Portal, a key tool for ocean planning and stakeholder engagement. This will be followed by participant questions and discussion.

3:45 pm **Summary of meeting outcomes, next steps, and closing remarks**
Ingrid Irigoyen, Meridian Institute
Gwynne Schultz, MARCO Chair

4:00 pm **Adjourn**

Appendix D

Inaugural Meeting of the Stakeholder Liaison Committee

March 10, 2014

MARCO
Mid-Atlantic Regional Council on the Ocean

Meeting Objectives

- Introduce you to Mid-Atlantic regional ocean planning
- Provide you with an opportunity to help shape this committee process
- Facilitate in-depth discussion and feedback

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Agenda

- Welcome, introductions, and agenda review
- Presentation and discussion: Mid-Atlantic Ocean Planning
- Presentation and discussion: Shaping the Stakeholder Liaison Committee
- Presentation and discussion: Draft Mid-Atlantic Regional Ocean Planning Framework
- Presentation: Mid-Atlantic Ocean Data Portal

MARCO
Mid-Atlantic Regional Council on the Ocean

Agenda

- Welcome, introductions, and agenda review
- **Presentation and discussion: Mid-Atlantic Ocean Planning**
- Presentation and discussion: Shaping the Stakeholder Liaison Committee
- Presentation and discussion: Draft Mid-Atlantic Regional Ocean Planning Framework
- Presentation: Mid-Atlantic Ocean Data Portal

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Appendix D

Ocean-Related Opportunities and Challenges in our Region

- Our Mid-Atlantic ocean waters and ecosystems are economic engines and cultural treasures.
- Ocean activities and ecosystem components are managed separately by many jurisdictions. But they are interconnected!

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What is Ocean Planning?

- A process for bringing together ocean managers and stakeholders
- A science- and information-based tool

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Mid-Atlantic Regional Council on the Ocean (MARCO)

To address this new era of ocean challenges and opportunities, the Governors of New York, New Jersey, Delaware, Maryland, and Virginia in 2009 signed an agreement that established MARCO

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Mid-Atlantic Regional Council on the Ocean

Mid-Atlantic Regional Planning Body (MidA RPB)

- Established in April 2013
- Intergovernmental group created to coordinate and implement regional ocean planning
- Includes representatives of:
  - Six Mid-Atlantic states (NY, NJ, PA, DE, MD and VA)
  - Shinnecock Indian Nation
  - Mid-Atlantic Fishery Management Council
  - Eight federal agencies

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What is the purpose of the MidA RPB?

To coordinate among State, Federal, Tribal, and Fishery Management Council representatives

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What will the MidA RPB do?

- Develop a work plan
- Assess and identify capacity
- Complete a regional ocean assessment
- Engage stakeholders and improve coordination
- Consider developing an ocean plan

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MidA RPB Timeline

2013-2014 Organize and identify goals/products

2015-2016 Complete first iteration products and implement actions

2017-2018 Implement, adapt, and iterate

- Ongoing activities during this timeline
  - Stakeholder engagement
  - Data collection/sharing/integration
  - Adaptation of planning products

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How will MARCO work with the MidA RPB?

- Together, MARCO and the MidA RPB can promote greater, more effective governmental and private investment, and generate more attention on priority Mid-Atlantic issues.
- MARCO products and services available to the MidA RPB:
  - Mid-Atlantic Ocean Data Portal
  - Stakeholder Engagement
  - Preliminary Regional Ocean Assessment

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Stakeholder Engagement Efforts

- MidA RPB Public Listening Sessions
- MidA RPB Meetings
- MidA RPB Webinars
- MARCO SLC
- MARCO Data Portal project
- One-on-one interactions
- More TBD…

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Agenda

- Welcome, introductions, and agenda review
- **Presentation and discussion: Mid-Atlantic Ocean Planning**
- **Presentation and discussion: Shaping the Stakeholder Liaison Committee**
- Presentation and discussion: Draft Mid-Atlantic Regional Ocean Planning Framework
- Presentation: Mid-Atlantic Ocean Data Portal

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Members of the SLC

Individuals who

- Are recognized as thought leaders and key nodes of communication by their communities of interest
- Understand and can represent a variety of perspectives and interests in the region
- Represent of a larger group of stakeholders who may be impacted by, involved in, or interested in ocean planning

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Objectives for the SLC

- Provide direct input and feedback to MARCO about design and implementation of regional ocean planning in the Mid-Atlantic.
- Act as a conduit for information between stakeholders in the region and MARCO about regional ocean planning.
- Serve as a venue for increasing dialogue, understanding, and communication among stakeholders.

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How did we choose the members of this committee?

- Geographic and sectoral diversity
- Broad range of stakeholder perspectives of the Mid-Atlantic region
- Small in size to foster meaningful dialogue among its members

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SLC Member Roles

SLC Members are asked to

- **Strive** to represent the issues and interests of the full diversity of their sector
- **Work** with MARCO to tap into existing communication networks
- **Share** information and perspectives with one another and with MARCO
- **Help shape** the ocean planning process

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How will MARCO support you in your role?

MARCO will:

- Provide management, support, and facilitation
- Work to ensure participation in the SLC cross-sector dialogue is fair and balanced
- Develop the objectives for and schedule of convening of the SLC, in consultation with the SLC
- Ensure SLC members have the materials related to ocean planning
- Convey SLC input and feedback to ocean planners in the region, including the RPB

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Discussion Questions

- What ideas do you have about how the SLC process can meet its objectives?
- How can MARCO help you carry out your roles on the SLC and engage your sectors?

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Appendix D

Agenda

- Welcome, introductions, and agenda review
- Presentation and discussion: Mid-Atlantic Ocean Planning
- Presentation and discussion: Shaping the Stakeholder Liaison Committee
- **Presentation and discussion: Draft Mid-Atlantic Regional Ocean Planning Framework**
- Presentation: Mid-Atlantic Ocean Data Portal

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MidA RPB Timeline

2013-2014 Organize and identify goals/products

2015-2016 Complete first iteration products and implement actions

2017-2018 Implement, adapt, and iterate

- Ongoing activities during this timeline
  - Stakeholder engagement
  - Data collection/sharing/integration
  - Adaptation of planning products

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Draft Ocean Planning Framework

Proposed Elements:

- Initial geographic focus
- Vision statement
- Principles
- Goals and objectives
- Example actions

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Initial Geographic Focus

- Primary geographic focus area:
  - Shoreline out to 200 miles (State and Federal waters)
  - Northern limit: NY/CT and NY/RI border
  - Southern limit: VA/NC border
- Connect and coordinate with major bays, estuaries, and terrestrial areas

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Draft Vision

A Mid-Atlantic ocean where safe and responsible use and stewardship support healthy, productive, resilient, and treasured natural and economic ocean resources that provide for the well-being and prosperity of present and future generations

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Nine Draft Principles

1) **Recognize interconnections** between human uses, marine ecosystem, and coastal communities
2) Share information to ensure the **compatibility of multiple interests**
3) **Improve resilience** associated with ocean and coastal hazards
4) Consider **sound science** and traditional knowledge in decision-making
5) **Adaptive management**
6) **Consistency with existing laws**
7) Increase **coordination and government efficiency**
8) Promote public input through **transparency and engagement**
9) Respect the ocean's **intrinsic value**

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Draft Goals

Goal 1: Promote ocean ecosystem health and integrity

- conservation, protection, enhancement, and restoration.

Goal 2: Plan and provide for existing and emerging ocean uses in a sustainable manner

- reduce conflicts, improve efficiency and regulatory predictability, and support economic growth.

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Draft Objectives for Goal 1

Promote ecosystem health and integrity

1) Understand, protect and restore key habitats
2) Account for ocean ecosystem changes and increased risks
3) Value traditional knowledge of the ecosystem

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Draft Objectives for Goal 2

Plan for existing and emerging ocean uses in a sustainable manner

1) National security
2) Ocean energy issues
3) Commercial and recreational fishers and fishing communities
4) Ocean aquaculture
5) Nautical information and navigation practices
6) Offshore sand and gravel resources
7) Non-consumptive recreational uses
8) Tribal uses and submerged cultural resources
9) Submerged infrastructure

MARCO
Mid-Atlantic Regional Council on the Ocean

Agenda

- Welcome, introductions, and agenda review
- Presentation and discussion: Mid-Atlantic Ocean Planning
- Presentation and discussion: Shaping the Stakeholder Liaison Committee
- Presentation and discussion: Draft Mid-Atlantic Regional Ocean Planning Framework
- **Presentation: Mid-Atlantic Ocean Data Portal**

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MARCO's Mid-Atlantic Ocean Data Portal: A regional hub for sharing information & maps

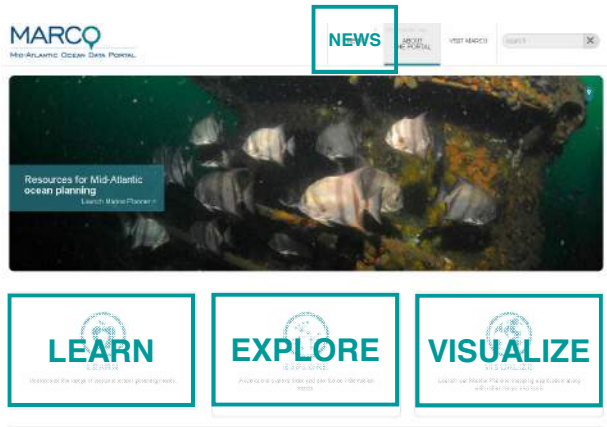
Stakeholder Liaison Committee
Washington, DC
March 10, 2014

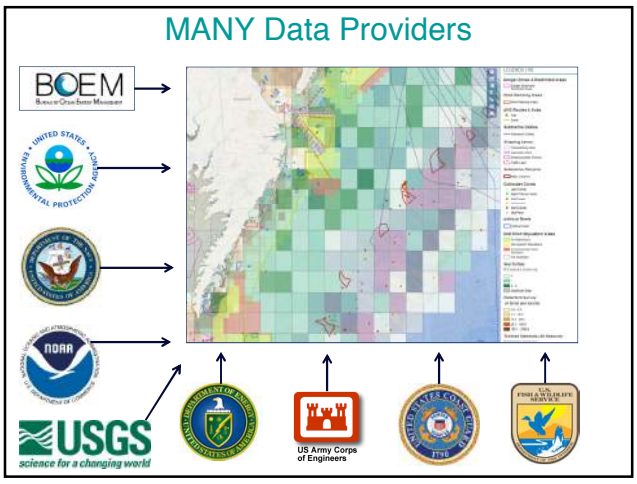
MARCO
Mid-Atlantic Ocean Data Portal

Appendix D

"The Mid-Atlantic Ocean Data Portal is an **online toolkit and resource center** that consolidates available data and enables state, federal and local users **to visualize and analyze ocean resources and human use information** such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others.

The Portal serves as **a platform to engage all stakeholders** in ocean planning from the five-state Mid-Atlantic region—putting all of the **essential data and state-of-the-art mapping and visualization technology** into the hands of the agencies, industry, and community leaders engaged in ocean planning."





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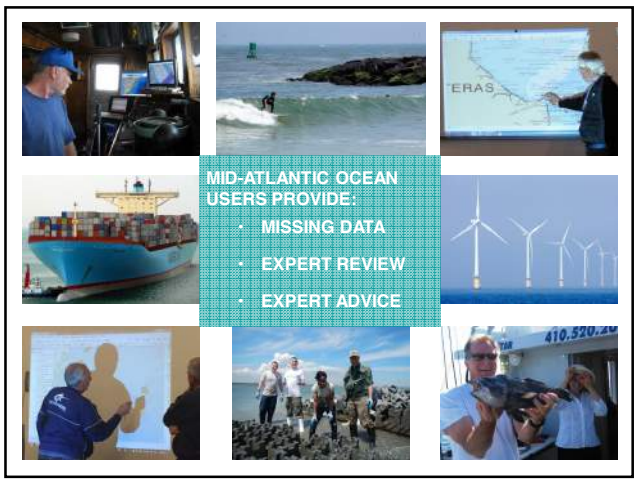
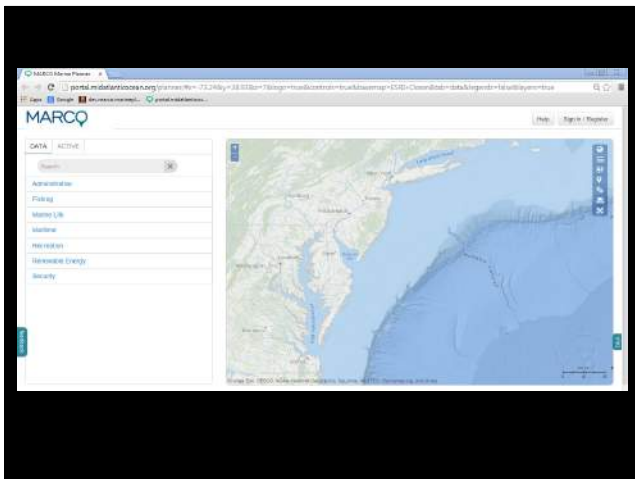


The Portal Team needs help from ocean users. So far, our outreach includes:

- Participatory Mapping Workshops
- Online Recreational Boater Survey
- Surfrider's Ocean Recreation Survey
- Comm. Fisheries Advisory Group
- Meetings w/ Environmental Groups
- Meetings w/ Five Major Ports
- Meetings w/ Wind Energy Companies
- Portal Data Review Group



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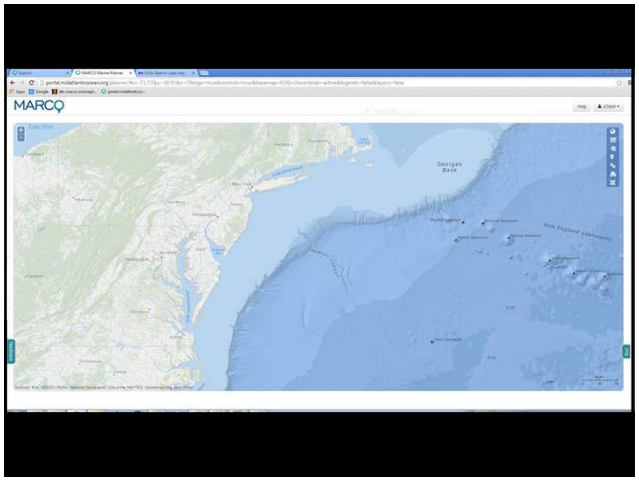
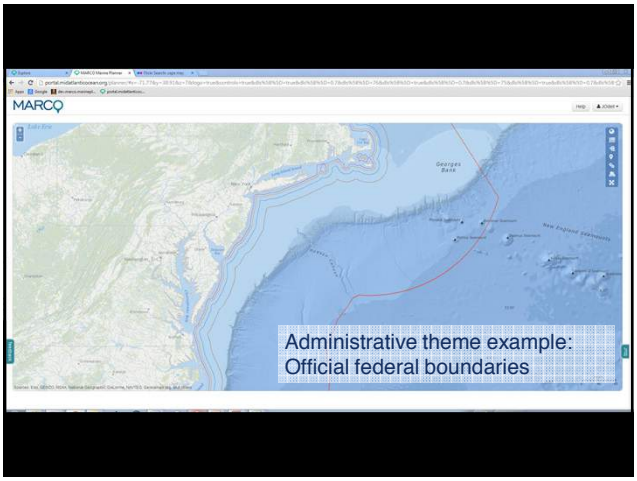
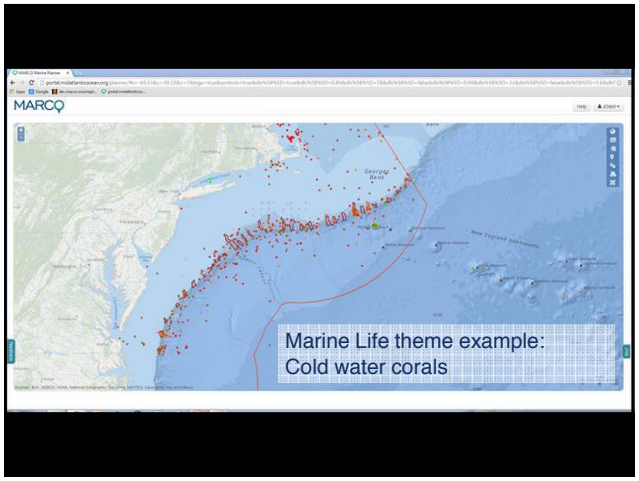
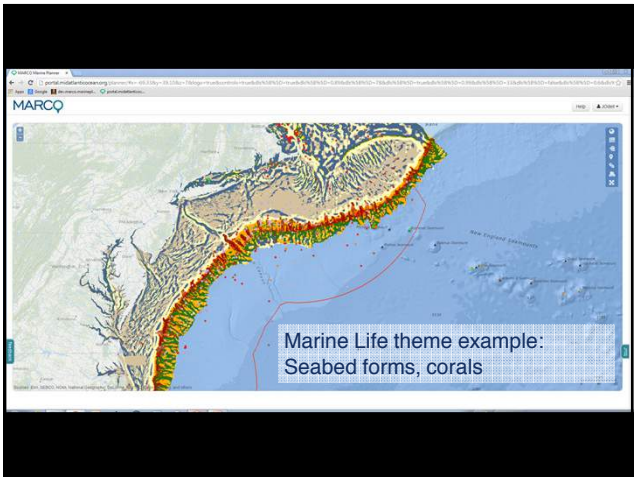

MARCO


MARCO
Administrative theme example:
Official federal boundaries


MARCO
Marine Life theme example:
Cold water corals


MARCO
Marine Life theme example:
Seabed forms, corals

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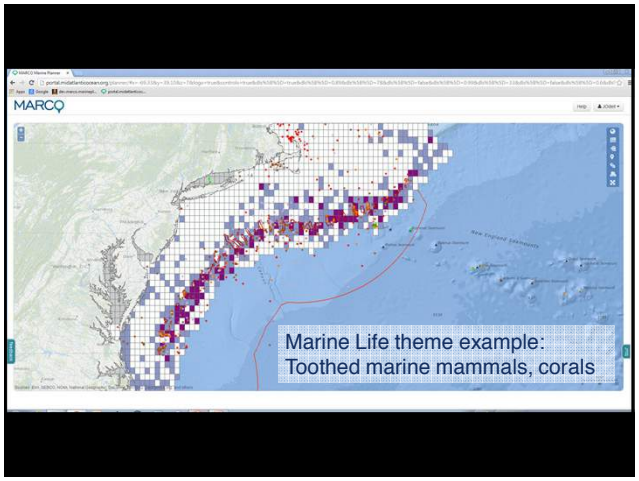
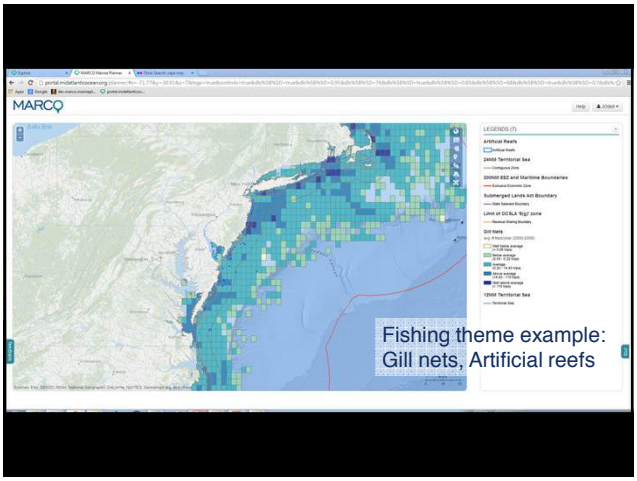
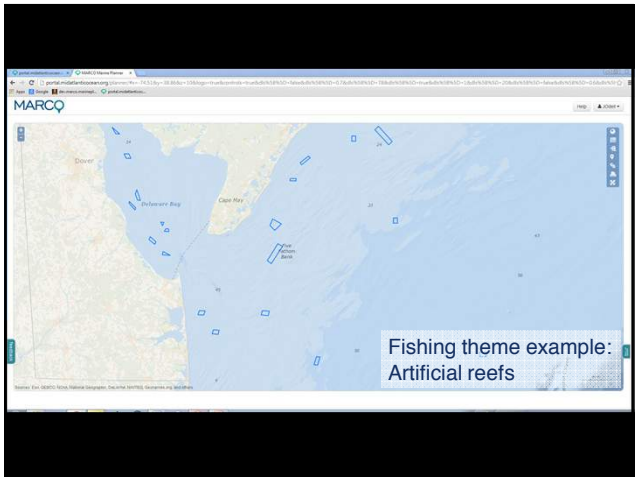
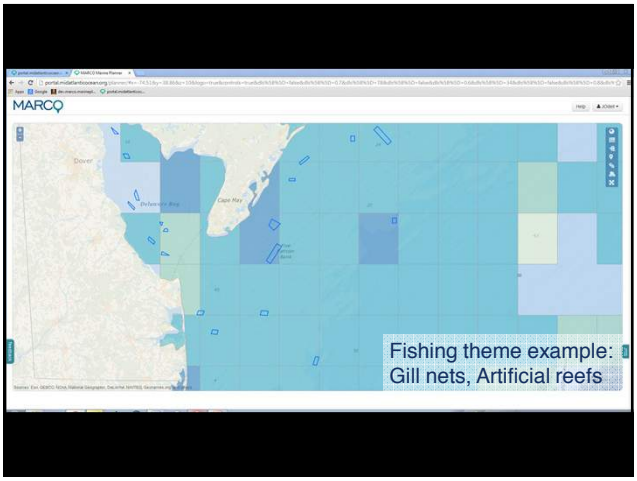

MARCO
Marine Life theme example:
Toothed marine mammals, corals

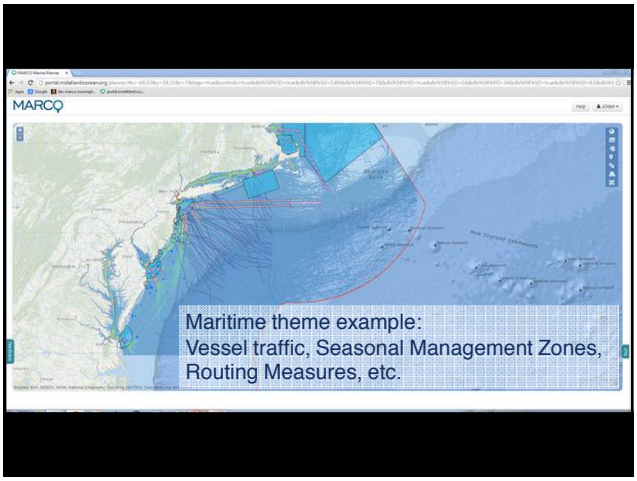

MARCO
Fishing theme example:
Gill nets, Artificial reefs

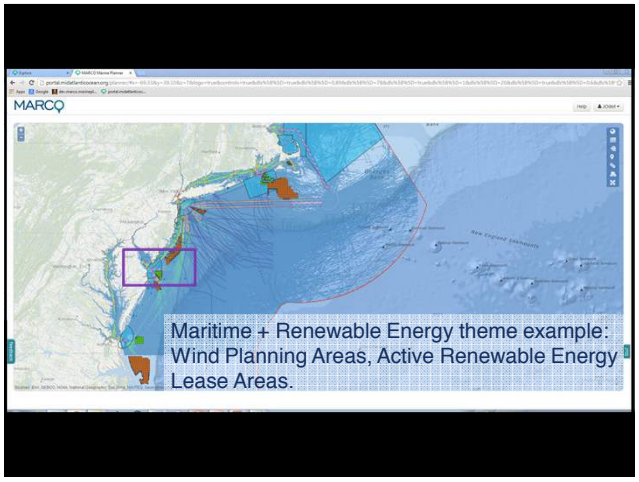

MARCO
Fishing theme example:
Artificial reefs

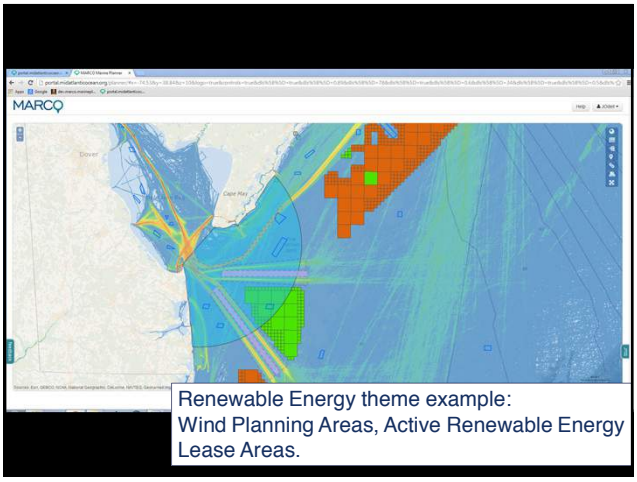

MARCO
Fishing theme example:
Gill nets, Artificial reefs

Appendix D

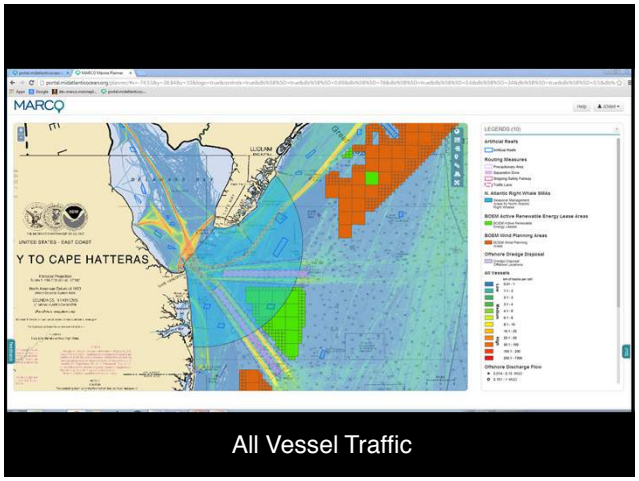

MARCO
Maritime theme example:
Vessel traffic, Seasonal Management Zones, Routing Measures, etc.


MARCO
Maritime theme example:
Vessel traffic, Seasonal Management Zones, Routing Measures, etc.

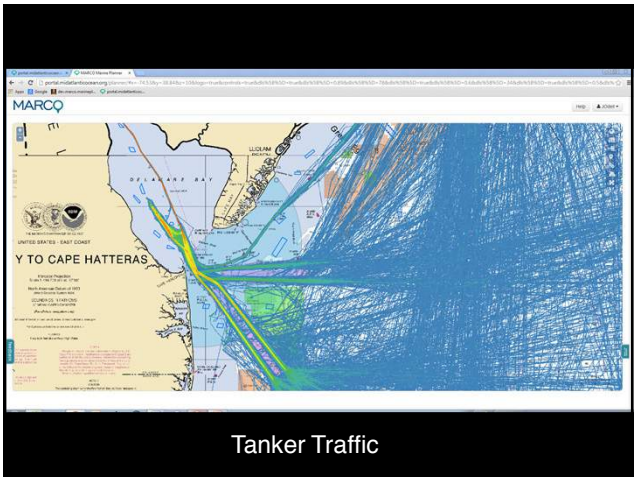

MARCO
Maritime + Renewable Energy theme example:
Wind Planning Areas, Active Renewable Energy Lease Areas.


MARCO
Renewable Energy theme example:
Wind Planning Areas, Active Renewable Energy Lease Areas.

Appendix D



All Vessel Traffic

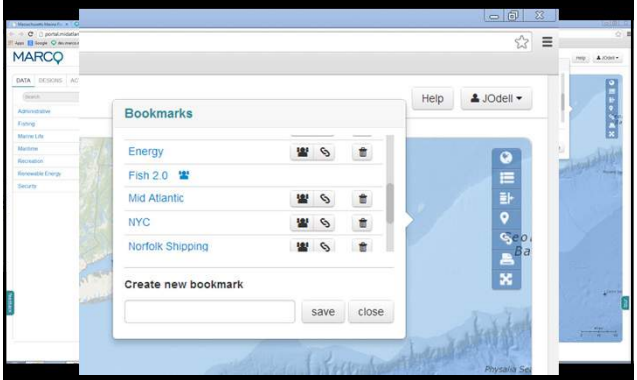


Tanker Traffic

Registered users access portal features beyond simple data visualization

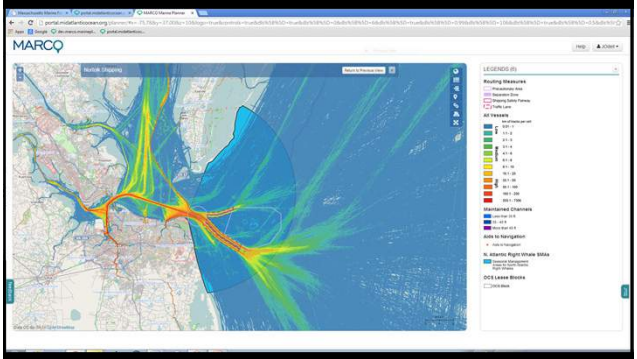
- Draw feature can be used to create new spatial data to highlight areas of importance or concern
- Lease blocks can be selected and saved, like drawings.
- A beta (demonstration) reporting feature is available to compare lease block groups
- Bookmarks saved with your account to be revisited or shared with others
- Many other account based features possible as needed to support a planning process

Bookmarks



Appendix D

Bookmarks



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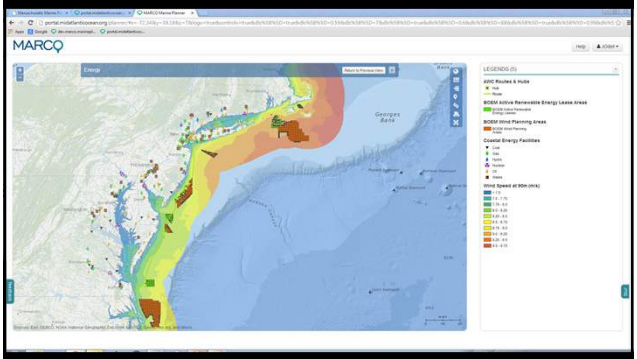
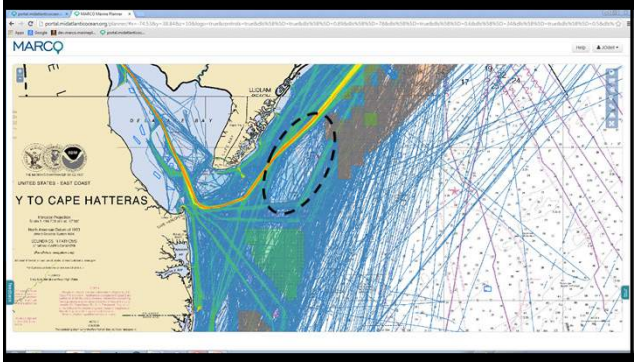
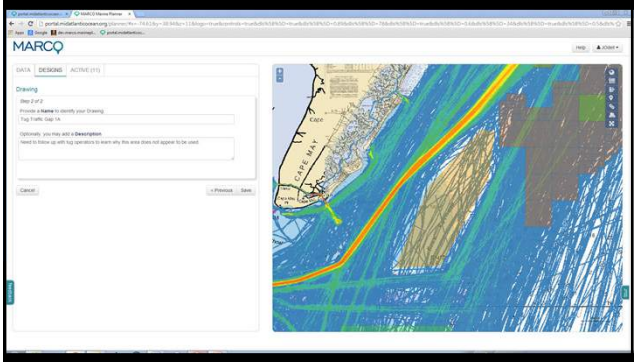


Drawing feature example



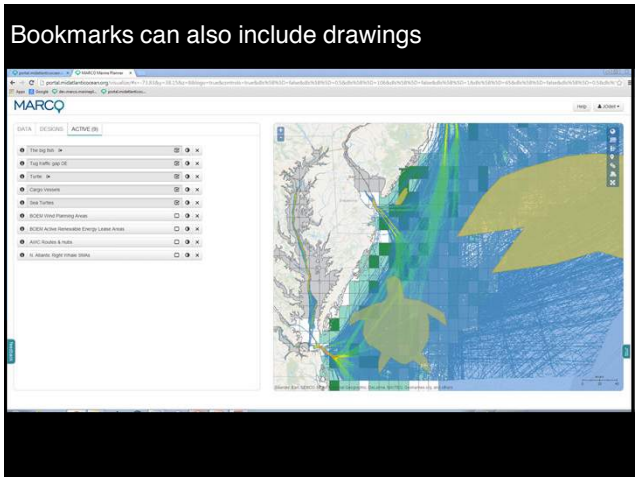
Tug / Tow traffic at Delaware Bay entrance

Drawing feature example



Drawing defining apparent low use area for tug tow traffic

Appendix D


Bookmarks can also include drawings
MARCO


MARCO
MID-ATLANTIC OCEAN DATA PORTAL
RESOURCES FOR
REGIONAL OCEAN PLANNING
Tour the portal at portal.midatlanticocean.org

Appendix E
Description of MARCO Stakeholder Liaison Committee

Since its inception in 2009, the Mid-Atlantic Regional Council on the Ocean (MARCO) has engaged stakeholders from ocean industries, commercial fishing, ocean recreation interests, environmental and conservation groups, research institutions, and the public to help inform its activities. Recent stakeholder engagement efforts have focused on the development of the Mid-Atlantic Ocean Data Portal and providing opportunities via workshops and meetings to foster dialogue among stakeholders and Federal and State agencies to share ideas on ocean planning. For example, MARCO sponsored the recent Mid-Atlantic Regional Ocean Planning Workshop in April 2013, a gathering of 160 individuals representing industry, federal, state, tribal, and local government, academia, the fishing community, environmental NGOs, and the public.

In light of the increased focus on regional ocean planning, MARCO is convening a Stakeholder Liaison Committee (SLC) designed to strengthen its communication network and foster meaningful and ongoing stakeholder involvement in the Mid-Atlantic's regional ocean planning process. The SLC will serve as a forum for the exchange of information and ideas among SLC participants. The SLC will also create an opportunity for participants to reach out to their industry, interest group, or sector to ensure that all interested constituents are informed and engaged in the regional ocean planning process. Insights and information gained through this new multi-sector engagement effort will (1) improve the Mid-Atlantic States' increased understanding of the issues and needs of the region's marine industries, commercial and recreational fishers, other recreational interests, the offshore wind industry, and conservation interests and (2) be shared with Federal, State, and Tribal members of the Mid-Atlantic Regional Planning Body to inform their work in ocean planning.

SLC Objectives

The objectives of the SLC are to tap into the leadership role and communication networks of SLC members to:

- Provide direct input and feedback to MARCO about design and implementation of regional ocean planning in the Mid-Atlantic.
- Act as a conduit for information between stakeholders in the region and MARCO about regional ocean planning.
- Serve as a venue for increasing dialogue, understanding, and communication among stakeholders.

Stakeholder Liaison Committee Members

SLC members are individuals who are recognized as thought leaders and key nodes of communication by their communities of interest (e.g. their industry, interest group, or sector). SLC members understand and can represent a variety of perspectives and

interests in the region. They are credible representatives of a larger group of stakeholders who may be impacted by, involved in, or interested in ocean planning in various ways. Their membership in the SLC is an opportunity to provide direct, detailed input and feedback to MARCO throughout the ocean planning process.

For the purposes of the SLC, stakeholders are defined as those who:

- May be affected by decisions about use of the Mid-Atlantic ocean and its resources;
- Carry out activities that currently or in the future may use ocean resources of the planning area (e.g., water, space);
- Have an interest in the management of ocean resources in the planning area. This includes the full breadth of interests, including e.g., economic, environmental, historical, spiritual and cultural interests and includes interests that may be seasonal or specific to certain geographies.

MARCO strives to ensure that the membership of the SLC reflects the geographic and sectoral diversity and broad range of stakeholder perspectives of the Mid-Atlantic region. At the same time, it is MARCO's intention that the SLC remain sufficiently small in size to foster meaningful dialogue among its members. For this reason, ocean planners in the region view the SLC is one among a number of important mechanisms for stakeholder engagement about ocean planning in the Mid-Atlantic. Perspectives that may not be fully reflected in the membership of the SLC have a variety of opportunities to provide input throughout the regional ocean planning process, including public listening sessions being planned for across the region and submission of written and verbal public comments.

SLC Member Roles

- SLC members will strive to represent the issues and interests of the full diversity of their sector (i.e., not only their company, organization, community).
- SLC members will work with MARCO to tap into existing communication networks to (a) raise awareness about opportunities for stakeholders to participate in the ocean planning process and (b) encourage input during those opportunities.
- SLC members will share information and perspectives with one another and with MARCO to foster constructive regional dialogue about ocean planning and how the planning process can meet the needs of multiple interests.
- SLC members will help shape the ocean planning process by reviewing and commenting on public drafts of ocean-planning related ideas and materials, providing relevant data and information, sharing information with others in their interest groups and conveying resulting input to MARCO, identifying major issues and concerns as early in the process as possible, and suggesting constructive alternative approaches for consideration.

SLC Member Anticipated Commitments

- MARCO is mindful and respectful of the time commitments of SLC members and will strive to use members' time most effectively and efficiently.
- It is anticipated that the SLC will meet either in-person or by teleconference on a quarterly basis. The manner, timing, and location of these convenings will depend on the nature and extent of input being sought and the most effective and appropriate timing for providing that input.
- Between and in preparation for convenings, the SLC may be asked to (a) seek input from others in their interest group about major draft ideas or materials related to regional ocean planning and (b) convey that input to MARCO in writing or verbally.
- MARCO is committed to managing and facilitating the SLC process during calendar years 2014-2015. Any activity extending beyond 2015 will be dependent on available resources and continued need. Members are asked to commit to this timeframe, if possible and appropriate. Should a member's role as a leader in a given sector change over the course of those two years (e.g., because of change in profession), members would be expected to relieve themselves of their role on the SLC and assist MARCO in identifying an appropriate replacement to represent their interest group.
- MARCO and its partners may be able to provide limited travel support for those SLC members who would otherwise not be able to participate in in-person meetings related to the process. Resources are not available to support the travel of all SLC members and there is no financial compensation for participation.

MARCO's Roles

In managing the SLC process, MARCO will:

- Provide for effective management, support, and facilitation of the process.
- Work to ensure participation in SLC cross-sector dialogue is fair and balanced and takes into account the perspectives of SLC members in the design and execution of the SLC process.
- Develop the objectives for and schedule of convening of the SLC, in consultation with the SLC.
- Ensure SLC members have the relevant draft ideas and materials related to ocean planning that will allow the SLC to play its role most effectively. In doing so, MARCO will seek ways to make provision of member input as easy as possible.
- Convey SLC input and feedback to ocean planners in the region, including the Mid-Atlantic Regional Planning Body.

MARCO's Commitments

MARCO is committed to:

- Form a SLC that reflects the broadest range of interests possible.

- Ensure that input is sought from the SLC in a timely manner and allows a range of stakeholder input to be considered early in the development of ocean planning products.
- Ensure that SLC members have sufficient notice of meetings and advance materials to realistically and effectively participate.
- Ensure that SLC members have access to important ocean planning information and tools, including the *Mid-Atlantic Ocean Data Portal* and its team.
- Work to ensure that any technical information is provided in a way that is understandable and clear to stakeholders and the public.
- Ensure transparency and openness throughout the SLC process.
- Post the names and contact information of SLC members to enable members of their sector constituencies to recognize SLC members as leaders and important conduits for input about ocean planning.
- Ensure that SLC member knowledge, input and data are conveyed to regional ocean planners, including the Mid-Atlantic Regional Planning Body, in a timely manner.

Appendix F

Draft Mid-Atlantic Regional Ocean Planning Framework

Since the formal establishment of the Mid-Atlantic Regional Planning Body (MidA RPB) in April of 2013, the MidA RPB has been identifying needs and opportunities that can be addressed through regional ocean planning. This document offers, for public review, the MidA RPB's draft framework for regional ocean planning. The framework will inform how the MidA RPB moves forward with ocean planning by articulating a vision, principles, goals, objectives, example actions, and a proposed geographic focus.

Public feedback and ideas about this draft framework will help the MidA RPB ensure it is accounting for the full diversity of ocean interests in the region. To provide input on this draft framework, please send comments in writing to MidAtlanticRPB@boem.gov by April 15, 2014. To facilitate a regional dialogue, the MidA RPB is planning a variety of in-person and online public input opportunities for early 2014. Details about these opportunities will be posted on the MidA RPB website at www.boem.gov/Mid-Atlantic-Regional-Planning-Body/ in the coming weeks. Members of the public can also request to receive email updates from the MidA RPB by sending a message to MidAtlanticRPB@boem.gov.

Definitions of the terms used in this document are as follows:

- **Vision:** Desired future state for the Mid-Atlantic ocean.
- **Principles:** Basic or essential qualities or elements determining the intrinsic nature or characteristic behavior of regional ocean planning. Principles describe how the MidA RPB intends to operate.
- **Goals:** Statements of general direction or intent. Goals are high-level statements of the desired outcomes the MidA RPB hopes to achieve.
- **Objectives:** Statements of specific outcomes or observable changes that contribute to the achievement of a goal.
- **Actions:** Specific activities that Federal, State, and Tribal agencies may take, individually or together, to address the stated objectives.
- **Geographic Focus:** The area of focus for MidA RPB planning and coordination efforts.

About Mid-Atlantic regional ocean planning

Regional ocean planning will improve our understanding of how the Mid-Atlantic ocean and its resources are being used, managed, and conserved; and guide planning to address current challenges and emerging opportunities. Regional ocean planning will help guide resource conservation and economic development by facilitating information sharing, fostering collaboration, and improving decision-making about a growing number of ocean uses vying for ocean resources and space. Partnerships with stakeholders will be critical to the success of this planning effort.

The regional ocean planning process **does *not* change** existing authorities or create new mandates. Rather, it aims to improve the efficiency of those authorities as well as effectiveness of the mandates being implemented by the Federal agencies with jurisdictions in the Mid-Atlantic ocean.

Key elements of regional ocean planning include:

- Identify shared regional goals and objectives to guide decision-making by Federal, State and Tribal entities, informed by stakeholder engagement and input.
- Provide participation by ocean stakeholders and the public.
- Build upon all relevant work at the regional, State, Tribal, and local levels.
- Identify emerging issues and account for the needs of both current and future generations, while remaining mindful of traditional uses.
- Efficiently use constrained public resources, while leveraging investments with private-sector partnerships.
- Consult scientists, technical, and other experts in conducting regional ocean planning and developing ocean planning products.
- Inform data collection and analyses to better understand the potential benefits and risks of decisions.
- Compile a regional assessment of ocean uses, natural resources, and economic and cultural factors to provide a comprehensive understanding and context for ocean planning.
- Use enhanced collaboration and coordination across jurisdictions and with stakeholders to avoid disputes and facilitate compatibility wherever possible. In order to resolve disputes that do arise, the MidA RPB will emphasize use of collaborative, mediative approaches in an effort to avoid costly, formal dispute resolution mechanisms and find solutions that meet the interests of multiple parties.

Mid-Atlantic Ocean Data Portal

The Mid-Atlantic Ocean Data Portal is an online toolkit and resource center that consolidates available data and enables users to visualize and analyze ocean resources and human use information such as fishing grounds, recreational areas, shipping lanes, habitat areas, and energy sites, among others. The Mid-Atlantic Regional Council on the Ocean (MARCO) initiated and oversees the portal in close coordination with the Portal Project Team, using funds provided by the National Oceanic and Atmospheric Administration's Regional Ocean Partnership funding program. For more information, please visit: http://portal.midatlanticocean.org/portal/

About the Mid-Atlantic Regional Planning Body

Regional ocean planning in the Mid-Atlantic is led by the MidA RPB, which includes representatives from Federal, State, Tribal, and the Mid-Atlantic Fishery Management Council entities, as listed below.

- The six Mid-Atlantic States: New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia
- The Shinnecock Indian Nation
- The Mid-Atlantic Fishery Management Council
- Eight 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
  - 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

To learn more about the MidA RPB and to view recent and historic postings, please visit www.boem.gov/Environmental-Stewardship/Mid-Atlantic-Regional-Planning-Body/index.aspx

Role of the Mid-Atlantic Regional Planning Body

The MidA RPB provides a forum for coordination of ocean planning activities in the region. As part of the regional ocean planning process, the MidA RPB plans to do the following:

- Develop a work plan that describes strategies and activities designed to achieve the MidA RPB goals and objectives.
- Compile a capacity assessment to identify existing activities that are relevant to ocean planning.
- Complete a regional ocean assessment to provide baseline information for ocean planning in the Mid-Atlantic that takes into account current trends and forecasts about changing ocean uses and ecosystems.
- Consider developing a forward looking ocean plan to foster enhanced coordination on ocean management and stewardship across jurisdictions. The purpose and content of such a plan would be determined by the MidA RPB in collaboration with stakeholders.

DRAFT Description of Initial Geographic Focus

The MidA RPB proposes that the primary geographic focus area for regional ocean planning at this time be the ocean waters of the region. This means:

- From the shoreline out to 200 miles (EEZ), which includes State and Federal waters
- The northern limit would be the NY/CT and NY/RI border
- The southern limit would be the VA/NC border

The RPB does not anticipate including in its planning efforts the major bays and estuaries of the Mid-Atlantic. However, where necessary, the MidA RPB will draw connections and coordinate with estuarine and terrestrial areas for planning purposes, particularly in such cases where ocean uses may impact coastal communities, estuaries, and ports or other shore side infrastructure. Coordination and collaboration with Regional Planning Bodies and other entities in the Northeast and South-Atlantic, including leveraging of resources, will also be essential for success. The RPB will consider further refining the geographic focus as goals and objectives are determined, as informed by public input.

DRAFT Vision

The draft vision is intended to articulate the RPB's desired future state for the Mid-Atlantic ocean:

A Mid-Atlantic ocean where safe and responsible use and stewardship support healthy, productive, resilient, and treasured natural and economic ocean resources that provide for the wellbeing and prosperity of present and future generations.

DRAFT Principles

The Mid-Atlantic ocean planning efforts would be guided by the following overarching principles:

Principle 1 (Recognize Interconnections) – The MidA RPB will facilitate an approach to managing ocean resources that recognizes and considers the interconnections across human uses and interests, marine species and habitats, and coastal communities and economies.

Principle 2 (Compatibility of multiple interests) – The MidA RPB will coordinate in making information available to support economic development and ecosystem conservation so that multiple interests can co-exist in a manner that reduces conflict and enhances compatibility.

Principle 3 (Improving resilience) – The MidA RPB will consider the risks and vulnerabilities associated with past, present, and predicted ocean and coastal hazards (e.g., erosion, extreme weather, and sea level rise) and predicted changes to temperature and ocean acidification to protect Mid-Atlantic ocean and coastal communities, users, and natural features.

Principle 4 (Sound science) – The MidA RPB will consider sound science and traditional knowledge in decision-making.

Principle 5 (Adaptive management) – The MidA RPB will apply a flexible and adaptive approach in accommodating changing environmental conditions, advances in science and technology, and new or revised laws and policies.

Principle 6 (Consistency with existing laws) – MidA RPB actions will be consistent with Federal laws, regulations, Executive Orders, and treaties, and with State laws, regulations, Executive Orders, and treaties where applicable.

Principle 7 (Coordination and government efficiency) – The MidA RPB will serve as a forum to increase inter-jurisdictional coordination to facilitate efficient and effective management of Mid-Atlantic ocean uses and resources consistent with regional needs. Such coordination will extend to partners and issues in adjacent uplands, in the Northeast and South Atlantic, and international waters to the east.

Principle 8 (Transparency and engagement) – MidA RPB processes and products will benefit from meaningful public input, be designed to be easily understood by all, and allow stakeholders to participate and understand when and how decisions are reached that affect their lives.

Principle 9: (Intrinsic value) – The MidA RPB will respect the intrinsic value of the ocean and its biodiversity, at the same time recognizing humans as part of the ecosystem and dependent on the health of the ecosystem for our own well-being.

DRAFT Mid-Atlantic Ocean Planning Goals and Objectives

Mid-Atlantic ocean planning goals will be high-level statements of the desired outcomes the MidA RPB hopes to achieve. Objectives will describe specific outcomes and observable changes that contribute to the achievement of ocean planning goals. They are intended to serve as guideposts for the focus and work of the MidA RPB. Draft ocean planning goals and draft objectives are offered below for public feedback, and include articulation of some example actions that could be taken by the MidA RPB to achieve the draft goals and objectives for illustrative purposes.

DRAFT Ocean Planning Goal 1:
Promote ocean ecosystem health and integrity through conservation, protection, enhancement, and restoration.

Note: Goal #1 focuses on protecting and conserving our ocean and coastal resources through efforts that improve our understanding of ocean resources and habitats, account for ecosystem changes, consider traditional values and scientific data in regional ocean planning, and foster collaboration across jurisdictions around ocean conservation efforts.

Draft objectives:

1) (*Understanding, protecting and restoring key habitats*) Enhance understanding of Mid-Atlantic ocean habitats and physical, geological, chemical, and biological ocean resources through improved scientific understanding and assessments of the effects of ocean uses. Foster collaboration and coordination for protection and restoration of critical ocean and coastal habitats.

   Example action: Map and characterize canyon habitats in the Mid-Atlantic region. Identify Federal, State and Tribal habitat protection and restoration initiatives to leverage partnerships that maximize the opportunity for success.

2) (*Accounting for ocean ecosystem changes and increased risks*) Facilitate enhanced understanding of and take into account in decision-making current and anticipated ocean ecosystem changes in the Mid-Atlantic. These include ocean-related risks and vulnerabilities associated with ocean warming (including sea level rise, coastal flooding/inundation), ocean acidification (including effects on living marine resources), and changes in ocean wildlife migration and habitat use.

   Example actions: Coordinate the collection and understanding of information needed to adjust human use activities in certain ocean areas in response to changing migratory pathways of marine life. Coordinate information sharing regarding sea level rise and ocean acidification in order to inform management of living marine resources and coastal communities and industries dependent on them.

3) (*Valuing traditional knowledge of the ecosystem*) Pursue greater understanding and acknowledgment of traditional knowledge along with other cultural values, and incorporate such knowledge and values in the ocean planning process.

   Example action: Include traditional ecological knowledge and consideration of local cultural values in regional capacity assessment.

DRAFT Ocean Planning Goal 2:
Plan and provide for existing and emerging ocean uses in a sustainable manner that reduces conflicts, improves efficiency and regulatory predictability, and supports economic growth.

Note: Goal #2 focuses on fostering coordination, transparency, and use of quality information to support accommodation of existing, new, and future ocean uses in a manner that reduces conflict and enhances compatibility. The MidA RPB has chosen to organize the draft objectives under Goal 2 by sector to facilitate initial data collection, future needs assessment, and highlight how the proposed actions will affect key stakeholders. During the subsequent phases of the ocean planning process, application of the principles articulated above calls for considering various sectors and concerns in an integrated, holistic, and collaborative manner. The MidA RPB intends to provide the means for decision-makers to implement their programs and authorities in an integrated way.

Draft objectives, organized by sector:

1) (*National security*) Account for national security interests in the Mid-Atlantic through enhanced coordination and sharing of information across agencies.

   Example action: Consider military needs and preferences early in decision-making processes to avoid potential conflicts with proposed ocean activities and current and planned military training and testing areas.

2) (*Ocean energy*) Facilitate greater collaboration around ocean energy issues in the Mid-Atlantic.

   Example action: Coordinate data collection for environmental assessment to inform development of new offshore renewable energy projects.

3) (*Commercial and recreational fishing*) Foster greater understanding of the needs of Mid-Atlantic fishers and fishing communities in the context of the full range of ocean uses and conservation efforts.

   Example action: Identify areas of high fish productivity and high usage to inform management of ocean uses and habitat areas.

4) (*Ocean aquaculture*) Inform ocean aquaculture siting and permitting in the Mid-Atlantic through greater coordination among stakeholders and management authorities to address compatibility issues.

   Example action: Facilitate interagency coordination regarding ocean aquaculture permitting.

5) (*Maritime commerce and navigation*) Enhance coordination to ensure new and updated nautical information and navigation practices at local, regional, and international levels are considered in regional ocean planning.

   Example action: Coordinate information about new and proposed revisions to existing maritime corridors in the Mid-Atlantic, taking into account global and regional trends in maritime commerce.

6) (*Offshore sand management*) Facilitate enhanced coordination among coastal jurisdictions, Federal and State regulatory agencies, and Tribal entities on the use of sand and gravel resources in the Mid-Atlantic.

   Example action: Coordinate regional identification and prioritization of sand borrow sites in Federal and State waters.

7) (*Non-consumptive recreation*) Coordinate improved understanding of near-shore and offshore non-consumptive recreational uses in the Mid-Atlantic to inform management of ocean activities and resources that may impact those activities (e.g., surfing, boating, whale watching, birding, diving).

   Example action: Share data about ocean areas important for recreational activity and recreational user perceptions on issues such as siting of ocean renewable energy facilities.

8) (*Tribal uses*) Recognize and take into account important Tribal uses and submerged cultural resources in the planning process.

   Example action: Document and foster shared understanding of ocean and coastal sites important to Tribal use, beliefs, and values related to the Mid-Atlantic ocean.

9) (*Critical ocean infrastructure*) Facilitate greater understanding of the current and potential future location of submerged infrastructure, such as submarine cables (e.g., for communication and electricity) and pipelines.

   Example action: Engage the submarine cables and submerged pipelines industries to understand their current and projected needs for ocean space, and conduct an inventory of obsolete structures.

The MidA RPB encourages public input on this draft document. Please send comments in writing to MidAtlanticRPB@boem.gov by ***April 15, 2014****. To facilitate a dialogue, the MidA RPB is also planning a variety of in-person and online public input opportunities for early 2014. Details about these opportunities will be posted on the RPB website (www.boem.gov/Mid-Atlantic-Regional-Planning-Body/) in the coming weeks. Members of the public can also request to receive email updates from the RPB by sending a message to MidAtlanticRPB@boem.gov.*