Virginia Ocean Plan Policies

Executive Summary

This project proposes to develop a Virginia Ocean Plan to further detail and build upon the Mid-Atlantic Ocean Action Plan completed in 2016. The Virginia Ocean Plan will be a comprehensive mechanism for addressing a variety of ocean issues that affect Virginians and neighboring states. These include but are not limited to protection and promotion of commercial and recreational fisheries and aquaculture, provision for adequate and safe shipping lanes for a growing Port of Virginia, identification and protection of ocean wildlife and habitats, identification of military needs, and development of measures to prevent and mitigate ocean acidification and improve ocean health, as well as identification of appropriate areas for additional offshore wind energy lease areas.

In the first year of this multi-year grant, the Virginia Coastal Policy Center (VCPC) worked to develop the early framework of the ocean plan development process. In Fall 2021 and Spring 2022, a student team researched other states' ocean plans, presented an overview of their findings at a meeting of state natural resource agencies, and produced a white paper that has been published on the VCPC website. The team then distributed that paper to the Virginia natural resource agencies and obtained their input and feedback on a draft outline for the Ocean Plan. The team and VCPC Director also assisted the CZM Program Manager with planning and hosting a meeting with the Virginia Tribes to gain their input into the draft plan outline, and one of the law students worked with CZM staff to develop a Communications Plan for the Ocean Plan. Finally, the VCPC Assistant Director and a research assistant helped the CZM Program Manager host another meeting of state natural resource agencies in Summer 2022, and a research assistant drafted an email to federal partners to brief them concerning the first meeting of the full Ocean Planning Committee, which will be held in October 2022.

In September 2022, a new team of VCPC students continued to support the Coastal Zone Management Program in planning for hosting the first committee meeting, including assisting with development of an agenda. They also began meeting with state partners to ask for suggestions for best management practices (BMPs) that could be incorporated into the plan to support the safe and sustainable conduct of offshore activities. This work will continue into the next fiscal year and grant cycle.

This project, Task 92.01, was funded by the Virginia Coastal Zone Management Program led by the Virginia Department of Environmental Quality through Grant FY 21 - NA21NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended

Virginia Coastal Zone
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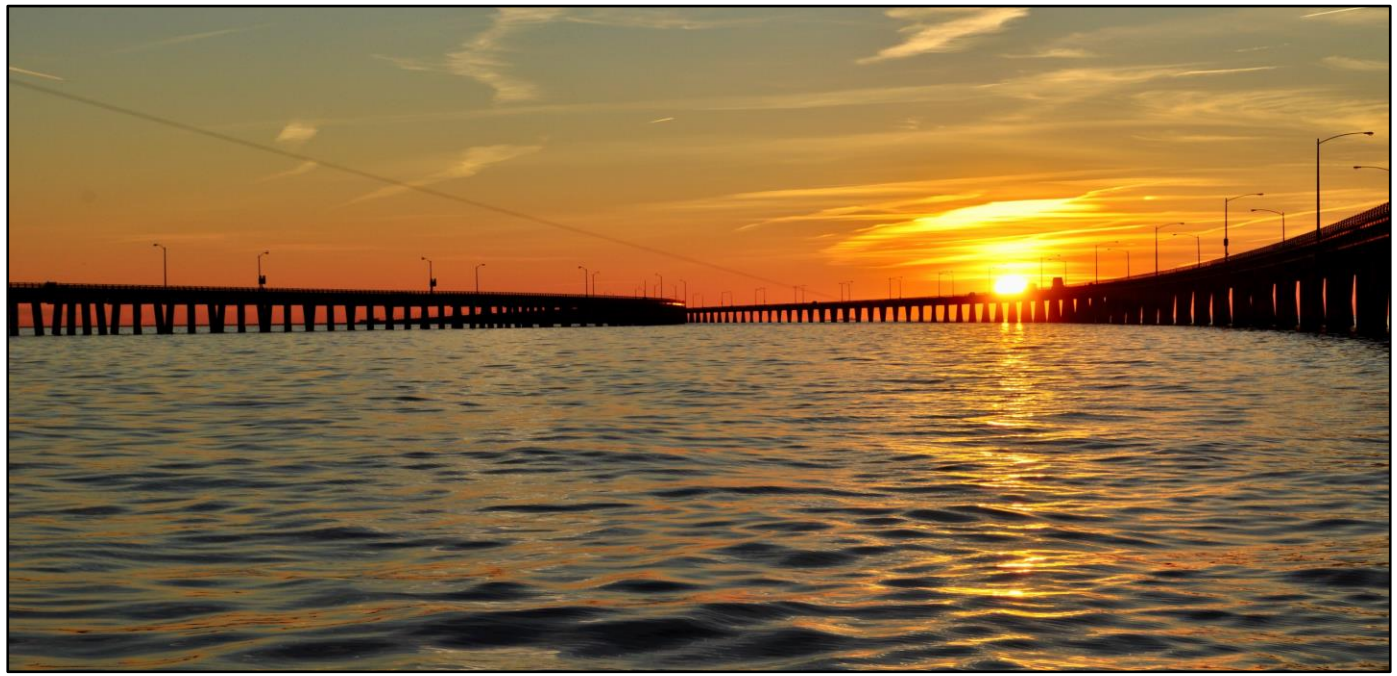
Table of Contents:

Toward a Virginia Ocean Plan: Ocean Management Policy Recommendations

Nate Dominy & Luke Foley



WILLIAM & MARY
LAW SCHOOL
VIRGINIA COASTAL POLICY CENTER

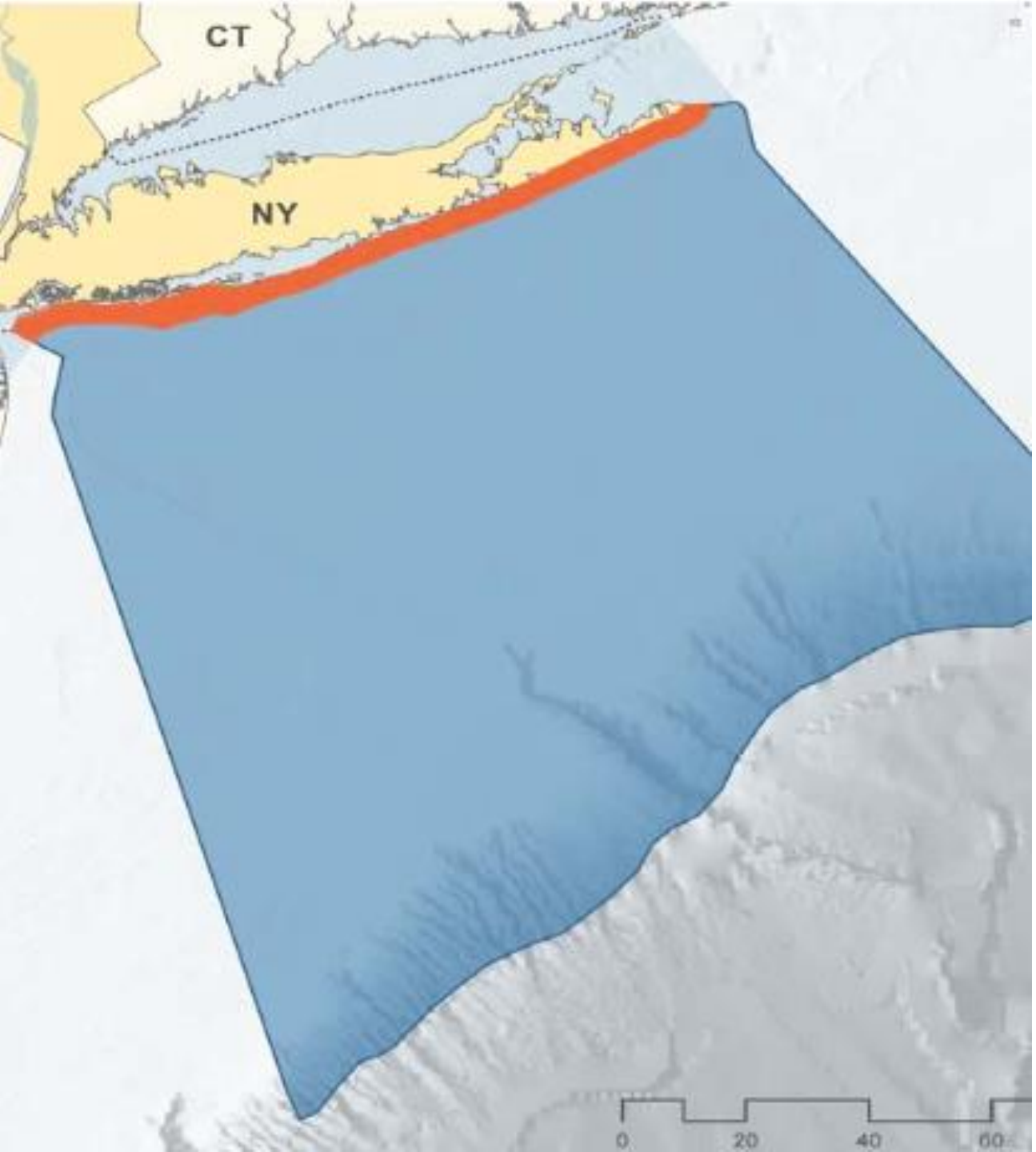
Introduction

- What is an ocean plan?
- Where is Virginia in this process?
- Representative nature of chosen states
- Similarities between the states – MSP, Public involvement

Massachusetts

Ocean Management Plan - 2009

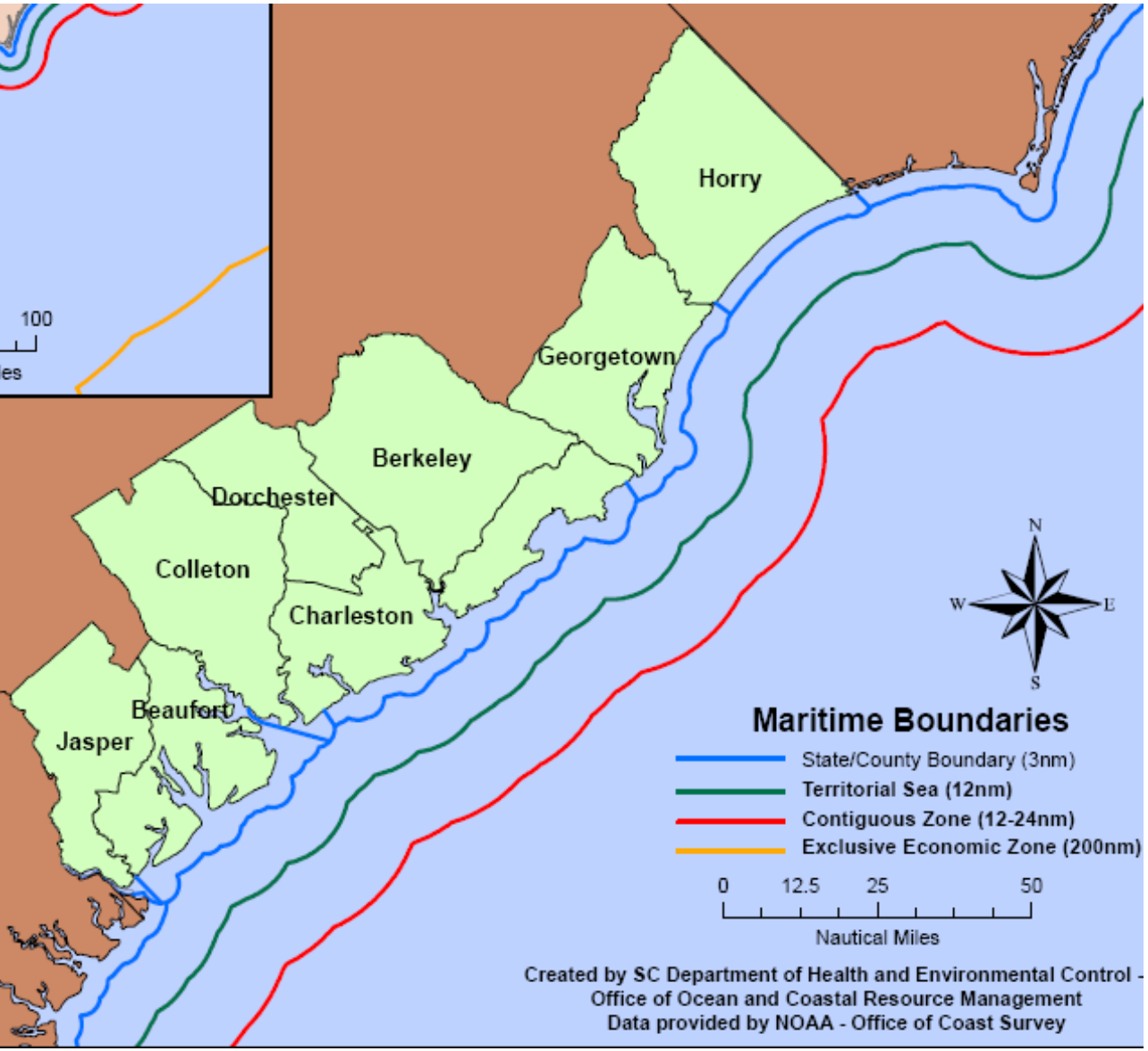
- Multi-use areas
- Review period (2015, 2022)
- Development studies and partners
- Revenue through permitting



New York

Ocean Action Plan – 2017-2027

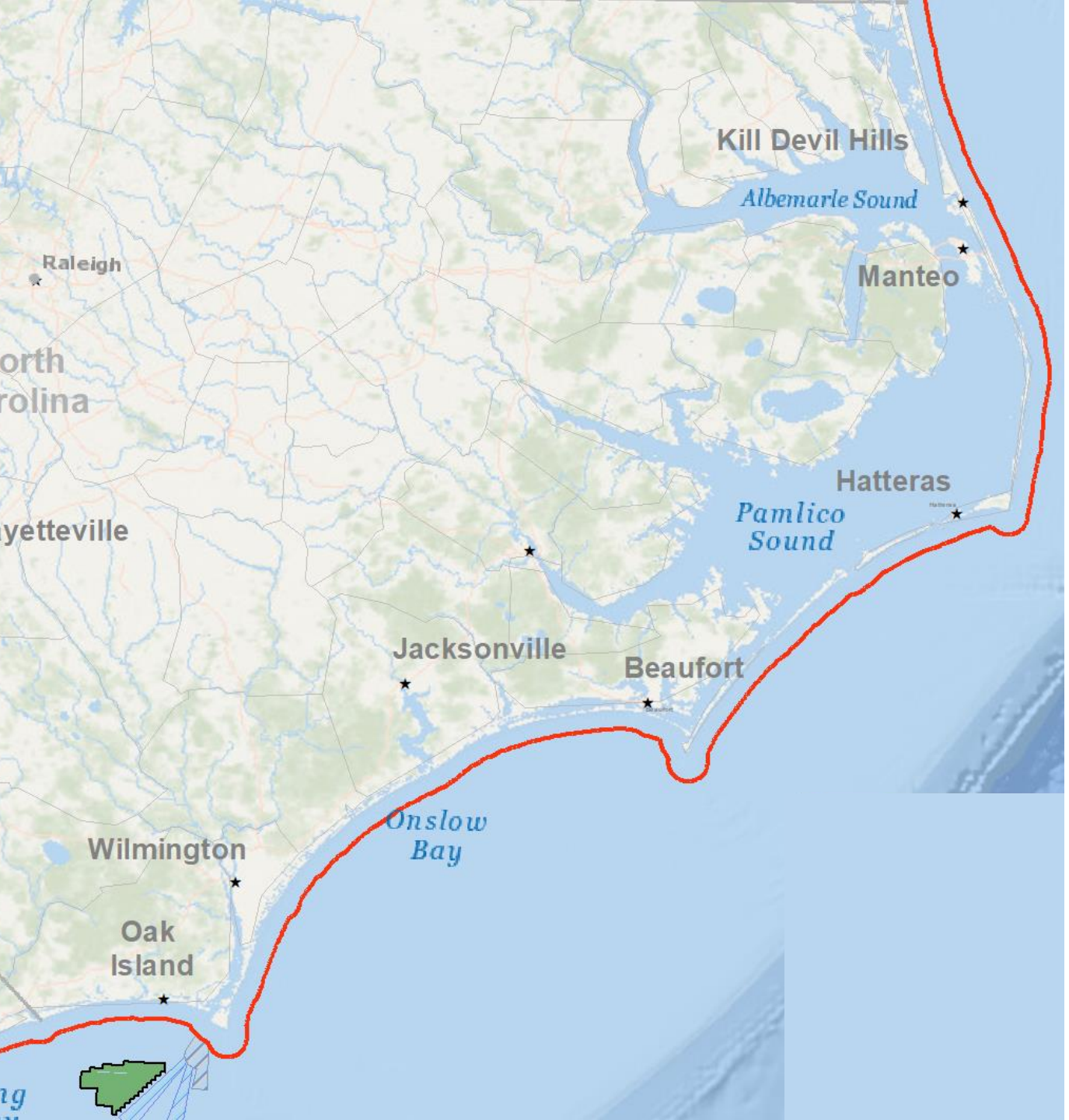
- Fragmented implementation
- Deep sea focus
- Interstate cooperation



South Carolina

Ocean Report - 2012

- Nine recommendations as a guide
- Restructuring and imminence
- Need for state-level momentum



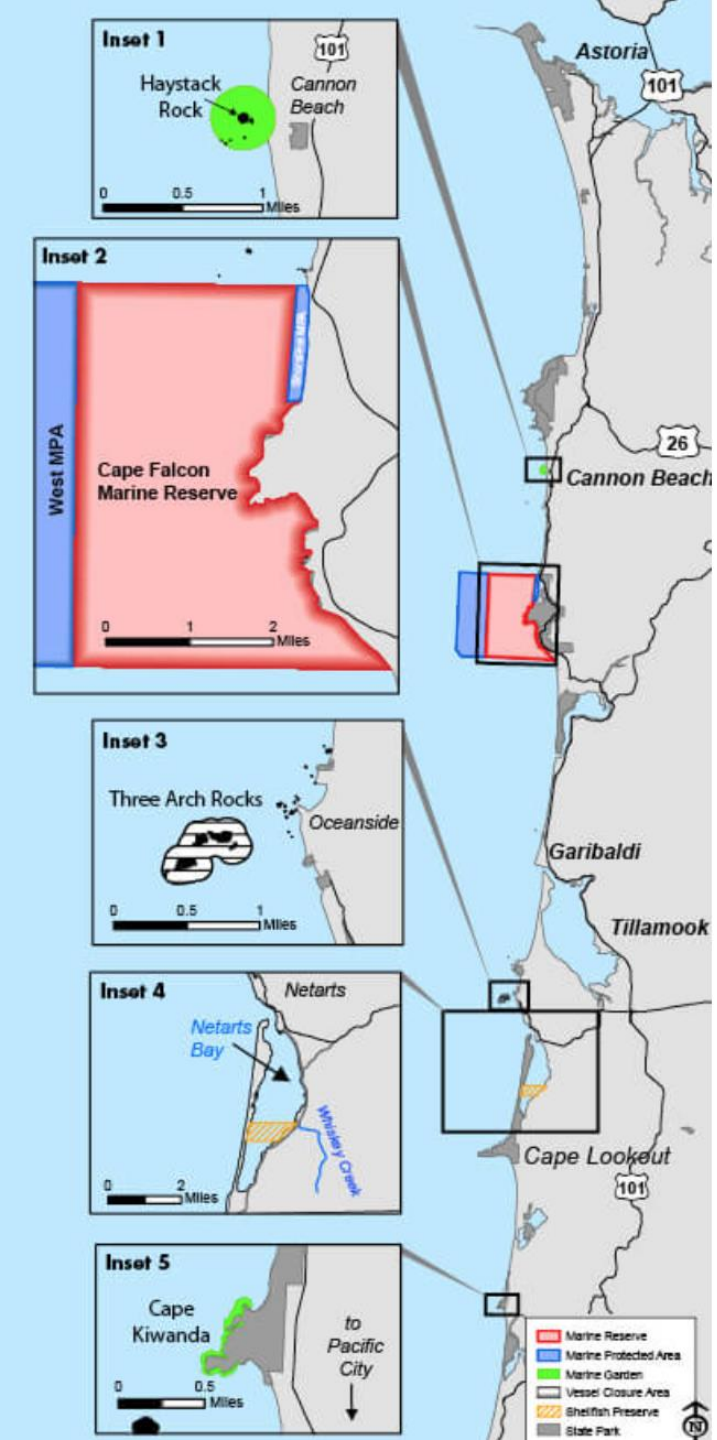
North Carolina

Coastal Ocean Report - 2009

- Four focus areas
- Call for comprehensive plan
- Political shifts and community preservation

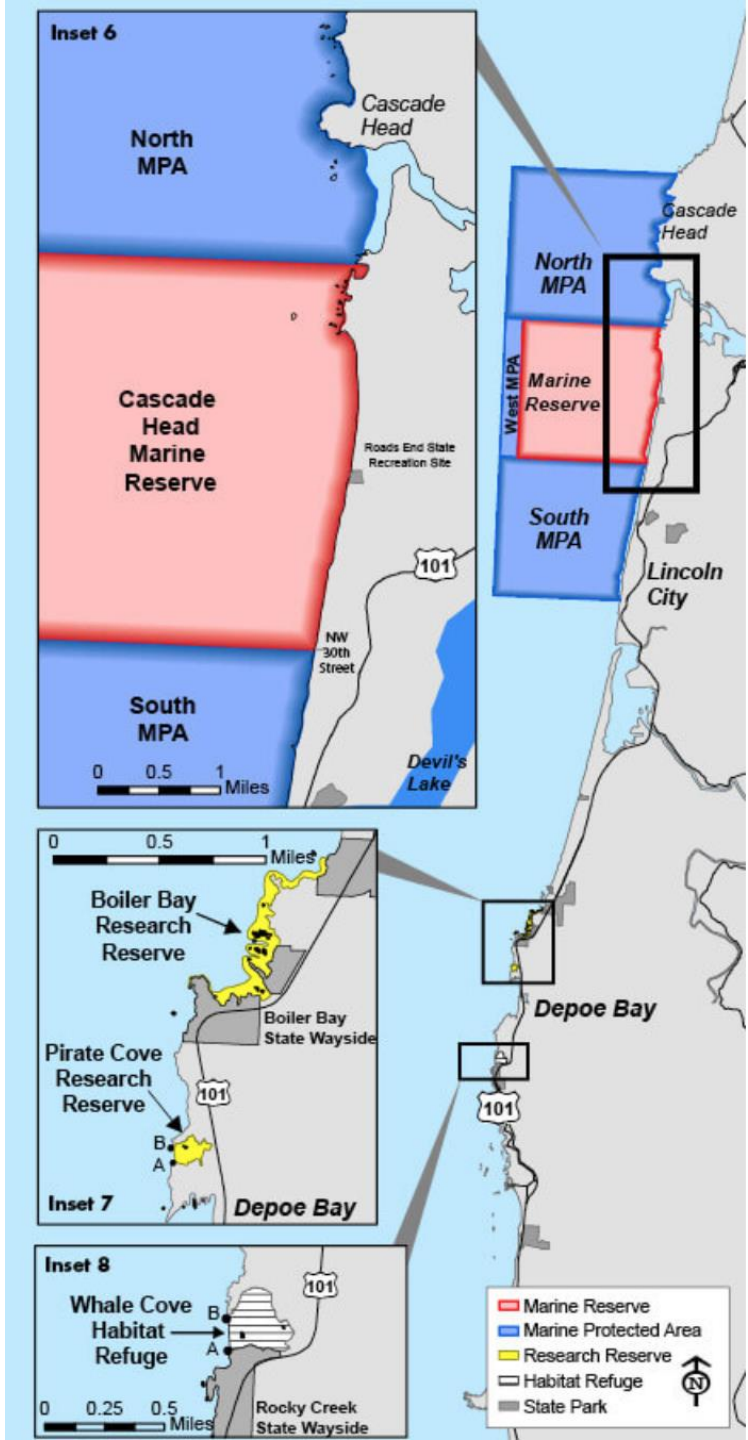
Oregon

- Statewide Planning Goal 19: Ocean Resources (1977)
- Ocean Plan (1987)
- Territorial Sea Plan (1994)



Mapping & Marine Protection

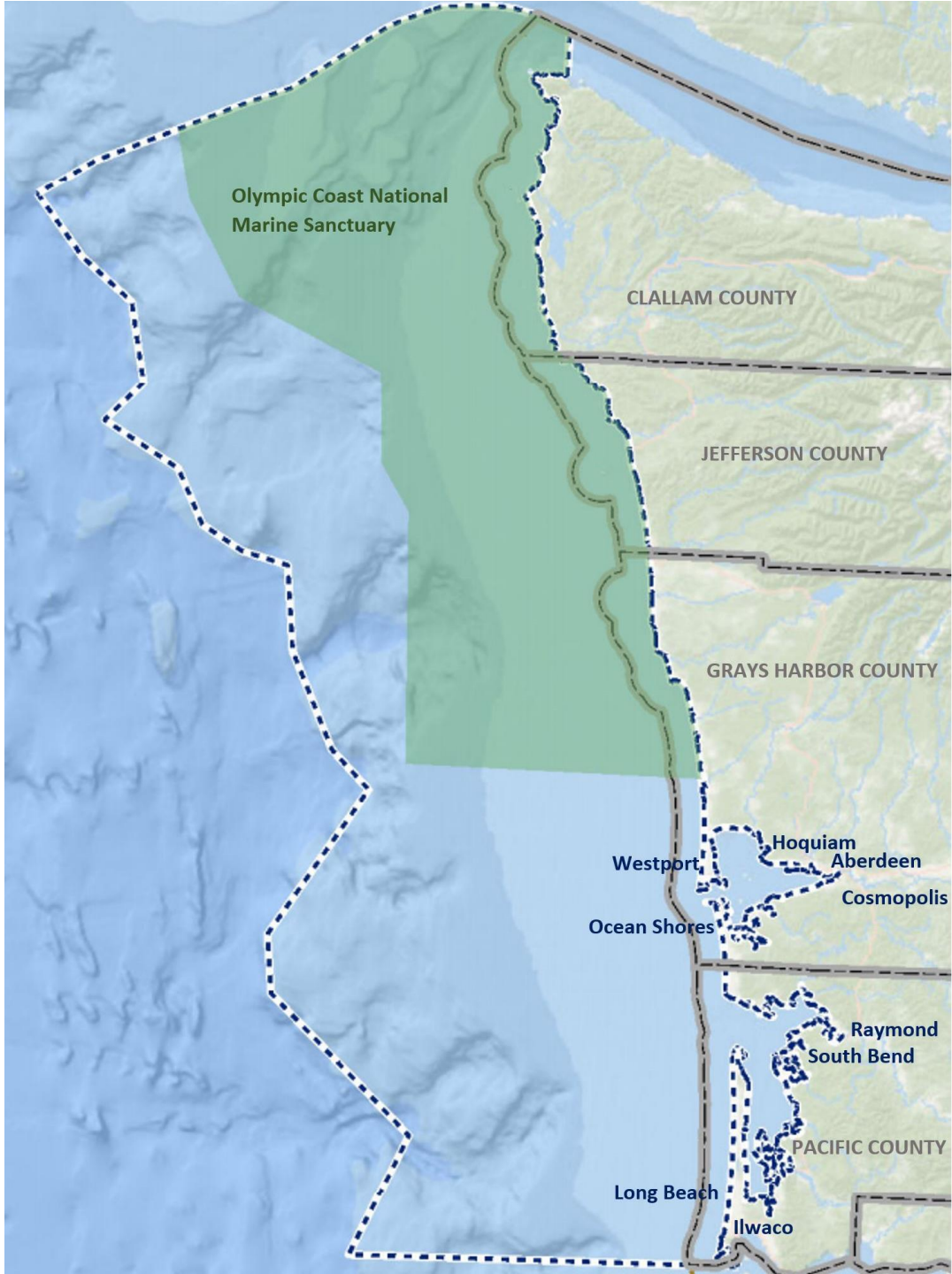
- WindMap Tool
- Marine Reserve Program



Washington

Marine Spatial Plan (2017)

- ❖Study area (55nm)
- ❖Spatial analyses



Virginia

- MARCO/MACO
- Topics of Interest
  - Renewable Energy
  - Shipping
  - Fishing
  - Military
  - Recreational Use
  - Others?

Recommendations

- Public Input
- Revenue
- Virginia Agency Collaboration
- Regional Collaboration
- Adaptive Management
- Traditional Ecological Knowledge (TEK)/Tribal Input
- Plan Cohesion

Sustainable Ocean Planning Checklist*

Process	Content	Impact
Inclusive	Place-based	Endorsed
Integrative	Ecosystem-based	Financed
Iterative	Knowledge-based	Capacitated

*High Level Panel for a Sustainable Ocean Economy, 100% Sustainable Ocean Management (2021)


Questions?

Virginia Ocean Planning Committee

Meeting #2 AGENDA

Thursday, February 17, 2022

9:00am - 12:00pm

Zoom link: https://vcu.zoom.us/j/97422261146?pwd=c0pCZEJxVk1tcUxRajAyRncrcVl0dz09

9:00 Welcome, Introductions, Project Update (original strategy is pasted in below)
Laura McKay, Virginia Coastal Zone Management Program

- Virginia agencies and academics
  - Virginia Energy
  - VMRC
  - DWR
  - VIMS
  - Virginia Port Authority
  - W&M Center for Conservation Biology
  - ODU
  - UVA - Belmont Ocean Project
- Year 1 grantees
  - W&M Coastal Policy Center
  - DWR/VA Aquarium
  - VCU
  - MARCO
- November Coastal Partners Workshop polling on ocean conservation (see below)
- Reminder that the boundaries of the planning area are from the ocean shoreline out to and inclusive of the canyons and latitudinal boundaries at Maryland to the north and North Carolina to the south (not the OCS revenue sharing boundaries). We also agreed to include MD and NC in our planning as well the other Mid-Atlantic states of NY, NJ, and DE
- Response from DEQ Policy Director on public meeting requirements: *The question of whether you are required to public notice the meeting for purposes of FOIA, depends on whether the group is a public body under FOIA (https://law.lis.virginia.gov/vacode/title2.2/chapter37/section2.2-3701/). At this point and based on your description, it does not sound like it is a public body. As you bring in other stakeholders, you may want to consider whether or not you want to public notice the meetings just so that you aren't having folks that are left out or concerned they are left out.*
- New Tool for Mid-Atlantic Wind Siting: https://docs.google.com/document/d/1b4TnrC2tW6SeVSs5lRrW3xAm6lwpNsDH51lBDAKBUeE/edit
- Also: www.windsiteva.org from ODU which uses MARCO and other data with an emphasis on military/security issues.
- Feb 16 BOEM Central Atlantic Task Force Meeting

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Central Atlantic Milestones

Milestone	Action	Target Date
Task Force Meeting	Hold virtual meeting	February 16, 2022
Publish Call for Information and Nominations	Publish Call	Q2 2022
	45-Day Comment Period	Q2 2022
Area Identification	Identify Wind Energy Area(s)	Q3 2022
Lease Sale	Proposed Sale Notice	Q1 2023
	Final Sale Notice	Q2 2023
	Hold auction	Q3 2023

9:15 VCPC Presentation: "Toward a Virginia Ocean Ocean Plan: Lessons from Other States and Policy Recommendations
Nathaniel Dominy and Luke Foley, Virginia Coastal Policy Center, William and Mary Law School

9:35 Q&A and review of any comments committee members added to the document on the Google drive https://docs.google.com/document/d/1clyNHZTZ2H3AOOLNvkm_PNl5RrnvKUACgcceeS7e0r0/edit

Revenue question: what types of fees are collected in MA? It is commercial permits that are charged a fee (wind, cables, use of subaqueous lands and also violation of permit fees.
Rachael: we have permitting program within 3 miles. MRC has a "royalty" for the permit which goes into waterways improvement fund. The fund can now be used for wetland restoration, ocean planning, etc. MRC now looking at how to spend it. Problem is fund is not protected by code - says you can spend money on certain things but not what you can't spend it on.
From *Rachael Peabody VMRC to Everyone 09:51 AM
The group could consider specialized submerged lands royalty fees for larger ocean based projects....

WIF generates about $1M/yr - has about $3M right now. NOt sure how much from offshore cables.
Jerry: what are top 2 reasons for failure?
Nate: political shift in NC from dem to rep. In SC agency moved from coast to capitol and lost staff

E Andrews: students are next looking at communication plan. ALso TEK - how best should we incorporate Tribes and their knowledge which they may want to protect. Nansemond TRibe spoke at BOEM Task Force and are interested in oyster culture. NOt sure what their concerns are - likely traditional ocean uses.
Note from Chris Gullickson via email to Laura (he was not able to join all of this meeting):

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RE: Feb 17 Virginia Ocean Planning Committee Meeting

External Inbox ×

Chris Gullickson 8:43 AM (4 hours ago)
to me

Laura-
The paper looked good from a high-level and I like what is being recommended for the VA approach in creating an ocean plan. Once we get to the development of the plan, the Port will want to provide additional input/guidance on ensuring alignment with on-going and future commercial maritime activities.
Kind regards,
Chris

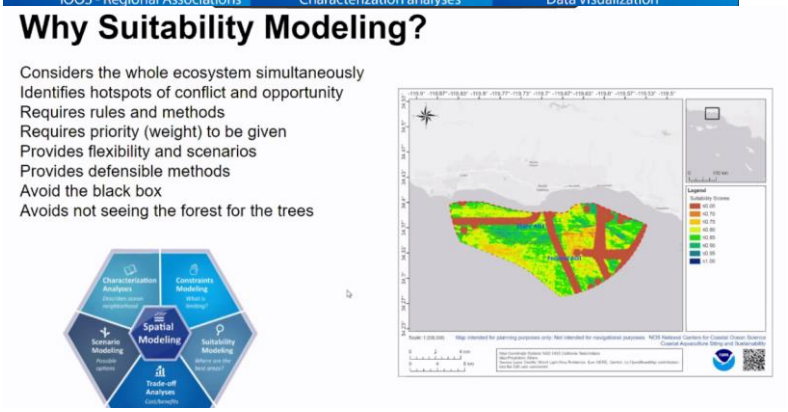
Next Step: set up a late spring or early summer meeting of federally reco tribes, CZM and CPC. Rachael would like to have their person join.
From Becky Gwynn Virginia DWR to Everyone 10:03 AM
Laura, I would be interested - DWR is engaging with Tribes on collaborative conservation and greater awareness about our respective interests in wildlife and habitat conservation.

10:00 Results of Mid-Atlantic Coastal Acidification Network (MACAN) Workshop on Ocean Acidification
Avalon Bristow, Mid-atlantic Regional Council on the Ocean Program Director and MACAN C0-Director

OA Alliance could be invited to come speak to us. Virginia, as a member, is supposed to develop an OA Plan.
Need to be sure Virginia's monitoring locations and data are updated on the MARCO Portal.

10:10 Q&A

10:20 Dr. James Morris of NOAA's Marine Spatial Ecology Division at the National Centers for Coastal Ocean Science (Beaufort NC): marine spatial modeling - potentially off Virginia/Mid-Atlantic, if funding can be identified and if it can be timely.



Virginia would have to scope out a project with NCCOS and find resources to support it. Partnering with BOEM could be an option. $3M investment from DOE a few years ago made possible where we are today. Models always need to be updated. Doing Gulf of Mexico wind area modeling in 3 months. 60% of data were public and 40% proprietary in one model NCCOS did. Need to be able to process confidential data. Gulf of Mexico Atlas - it will evolve with the BOEM wind process - all the processed data is published (e.g. private data under fishing data "rule of 3."

10:45 Group Discussion: **Determining Virginia Ocean Plan Priorities**

- What "enforceable policies" or mechanisms employed by other states should be further investigated to promote adoption of a draft plan?

May be best to wait until we have more clarity from agency heads and Gov's office.
We need to leverage what we can control within the 3 mile limit to beyond that limit. Deputy SNR Travis Voyles has experience as legal counsel in area of natural resource economics. Could be valuable to engage with the new administration.
"Listed federal activities" and Geographic Location Descriptions could be considered "enforceable policies" under the 309 grant.
Could be possible to pursue an EO to adopt a Virginia Ocean Plan

- Should Virginia consider some type of funding mechanism to ensure continued updates and monitoring of the plan beyond the 5 year CZM grant strategy? If so, which ones? Should that funding include baseline and environmental monitoring?

  Ellen Bolen now at NFWF managing the Ocean Fund - this could be a source for additional tasks.

  PLan needs to have an institutionalized structure to manage the plan and there needs to be funding for ongoing monitoring to be able to continue to adapt and implement the plan.

  Spatial planning would allow for cost benefit analysis

  Not any great land-based models for ongoing state-level funding for comprehensive planning.

  Bills in GA are generally small amounts. Virginia has a history of initiating plans and then not staffing and funding their continuation.

  Virginia Energy is hiring a Director of Offshore Wind.

- Which specific issues should be addressed (at least initially) in the plan?
  - siting of offshore wind turbines and cable alignments offshore and on land
  - siting of areas for Port expansion (discussed at last VOWDA meeting)
  - siting/identification of "blue spots," marine managed areas, or designation of marine sanctuaries (which can allow fishing according to NOAA's MArine Sanctuary Program) or Fishing and Recreation Conservation Areas
  - siting of sand mining
  - siting of offshore aquaculture
  - consideration of security and shipping areas
  - actions to address and promote recreational/tourism uses (#1 ocean economy driver)
  - actions to address ocean acidification
  - actions to protect or develop carbon sinks
  - actions to address shifts in species and habitats
  - actions to identify and protect cetacean migration corridors
  - Environmental Justice should be addressed
  - invasive species
  - cumulative impacts to fishing and changes to ocean uses
  - *Note: marine debris is handled separately through the Virginia Marine Debris reduction Plan*

  Need better spatial data on many of these. MARCO collecting some rec data soon and a layer is going up next week to show areas for whale watching.

- Given yesterday's BOEM Central Atlantic Task Force meeting, to what degree should Virginia's Ocean Plan be a "spatial plan" versus a "goals & objectives" plan? Or should it include elements of both?

  At the October meeting the discussion was:
  "*The plan should be a framework for defining what is important so regulatory agencies have more guidance for better management; need a regulatory road map; plan should identify processes through which conflicts can be resolved. The plan could be like a local government comp plan – where you lay out a general vision and a process for decisions*

Commented [1]: A marine sanctuary designation is not an easy process. Certain parameters need to be met and the process can take years.

Commented [2]: Artificial reefs fit this category. They are identified and permitted by NOAA and USACOE. Offshore artificial reefs can be designated as Special Management Zones by the Mid-Atlantic Fishery Management Council.

to be made. Very important to lay out procedures – more so than a map – and maps will change over time. Plan should include a regular schedule of updates."

In summary, we are recommending removal of these areas for the following reasons:

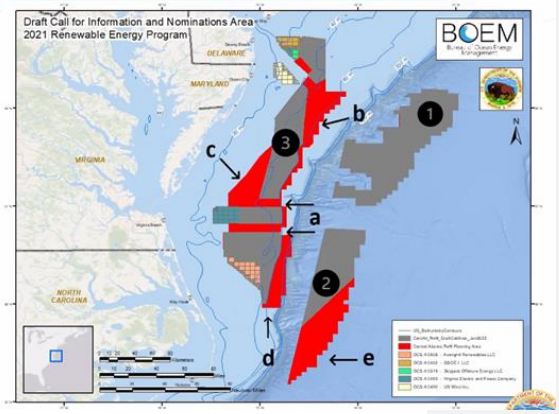
a. Navigation lanes

b. Multiple fisheries and navigation

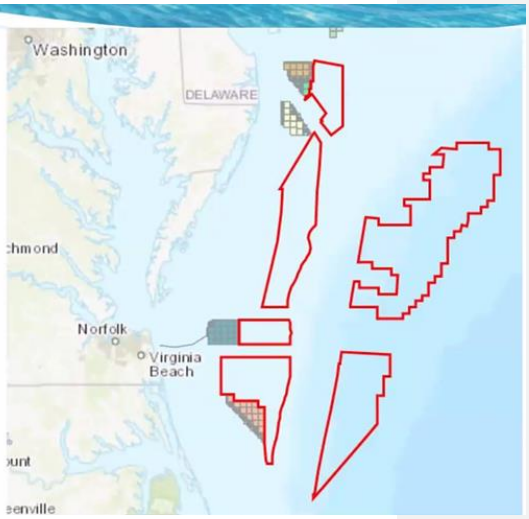
c. NASA Exclusion Zone, navigation

d. Multiple fisheries and loggerhead sea turtle

e. Gulf Stream, Black capped petrel, loggerhead turtle, *Sargassum*



- 4.0 million acres
  - 68.5% reduction from Region
  - 31.0% reduction from Planning Area
- Currently evaluating initial DoD compatibility assessment



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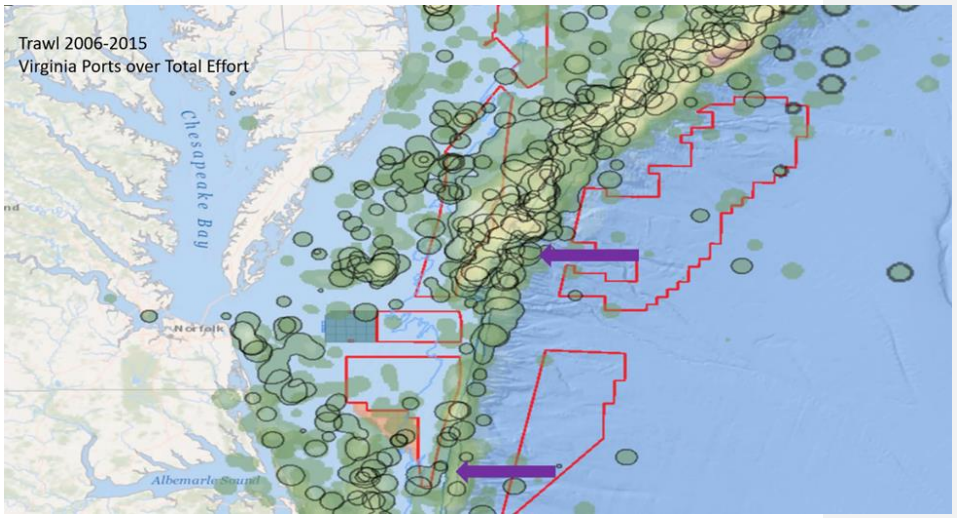
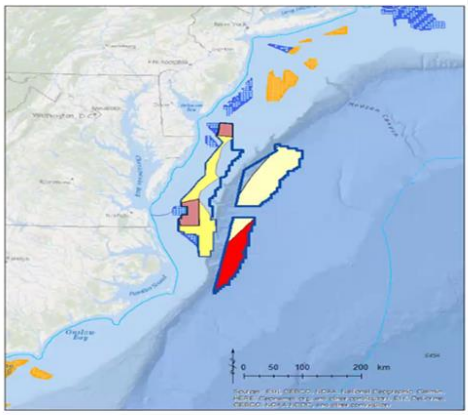


AREAS OF CONCERN:

Black-capped Petrel:
High (red)
Moderate (light yellow)

Non-breeding diving birds (gannets & loons):
High (dark pink)
Moderate (dark yellow)



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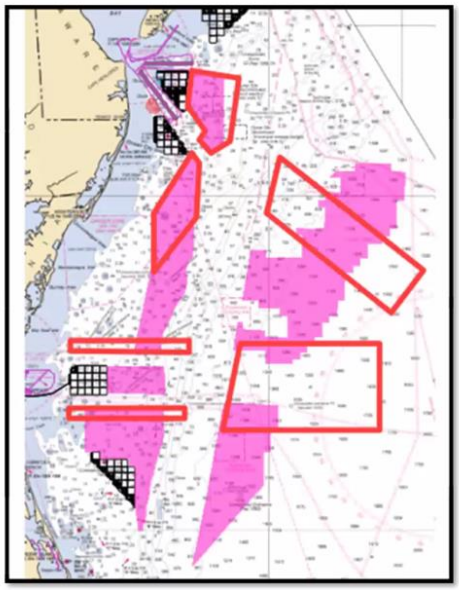
Areas of Concern



11:15 Next Steps -to meet deliverables of Year 1

Major Milestone(s): First annual meeting (virtual if necessary); establishment of work groups as needed; selection and establishment of communication tools and a schedule for their use; and a draft outline of the plan.

- Do we want to set up a work group to draft elements of the plan?

CPC, CZM, DWR, VCU, MRC - small group to start developing an outline for the plan.

- **Next Step: set up an April meeting of federally reco tribes, CZM and CPC. Rachael would like to have their person join. Doodle poll will go out**
  - **From Becky Gwynn Virginia DWR to Everyone 10:03 AM**
  - **Laura, I would be interested - DWR is engaging with Tribes on collaborative conservation and greater awareness about our respective interests in wildlife and habitat conservation.**
- Meet in June 14 9 -12pm (just state entities again - we'll send a doodle poll for a date) to review a draft Virginia Ocean Plan Outline and draft communications plan?
- At that meeting decide if we are ready to invite in federal agencies
- In late summer or before Sep 30 meet with federal agencies
  - Bring in federal agencies to review at a July meeting? Who?
  - BOEM: They are interested in participating, although their time is limited. They expressed appreciation for the Commonwealth's assistance in clarifying a vision for how the ocean off Virginia should be used and managed.
  - ACOE, NOAA/NMFS, Navy, Coast Guard,VA Maritime Association
- Then think about planning a public meeting in fall of 2022.

- Industry and NGO reps?: Dominion, commercial (including charter boats, OMEGA Proteins) and recreational fishing, Sierra Club, The Nature Conservancy; VA Pilots Association, Others?

11:30 How shall we allocate the FY22 strategy funds ($183,000 - match free) FY21 allocations:

Task 92.01	CPC	Ocean Plan Policies	$ 60,000
Task 92.02	VCU	Fisheries Stakeholder Engagement	$ 44,000
Task 92.03	DWR	Integration of Protected SpeciesPlans	$ 50,000
Task 92.04	CSSF	MARCO Liaison	$ 29,000
			$183,000

Draft applications are due to CZM March 2, 2022

Year(s): **Two – Three (FY 2022 -23)**

Description of activities: Develop contracts for additional data collection as needed and identified in Year One. Flesh out appropriate actions, through work groups or other means, related to identification of offshore wind and aquaculture leases, critical ocean resources that may require additional protections, and ocean acidification reduction or mitigation measures. Conduct participatory GIS meetings with key stakeholders (virtual if necessary).

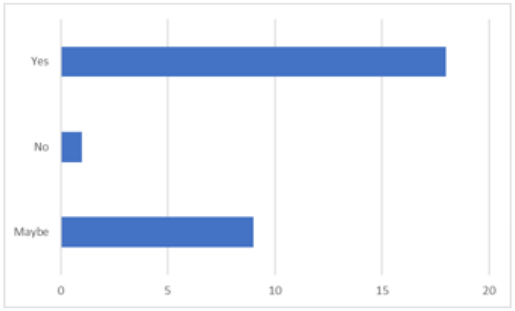
Major Milestone(s): Complete a first draft of the plan including draft maps showing preferred locations for human uses and areas of high concentration of ocean resources, which may merit additional protection. Demonstrated use of the Virginia CZM and TNC-funded FY19 Task 94.02 offshore wind-siting tool.

12:00 Adjourn

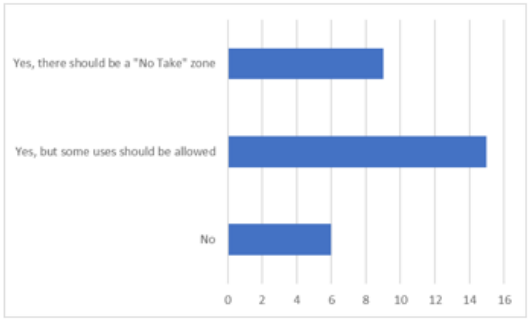
Virginia Coastal Zone MANAGEMENT PROGRAM

Results of Coastal Partners Workshop Polling on Ocean Planning

Polling Question 1: Over the next 5 years, should Virginia CZM's Ocean Planning process identify potential areas for ocean aquaculture (e.g. for seaweed, mussels, etc.)



Polling Question 2: Over the next 5 years, should Virginia CZM's Ocean Planning process identify a potential National Marine Sanctuary or conservation area?



Invitees (NOAA, state agencies, academics and Year 1 grantees):
**Indicates a Year 1 grantee. Highlighting indicates those attending.*

John Kuriawa , NOAA Office for Coastal Management (via Zoom)
Al Christopher, Virginia Dept. of Energy
Ken Jurman, Virginia Dept. of Energy
Erik Olson, Virginia Dept. of Energy
*Becky Gwynn, Virginia Dept. of Wildlife Resources
Ruth Boettcher, Virginia Dept. of Wildlife Resources
Rachael Peabody, Virginia Marine Resources Commission
Patrick Geer, Virginia Marine Resources Commission
Bettina Rayfield, Dept. of Environmental Quality/EIR
Chris Gullickson, Virginia Port Authority

*Elizabeth Andrews, William & Mary Coastal Policy Center
*Jesse Reiblich, William & Mary Coastal Policy Center
*Nate Dominy, 3rd year law student, William & Mary Coastal Policy Center
*Luke Foley, 3rd year law student, William & Mary Coastal Policy Center
*Mark Swingle, Virginia Aquarium & Marine Science Center
*Sue Barco, Virginia Aquarium & Marine Science Center
*Todd Janeski, Virginia Commonwealth University
*Avalon Bristow, Mid-Atlantic Regional Council on the Ocean (via Zoom)
Mark Luckenbach, Virginia Institute of Marine Science
Bryan Watts, William & Mary Center for Conservation Biology
Jerry Cronin, Old Dominion University
Frank Dukes, University of Virginia
Alexandra Cook, University of Virginia
Jeff Flood, Virginia CZM Program

Also joining were:
Kim Cole and Kristi Lieske, Delaware
Casey Nolan, Maryland
Jim Morris, NOAA/NCCOS

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Ocean Resources Strategy (*written in summer 2020; approved by NOAA Feb 4 2021*)

I. Issue Area(s)

The proposed strategy or implementation activities will support the following high-priority enhancement areas *(check all that apply)*:

- ☐ Aquaculture
- ☐ Energy and Government Facility Siting
- ☐ Coastal Hazards
- ☒ Ocean/Great Lakes Resources
- ☐ Special Area Management Planning
- ☐ Cumulative and Secondary Impacts
- ☐ Wetlands
- ☐ Marine Debris
- ☐ Public Access

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes *(check all that apply):*

- ☐ A change to coastal zone boundaries;
- ☒ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;
- ☐ New or revised local coastal programs and implementing ordinances;
- ☐ New or revised coastal land acquisition, management, and restoration programs;
- ☐ New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,
- ☒ New or revised guidelines, procedures, and policy documents, which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. ***Strategy Goal:*** Adoption of a Virginia Ocean Plan.

C. ***Describe the proposed strategy and how the strategy will lead to and/or implement the program changes selected above*:**

The Virginia CZM Program proposes to develop a Virginia Ocean Plan that will further detail and build upon the Mid-Atlantic Ocean Action Plan completed in 2016. The Virginia plan will consider a variety of issues including identification of potential sites for additional offshore wind energy leases, aquaculture, shipping and military needs, protection of ocean wildlife and habitats. It may also address state actions to minimize ocean acidification and improve ocean health. A Virginia Ocean Plan, once developed could be implemented through a number of possible mechanisms including a gubernatorial executive order, MOUs among state and/or federal agencies, or formally adopted specific policies and guidelines. The plan will also strive to engage stakeholders from the neighboring states of North Carolina and Maryland.

III. Needs and Gaps Addressed

Identify what priority needs and gaps the strategy addresses, and explain why the proposed program change or implementation activities are the most appropriate means to address the

priority needs and gaps. This discussion should reference the key findings of the assessment and explain how the strategy addresses those findings.

As laid out in the Phase I and II assessments, the Commonwealth of Virginia is working toward a significant reliance on renewable energy. According to a summary of Virginia's 2020 Clean Economy Act posted on Virginia's Legislative Information System, "The measure replaces the existing voluntary renewable energy portfolio standard program (RPS Program) with a mandatory RPS Program. Under the mandatory RPS Program, Dominion Energy and Virginia and American Electric Power are required to produce their electricity from 100 percent renewable sources by 2045 and 2050, respectively." Further, according to the Governor's April 12, 2020 press release, the Clean Economy Act, among other goals: "**Advances offshore wind."** The Act provides that 5,200 megawatts of offshore wind generation is "in the public interest." It requires Dominion Energy Virginia to prioritize hiring local workers from historically disadvantaged communities, to work with the Commonwealth to advance apprenticeship and job training, and to include an environmental and fisheries mitigation plan.**"**

A Virginia Ocean Plan would be a comprehensive mechanism for addressing a variety of ocean issues that affect Virginians and neighboring states. These include but are not limited to protection and promotion of commercial and recreational fisheries, provision for adequate and safe shipping lanes for a growing Port of Virginia, identification and protection of ocean wildlife and habitats, development of measures to prevent and mitigate ocean acidification as well as identification of appropriate areas for additional offshore wind energy lease areas.

IV. Benefits to Coastal Management

Discuss the anticipated effect of the strategy, including the scope and value of the strategy, in advancing improvements in the CMP and coastal management, in general.

Virginia's first Ocean Resources Strategy imagined a state-specific Virginia plan but was superseded by the development of a Mid-Atlantic Ocean Action Plan by the five Mid-Atlantic states, a plethora of a federal agencies, two federally-recognized tribes and the Mid-Atlantic Fisheries Management Council. That effort culminated in a federally approved plan in 2016. However, in 2018, a new federal Executive Order removed the requirement for federal agencies to adhere to that plan.

Although the Mid-Atlantic Regional Council on the Ocean has created a new intergovernmental body, the Mid-Atlantic Committee on the Ocean, to address regional ocean issues, the time has arrived for development of a more specific state plan in light of Virginia's needs mentioned above. Some years have passed since any state ocean plans have been adopted. While Virginia could benefit from the work and experience gathered through these plans, Virginia could also advance the state of ocean planning and provide a new, updated model for effective state-driven ocean plans. As the first state to have offshore wind turbines in federal waters, Virginia is well placed to undertake such work.

It is critical as increased offshore energy, shipping and other ocean activities are advanced, that Virginia take a comprehensive look at its ocean resources and uses and develop a plan that can ensure the long-term sustainability and health of Virginia's ocean waters. Of course, Virginia's

actions alone cannot guarantee that, but given Virginia's strong involvement in MARCO and MACO, and those organizations' involvement with the Northeast Regional Ocean Council and the regional Ocean Observing Associations, Virginia is well situated to attempt this work. It will also be important to coordinate these efforts with North Carolina; particularly given that North Carolina's Kitty Hawk offshore wind project will be tying into Virginia's electrical grid. In addition, BOEM no longer uses individual state Wind Energy Task Forces but rather multi-state ones such as the VA/NC Task Force.

V. Likelihood of Success

Discuss the likelihood of attaining the strategy goal and program change (if not part of the strategy goal) during the five-year assessment cycle or later. Address the nature and degree of support for pursuing the strategy and the proposed program change, as well as the specific actions the state or territory will undertake to maintain or build future support for achieving and implementing the program change, including education and outreach activities.

Virginia has a proven record of accomplishment in ocean planning through its experience with MARCO, the Mid-Atlantic Regional Planning Body and now the Mid-Atlantic Committee on the Ocean. Virginia led the development of five of the six action items for the 2016 Mid-Atlantic Ocean Action Plan under the healthy ocean ecosystem goal (including identification of ecologically rich areas (which a federal EO subsequently prohibited federal agencies from doing), mapping species shifts, development of an ocean acidification monitoring network, development of a regional strategy for marine debris reduction and development of healthy ocean indicators).

For this Virginia Ocean Plan, CZM staff will continue to support the VCU Ocean Stakeholder Coordinator and bring in new players from the Virginia Coastal Policy Center with deep experience in Virginia state government and others from state agencies that previously have had only marginal involvement in ocean issues. Virginia staff over the years have developed strong relationship with federal agencies working in Virginia such as the Navy, Coast Guard, BOEM and NASA/Wallops, (and of course NOAA) as well as other key stakeholders such as commercial and recreational fishermen, the Port of Virginia, Virginia Aquarium, the Mid-Atlantic Fisheries Management Council and the federally recognized tribes in Virginia. These positive relationships will be relied upon to develop the plan and they bode well for the success of this endeavor. In fact, in discussions with Darryl Francois of BOEM, he has expressed his support of a Virginia Ocean Plan saying that a state-driven plan that lays out the state's preferences and involves participation from North Carolina stakeholders would be of great assistance to BOEM.

The legal expertise of the Coastal Policy Center at the College of William & Mary will lend added expertise in researching and recommending the best mechanism(s) for adopting a Virginia Ocean Plan. The CPC also has access to top-notch law students who will be able to take on various legal research regarding the feasibility and appropriateness of various actions developed in the plan.

Although the gubernatorial administration will change in January 2022, just months after this strategy begins, development of a Virginia Ocean Plan that promotes both ocean protection and sustainable ocean industry development as well as energy security should have appeal to both political parties. This has proven true at the federal level throughout the change from the Obama to the Trump administration, albeit with different emphases.

The Virginia Offshore Wind Development Authority as well as the Department of Mines, Minerals and Energy have expressed strong support for development of this plan – particularly the identification of additional offshore wind commercial lease areas. The Virginia Marine Resources Commission also has expressed support for a plan that will assist in the appropriate development of subaqueous permits needed for offshore wind transmission cables and aquaculture in state waters, as well as one that will address ocean acidification issues that are so important to Virginia's shellfish industry. The Virginia Aquarium, a major Virginia CZM partner and grantee, has long supported efforts to protect marine mammals and sea turtles as well as ocean habitats such as Norfolk Canyon.

To build future support for development and implementation of a Virginia Ocean Plan, the CZM Program will develop and undertake a variety of communication and outreach techniques. Webpages will be developed to build support for and ensure transparency of actions being developed for inclusion in the plan and to create a single location for information on plan development. Webinars also will be held to present progress on plan development and to solicit input from stakeholders on desired actions. Participatory GIS will be used to allow stakeholders to map clearly areas where they think various human activities should or should not take place in both state and federal ocean waters. Public meetings (virtual if necessary) will be held to provide a forum for public discussion and engagement (assuming physical distancing measures eventually allow for large public gatherings). The Virginia CZM Program's magazine will also provide updates on plan development. Given the challenges in engaging the fishing community, the VCU fisheries liaison/stakeholder coordinator will continue to be funded under the strategy to conduct one-on-one and other meetings with the fishing community, relying on the strong relationships he has built with them over the past few years.

VI. Strategy Work Plan

Using the template below, provide a general work plan that includes the major steps that will lead toward or achieve a program change or implement a previously achieved program change. For example, even if the final adoption of the program change is outside of the CMP's control, what steps will be included in the work plan so the CMP ensures the program change is considered, reviewed, and hopefully adopted by the outside entity? Who are the other stakeholders or elected officials that need to be engaged, and how and when during the strategy development process? While the annual milestones are a useful guide to ensure the strategy remains on track, OCM recognizes that they may change somewhat over the course of the five-year strategy due to unforeseen circumstances. The same holds true for the annual budget estimates. Further detailing and adjustment of annual activities, milestones, and budgets will be determined through the annual cooperative agreement negotiation process.

Strategy Goal: Adoption of a Virginia Ocean Management Plan

Total Years: **5 Years**

Total Budget: **$930,000**

Year(s): **One FY2021**

Description of activities: In the first year, the Virginia CZM Program will contract with the William & Mary Coastal Policy Center to facilitate the ocean plan development process. The CPC and its students will research other state ocean plans and interview staff from other states to gather lessons learned as to the most effective and efficient ways to develop and adopt a *state* ocean plan.

A Virginia "Ocean Planning Committee" will be established comprised of key stakeholders as well as federal and state government representatives. An initial meeting (virtual if necessary) of this group will be held to present to them this five year strategy and gather input on the proposed issues to be addressed by the plan. They will be asked to identify research needed for effective plan development. The group may decide to establish separate work groups (that would interact more frequently) based on the topics to be addressed in the plan.

A communications plan will be developed. Agreed upon techniques such as webpages, webinars, and public meetings (virtual if necessary) will be established along with a time schedule for proposed events, taking into account whatever social distancing measures may be in place.

Major Milestone(s): First annual meeting (virtual if necessary); establishment of work groups as needed; selection and establishment of communication tools and a schedule for their use; and a draft outline of the plan.

Budget: $176,000

Year(s): **Two – Three (FY 2022 -23)**

Description of activities: Develop contracts for additional data collection as needed and identified in Year One. Flesh out appropriate actions, through work groups or other means, related to identification of offshore wind and aquaculture leases, critical ocean resources that may require additional protections, and ocean acidification reduction or mitigation measures. Conduct participatory GIS meetings with key stakeholders (virtual if necessary).

Major Milestone(s): Complete a first draft of the plan including draft maps showing preferred locations for human uses and areas of high concentration of ocean resources,

which may merit additional protection. Demonstrated use of the Virginia CZM and TNC-funded FY19 Task 94.02 offshore wind-siting tool.

Budget: $176,000/yr. for 2 years = $352,000

Year(s): **Four – Five (FY 2024 -25)**

Description of activities: Finalize plan through series of meetings or other interactions with stakeholders (virtual if necessary). Post document for public comment. Continue communications and outreach efforts. Incorporate or address comments received and begin process for plan adoption.

Major Milestone(s): Final plan is made publicly available and adoption process is initiated.

Budget: $176,000/yr. for 2 years = $352,000

VII. Fiscal and Technical Needs

A. Fiscal Needs: If 309 funding is not sufficient to carry out the proposed strategy, identify additional funding needs. Provide a brief description of what efforts the CMP has made, if any, to secure additional state funds from the legislature and/or from other sources to support this strategy.

Given previous work done on a Mid-Atlantic regional ocean plan, the Section 309 funds budgeted for this strategy are expected to be sufficient. There will always be a need for further research and better data. However, the funds available should suffice for development of a solid Virginia Ocean Plan. Entities serving on the ocean planning committee may have access to additional funds if needed and the committee will be made aware of other potential federal or state funding opportunities such as NOAA Regional Ocean Partnership Data Sharing funds. This strategy will also involve the Virginia Sea Grant Program, which may have access to other NOAA funds if needed to carry out plan development, particularly with respect to offshore aquaculture.

B. Technical Needs: If the state does not possess the technical knowledge, skills, or equipment to carry out all or part of the proposed strategy, identify these needs. Provide a brief description of what efforts the CMP has made, if any, to obtain the trained personnel or equipment needed (for example, through agreements with other state agencies).

The Virginia CZM Program and its partners do appear to have the knowledge, skills and equipment to carry out this strategy. The knowledge and skills embodied in CZM staff include experience in regional ocean planning, participatory GIS, website development, and social marketing. In addition, partners such as William & Mary's Coastal Policy Center bring extensive legal knowledge and understanding of the workings of Virginia state government. In addition, the Virginia Institute of Marine Science has acquired an ocean-going research vessel, which is currently in the process of obtaining all of its certifications. The VCU fisheries liaison has developed strong relations with Virginia's fishing community. Agency staff at the Marine Resources Commission and the Department of Mines, Minerals and Energy also have years of experience in marine resources management and renewable energy development. All of these

entities are also members of the Virginia Coastal Policy Team that advises the entire Virginia CZM Program.

VIII. Projects of Special Merit (Optional)

If desired, briefly state what projects of special merit the CMP may wish to pursue to augment this strategy. Project descriptions should be brief (e.g., undertake benthic mapping to provide additional data for ocean management planning). Do not provide detailed project descriptions that would be needed for the funding competition.

Project of Special Merit proposals under this strategy could include detailed or updated mapping products for a variety of data such as marine mammal and sea turtle distribution and abundance, benthic habitat data – particularly presence of corals on the continental shelf westward of the submarine canyons, and recreational use mapping – particularly recreational fishing.

This budget has been updated with the actual Year 1 Budget. Years 2 through 5 will depend on annual CZM appropriations and needs as they are identified. Grantees may change each year.

5-YEAR BUDGET SUMMARY BY OCEAN STRATEGY COMPONENT						
Component	**FY 2021 Year 1**	**FY 2022 Year 2**	**FY 2023 Year 3**	**FY 2024 Year 4**	**FY 2025 Year 5**	**Total**
Policy Development by CPC	$60,000	$60,000	$60,000	$60,000	$60,000	**$300,000**
Stakeholder Coordination by VCU	$44,000	$40,000	$40,000	$40,000	$40,000	**$200,000**
Data Collection		$XX,XXX	$76,000	$76,000	$76,000	**$380,000**
Integration of Marine Mammal/Sea Turtle Conservation Plans by DWR/VA Aquarium	$50,000	$XX,XXX				
Mid-Atlantic Liaison by MARCO	$29,000					
Total Funding	**$183,000**	**$176,000**	**$176,000**	**$176,000**	**$176,000**	**$880,000**

Virginia Coastal Zone
MANAGEMENT PROGRAM

Virginia Ocean Planning Core Group Meeting

Meeting #3 AGENDA & NOTES

Wednesday April 6, 2022, 9:00am - 11:00am

Google Meet : meet.google.com/ugr-mzes-oah
(US)+1 617-675-4444
PIN: 568 584 574 9191#

Meeting Purpose: Begin drafting an outline for the Virginia Ocean Plan and a Communications Plan

Attendees: Becky Gwynn (DWR); Elizabeth Andrews, Nate Dominy, Luke Foley (VCPC), Rachael Peabody (MRC); Todd Janeski (VCU); Avalon Bristow (MARCO); and Laura McKay (CZM)

9:00 Review Draft outline on Google drive at:

https://docs.google.com/document/d/1eWZyhPB2Vql3vJdv_PB7dUlxkZXu5Hv9TPnizAfErmE/edit

Notes:

1. Introduction:
    a. Description of major players/groups (already covered)
    b. Discuss process of development for the ocean plan/history of ocean planning
    c. Statement of the current status of VA ocean
2. Supporting Ocean Ecosystems:
    a. Divide tribal section into 1) tribal areas of ecological significance and 2) areas of tribal and cultural/historical significance
    b. Under marine habitat protection section –
        i. Migratory routes
        ii. Seabirds
        iii. Coral protection
        iv. Invasive species
3. Sustainable Ocean Uses:
    a. Fisheries and Recreation:
        i. Should it be one section?
            1. Includes consumptive and non-consumptive uses – subheadings for a later draft

a. But, can be difficult to distinguish between consumptive and non-consumptive (e.g. recreational fishing is both)

b. Military – not much authority over it, but already well delineated in MARCO portal

c. Port Expansion

i. Not directly ocean related, but has a direct impact – VA looking to be construction hub for offshore wind

1. Suitable location selection – rather than select locations in the plan, include criteria for selecting location. Also determine responsible parties for making decisions

d. Add tribal/cultural/historic sustainability section

4. Plan Implementation:

a. Monitoring & Plan Update section

i. Add modeling as well (In reference to marine habitat protection specifically)

ii. Partner with other agencies outside the state for monitoring and modeling assistance and access to high end software

5. Appendices:

a. VCPC Ocean Plan White Paper by Nate and Luke

REORGANIZATION:

1. All topics listed under Sustainable Ocean Uses – look for ways to make every human use more sustainable

a. Add statement to each section describing how it impacts sustainable uses.

b. Climate change section

i. Parse language carefully around climate change issue

1. Refer to “changing climate” rather than “climate change”

ii. Include OA, sea temperatures, ocean currents, species range shifts

1. Policy recommendations for these issues could be possible law student project in summer 2022

2. VCPC students will clean up footnotes after meeting.

Next Steps:

10:30 Review Communication Plan at:

https://docs.google.com/document/d/1jwwFV6GUTYlkAvilvdFYAK4Kxw5lQlJnxltLBbMQqDU/edit

Notes:

1. Press releases – through DEQ and not involving VCPC

a. Maybe starting in year 3 if there's support

Next Steps:

11:00 Adjourn

12:00 ***International and Domestic Strategies for Ocean Conservation and Biodiversity: Is 30 by 30 Enough?,*** on **Wednesday, April 6, from 12 – 1:15 p.m. EDT**.
Zoom link:
https://monmouth.zoom.us/j/97016878808?pwd=bngrdStsWVBYR3FrRXNDSTQ0cGpsZz09

Call line option: (301) 715-8592
Meeting ID: 926 9063 4351 Passcode: 516167

Virginia Ocean Planning Meeting with Virginia Tribes

AGENDA & NOTES

Monday April 25, 2022, 10:30am - 12:00pm

Zoom Link: https://cwm.zoom.us/j/98584626337 Meeting ID: 985 8462 6337

Meeting Purpose: Explain Virginia CZM's process to develop a Virginia Ocean Plan and solicit Tribal input on the draft outline for the plan.

Hosts: Laura McKay (CZM), Elizabeth Andrews, Jesse Reiblich, Nate Dominy, Luke Foley (VCPC)

Attendees:
Chickahominy (Chief Adkins, Reggie Stewart, Carmen "Lenora" Adkins)
Chickahominy Eastern Division (Jessica Phillips)
Mattaponi (Chief Mark Custalow, Brandon Custalow - tentative, Lois Carter)
Nansemond (Chief Keith Anderson)
Pamunkey (Warren Taylor)
Upper Mattaponi (Reggie Tupponce, Leigh Mitchell, Kyle Mclemore)
Wolf Creek Cherokee (Chief Terry Price, Annette Price)
Nottoway Tribe (Chief Lynette Allston)
Ellen Chapman (Cultural Heritage Partners - for Monacan, Nansemond, Chickahomy, E. Chickahominy, Rappahannoock, Upper Mattaponi)

10:30 Introductions and Explanation of Mid-Atlantic Regional Ocean Planning and Development of a Virginia Ocean Plan

- 2016 Mid-Atlantic Ocean Action Plan
- Current MARCO/MACO regional planning activities
- 5 year grant from NOAA for development of a Virginia Ocean Plan that nests within the larger regional ocean planning effort
- Development of a Virginia Ocean Planning Committee
- Discuss how other Tribes have provided input to other state ocean plans
- Would any Tribes like to have representation on the committee? Discuss what time commitments may be.
- NOAA funding is expected soon for Regional Ocean Partnerships to coordinate the interstate and intertribal management of ocean resources and to implement priority actions, including associated sharing and integration of Federal and non-Federal data by the ROPs…and a certain amount of funding is expected to be set aside for Tribes. Congress is considering NOAA's spending plan and NOAA leadership is reviewing funding mechanisms.

11:00 Review Draft outline (attached)

- Is anything missing? (Ellen: need more underwater surveys of offshore areas - paleo landscapes - coring and side scan sonar; Warren Taylor - coastal erosion - will it be addressed; emerging tribal uses of the ocean; Lenora - look at repurposing light houses; e.g. ecotourism for econ development) Add a section on emerging ocean issues and developing ‘s blue economy.
- Should any descriptions be changed or expanded?
- Are you willing to share any of your traditional ecological knowledge? Protections can be provided for sensitive information.

11:30 Review Communication Plan (attached)

11:40 Final Questions and Next Steps

- Any additional comments/after thoughts can be emailed to Laura, Elizabeth and Jesse - preferably by June 7 so that comments can be added to the outline before June 14 when we will hold the next VA Ocean Planning Committee meeting.
- Laura send reminder for comments by June 1.

12:00 Adjourn

Virginia Ocean Plan Meeting with Tribes
4.25.2022

Laura's Presentation

- History of project, 309 grant etc.
- VOP wants to involve tribes and underserved communities
- One purpose of the meeting is to gauge interest in joining planning committee

Questions

- Lenora Adkins/Kyle Mclemore
    - Economic Development
        - Laura: Tribal emerging uses can be included in plan
        - Laura: Blue economy section that would cover all the different ideas raised in the meeting
- Ellen Chapman
    - Underwater archaeology
        - Underwater surveys should be considered to check for areas of historic significance
- Leigh Mitchell
    - How will involvement in the plan be good for tribes?
        - Laura: if tribes have ocean uses that they want to pursue/protect they can incorporate them into the plan and make sure they are officially accounted for
            - Advantageous to hear from tribes before federal agencies are involved in plan development
        - Laura: jobs related to renewable energy development made available to tribes and other groups such as veterans
- Warren Taylor
    - Coastal erosion
        - Laura: coastal erosion not within scope of this plan because the plan is restricted to the ocean, but coastal team will address coastal erosion and discovery of artifacts in their work
- Lenora Adkins
    - Repurposing lighthouses for eco-tourism
        - Example of uses that could be part of economic development section of plan separate from recreational use
- Lynette Allston
    - Planning to share presentation materials with Nottoway conservation and environmental committee
- Ellen Chapman (question posted in chat)
    - Is plan flexible, can tribes suggest additional topics for the plan to cover?

Communications Plan

- No feedback

Toward a Virginia Ocean Plan:
Lessons and Recommendations from Other States

Chesapeake Bay Bridge Tunnel at Sunrise – Photo by Nathaniel Dominy, 2011

Nathaniel Dominy, J.D. Candidate 2022
Virginia Coastal Policy Center
William & Mary Law School

Luke Foley, J.D. Candidate 2022
Virginia Coastal Policy Center
William & Mary Law School

William & Mary Law School
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Virginia Institute of Marine Science

Sea Grant Virginia

Fall 2021

About the Authors

Nathaniel Dominy is a third-year J.D. candidate at William & Mary Law School and a member of the Fall 2020 Virginia Coastal Policy Practicum I and Spring 2022 Practicum II. He is an Article Editor for the *William & Mary Environmental Law and Policy Review* and a past president of the William & Mary International Law Society. Prior to attending William & Mary, Nathaniel earned a Bachelor of Music degree from Ithaca College in 2009 and a Master's degree in Music Technology from IUPUI in 2011. He served in the Peace Corps from 2014-2016 in Madagascar as an English language instructor.

Luke Foley is a third-year law student at William & Mary Law School. He graduated from Syracuse University in 2016 with a B.A. in History and Citizenship & Civic Engagement. At William & Mary, he is a member of the *Environmental Law and Policy Review*, and a student in the Virginia Coastal Policy Center's Fall 2021 Practicum 1 and Spring 2022 Practicum II.

About the Virginia Coastal Policy Center

The Virginia Coastal Policy Center (VCPC) at the College of William & Mary Law School provides science-based legal and policy analysis of ecological issues affecting the state's coastal resources, providing education and advice to a host of Virginia's decision-makers, from government officials and legal scholars to non-profit and business leaders.

With two nationally prominent science partners – the Virginia Institute of Marine Science and Virginia Sea Grant – VCPC works with scientists, local and state political figures, community leaders, the military, and others to integrate the latest science with legal and policy analysis to solve coastal resource management issues. VCPC activities are inherently interdisciplinary, drawing on scientific, economic, public policy, sociological, and other expertise from within the University and across the country. With access to internationally recognized scientists at VIMS, to Sea Grant's national network of legal and science scholars, and to elected and appointed officials across the nation, VCPC engages in a host of information exchanges and collaborative partnerships.

CONTACT US

Please contact
Elizabeth Andrews
(eaandrews@wm.edu)
if you have comments, questions, or suggestions.

VCPC grounds its pedagogical goals in the law school's philosophy of the citizen lawyer. VCPC students' highly diverse interactions beyond the borders of the legal community provide the framework for their efforts in solving the complex coastal resource management issues that currently face Virginia and the nation.

I. INTRODUCTION

Virginia's ocean waters feature vast natural resources, and are used by its residents, visitors, and the military for recreation, commerce, and national security. New and intensified uses, such as offshore energy production, aquaculture, and increased shipping could impact Virginia's ocean resources. To ensure the continued protection of these resources, while allowing them to be used sustainably, the Commonwealth is developing its first ocean management plan. Because several state agencies currently manage Virginia's territorial sea waters, a coordinated and proactive approach is needed to effectively develop this plan. Developing a Virginia Ocean Plan can help protect the Commonwealth's ocean resources and facilitate coordination among federal, state, and local bodies as pressures increase.

Virginia can learn from the states that have already developed state ocean plans, as well as from regional ocean planning efforts. The plan can be implemented through enforceable state-level lawmaking, gubernatorial executive orders, memoranda of understanding (MOUs) between state and federal agencies, or formal adoption of its policies and guidelines by relevant state agencies. Additionally, Virginia can build upon the progress it has made regionally as a member of the Mid-Atlantic Regional Council on the Ocean (MARCO) to coordinate with neighboring states and stakeholders to successfully meet the goals of its ocean plan.[1] This white paper analyzes several states' ocean plans to provide lessons learned and other helpful guidance to Virginia's ocean planning process. It then recommends potential options and topics to implement the successful practices and avoid negative experiences of other states.

II. OTHER STATE PLANS & APPROACHES

The states analyzed in this paper were chosen because they are geographically close to Virginia, share similar ecological concerns with Virginia, or feature other aspects of their plans that merit comparison.[2] For instance, while West Coast states have less in common with Virginia ecologically and oceanographically, Washington and Oregon are included because these states were at the forefront of ocean planning, and therefore their approaches to the process are valuable examples. Massachusetts and New York are included because their plans are thoroughly developed, and they share many of Virginia's challenges and objectives. Further, because South Carolina and North Carolina both took preliminary steps towards the creation of comprehensive ocean plans but fell short of achieving that in the end, their efforts are helpful to consider for these lessons learned, as well as because of their ecological similarities and geographic proximity to the Commonwealth.

[1] MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN, MID-ATLANTIC REGIONAL OCEAN ACTION PLAN (2016), https://www.boem.gov/sites/default/files/environmental-stewardship/Mid-Atlantic-Regional-Planning-Body/Mid-Atlantic-Regional-Ocean-Action-Plan.pdf [hereinafter MARCO Plan].

[2] Many states not included in this review focus more extensively on coastal management in their ocean plans, had different priorities than Virginia, or were too far removed from Virginia's situation in terms of resources devoted to the development of their plan.

A. Massachusetts

Massachusetts has implemented a thorough and comprehensive plan for managing their ocean resources. In 2008, the Massachusetts legislature passed the Oceans Act, which called for the creation of a comprehensive ocean plan and led to the 2009 Massachusetts Ocean Management Plan.[3] In 2015 a revision by the Ocean Advisory Commission and Ocean Science Advisory Council, chaired by the Secretary of Energy and Environmental Affairs, created an updated version of the plan (2015 Plan).[4] A key component of the plan is a marine spatial planning system that establishes management areas.[5] In the plan, the state has designated the majority of the waters it controls, out to three nautical miles off shore, as "multi-use," a designation generally allowing open and free access.[6] The multi-use designation allows any use of the waters that does not require a permit.[7] Other key features of the Massachusetts 2015 Plan include a review schedule, coordinated development, and scientific and cultural studies.[8]

Another notable aspect of Massachusetts' ocean plan is that it explicitly requires scheduled reviews and allows for revisions based on those reviews. Massachusetts' Ocean Act and ocean plan requires a review of the plan every five years headed by the Secretary of Energy and Environmental Affairs (EEA).[9] The reviews are mandated by the initial 2008 law and were enacted in the Massachusetts Code of Regulations as a way to implement the call for the plan to be an evolving document.[10] After the necessary review, a new plan was released for public review in 2021 and finalized in 2022.[11] The review period allows the Commonwealth to amend the plan due to changing trends, new and developing science, and public and commercial reception to the plan. While the Commonwealth need not amend the plan based on the five-year review, the requirement forces re-evaluation to ensure the state is keeping best practices and accurate data as the basis of its plan. Further, there are certain aspects of the plan that require a review before they can be changed, such as creation or deletion of protected areas, to allow for input from the public and advisory boards.[12]

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[3] COASTAL ZONE MANAGEMENT OCEAN MANAGEMENT PROGRAM, 2015 MASSACHUSETTS OCEAN MANAGEMENT PLAN, VOLUME 1 1-1 (2015), https://www.mass.gov/files/documents/2016/08/ua/2015-ocean-plan-v1-complete-low-res.pdf [hereinafter MASSACHUSETTS 2015 PLAN].
[4] *See id.* The 2015 plan is current as of 2021.
[5] *Id.* at 1-4.
[6] *See id.* at 2-(1-4). Ninety-eight percent of state waters fall into the multi-use category. *Id.*
[7] *Id.* at 2-4.
[8] *Id.* at 1-1.
[9] *Id.*
[10] MASS. GEN. LAWS ch. 21A, §4C (2008), https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter21a/Section4c; 301 MASS. CODE REGS. 28.07 (2008), https://www.mass.gov/doc/301-cmr-2800-ocean-management-plan/download.
[11] COASTAL ZONE MANAGEMENT OCEAN MANAGEMENT PROGRAM, DRAFT 2021 MASSACHUSETTS OCEAN MANAGEMENT PLAN, VOLUME 1, 3 (2021), https://www.mass.gov/files/documents/2021/09/20/2021-draft-ocean-mgt-plan-v1.pdf [hereinafter 2021 DRAFT REVISION]. COASTAL ZONE MANAGEMENT OCEAN MANAGEMENT PROGRAM, 2021 MASSACHUSETTS OCEAN MANAGEMENT PLAN, VOLUME 1, 3 (2022), https://www.mass.gov/files/documents/2022/01/03/ma-ocean-plan-2021-vol-1.pdf.
[12] 301 MASS. CODE REGS. 28.07 (4) (2008).

The committees that created the 2015 Plan coordinated development of the plan by consulting interstate partners, federal agencies, tribal bodies, and the public at various stages.[13] Input from these sources was beneficial for identifying areas of concern and tapping resources that the state might not be able to identify from purely scientific or agency-driven planning.[14] The coordinated development process facilitated interaction between regional, federal, and tribal bodies that predate the creation of the 2009 or 2015 Plan, by centuries and even millennia.[15] Finally, the EEA secretary that led the review requested multiple groups conduct scientific, cultural, and academic studies to provide a comprehensive picture of the uses of the state waters.[16] These working group reports provided the basis for the 2015 Plan and allowed varying voices to be heard and to provide input.[17] The 2021 draft revision of the plan, reflects the changes being contemplated and highlights where the changes made in the 2015 revision process were successful.[18] The 2021 draft proposed redrawing some of the management areas, such as reducing the amount of area designated for wind energy production and updating the fee structures for inflation.[19]

B. New York

New York is like Virginia in several significant ways. Both states have large coastal economies and a little over 100 miles of shoreline, both share adjacent bodies of water with neighboring states and both are within the Mid-Atlantic region.[20] For these reasons, Virginia should consider adopting the successful attributes of the New York Ocean Action Plan (OAP).[21] The OAP, released in 2017, is a ten-year plan that focuses on the waters south of Long Island.[22] The OAP has distilled its purpose into four goals: (1) ensuring ecological integrity; (2) promoting economic growth, coastal development, and human use; (3) increasing resilience; and (4) empowering the public in ocean stewardship.[23] These four goals subdivide into additional

[13] MASSACHUSETTS 2015 PLAN, *supra* note 3, at 3-10. There is not a required list of partners in the plan, but rather a mentioning of all the sources that they received input from in its development. The four categories of groups that were singled out are not an exhaustive list of the groups that helped create the 2015 Plan. *See id.*

[14] *See id.*

[15] The Wampanoag and Narragansett tribes, both of whom collaborated on drafting the Plan, have been in the region for millennia.

[16] MASSACHUSETTS 2015 PLAN, *supra* note 3, at 1-3.

[17] *Id.*

[18] 2021 DRAFT REVISION, *supra* note 11, at 5-8.

[19] *Id.* The wind energy area reduction was due to findings that the areas were not suitable for energy production, and advances in offshore wind turbine technology allowing for turbines outside of Massachusetts' waters. *Id.*

[20] *New York*, NOAA OFFICE OF COASTAL MANAGEMENT, https://coast.noaa.gov/states/new-york.html (last modified Nov. 17, 2021) (showing New York's coastal economy is equal to over $1.4 trillion in GDP). *Compare* JANICE CHERYL BEAVER, U.S. INTERNATIONAL BORDERS: BRIEF FACTS 3 (2006), https://sgp.fas.org/crs/misc/RS21729.pdf (showing Virginia's coastline at 112 miles and New York's at 127) *with Worldmark Encyclopedia of the States*, City-Data.com, http://www.city-data.com/states/index.html (showing Virginia's boundary length at 1,356 miles and New York's at 1,430 miles). The Potomac River and Chesapeake Bay adjoin Virginia and Maryland while New York shares the Long Island sound with Connecticut. *See* Map of Eastern US, *in* GOOGLE MAPS, https://www.google.com/maps/d/u/0/edit?hl=en&hl=en&mid=1CJpxuU5mVyCG4j92eN6PyncyqYWVDCiU&ll=39.316829119166414%2C-75.85194038906249&z=7 (last visited May 9, 2022).

[21] DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK OCEAN ACTION PLAN: 2017-2027 (2017), https://www.dec.ny.gov/docs/fish_marine_pdf/nyoceanactionplan.pdf [hereinafter NEW YORK OAP].

[22] *Id.* at 6.

[23] *Id.* at 2.

objectives and specific actions that have been identified to achieve them.[24] The OAP further acknowledges the role that federal, regional and interstate collaboration must play in effectively implementing a successful plan.[25]

New York's state-controlled waters are much deeper than Virginia's and therefore the OAP focuses on deep water issues more than Virginia's plan probably will.[26] Two strengths of the New York OAP are its simplified goals and its well-defined interdepartmental coordination. The explicitly stated goals of the OAP make it easy to identify how portions of the OAP should be implemented based on which specific goal they promote and make it easier to track whether the stated goals are being met.[27] The breakdown of each goal into a specific objective and further to an action that can be taken or monitored makes implementation of the OAP easier to track.

New York divides the implementation and coordination of its OAP among many state departments including the Department of Environmental Conservation, the Department of State, the Office of General Services, and local and tribal governments.[28] With the help of the goals, objectives and actions laid out in their framework, the New York Department of Environmental Conservation has delegated the specific actions of the OAP to different state agencies to implement them.[29] The state developed a flow chart for the sixty-one actions in the OAP that shows which state agency is responsible for each action.[30] The chart also lists local, federal, interstate, tribal and other partners that will work with the agencies to meet the goals of the OAP.[31]

C. South Carolina

In 2008, the South Carolina Department of Health and Environmental Control organized the Ocean Planning Work Group (OPWG), which released its final Ocean Report in 2012.[32] The group was funded by a grant from NOAA under the Coastal Zone Management Act (CZMA)

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[24] *Id.*

[25] New York and Connecticut collaborated on the Long Island Sound Blue Plan that covers the waters of the Long Island Sound. This body of water is not considered to be ocean waters but shares many similarities and thus the Blue Plan is mentioned in the OAP as a source of collaboration. *Id.* at 56. The OAP, however, focuses more on the blue-water open-ocean areas south of Long Island. *Id.* at 6.

[26] *Atlantic Ocean Depth Map (Nautical Chart)*, FISHERMAP, https://usa.fishermap.org/depth-map/atlantic-ocean/ (last updated 2021) (showing Virginia with a maximum depth of fifty feet within its three nautical mile line and New York with a maximum depth of 115 feet).

[27] NEW YORK OAP, *supra* note 21, at 2.

[28] *See id.* This may be necessary in Virginia as its current Coastal Zone Management Program is networked and not the responsibility of a single state agency, so a Virginia ocean plan may need to be spread over multiple agencies. *See* discussion *infra* Section IV (E).

[29] *Summary of Actions in NY Ocean Action Plan*, DEPT. OF ENV'T CONSERVATION, https://www.dec.ny.gov/lands/100471.html (last updated 2017).

[30] *Id.*

[31] *See id.*

[32] SC OCEAN PLANNING WORK GROUP, SOUTH CAROLINA OCEAN REPORT: A FOUNDATION FOR IMPROVED MANAGEMENT AND PLANNING IN SOUTH CAROLINA (2012) https://scdhec.gov/sites/default/files/Library/CR-010549.pdf [hereinafter SC OCEAN REPORT]. The work group was established under the Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management and included representatives of state agencies, academics and non-profit contributors. *Id.* at 9.

section 309, the same source Virginia is using to fund its planning process.[33] The OPWG's stated goal was increased communication between state agencies and researchers, and creation of the Ocean Report to foster future research, education, and policy.[34] In the report the OPWG made nine recommendations,[35] which share the common themes of sustainable utilization, environmental concern, and reduction of conflict between parties operating on South Carolina waters.[36] The report highlights the regional cooperation among South Carolina, Georgia, Florida, and North Carolina under the Governor's South Atlantic Alliance, which identified the shared priority areas of the states in the region.[37] The goal of this regional alliance is to implement beneficial regional strategies for its five member states.[38] Additionally, the OPWG's work centered on numerous public workshops to help them achieve their nine recommendations.[39] By allowing public meetings to steer the Ocean Report's direction, the OPWG garnered broad support for the report they produced.[40]

The South Carolina Ocean Report highlights the need for continued momentum, structured progress, and milestones toward the creation of a comprehensive ocean plan. South Carolina laid the necessary groundwork in terms of stakeholder engagement and data collection but fell short of a forward-looking ocean plan due to, among other things, agency staffing issues affecting the ability to continue the work and more pressing concerns, like shoreline erosion, taking precedence.[41] The Ocean Report persists as a guide for state agencies, but without a clear overarching drive or vision it will be harder to achieve desired outcomes or maintain progress toward them. None of the nine recommendations the Ocean Report made have occurred.[42]

D. North Carolina

North Carolina, much like South Carolina, worked toward creating a functioning comprehensive ocean management plan, but ultimately fell short. The Ocean Policy Steering Committee, created by grant in 2008 with funding from NOAA, Sea Grant North Carolina, and other state agencies, released its final report in 2009 (2009 Report).[43] The North Carolina Coastal Resources Law, Planning and Policy Center prepared the report, which was then published by the

[33] SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL DIVISION OF OCEAN AND COASTAL RESOURCE MANAGEMENT, SOUTH CAROLINA COASTAL MANAGEMENT PROGRAM SECTION 309 ASSESSMENT AND STRATEGY 2016-2020 35 (2016) https://coast.noaa.gov/data/czm/enhancement/media/sc309-2016.pdf.
[34] SC OCEAN REPORT, *supra* note 32.
[35] *Id.* at 11.
[36] *See id.* at 145-151. The nine recommendations are listed under seven topic area headings: Ocean Management, Living Marine Resources and Habitats, Ocean Energy, Sand Resources, Marine Aquaculture, Ocean Mapping, and Ocean Monitoring. *Id.*
[37] *Id.* at 10.
[38] *Id.* at 23, 31.
[39] *Id.* at 10, 153.
[40] OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT, STATE OCEAN MANAGEMENT PLANS AND POLICIES: SYNTHESIS REPORT 19 (2006), https://scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Ocean_Mgt_Plans_Policies.pdf.
[41] Telephone interview with Barbara Neale, Senior Program Analyst, South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management (Jan. 12, 2022).
[42] *Id.*
[43] JOSEPH J. KALO ET AL., DEVELOPING A MANAGEMENT STRATEGY FOR NORTH CAROLINA'S COASTAL OCEAN (2009), https://ncseagrant.ncsu.edu/ncseagrant_docs/products/2000s/developing_mgmt_strategy.pdf [hereinafter NC OCEAN STRATEGY].

committee.[44] Since the 2009 Report, North Carolina has done no further work to develop a comprehensive ocean plan.[45] The 2009 Report made specific policy recommendations that state agencies should follow, but it did not require them to implement a comprehensive ocean plan, which would have required a mandate to do so from state-level lawmaking or executive orders.[46] The 2009 Report concluded with recommendations how to achieve a comprehensive ocean plan in the future.[47]

The committee focused on sand resource management, ocean based alternative energy, ocean outfalls, and ocean aquaculture.[48] While no comprehensive plan for North Carolina emerged from the 2009 Report, it did impact coastal management policy in the state. For instance, the Department of Environmental and Natural Resources adopted the Beach and Inlet Management Plan in 2011 that the 2009 Report called for at the conclusion of the section on sand resource management.[49] The 2009 Report recommended an update to the maps of North Carolina's ocean as a precursor to work on a comprehensive ocean plan, which the report called "beneficial to North Carolina and its communities."[50] The report also recommended either increasing the authority of particular agencies to allow effective administration, or to spread administration of the plan piecemeal over multiple agencies.[51]

One particularly important aspect of North Carolina's efforts is the public feedback the state received from stakeholders. Specifically, the 2009 Report includes an appendix of meeting minutes from public meetings held across the coastal regions of the state prior to the release of the report detailing public concerns and perception of the committee's work.[52] This feature of the report provides some insight into the potential concerns that Virginia residents may have in response to the creation of a Virginia Ocean Plan, especially because of the geographic and economic similarities of these two states. One common concern was funding the program, which committee members spoke about at the meetings at length.[53] The comments and responses of the committee—as well as the priorities of the new political majority after the 2009 Report[54]—shed light on the direction of the state since the report's release and its lack of further work on a

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[44] *Id.*

[45] *See* NORTH CAROLINA DIVISION OF COASTAL MANAGEMENT, ASSESSMENT AND STRATEGY OF THE NORTH CAROLINA COASTAL MANAGEMENT PROGRAM (2021), https://deq.nc.gov/media/20405/download.. Among other things, the change of political parties after release of the report led to a shift in priorities resulting in the lack of new developments. *See* Kalo, *infra* note 54.

[46] NC OCEAN STRATEGY, *supra* note 43, at 66.

[47] *Id.* at 64-66. The final section of the 2009 Report also includes a brief overview of other state and international ocean plans in place or under development at the time as well as a review of North Carolina's current laws affecting their ocean resources. *Id.* at 62-65.

[48] *Id.* at i-ii. The ending of each of the four subject area sections left recommendations for future work but focused mainly on coastal resources or impact on coastal communities.

[49] *Id.* at 10; NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, BEACH AND INLET MANAGEMENT PLAN (2011), https://deq.nc.gov/about/divisions/coastal-management/coastal-management-oceanfront-shorelines/beach-inlet-management-plan/bimp-final-report. The Beach and Inlet Management Plan was created by the Division of Water Resources and the Division of Coastal Management. *Id.*

[50] NC OCEAN STRATEGY, *supra* note 43, at 66. No specific group was identified to carry out the update of the maps, however the report recommends involving the Coastal Habitat Protection Plan in the mapping update. *Id.*

[51] *Id.*

[52] *Id.* at 69-84.

[53] *Id.* at 70-71.

[54] Telephone interview with Joseph J. Kalo, Graham Kenan Professor of Law Emeritus, Univ. N.C. (Dec. 17, 2021).

comprehensive ocean plan. Since the release of the report, the state's focus has been on coastal communities and the impact that policies will have on them and their limited land due to a large portion of them being barrier islands.[55]

Much of the work of the North Carolina Department of Environmental Quality on ocean planning and coastal management since the 2009 Report, including the creation of the Beach and Inlet Management Plan, has focused on coastal communities and the environmental impacts on them from erosion and storms.[56] While a lot of the work that would need to happen for NC to create an ocean plan is reflected in the 2009 Report, there has been no substantial further work on this issue done in the past decade.

E. Oregon

In 1987, the Oregon State Legislature established the Oregon Resources Task Force to create a comprehensive ocean management plan.[57] After meeting with community groups and other state agencies to determine which issues the plan should address, the Task Force prepared the 1990 Oregon Ocean Resources Management Plan (Ocean Plan).[58] The Ocean Plan is not limited to state waters, rather it identifies an "Ocean Stewardship Area" that encompasses the area within fifty nautical miles (nm) of the coast.[59] Acting on the Task Force's recommendations, the 1991 Oregon legislature passed the Oregon Ocean Resources Management Act, which established an Ocean Resources Program and designated the Oregon Department of Land Conservation and Development (DLCD) as the program's lead agency.[60]

That same year, the state legislature created the Oregon Ocean Policy Advisory Council (OPAC) to provide advice to the Governor, state agencies, and local governments on ocean policy and management issues.[61] OPAC consists of representatives from coastal community groups, local government and tribes, several state agencies, and the general public. Though OPAC does not possess direct regulatory authority, state agencies are required to act consistently with its recommendations once those recommendations have been approved by DLCD.[62] As its first project, OPAC was tasked with creating a Territorial Sea Plan (TSP) to provide guidance to state and federal entities in managing uses within three nm of Oregon's coast.[63] First adopted in 1994

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[55] *See id.*
[56] NORTH CAROLINA DIVISION OF COASTAL MANAGEMENT, *supra* note 45, (stating that the achievements of the state agencies from 2016-2020 are delineation of areas of inlet effluence, improving calculation of oceanfront shoreline change rates, and development of a North Carolina Coastal Community Resilience Guide).
[57] OREGON OCEAN RESOURCES MANAGEMENT PLAN, OREGON DEP'T OF LAND CONSERVATION AND DEVELOPMENT 5 (1991), https://www.oregon.gov/lcd/OCMP/Pages/Ocean-Plan.aspx [hereinafter ORMP].
[58] *Id.*
[59] *Id.* at 13.
[60] *Ocean Policy in Oregon*, DLCD, https://www.oregonocean.info/index.php/ocean-policy/64-ocean-policy-in-oregon) (last visited Nov. 15, 2021).
[61] *See* ORMP, *supra* note 57, at 166.
[62] OR. REV. STAT. § 196.443 (2019), https://oregon.public.law/statutes/ors_196.443.
[63] *Oregon Territorial Sea Plan, Part One: Ocean Management Framework*, OREGON OCEAN POLICY ADVISORY COUNCIL (1994), https://www.oregon.gov/lcd/OCMP/Documents/otsp_1-a.pdf.

by the state legislature, the TSP has been amended several times by OPAC and DLCD to reflect changing needs and uses.[64]

A 2009 amendment added Part Five of the TSP, "Use of the Territorial Sea for the Development of Renewable Energy Facilities."[65] Part Five describes the process for evaluating the viability of renewable energy facilities and includes requirements for those facilities should they become operational.[66] It also provides a siting system to identify appropriate locations for development to minimize potential adverse effects on existing ocean resources, delegating to DLCD the authority to identify "Designated Areas" in which less strict review standards are applied than other areas of the territorial sea.[67] While developers are free to apply for a lease in other parts of the territorial sea, the lower standards in these areas encourage developers to target those areas that the state has deemed more suitable for development.[68] In federal waters, DLCD's role is to review federal decisions to authorize renewable energy development on the outer continental shelf, provided the facility will have reasonably foreseeable effects on Oregon's coastal resources.[69] DLCD's review determines whether the federal decision is consistent with the CZMA, the TSP, and the coastal management program.[70]

Part Five of the TSP also establishes requirements that lease applicants must meet. To ensure that development and operation of a potential facility will comport with Oregon's conservation goals, applicants must satisfy a set of stringent review standards, which are enumerated in the amendment.[71] Should an applicant pass that initial evaluation, it is then obligated to submit a host of development and operation plans that are then assessed separately.[72] These standards are derived from the U.S. Bureau of Ocean Energy Management's (BOEM) leasing standards in order to maintain consistency between the state and federal processes.[73] Oregon's process is conducted by a Joint Agency Review Team (JART), comprised of representatives from various state and federal agencies, local government, and tribes.[74] Part Five's layered approach to energy development demonstrates how a demanding review system can ensure that conservation objectives are prioritized and that all interested parties are brought to the table.

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[64] *Territorial Sea Plan*, DLCD, https://www.oregon.gov/lcd/OCMP/Pages/Territorial-Sea-Plan.aspx (last visited Nov. 15, 2021).
[65] *Oregon Territorial Sea Plan, Part Five: Uses of Territorial Sea,* OREGON OCEAN POLICY ADVISORY COUNCIL 2 (2009), https://www.oregon.gov/lcd/OCMP/Documents/TSP_Part5_FINAL_2019Combined.pdf.
[66] *See id*.
[67] *Id.* at 4.
[68] Telephone interview with Andy Lanier, Marine Affairs Coordinator, Oregon DLCD, (Jan. 21, 2022).
[69] *Oregon Territorial Sea Plan, Part Five*, *supra* note 65, at 5.
[70] *Id.*
[71] *Id.* at 9. The Resource and Use Inventory and Effects Evaluation and Special Resources and Use Review Standards require that applicants submit information regarding location, size, and method of operation, as well as data that identifies adjacent affected areas, any geologic hazards, and any cultural or economic impacts that the facility might have. *Id.* at 8. Applicants are then obligated to submit a facility development plan, project operation plan, decommissioning plan, and financial assurance plan, to name a few. *Id.* at 23-26.
[72] *Id.* at 27.
[73] Telephone interview with Casey Dennehy, Marine Policy Associate, Wash. Dept. of Ecology (Jan. 10).
[74] *Oregon Territorial Sea Plan, Part Five*, *supra* note 65, at 6. The JART consists of representatives from the Oregon Departments of Fish and Wildlife, Parks and Recreation, Environmental Quality, Land Conservation and Development, Water Resources, Energy, and Geology and Mineral Industries. *Id.*

With Part Five's regulatory groundwork in place, Oregon has begun taking more substantive steps toward renewable energy development. Per a request from Oregon's Governor, DLCD partnered with BOEM to create the BOEM Oregon Intergovernmental Renewable Energy Task Force.[75] The Task Force provides coordination among federal, tribal, state, and local governmental bodies regarding potential renewable energy activities on Oregon's outer continental shelf.[76] In June of 2020, the state of Oregon and BOEM committed to wind energy planning in federal waters and BOEM is now scouting the Oregon coast for potential wind farm locations.[77]

Oregon's ocean planning has also allowed for significant progress regarding marine habitat protection efforts. Several sections of the original ORMP are dedicated to habitat conservation and provide broad policy recommendations to future regulators.[78] Acting on those recommendations, Oregon established a tiered system of marine habitat protections that vary depending on the sensitivity of the fishery or habitat.[79] Marine reserves are the most protective and do not allow any extractive activity, except as necessary for research or monitoring purposes.[80] Oregon first designated three marine reserves in 2011 and now has five within its territorial waters.[81] Marine Protected Areas, on the other hand, allow varying levels of extraction based on the health of the area's marine biology.[82] Oregon has designated nine Marine Protected Areas.[83] Marine Gardens and Habitat Refuges are also used to protect intertidal species. The Oregon legislature has called for an evaluation of the Marine Reserves Program and a report has been scheduled for 2023, at which point the success of the program will be evaluated.[84] Because the program is Oregon's first foray into a marine reserves system, the intent of the program was to gather data and conduct research on the species and habitats within the marine reserves, rather than to establish a lasting system for effective management of those waters. For that reason, the 2023 review will not evaluate whether the program facilitated ecologically beneficial results, but will use the information that has been gathered from studying the reserves to construct a system that promotes active management of important fisheries and habitats.[85] One possible change might be to the zero-extraction policy towards reserves, which has actually proven problematic in certain areas where population control of a particular species would be beneficial to the ecosystem as a whole.[86]

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[75] *BOEM Oregon OCS Renewable Energy Task Force*, Oregon Ocean Information, https://www.oregonocean.info/index.php/boem-oregon-task-force (last visited Nov. 16, 2021).
[76] *Id.*
[77] Knox Keranen, *Massive Offshore Wind Farms Could be Coming to Oregon*, THE WORLD (Jul. 5, 2021), https://theworldlink.com/news/local/massive-offshore-wind-farms-could-be-coming-to-oregon/article_8450f2e6-da89-11eb-a540-5b1159cf1ac8.html.
[78] *See* ORMP, *supra* note 57, at 51-55.
[79] *See Management Designations for Marine Areas*, OREGON FISHING, https://www.eregulations.com/oregon/fishing/management-designations-for-marine-areas (last visited Nov. 16, 2021).
[80] *See The Reserves*, OREGON MARINE RESERVES, https://oregonmarinereserves.com/reserves/ (last visited Nov. 16, 2021).
[81] *Id.*
[82] *See* OREGON FISHING, *supra* note 79.
[83] OREGON MARINE RESERVES, *supra* note 80.
[84] *Id.*
[85] Telephone interview with Andy Lanier, Marine Affairs Coordinator, Oregon DLCD, (Jan. 21, 2022).
[86] *Id.*

Because Oregon is a pioneer of the ocean planning movement, its experience contains lessons for other states. Perhaps the most notable lesson is the importance of a foundational piece of legislation that clearly expresses the state's ocean management priorities. In Oregon, that document is Statewide Planning Goal 19: Ocean Resources. Goal 19 states that Oregon aims to "conserve marine resources and ecological functions for the purpose of providing long-term ecological, economic, and social value and benefits to future generations."[87] Goal 19 was adopted in 1977 and has guided Oregon's ocean management policy ever since by providing a set of implementation requirements (including the Ocean Stewardship Area) and management measures that explain how the state should prioritize its interest in conservation and sustainable development.[88] Goal 19 was foundational to the work of the 1987 Ocean Resources Task Force, which included the Ocean Stewardship Area in its original plan. The stewardship area was delineated to encourage scientific research on marine ecosystems and oceanographic conditions and to ensure that future management of those waters would comport with Oregon's conservation goals within its territorial waters.[89] After decades of research, including surveys to gauge public tolerance for the aesthetic impact of offshore facilities, Oregon has been able to determine where it would prefer that offshore development take place. That information is now publicly accessible in an online mapping tool that shows the user what level of protection applies in a given section of the territorial sea.[90] Projects like this, in conjunction with the marine reserve program, underscore the importance of robust data collection in connection with ocean planning, a lesson that states like Washington have since built upon.

F. Washington

Washington's ocean management effort, which is primarily encompassed in its 2017 Marine Spatial Plan (MSP), serves as a good case study, in part because it demonstrates a modern and comprehensive approach. Washington's MSP is a collaboration between numerous state agencies, which met with local community organizations, tribes, and the federal government to create a comprehensive tool to guide regulators and applicants through the development of new ocean uses.[91] The plan was developed by the State Ocean Caucus, an interagency team that included representatives from Washington Sea Grant and several state agencies.[92] As part of Washington's Coastal Zone Management Program (CZMP), the MSP allows the state government to review federal actions that have reasonably foreseeable effects on Washington's coastal resources.[93]

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[87] *See* Statewide Planning Goal 19: Ocean Resources, https://www.oregon.gov/lcd/OP/Documents/goal19.pdf.
[88] *Id.*
[89] *Id.*
[90] *See Oregon Offshore Wind Mapping Tool*, OREGON OCEAN INFORMATION, https://www.oregonocean.info/index.php/boem-oregon-task-force/134-oregon-offshore-wind-mapping-tool (last visited Jan. 21, 2022).
[91] *See* Washington Dep't of Ecology, Washington Marine Spatial Plan 20 (2017), https://apps.ecology.wa.gov/publications/documents/1706027.pdf [hereinafter MSP]. The State Ocean Caucus led the planning process. The Caucus is an interagency team consisting of representatives from the Washington Departments of Ecology, Natural Resources, and Fish and Wildlife; the Washington Governor's office; the Washington State Parks and Recreation Commission; and Washington Sea Grant. *Id.* at 1-2.
[92] *Id.*
[93] *Id.*

Similar to Oregon's "Ocean Stewardship Area," Washington's MSP identifies a "Study Area" that extends thirty-five to fifty-five nm offshore and begins by mapping patterns of existing uses to show which areas of the Washington coast accommodate the most uses.[94] The plan then shifts its focus to preparation for new ocean uses, mostly offshore renewable energy projects and aquaculture.[95] Notably, the review standards and siting requirements for facility development closely resemble those of the Oregon plan.[96] In addition to those requirements, the MSP also introduced two enforceable policies to bolster Washington's federal consistency review of new ocean use. The first, the Important, Sensitive and Unique areas (ISUs) Protection Standards, designates a list of ISUs that are afforded increased protection from adverse effects to those areas.[97] The second, the Fisheries Protection Standard, provides that any new use must minimize its negative impact on fishing.[98] Because the CZMA requires that federal activities remain consistent with the enforceable policies of the state's CZMP, the MSP's inclusion of these policies provides Washington with additional tools with which to regulate development outside state waters.

A large portion of the MSP is dedicated to detailing the latest data on coastal uses and resources and provides an in-depth analysis of the current condition of the Washington coast's water quality, wildlife, coastal erosion, marine ecosystems, native and traditional uses, and transportation and commerce.[99] Based on predicted trends, the plan then provides recommendations for protecting and preserving existing sustainable uses, maintaining maritime communities, conserving marine ecosystems, developing an integrated decision-making model for spatial planning, and encouraging sustainable economic development.[100] For example, using data from the National Centers for Coastal Ocean Science at NOAA, the spatial analyses chapter includes modeling of seabird and marine mammal population distributions and migration patterns.[101] Those models can then be overlaid with other maps in the MSP to show where certain proposed uses would likely conflict with migration patterns or sensitive habitats. Developers (in partnership with BOEM) can then identify the areas with the least amount of conflict, create plans for those areas, and then submit their proposal to the state. Interestingly, Washington opted not to identify low conflict areas in the MSP, instead providing data that allows developers to make that determination. Because of this arrangement, Washington can remain non-committal regarding development in particular areas, allowing it to wield its influence more flexibly than if it had identified areas for development.[102]

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[94] *Id*. at 16.
[95] *See id*.
[96] *See id.* at 415; *see* ORMP, *supra* note 57, at 27. Washington's review process employs the same layered approach, requiring a review standards evaluation, followed by construction and operation plans, all of which call for the same information as Oregon's requirements. *Compare* MSP, *supra* note 91, at 415, *with* ORMP, *supra* note 57, at 27.
[97] *See* MSP, *supra* note 91, at 559.
[98] *See id.* at 560.
[99] *See id*.
[100] *See id*.
[101] *See id*. at 336-347.
[102] Telephone interview with Casey Dennehy, Marine Policy Associate, Wash. Dept. of Ecology (Jan. 10, 2022). As part of the MSP's spatial analysis, Washington ran thousands of simulations, but could not identify any areas that didn't at least partially conflict with a high intensity use like fishing. *Id*.

III. THE VIRGINIA CONTEXT

Despite the Chesapeake Bay comprising most of its coastal waters, Virginia maintains an important relationship with the ocean, and its territory encompasses a considerable amount of ocean waters. Virginia's offshore waters host many uses, both recreational and commercial, such as fishing, shipping, and aquaculture. Coordinating those sometimes-competing uses can be challenging. At the same time, Virginia also has a strong interest in maintaining a healthy ocean ecosystem, both to support uses like fishing, and to protect its ocean wildlife. A state ocean plan can help to meet both interests, encouraging development and use of the ocean in a way that does not stymie conservation efforts.

The origins of Virginia's ocean planning history can be traced back to 2008, when CZM Programs in the Mid-Atlantic formed a Governor's Agreement on Ocean Conservation, which it signed on to in 2009.[103] Next, President Obama signed the National Ocean Policy (NOP) into law via executive order.[104] Implementation of the NOP was delegated to the National Ocean Council (NOC), which was tasked with ensuring federal agency participation in regional ocean planning efforts through the creation of Regional Planning Bodies.[105] In 2013, the NOC published the National Ocean Planning Implementation Plan and the Marine Planning Handbook, both of which provide regional actors with recommendations for developing ocean plans.[106] Using these recommendations, the Mid-Atlantic Regional Planning Body created the Mid-Atlantic Ocean Action Plan, which received federal approval in 2016.[107] The plan's stated goal was "to improve communication and collaboration among Federal, State and Tribal management entities . . . facilitate the transition to a more systems-based approach to ocean management . . . promote ecosystem health . . . and plan and provide for existing and emerging ocean uses in a sustainable manner."[108] However, a 2018 executive order declared that federal agencies were no longer mandated to enforce regional plans.[109] Although a subsequent regional body, the Mid-Atlantic Committee on the Ocean (MACO) that includes federal agencies and tribes, has been established by MARCO to address Mid-Atlantic ocean management, Virginia can also develop a state-specific plan to address its specific ocean management priorities.[110] A state-specific plan that features regional cooperation would give Virginia more autonomy and flexibility over its ocean planning efforts, while also maintaining its Mid-Atlantic partnerships.

Though federal agencies are no longer required to adhere to the Mid-Atlantic Ocean Action Plan of 2016, it can serve—in conjunction with MACO—as a useful reference for Virginia as the

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[103] *Mid-Atlantic Governors' Agreement on Ocean Conservation*, http://midatlanticocean.org/wp-content/uploads/2013/11/MidAtlantic-Governors-Agreement.pdf (last visited Feb. 9, 2022).
[104] Exec. Order No. 13,547, 75 C.F.R. § 43021 (2010), https://www.federalregister.gov/documents/2010/07/22/2010-18169/stewardship-of-the-ocean-our-coasts-and-the-great-lakes.
[105] *Id.*
[106] MARCO Plan, *supra* note 1.
[107] *Id.* at 12.
[108] *Id.*
[109] Exec. Order No. 13,840, 83 C.F.R. § 29431 (2018), https://www.federalregister.gov/documents/2018/06/22/2018-13640/ocean-policy-to-advance-the-economic-security-and-environmental-interests-of-the-united-states.
[110] *Mid-Atlantic Committee on the Ocean*, MARCO, https://www.midatlanticocean.org/ocean-planning/mid-atlantic-committee-on-the-ocean/ (last visited Nov. 17, 2021).

state constructs its own plan. For example, even though the Virginia Ocean Plan will be state-specific, close collaboration with Virginia's neighbors, most prominently Maryland and North Carolina, will be vital to the plan's success. Through a collaborative approach, Virginia and its neighbors can pool resources and more effectively tackle issues that transcend state boundaries, like marine habitat protection and offshore wind development. Because the Mid-Atlantic Ocean Action Plan contains a blueprint for interjurisdictional cooperation in the region—including tribal involvement—Virginia may want to adopt and build on that guidance.[111] The plan also identifies many of Virginia's ocean management priorities, such as renewable energy, port and shipping management, military use, commercial and recreational fishing, aquaculture, and ocean health.[112] The Virginia Ocean Plan will likewise need to address these issues, meaning that as the Virginia Ocean Planning Committee works towards creating a comprehensive, adaptively managed ocean plan, the MARCO plan can be provide a helpful launching point.

A Virginia Ocean Plan could help prioritize and foster the state's priorities and energy goals. For instance, it could facilitate increased offshore wind development projects, which in turn could foster the Commonwealth's transition to renewable energy in a way that least impacts its natural resources, and the country's national security and defense mission readiness.[113] Virginia's 2020 Clean Economy Act requires that the Commonwealth's energy providers produce electricity from 100 percent renewable sources by 2050.[114] As the first state to undertake building an offshore wind farm in federal waters, it is important that Virginia implement an effective offshore renewable energy strategy that is in sync with its other ocean management objectives.[115]

The Plan could also proactively address emerging environmental threats to the state's coastline. Ocean acidification and hypoxia are emerging ocean health impacts that are only starting to affect Virginia's waters and aquaculture. Virginia can borrow significantly from West Coast states that are currently dealing with much higher levels of ocean acidification than those on the Atlantic coast.[116] Ocean acidification occurs when the pH level of seawater is reduced for an extended period, primarily due to carbon dioxide uptake.[117] A more acidic ocean is chemically corrosive to shellfish, making it more difficult for them to form shells and skeletons.[118] Ocean acidification's damage to Pacific shellfish harvests has made this issue a top priority for West Coast states.[119] Because Atlantic acidification levels are projected to increase in the coming decades, and because Virginia values its shellfish industry so highly, a forward-thinking Virginia Ocean Plan would adopt the mitigation and adaptation strategies being deployed in Oregon,

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[111] *See* MARCO Plan, *supra* note 1.
[112] *Id*.
[113] The Norfolk Naval Station is the world's largest naval base and is responsible for the operational readiness of the US Atlantic Fleet. *See About*, NAVAL STATION NORFOLK, https://www.cnic.navy.mil/regions/cnrma/installations/ns_norfolk.html (last visited Jan. 11, 2022).
[114] Va. Code Ann. § 56-585.5 (2021), https://law.lis.virginia.gov/vacodeupdates/title56/section56-585.5/#:~:text=Utility%20Regulation%20Act-,%C2%A7%2056%2D585.5.,renewable%20and%20zero%20carbon%20sources.
[115] *About Coastal Virginia Offshore Wind*, COASTAL VIRGINIA OFFSHORE WIND, https://coastalvawind.com/about-offshore-wind.aspx (last visited Nov. 17, 2021).
[116] *See* Washington State Blue Ribbon Panel on Ocean Acidification, *Ocean Acidification: From Knowledge to Action* (2012), https://apps.ecology.wa.gov/publications/documents/1201015.pdf.
[117] *Id.* at xi. pH levels measure the acidity of water. *Id.* at app. 4.
[118] *Id*. at xiii.
[119] *Id*. at xii.

Washington, and California.[120] The West Coast states also possess well-established marine habitat reserve and conservation programs that Virginia could model its own after.[121]

Renewable energy, ocean conservation and ocean acidification are just a few of the priorities that a Virginia Ocean Plan can cover. In addition to those listed above, a Virginia Ocean Plan could also address sand mining, non-extractive recreational uses, public access, shifting species, port development and expansion needs and temperature changes, amongst others. An extensive list of current priorities will be critical to the ocean plan's initial success, but its longevity will likely be determined by its adaptability. The plan should therefore incorporate adaptive management principles to enable regulators to proactively deal with emerging concerns. The next section elaborates on this suggestion and provides recommendations based on the strengths and weaknesses of other state ocean plans.

III. RECOMMENDATIONS FOR VIRGINIA

A. Public Input

A primary concern for developing an ocean plan is input from the public and stakeholders potentially affected by the plan.[122] For this reason, public input is critical to the success of proposed regulations, and the states analyzed in this white paper all realized that and included public input. Virginia's Ocean plan can also benefit greatly by allowing stakeholders to have a voice during as many phases of this project as possible. In the Massachusetts, South Carolina, and North Carolina all solicited public input, and included summaries, or transcriptions, of public comments in their reports.[123] The current proposal for creating the Virginia Ocean Plan includes the intention to garner stakeholder/public input and this should be maximized as much as possible to increase the legitimacy of the plan.[124] Like North Carolina, the Virginia group would be best served by spreading out meetings with public involvement geographically, or virtually, in areas with potentially impacted residents to maximize public input, as COVID restrictions allow.[125] "Public participation is not simply a nice or necessary thing to do; it actually results in better outcomes and better governance."[126]

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[120] *See* Julia A. Ekstrom, et al., *Vulnerability and Adaptation of US Shellfisheries to Ocean Acidification*, 5 NATURE CLIMATE CHANGE 207, 214 (2015), https://www.researchgate.net/publication/272923440_Vulnerability_and_adaptation_of_US_shellfisheries_to_ocean_acidification.

[121] *See* ORMP, *supra* note 57, at 51-55.

[122] Paul Burstein, *The Impact of Public Opinion on Public Policy: A Review and an Agenda*, 56 POL. RSCH. Q. 29 (2003), https://doi.org/10.2307/3219881.

[123] COASTAL ZONE MANAGEMENT OCEAN MANAGEMENT PROGRAM, REVIEW OF THE MASSACHUSETTS OCEAN MANAGEMENT PLAN 44-48 (2014), https://www.mass.gov/files/documents/2016/08/xp/ma-ocean-plan-review.pdf; SC OCEAN REPORT, *supra* note 32, at 165-75; NC OCEAN STRATEGY, *supra* note 43, at 69-84.

[124] Agenda of the Virginia Coastal Zone Management Program, Developing a Virginia Ocean Plan (Oct. 21, 2021).

[125] NC OCEAN STRATEGY, *supra* note 43, at 69-84.

[126] *Public Participation Guide: Introduction to Public Participation*, EPA, https://www.epa.gov/international-cooperation/public-participation-guide-introduction-public-participation (last updated July 12, 2021).

B. Adaptive Management

To account for the emergence of new uses and unforeseen environmental issues, Virginia should incorporate into its ocean plan adaptive management principles that allow the plan to maintain long term effectiveness. Massachusetts has incorporated into its plan a five-year review period to keep their ocean plan an evolving document.[127] This review requirement can help the state adapt its plan to new science and new techniques in ocean management, or, if included, even update a fee structure in the plan to account for inflation.[128] Washington's MSP states that the plan will "develop an integrated decision-making process which supports proactive, adaptive, and efficient spatial planning."[129] It also features a monitoring system, run by an interagency team, that is designed to periodically revisit certain scientific indicators and determine whether the indicators suggest a need for change, as well as identify any data gaps that need to be studied.[130] In this way, the extensive data collection that undergirds Washington's MSP helps to ensure that the plan remains adaptive. To maintain communication among the different parties administering the plan, Washington charged its State Ocean Caucus with facilitating communication between state and federal agencies.[131]

Because continued communication is important to maintaining a plan this is both proactive and responsive, Virginia should similarly delegate communication duties to an interagency body as well as continue to use its representation in MARCO's Mid-Atlantic Committee on the Ocean to communicate with federal agencies and neighboring states. Virginia should also continue to prioritize data collection as it has through its membership in MARCO and include a monitoring system to ensure that the Virginia plan does not stagnate or become out-of-date.

C. Traditional Ecological Knowledge

Traditional ecological knowledge (TEK) refers to the unique understanding of the environment that indigenous communities and local peoples typically possess, as well as the insights that their perspective can provide.[132] By including TEK in its ocean plan, an ocean planning committee gives the state access to historical knowledge that may long predate its founding, a resource that any planning committee would be remiss to disregard. Washington's Marine Spatial Plan includes a section dedicated to TEK, in which the different tribes that were included in the ocean planning effort, all of which are federally recognized, explain the cultural significance of the ocean and its resources to them, as well as the natural resources management strategies that the tribes have used over time.[133] While that section provides helpful context for the reader, it appears that Washington's substantive incorporation of TEK into the plan was limited to

[127] MASS. GEN. LAWS ch. 21A, §4C (2008).
[128] 301 MASS. CODE REGS. 28.07 (4) (2008).
[129] MSP, *supra* note 91, at 27.
[130] *Id*. at 401.
[131] Telephone interview with Casey Dennehy, Marine Policy Associate, Wash. Dept. of Ecology (Jan. 10).
[132] TEK is "knowledge, practice, and belief concerning the relationship of living beings to one another and to the physical environment, which is held by peoples in relatively nontechnological societies with a direct dependence upon local resources." Robin Wall Kimmerer, *Weaving Traditional Ecological Knowledge into Biological Education: A Call to Action*, 52 (5) BioScience 432 (2002), https://doi.org/10.1641/0006-3568(2002)052[0432:WTEKIB]2.0.CO;2.
[133] MSP, *supra* note 91, at 37-39.

the input that tribal leaders had in the planning process.[134] According to the plan, tribal staff participated in workshops, meetings, and forums; reviewed and provided input on planning priorities; provided technical and scientific information and feedback; and partnered with state agencies on data collection and field work.[135] Virginia could replicate that model, but would need to identify tribes that have a relationship with the ocean, a process that was easier for Washington because many of its tribes are located on the coast. Virginia should also recognize that some tribes may not be willing to share their TEK with state planners.

D. Revenue

The Plan should also identify a revenue source to fund its goals and implementation. Funding is also necessary to complete reviews of the plan, proposed restorative work in Commonwealth waters, or any other work deemed necessary to implement the goals identified by the plan. The fee structure in the Massachusetts 2015 Plan requires commercial projects that desire to use state ocean resources to pay a fee.[136] This is a great revenue source for Massachusetts and has raised over one million dollars since their initial plan was released in 2009.[137] The draft revision of the Massachusetts plan for 2021 specifically aimed to update the fee structure to account for inflation.[138] One of the concerns that is commonly raised in response to ocean plans is the need for funding to implement their specific goals, and for enforcement.[139] Implementation of a fee structure like that in Massachusetts could provide a means for Virginia to cover the expenses of personnel or research necessary for implementation and regulation of its Ocean Plan, or it could be used for restoration projects to help revive or maintain ocean resources as Massachusetts does with the revenue from its fee.[140]

E. Virginia Agency Collaboration

The Virginia CZMP, which is undertaking the efforts to create the Virginia Ocean Plan, is a networked program.[141] If the Virginia Ocean Plan features the same agencies that currently participate in the networked Program or any others, then collaboration among these agencies will play a major role in ensuring the success of the plan. The coordination also could involve public-private partnership on some projects, which provides for non-governmental funding sources and

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[134] *See id.*
[135] *Id.* at 32.
[136] MASSACHUSETTS 2015 PLAN, *supra* note 3, at 3-(4-7). This is predominantly aimed at offshore energy generation and cable laying. It specifically excludes commercial and recreational fishing from the fee structure. *Id.*
[137] The Massachusetts plan has raised over $1M thus far. Mass. Off. of Coastal Zone Mgmt., *Ocean Resources and Waterways Trust Fund Deposits and Expenditures*, MASS.GOV, https://www.mass.gov/service-details/ocean-resources-and-waterways-trust-fund-deposits-and-expenditures (last visited May, 9, 2022).
[138] 2021 DRAFT REVISION, *supra* note 11, at 10.
[139] *See, e.g.*, NC OCEAN STRATEGY, *supra* note 43, at 69-84.
[140] MASSACHUSETTS 2015 PLAN, *supra* note 3, at Appendix 7-3.
[141] *Coastal Zone Management Programs*, NOAA OFFICE FOR COASTAL MANAGEMENT, https://coast.noaa.gov/czm/mystate/#virginia (last updated Nov. 18, 2021). The networked CZMP in Virginia is led by staff housed in the Department of Environmental Quality and also includes the departments of: Conservation and Recreation (DCR); Wildlife Resources (DWR); Health; Agriculture and Consumer Affairs; Forestry; Historic Resources; Energy; Transportation; Virginia Economic Development Partnership; Marine Resources Commission (MRC); and the Virginia Institute of Marine Science. Va. Dep't of Env't Quality, *Coastal Zone Management*, DEQ, https://www.deq.virginia.gov/coasts/coastal-zone-management (last visited May 9, 2022).

better private-sector representation in the planned actions. Oregon, Washington, and New York have all used public private partnerships, leading to successful studies and collaborations that advance the goals of their plans.[142] Public-private partnerships might not be appropriate for every situation, they have been criticized for decreasing accountability and public control over projects, but they provide another tool that Virginia could deploy in certain circumstances. Additionally, Virginia could create a new state agency to handle the implementation of the Virginia Ocean Plan as Massachusetts did.[143] However, this approach is likely not preferable, as the funding and political will to create such an agency would likely be hard to find.

F. Regional Collaboration

Interstate cooperation will also be crucial to the success of Virginia's ocean plan. Broader goals of a future Virginia Ocean Plan will be more challenging to achieve without regional collaboration as many potential important features of the plan do not adhere to political boundaries, such as ocean dwelling species or power cables. However, Virginia's participation in MARCO and MACO along with Maryland, Delaware, New Jersey, New York, and many federal agencies provides a sound foundation for regional collaboration. Virginia should also work with North Carolina and consider efforts being undertaken through the MOU signed by North Carolina, Virginia and Maryland to promote offshore wind.[144] Further, the Chesapeake Bay Commission, which is a successful collaborative effort between Virginia, Maryland, and Pennsylvania to "restore the Bay watershed," might provide a template for a similar regional cooperation on these ocean issues.[145] The lessons in regional cooperation learned from inclusion in these groups are important to bring to the Virginia Ocean Plan and will strengthen any plan produced.

G. Plan Cohesion

Instead of a piecemeal approach, Virginia, through its NOAA-approved Section 309 strategy to develop a Virginia Ocean Plan, has already put in place in the concept of a comprehensive approach to ocean planning. The experiences of Oregon and Washington highlight why this approach is a good one. Because Oregon began its ocean planning efforts several decades ago, the original plans are very broad and somewhat shallow compared with more recent efforts, acting more as a set of general recommendations than as enforceable regulations. Oregon has since built upon those recommendations, fleshing out the original plan with addenda that contain specific regulations. While Oregon's plan has proven to be effective, the piecemeal way in which it came together means that there is sometimes a lack of continuity between documents, and different parts of the plan are located on different websites, making it less accessible and harder to digest than others. Virginia could follow Washington's lead instead, which has more explicitly and cohesively addressed planning in its offshore study area. While Oregon's ocean planning components are spread out among different agencies and programs, Washington's MSP features all the state's marine spatial planning in one document. Virginia should consider replicating the comprehensive,

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[142] *Summary of Actions in NY Ocean Action Plan*, *supra* note 29.
[143] MASS. GEN. LAWS ch. 21A, §4C (2008).
[144] Dave Kovaleski, *Maryland, Virginia, and North Carolina form Partnership to Develop Offshore Wind*, DAILY ENERGY INSIDER (Nov. 2, 2020), https://dailyenergyinsider.com/news/27769-maryland-virginia-and-north-carolina-form-partnership-to-develop-offshore-wind/.
[145] *About Us*, CHESAPEAKE BAY COMMISSION, https://www.chesbay.us/about (last visited Nov. 18, 2021).

data-intensive style of the Washington MSP, and the designation of an offshore area in the vein of Oregon's Ocean Stewardship Area and Washington's Study Area to facilitate data collection.

IV. CONCLUSION

States have taken different approaches to ocean planning, driven by their diverse natural resources and priorities. By identifying the relative strengths and weaknesses of other states' planning processes, Virginia can learn from their experiences. Though Virginia possesses its own unique set of priorities and considerations, understanding the strategies pursued by other states will help the drafters of a Virginia Ocean Plan to identify a desirable approach for the Commonwealth while avoiding common mistakes. A Virginia Ocean Plan should, at a minimum, feature public input, adaptive management, traditional ecologic knowledge and consultation with tribes, a stable revenue source for plan maintenance and implementation, state agency collaboration, regional collaboration on issues that transcend state boundaries, and a single, cohesive plan as its output. If the Virginia Ocean Plan includes at a minimum the above recommendations, adapted to Virginia's needs, the resultant plan will be a comprehensive and sustainable path to the future for Virginia's ocean resources.

Appendix – Recommended Ocean Planning Topics

The following is an inexhaustive list of potential topics for inclusion in a comprehensive Virginia Ocean Plan:

- Offshore energy: Virginia is already moving ahead with offshore wind energy development, and the plan could provide a regulatory framework for that and other facility development such as wave and tidal energy.[146]
- Ocean acidification: The plan could include ocean acidification mitigation measures in preparation for the projected rise in acidification levels in the coming decades.[147]
- Fisheries management: The Virginia plan could include a section that guides in designating areas or providing criteria for commercial and recreational fishing zones.
- Military use: The large military presence in Virginia necessitates a section of the plan that designates ocean areas for certain military use and coordinates the location of those use areas with commercial and recreational uses like shipping and fishing to ensure the military's security concerns are accounted for.[148]
- Port Management: The plan could address Virginia's busy ports, which play an integral role in the Commonwealth's maritime economy.[149]
- Shipping: The plan could account for commercial shipping concerns and explain how shipping lanes will interact with areas designated for other uses.
- Offshore aquaculture: Aquaculture is a major use in Virginia waters and the shellfish industry is a significant stakeholder in any development of Virginia ocean policy.[150] The plan could address invasive species management, climate change challenges related to ocean aquaculture, and development of new aquaculture areas in Virginia' ocean.
- Marine habitat protection: The plan could address the type of marine habitat protection system, if any, that Virginia wishes to pursue. This could include best practices for habitat preservation and information about the populations that currently and historically inhabit Virginia's offshore waters.
- Recreation: Recreational use of Virginia's ocean is important both to local communities and to visitors, as tourism is an important part of the economy.[151] The plan could distinguish between extractive and non-extractive recreational use.

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[146] *Seajacks Opens Operational Base in Virginia Beach*, OEDIGITAL (Feb. 22, 2022), https://www.oedigital.com/news/494486-seajacks-opens-operational-base-in-virginia-beach.

[147] Julia A. Ekstrom et al., *Vulnerability and Adaptation of US Shellfisheries to Ocean Acidification*, 5(3) NATURE CLIMATE CHANGE 207 (2015), https://www.researchgate.net/publication/272923440_Vulnerability_and_adaptation_of_US_shellfisheries_to_ocean_acidification.

[148] *Virginia Military Bases*, MILBASES, https://www.milbases.com/virginia (last updated 2022). Virginia is home to twenty-eight military bases including ten Navy and seven Coast Guard bases. *Id.*

[149] ROY L. PEARSON & K. SCOTT SWAN, THE FISCAL YEAR 2018 VIRGINIA ECONOMIC IMPACTS OF THE PORT OF VIRGINIA (2019).

[150] *Shellfish Aquaculture, Farming and Gardening*, VIRGINIA MARINE RESOURCES COMMISSION, https://www.mrc.virginia.gov/Shellfish_Aquaculture.shtm (last visited Mar. 5, 2022).

[151] *Economic Impact of Visitors in Virginia 2020*, TOURISM ECONOMICS (2020) https://www.vatc.org/wp-content/uploads/2021/09/Virginia-Tourism-Economic-Impact-2020.pdf. Even under pandemic restrictions tourism in Virginia represented 3.1% of the economy for 2020. *Id.*

- Mining: The plan could provide regulatory guidance for the potential sand, gravel, and other mining operations that could begin in Virginia's offshore waters and should contain information about the environmental impacts of those practices to determine how to prioritize mining within the network of other uses and conservation objectives.[152]
- Coastal Development: Impacts to the ocean ecosystem from coastal development can be extreme, so the plan could provide guidance on developments and how they may reduce their negative affect on the ocean, such as through outfalls, storm water runoff, or increased nutrient loads.[153]
- Monitoring: A key to successful maintenance of a plan in the long term is through development of tools for baseline monitoring and intensive monitoring of critical concern areas.[154]
- Areas of safety concern: Due to the historical military uses, shipwrecks, and natural hazards, an ocean plan could note areas with safety concerns and mark them for exclusion or avoidance.[155]
- Tribal and cultural significance areas: The plan could contain a section in which tribes can describe their current and/or historical use of offshore waters and provide any Traditional Ecological Knowledge that they wish to share. Areas with historical ties to tribes, or of cultural significance to the state as a whole, may need special protection or mention in the plan.[156]
- Education: Ocean education will aid in connecting the goals of Virginia's plan to the public and private stakeholders impacted by the plan.[157]

[152] *Offshore Sand and Heavy Minerals Resources*, VIRGINIA ENERGY, https://energy.virginia.gov/geology/ocssands.shtml (last visited Mar. 5, 2022).
[153] *Coastal Development*, OCEAN TRACKS, https://oceantracks.org/library/human-impacts/coastal-development#:~:text=Coastal%20development%20involves%20activities%20such,coral%20reefs%2C%20and%20seagrass%20beds (last visited Mar. 5, 2022).
[154] Critical concern areas might include invasive species, cetaceans, impacts from the military, commercial and recreational fishing, or other ocean uses.
[155] *Office of Coast Survey*, NOAA (Dec. 14, 2021), https://www.charts.noaa.gov/OnLineViewer/12221.shtml. This could potentially be an easy way to create marine sanctuaries for wildlife if, for instance, an area is known to contain unexploded ordnance such as the cited chart shows off of Mink Island. *Id.*
[156] *Cultural Heritage Marine Protected Areas*, NOAA, https://marineprotectedareas.noaa.gov/nationalsystem/culturalheritage/ (last visited Mar. 10, 2022).
[157] Shreya Chaudhuri, *There is a Need for Ocean Environmental Education*, PROJECT PLANET (Nov. 15, 2019), https://projectplanet.world/there-is-a-need-for-ocean-environmental-education/.

Virginia Ocean Planning Committee (State Agencies & Contractors)

AGENDA & NOTES

Tuesday June 14, 2022, 9:00am - 11:00am

Zoom Link: https://cwm.zoom.us/j/93840708231 Meeting ID: 938 4070 8231

Major Meeting Goals

- Review the draft outline for the plan and Tribal input on the draft received at the April 25 meeting with the Tribes.
- Set date for meeting with federal agencies and review list of invitees
- Discuss allocation of ocean data collection funds

Attendees: See highlighted names in list at end of file.

9:00 Welcome/Roll Call

9:10 Description of new Governor's Office "Offshore Wind Coordination" calls every other Wednesday

- Briefings provided at first meeting by Laura and Rachael
- Next meeting is June 15; state agencies only
- Avalon mentioned Regional Wildlife Science Collaborative State Sector Caucus meeting that will include a discussion on state funding and prioritization processes for offshore wind and wildlife research. Meeting coming up June 16 from 9:30 - 11am ET. Email abristow@midatlanticocean.org if you are affiliated with a state agency and interested in joining.

9:20 Update from Rutgers (Sarah Smith) on their NSF proposal - Future Blue - the Blue Ocean Economy Convergence Accelerator project using Virginia as a case study as we respond to the Central Atlantic Call Area and develop our Virginia Ocean Plan

- Goal to be forward-looking, place-based, responsive to climate change
- Pitch to NSF for Phase 2 is scheduled for June 29 - should hear about this in July
- Pat Kinsman: which decision-makers are you looking for feedback from: everyone - agencies, industries, fishermen osw developers. Thinking about this very broadly.
- Avalon: glad to see NROC as partner and MARCO as well. How do you environ this intersecting with portals? Some Rutgers PIs sit on MARCO portal team. Sarah said they've had some convos with Nick Napoli and Emily Schumchenia. Portals will cross-reference each other and Future Blue could develop customized projections that could sit on portals.
- For follow-up, sarah.l.smith@rutgers.edu

9:35 Review updated draft outline with Tribal and Acting Secretary Voyles' comments incorporated (attached)

- Participating Tribes included Chickahominy, Chickahominy Eastern Division, Pamunkey, Upper Mattaponi, and Nottoway. All federal and state recognized Virginia Tribes were invited.
- Comments from Tribes
  - Pamunkey asked if coastal erosion would be addressed (it will not)
  - Chickahominy requested we look at emerging Tribal uses - especially marine ecotourism and add a section on emerging ocean economy
  - A rep of Cultural Heritage Partners suggested we need more underwater surveys of offshore areas - paleo landscapes - coring and side scan sonar that could piggy-back on existing ocean research cruises
- Comments from Acting Secretary Voyles
  - He supports a very comprehensive approach to overcome "stove-piping" in Virginia government. Include VA Space Agency, Veterans Affairs and relevant local governments (e.g. ocean facing localities of Accomack, Northampton and VA Beach and A-N and HR PDCs)
  - Invite public comment early on
  - Be sure not to use any jargon in public documents such as "blue economy"
- Should any descriptions be changed or expanded?
  - BG, DWR: Add DEIJ issues, commitments
- Is anything missing? Is this ready to share with federal agencies?
  - PK, POV: How is the plan going to be used? What is added value? Risk of putting everything in, will it actually be helpful? How often updated?
  - LMK: Potentially add in copy of Port long-range plan when ready?
    - https://www.portofvirginia.com/wp-content/uploads/2016/02/TPOV-master-plan-2065-final-020316.pdf
  - JW, VCPC: USCG usually also includes "waterfront facilities/infrastructure" in referencing ocean planning issues within 3nm
    - PK: Need for understanding potential need for additional anchorages

9:45: Thoughts from NOAA:

- *How and for which issues/decisions do we anticipate the VA Ocean Plan will inform, guide, or otherwise influence decisions to be made by other parties (e.g., BOEM, developers) especially as related to offshore wind? Or in other words, how will the VA Ocean Plan help ensure more collaborative decision-making consistent with best available data?*
  - TJ: Ideally, recognized as a tool by VA state leadership, JK: Agree, necessary
- Also: *…the ability of the state to effectively engage and incorporate the concerns of affected stakeholders seems to be paramount to the success of an ocean plan, but somewhat obscured in the current draft outline. Perhaps there could be an explicit section on stakeholder engagement or greater elaboration of how public input will be undertaken in a comprehensive way? An example would be the mention of Traditional Environmental Knowledge (TEK) from tribes, but what about TEK from fishermen? Or new data/input from recreational users and eco-tourism guides?*
  - BG, DWR: What is being thought of re: emerging ocean economies? Can we add more detail?

        - Specifically eco-tourism?

10:10 Review Communication Plan (attached)

- review draft CZM Ocean Plan webpages
    - additions to webpages?
    - Ocean Management/Virginia Ocean Planning web info to include:
        - Fact Sheet: see below
        - October 2021 - September 2026 Ocean Strategy
        - Public Input Opportunities
        - Draft Virginia Ocean Plan Outline
        - Fishing & Offshore Wind (add EMF report, link to VOWDA - https://www.energy.virginia.gov/offshore-wind/VOWDA.shtml , link to BOEM Central Atlantic Task Force - https://www.boem.gov/renewable-energy/state-activities/central-atlantic-activities)
        - Marine Mammal/Sea Turtle Stranding (add FY19 and FY20 grant reports - also add link to Ocean Data Portal (Marine Life/ marine mammal strandings by county, season and species - https://portal.midatlanticocean.org/visualize/#x=-74.00&y=39.00&z=7&logo=true&controls=true&basemap=ocean&themes%5Bids%5D%5B%5D=2&tab=data&legends=false&layers=true)
        - Resources - add other links to docs.
- review draft ocean plan fact sheet Perhaps don't show red canyon outlines. Say "rare" whale shark - or Becky Gwynn will send wording. Or use a more typically seen state or federal designated species.
- when should we hold a Virginia Ocean Plan Open House?
    - November or December? Late Nov or early Dec
    - list all stakeholders we should invite
    - BG, DWR: How best to reach diverse audiences? Public survey?
    - Rachael Peabody: What does an open house involve?
        - LMK: Topic tables that match outline, invite public comments
    - When to host?
        - November: November 14-18th? or Nov 28 - Dec 2

10:25 Discuss ideas for ocean data collection using FY22 budget of $39k and possibly ~40k in FY21 from Marine Debris strategy funds that may be returned due to hiring difficulties. Perhaps Passive Acoustic Monitors for detecting whales prior to turbine deployment?

10:35 Prepare for meeting with federal agencies

- agree on objectives of meeting (e.g. to describe Virginia Ocean Plan process, gain their input on draft agenda, plan for open house,
- possible dates for virtual meeting: October 12, 13, **TUESDAY 18 afternoon**, 19, or 20?
- list federal agency contacts to invite
- Laura to share a blurb about the VOP that all could share with fede agency contacts they have.

10:50: Updates from Ocean Plan grantees (CPC, DWR, MARCO, VCU)

11:00 Adjourn

Roll Call

June 14 attendees highlighted in green

State Agencies & NOAA Sponsor

- CZM: Laura McKay, Will Isenberg, Virginia Witmer
- NOAA: John Kuriawa
- DWR: Becky Gwynn, Ruth Boettcher
- MRC: Pat Geer, Rachael Peabody
- VDE: Al Christopher, Ken Jurman
- VPA: Chris Gullickson, Patrick Kinsman
- DEQ: Tina Rayfield
- *VSA (Virginia Space Authority): Contacted Jim McArthur, Vice Chair of Board - he contacted Kimberly West - waiting to hear back.*
- *DVS (Virginia Department of Veterans Services):Phillip Trezza Director, Transition and Employment Programs?? To be contacted at 804 482.8515*

Tribes

- Nottoway: Beth Roach
- Upper Mattaponi: Reggie Tupponce
- Chickahominy: Reggie Stewart

Academia

- W&M CPC: Elizabeth Andrews, Gray Montrose, Jes Watts
- W&M VIMS: Mark Luckenbach
- W&M CCB: Bryan Watts
- VA Sea Grant: Troy Hartley
- VCU: Todd Janeski
- ODU: Jerry Cronin
- UVA: Frank Dukes, Michaela Accardi (OCEANS PACT/Belmont Forum)
- Rutgers: Sarah Smith (Blue Economy Accelerator Project)

Contractors

- Virginia Aquarium: Mark Swingle, Sue Barco
- MARCO: Avalon Bristow

To be added: Neighboring States

- (DE, MD , NC have expressed interest)

To be added: Federal Agencies

- NOAA/NMFS
- BOEM
- Coast Guard
- Navy
- USFWS
- NASA


Virginia Coastal Zone
MANAGEMENT PROGRAM

Communications Plan (updated May 24, 2022)

Virginia Coastal Policy Center Responsibilities for the Virginia Ocean Plan

The Virginia Coastal Policy Center (VCPC) will take a supporting role in facilitating the creation of the Virginia Ocean Plan by aiding in communications among members of the Virginia Ocean Planning Committee (VOPC - led by the Virginia Coastal Zone Management Program Manager), the public, and other interested parties. The CZM Program Manager and Outreach Coordinator will be the VCPC's primary contacts for communications work throughout the ocean planning process. To clarify expectations, this communications plan spells out known deadlines for deliverables and expectations as they are currently understood.

1. Meeting Coordination
   Deadline:
   - As agreed by VOPC members, VCPC and CZM.

   Purpose:
   - For progressing work on the Virginia Ocean Plan.
   - Gathering of input from non-VOPC parties during open meetings.

   Method:
   - VCPC will schedule meetings in collaboration with the CZM Manager and CZM will handle public notice publication when needed
   - VCPC will record minutes for use in communications and plan development
   - VCPC will summarize feedback from both public and private entities

2. Ocean Plan Project Factsheet
   Deadline:
   - End of Spring, beginning of Summer 2022

   Purpose:
   - For dissemination to the general public and especially interested public and private entities
   - Brief education about the process and timeline for development of a Virginia Ocean Plan and generation of interest for future public VOPC meetings.

   Method:
   - VCPC and CZM will contribute to a shared text file on Google Drive to draft content and identify graphics.
   - Virginia CZM will design the factsheet.
   - The factsheet will be downloadable from the CZM website and emailed to a distribution list of known or potentially interested parties.

3. Ocean Plan Webpages on the CZM Website
   Deadline:
   - Initial publication by late Spring, or Summer 2022
   - Continual updates expected after milestones and important events

   Purpose:
   - To provide public access to the work of the VOPC as it is ongoing including:

  - A general overview of the project – role of CZM and VCPC, the value of ocean planning, project outline and goals
  - Newsworthy events and research
  - Lists of VOPC members or participating bodies
  - Related projects and programs that can be linked from the website – MARCO, MACO, other CZM §309 projects
  - Overviews of VOPC work completed to date

Method:

- Text files sent to Virginia Outreach Coordinator for formatting and eventual upload to the CZM website.

4. E-News Bulletins or Constant Contacts

Deadline:

- Publication as needed

Purpose:

- For dissemination to interested members of public and private bodies as well as general public.
- More in-depth and specific education and resources about the process of ocean planning than the fact sheet.
- Topics to include:
  - Meeting notes and outcomes from full VOPC meetings
  - Outcomes of §309 grant projects – Ocean Data Collection, Grant to TNC for wind turbine siting tool, etc.
  - Fisheries community outreach on ocean planning (VCU Fisheries Coordinator)
  - DWR projects – marine mammal and sea turtle conservation plan
  - New MARCO or Coastal GEMS layers/ocean planning section – mapping projects

Method:

- Text files sent to CZM Outreach Coordinator for formatting and eventual distribution via Constant Contact email.
  - Assistance with garnering contacts will be necessary – shipping companies, internet forums of potentially interested parties, other sources as identified by VOPC members

5. Public Written Comment Opportunities

Deadline:

- Potentially beginning at the end of year two of the grant

Purpose:

- For gathering public comments and distilling them into usable form for the VOPC members to address in the process.

Method:

- Comments gathered from all public meetings, recorded, and summarized for VOPC use in a text file.

6. Public Open House(s)

   Deadline:

   - No set date, but mid-way in plan development and again before plan is finalized.

   Purpose:

   - For gathering public comments and distilling them into usable form for the VOPC members to address in the process.

   Method:

   - Comments gathered from open house, recorded, and summarized for VOPC use in a text file.

OCEAN PLAN MEETING
14 June 2022
Facilitator: Laura McKay, Virginia CZM

Agenda

- Review draft plan
- Set date for meeting w/federal agencies
- Discuss funding for ocean data collection

Coordination Meetings

[Laura McKay, CZM] Travis Boyles, Acting Secretary of Natural Resources, requested fortnightly calls/meetings to coordinate offshore wind.

[Rachel Peabody, VRMC] Hope is that each agency will boil up those impacts/resources/concerns surrounding the central Atlantic call area so we can continue, as a state, to winnow down the optimal locations for offshore wind.

[Avalon Bristow, MARCO program director, RWSC] FYI for state agencies: How states are funding research for offshore wildlife (call TH 09:30).

[Pat Kinsman, Port of Virginia] Regarding the Atlantic lease area, Point of Virginia is coordinating with Virginia Maritime Association & USCG to make sure shipping channels are not involved. **New contact info: PKinsman@portofvirginia**

NSF Proposal: "Future Blue Project Brief"

[Sara Smith, Rutgers U: sarah.l.smith@rutgers.edu] Funded by an NSF Convergent Accelerator Grant

Overview: Future Blue is an intuitive online dashboard that provides projections on future ocean conditions to enable climate adaptation to create a thriving blue economy that works for everyone. We are still making decisions based on past ocean conditions and predictions. Forward looking, climate informed information for offshore ocean planning. Free to users, can see a place-based summary of future climate impacts.

Three most promising initial user groups:

1. Coastal zone managers in the 20 states planning for offshore wind
2. Conservation directors and planners for > 1000 MPAs in the US
3. Community developments organizations along our coast

How Future Blue is related to the Virginia Ocean Plan:

Project Objectives:

- Empower adaptation w/local climate projections
- Democratize access to climate information for key audiences
- Integrate diverse community interest into the data/decision making of the blue economy

Developed commitments with partners: Virginia CZM, NOAA office of Nat Marine Sanctuaries, New Bedford Ocean Cluster, Island Institute in Maine

Geographic focus is "northeast" (Maine to NC/the shelf).

Applying for Phase II of funding. Pitch to NSF 29 June; anticipate response end of July re Phase II funding.

[Patrick Kinsman, POV] Question: who are the specific VA decision makers from whom you are looking for feedback; Answer (Sarah): casting wide net (fisheries, agencies, wind developers).

[Avalon Bristow, MARCO] Question: how do you envision portal intersection; Answer (Sarah): we have had conversations about intersecting the other portals, landed on customized climate projections from ours that would sit on the other portals, but ours would be a stand-alone. Second round of funding will help develop what that would look like.

Draft Outline & Tribal Concerns

[Laura McKay, VCZM] Tribes on call inquired how far inland this plan would extend, and about emerging issues – will discuss later in this meeting. Encouraged including the need for underwater surveys of historic civilization (underwater archeology). Story about 1970s scallop fisherman who pulled up wooly mammoth remains and a weapon. Reggie Stewart, Chickahominy Tribe agrees that sums up the call.

Had briefing w/Travis Boyles, Acting Secretary of Natural Resources. New administration quite supportive of a comprehensive approach, glad for this effort. Encouraged public comment very early on. Discourage used of jargon that is not widely understood (Blue Economy) **Action: have open house, public comment sooner than originally planned**

Virginia Ocean Plan Draft Outline

[John Kuriawa, NOAA Program Officer] Reflect in the outline/draft: the best management practices on how to engage stakeholders. Trying to capture in this plan: focusing on those engagement opportunities whenever possible.

[Avalon Bristow, MARCO] hosted a DEIJ workshop, put on a jam-board a brainstormed list of stakeholders. AB will cross-reference that list to ensure no stakeholders are missing from our list. Additionally recommends a broad statement that this document will evolve as new ocean users/stakeholders emerge.

[Patrick Kinsman, POV, former ACOE] re question of Port expansion/adding it to the plan: the port has a 50-year strategic plan; concern that if you put everything in it (plan) will it be useful? Might be lengthy and not provide much value.

[Jes Watts note] recommend including POV expansion (*if not duplicative of DEQ or other agency policy*) activities, because many of the activities that originate or move through the Port (maritime traffic, international shipping terminal, possibly waterfront facilities) impact Ocean Plan jurisdiction considerations and future concerns.

[Becky Gwynn, VA Dept Wildlife Resources] encourage leaving what you have there (in draft) re port expansion - even if we revise the language

[Todd Janeski, DCR Healthy Waters Program Manager] broader comprehensive view from a port and infrastructure perspective as it relates to the seafood industry there is inclusion of shoreside operations that are reliant on fisheries that are caught in the ocean – coordination could go a long way – how we best are investing in limited resources (e.g. dredging a port to benefit one industry – how other smaller, neighboring projects could be completed while that equipment is mobilizes) or the manner in which we receive seafood off the boats (Rudy Inlet) in parking lots.

[Laura McKay, VCZM] We do not want this plan to duplicate what already exists, but it seems like we do have opportunities to coordinate for these types of activities – let's keep it in for now.

[Patrick Kinsman, POV, former ACOE] It sounds like what we're talking about with the port is that the coastal zone is being included, which is counter to what we told Tribal leaders. Rudy Inlet is a local land use issue.

[Todd Janeski, DCR Healthy Waters Program Manager] A plan like this can help guide that even in an outline form.

[Becky Gwynn, VA DWR] brings up anchorages

[Laura McKay, VCZM] We are going to need more anchorages, especially to avoid turbines and transmission cables. Asks who is involved in creating anchorage areas.

[Jes Watts note] The authority for federal anchorage regulations is held by the US Coast Guard (33 U.S.C. 471, 2071; 33 CFR 1.05-1). Anchorages specific to Virginia: 33CFR166-168.

[Laura McKay, VCZM] The changing ocean climate/what can VA do to prepare for mitigating these changes. Sarah Smith's presentation/tool will be helpful. Plan implementation. Reminder, we have time. This is a 5-year effort. If the plan is going to be useful, it will take time/effort. The plan should address the manner in which this will be done (the grant will not cover this).

[John Kuriawa, NOAA] How is this plan going to guide specific collaborative actions? Todd's example represents an opportunity and might suggest that we need to be comprehensive. Thinking about what authority or oversight the group implementing this plan possesses. How is this plan going to foster collaboration to influence better decision making? As we begin to write the actual plan, we should begin to capture opportunities where we have the ability to influence positive change/align with other groups.

[Todd Janeski, DCR] Part of the value is that this will be recognized as being a tool.

[Becky Gwynn, DWR] Potential to include emerging Tribal concerns, needs, and opportunities.

[Laura McKay, VCZM] Next agenda item. Makes note of Comms Plan doc 4-5-22.

LM is capturing this directly in the comms plan, in green

[Avalon Bristow, MARCO] Potentially inclusion in MARCO listserv/working w/MARCO comms team.

[Laura McKay, VCZM] Shared regional priorities are optimally captured by focusing on each state determining their own priorities, then seeing where the common threads lie.

[Virginia Witmer] Important to continue working on this communication plan, and be clear in the outline as far as public vs stakeholder etc.

[Will Isenburg, VA CZM] Public surveys

LM walks us through web pages and VAOP folder fact sheet.

[Laura McKay, VCZM] What else should go in this fact sheet?

[Jes Watts note] Is this fact sheet/all public facing resources accessible?

[Todd Janeski, DCR] Recommends including commercial fisherman in the visual aids, perhaps replacing one of the pictures of wildlife. Recent designation of Hudson canyon as a Marine Sanctuary. Consider removing the canyon references – taking commercial fisherman into account so as to avoid perceptions of this team driving any bias.

[Becky Gwynn, DWR] Recommends characterizing whale shark with a term other than "endangered" (visual aid description text).

[Laura McKay, VCZM] Schedule talk.

Open House:

Topic tables (shipping, offshore wind, etc.), the MARCO portal for attendees to explore, and a mechanism to capture their input and contact info. While keeping in mind that we do not want to squelch any ideas – bottom-up approach. *Dates captured in doc.*

Meeting w/Federal Agencies:

Working with Federal agency schedule. Holding Tuesday, 18 November.
Share draft outline, objectives with these agencies, and gather input.

Roster is in VOP folder.
Who in the USCG should come to this meeting?

[Jes Watts note] Recommend Sector Hampton Roads (Sector Virginia? *), Prevention Department. Potentially Waterways Management (WWM) Division.

*Sector area of responsibility covers the Atlantic Coast from the Virginia/Maryland border to the Virginia/North Carolina border, the Virginia portion of the Chesapeake Bay and its tributaries, the Virginia portion of the Intracoastal Waterway, some inland lakes and the busy commercial ports that comprise the Port of Virginia.

End.

Virginia Ocean Plan

Draft Outline- not for Distribution

*(**Updated May 27, 2022** to reflect Tribal input received 4-25-22 and Acting Secretary of Natural & Historic Resources' input received 5-26-22)*

*(**Updated again June 14, 2022** in green and red fonts to reflect state entities' further edits.)*

I. Introduction

- Statement of Need for a Virginia Ocean Plan (value added of a plan) and Process for Developing the Plan
- Current state of Virginia's Ocean (include reference to separate 2021-25 Virginia Marine Debris Reduction Plan)[1]
- Brief History of Ocean Planning in the Region
- Description of Virginia Ocean Planning Committee
- Description of Stakeholder Engagement Efforts to Develop the Plan (*be sure to make this very comprehensive and reference the appendix A)*
- Add statement about DEIJ, and that efforts were made to be inclusive of ocean user perspectives in the development of the Plan, but that it could evolve as new ocean uses arise, and/or as this Plan is implemented.

For each section of the plan, we need to lay out policy goals and how these would be implemented by decision-makers. This will depend on what authority each entity has and how entities can collaborate with each other. Need to align independent efforts and coordinate them.

II. Supporting *Existing* Ocean Uses to Ensure Sustainability and Promote a Healthy Ocean

- For each existing human use of the ocean, how can we make it more sustainable? For each use, marine habitat and species protection will be addressed.

Fisheries and Recreation

The plan should include identification of valuable areas for commercial and recreational fishing and non-consumptive recreation. Recreational use of Virginia's ocean is

[1] Katie Register & Laura McKay, *2021-2025 Virginia Marine Debris Reduction Plan*, VIRGINIA COASTAL ZONE MANAGEMENT PROGRAM (Nov. 2021), http://www.longwood.edu/cleanva/images/Virginia%20Marine%20Debris%20Reduction%20Plan%20-2021-25%20as%20of%2011-2021.pdf.

important both to local communities and to visitors, as tourism is the highest economic value industry of the current economy.[2]

Military Use
The large military presence in Virginia necessitates a section of the plan that addresses the coordination of military use areas with other commercial and recreational uses such as shipping and fishing to ensure the military's security concerns are accounted for.[3]

Shipping
The plan should address commercial shipping concerns and explain how shipping lanes will interact with areas designated for other uses.

Mining
The plan should provide regulatory guidance for the potential sand, gravel, and other mining operations in Virginia's offshore waters and should contain information about the environmental impacts of those practices to determine how to prioritize mining within the network of other uses and conservation objectives.[4]

Areas of Tribal Interest
The plan should/could contain a section in which tribes can describe their current and/or historical sustainable use of offshore waters and provide any Traditional Ecological Knowledge that they wish to share. Additionally, areas of cultural or historic significance to the tribes may need special protection or mention in the plan.[5]

Areas of General Cultural/Historic Interest
The plan should address areas of cultural or historic interest such as shipwrecks, and other submerged cultural/historic resources.

III. Supporting *Emerging* Ocean Uses to Build a Sustainable Ocean Economy

For each emerging or future human use of the ocean, how can we make it more sustainable? For each use, marine habitat and species protection will be addressed.

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[2] *Economic Impact of Visitors in Virginia 2020*, TOURISM ECONOMICS (2020) https://www.vatc.org/wp-content/uploads/2021/09/Virginia-Tourism-Economic-Impact-2020.pdf. Even under pandemic restrictions tourism in Virginia represented 3.1% of the economy for 2020.

[3] *Virginia Military Bases*, MILBASES, https://www.milbases.com/virginia (last updated 2022). Virginia is home to twenty-eight military bases including ten Navy and seven Coast Guard bases.

[4] *Offshore Sand and Heavy Minerals Resources*, VIRGINIA ENERGY, https://energy.virginia.gov/geology/ocssands.shtml (last visited Mar. 5, 2022).

[5] *Cultural Heritage Marine Protected Areas*, NOAA, https://marineprotectedareas.noaa.gov/nationalsystem/culturalheritage/ (last visited Mar. 10, 2022). This NOAA site lists current Marine Protected Areas and provides tools on how to best implement new areas for protecting cultural heritage.

Offshore Renewable Energy
Virginia is moving ahead quickly with offshore wind energy development. This plan should help identify specific locations within BOEM's Central Atlantic Call Area that are appropriate for offshore wind development. The plan should provide a regulatory framework for that and other facility development such as wave and tidal energy.[6]

Offshore Aquaculture
Offshore aquaculture could become an important future use in ocean waters off Virginia. There is renewed interest in seaweed and fish farming.[7] Ocean-borne invasive species could negatively affect Virginia's nearshore shellfish aquaculture industry. The plan should address invasive species management, climate change challenges and opportunities related to ocean aquaculture, and development of new ocean aquaculture areas off Virginia.

Marine Ecotourism
The plan should identify ways to promote marine ecotourism and associated jobs, especially for Tribal members and underserved communities. An industry already exists for whale watching and pelagic bird watching but could be expanded and include renewable energy tourism. Marine wildlife and habitat protection could be facilitated through guide certification (similar to the program for land and near shore guide certification developed by CZM). Promotion efforts could be conducted in collaboration with the Virginia Tourism Corporation. Connections between nearshore tourist attractions (such as lighthouses, ports and working waterfronts) and offshore interests (such as shipping, boating, offshore wind and fishing) could be made and promoted to increase awareness and care for the ocean environment.

Port Expansion
Should the plan help identify the process for selecting suitable areas for expansion of important ocean economy facilities such as offshore wind staging, commercial seafood, marine construction, shipping?[8]

Issue to discuss: If the Ocean Plan is specifically focused on Virginia's ocean and not the bay, coast, or other non-ocean areas, should planning for port expansions to accommodate offshore wind staging and other ocean uses and to ensure protection of sensitive lands (e.g. wetlands, important bird areas, etc) be included in the plan?

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[6] *Seajacks Opens Operational Base in Virginia Beach*, OEDIGITAL (Feb. 22, 2022), https://www.oedigital.com/news/494486-seajacks-opens-operational-base-in-virginia-beach.
[7] *Shellfish Aquaculture, Farming and Gardening*, VIRGINIA MARINE RESOURCES COMMISSION, https://www.mrc.virginia.gov/Shellfish_Aquaculture.shtm (last visited Mar. 5, 2022).
[8] *See* Nathan Crawford, *Port of Virginia approves $61 million construction bid to expand rail capacity*, WAVY (Nov. 9, 2021, 2:53 PM), https://www.wavy.com/news/business/port-of-virginia-approves-61-million-construction-bid-to-expand-rail-capacity/; *Craney Island*, THE PORT OF VIRGINIA, https://www.portofvirginia.com/facilities/craney-island/ (last visited Apr. 12, 2022). The expansion of Virginia port facilities is happening already, so the guidelines can help the process as it continues.

Potential revised language for discussion:
The plan should aid in coordinating among relevant ocean focused state agencies and port expansion projects as they have a direct impact on the ocean through increased traffic. Port expansion will also bring expansion of important ocean economy facilities such as offshore wind staging, commercial seafood, and marine construction.

Additional Anchorage Areas: will need to work with Port and USCG on this and wind developers, etc.

IV. Addressing the Changing Ocean Climate

- What can Virginia do to prepare for and mitigate changes in the ocean?

Description of Changes: Sea Temperature, Ocean Acidification[9], Ocean currents
The plan should describe these changes and note all the resources for tracking the changes.

Addressing Species Range Shifts
The plan should address climate impacts to all marine wildlife including seabirds, fish, marine mammals, sea turtles, etc. It should address the management of shifts in species range as temperatures warm and currents slow and shift.[10]

V. Plan Implementation

The plan should describe how it will be implemented and financed.

Monitoring, Modeling & Plan Update Schedule
A key to successful maintenance of a plan in the long term is through development of tools for baseline monitoring and intensive monitoring of critical concern areas.[11]
The plan should also propose a funding mechanism to ensure implementation, monitoring and updating of the plan occurs for as long as needed.

Communication and Education

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[9] Julia A. Ekstrom et al., *Vulnerability and Adaptation of US Shellfisheries to Ocean Acidification*, 5(3) NATURE CLIMATE CHANGE 207, (2015), https://www.researchgate.net/publication/272923440_Vulnerability_and_adaptation_of_US_shellfisheries_to_ocean_acidification.

[10] VIRGINIA INSTITUTE OF MARINE SCIENCE, VANISHING AND EMERGING ECOSYSTEMS OF COASTAL VIRGINIA: CLIMATE CHANGE IMPACTS AND ADAPTATION (2008), https://www.vims.edu/research/units/legacy/icccr/_docs/coastal_ecosystems.pdf.

[11] Critical concern areas might include invasive species, cetaceans, military, commercial and recreational fishing, or other ocean uses.

Communicating development of the plan (see Appendix B) and providing ocean education will aid in connecting the goals of Virginia's plan to the public and private stakeholders impacted by the plan.[12]

VI. Appendices

A. Description of all stakeholder engagement efforts - (especially in discussing policy improvements)
B. Coastal Policy Center paper on other state ocean plans
C. Communications Plan
D. Links to other resources

Above from NOAA NOS website July 1, 2022

[12] Shreya Chaudhuri, *There is a Need for Ocean Environmental Education*, PROJECT PLANET (Nov. 15, 2019), https://projectplanet.world/there-is-a-need-for-ocean-environmental-education/.

Communications/Engagement Plan (updated October 2022)

Virginia Coastal Policy Center and VA CZM Program Responsibilities for the Virginia Ocean Plan

The Virginia Coastal Policy Center (VCPC) will take a supporting role in facilitating the creation of the Virginia Ocean Plan by aiding in communications among members of the Virginia Ocean Planning Committee (VOPC - led by the Virginia Coastal Zone Management Program Manager), the public, and other interested parties. The CZM Program Manager and Outreach Coordinator will be the VCPC's primary contacts for communications work throughout the ocean planning process. To clarify expectations, this communications plan spells out known deadlines for deliverables and expectations as they are currently understood.

1. Committee Meeting Coordination
   Timing:
   - As agreed by VOPC members, VCPC and CZM.

   Purpose:
   - For progressing work on the Virginia Ocean Plan.

   Method:
   - VCPC will schedule meetings in collaboration with the CZM Manager and CZM will handle public notice publication when needed
   - VCPC will record minutes for use in communications and plan development
   - VCPC will summarize feedback from both public and private entities
   - Leverage MARCO and MACO planned meetings to communicate VA Ocean Plan progress through Avalon Bristow, MARCO Program Director during Year 1

2. Ocean Plan Project Factsheet
   Deadline:
   - End of Summer 2022 (completed)

   Purpose:
   - For dissemination to the general public and especially interested public and private entities
   - Brief education about the process and timeline for development of a Virginia Ocean Plan and generation of interest for future public VOPC meetings.

   Method:
   - VCPC and CZM will contribute to a shared text file on Google Drive to draft content and identify graphics.
   - Virginia CZM will design the factsheet.
   - The factsheet will be downloadable from the CZM website and emailed to a distribution list of known or potentially interested parties.

3. Ocean Plan Webpages on the CZM Website
   Deadline:
   - Initial publication by Summer 2022 (completed)
   - Continual updates expected after milestones and important events

Purpose:

- To provide public access to the work of the VOPC as it is ongoing including:
    - A general overview of the project – role of CZM and VCPC, the value of ocean planning, project outline and goals
    - Newsworthy events and research
    - Lists of VOPC members or participating bodies
    - Related projects and programs that can be linked from the website – MARCO, MACO, other CZM §309 projects
    - Overviews of VOPC work completed to date

Method:

- Text files sent to Virginia Outreach Coordinator for formatting and eventual upload to the CZM website.

4. E-News Bulletins or Constant Contacts

Timing:

- Publication as needed
- Use MARCO Listserve and Virginia CZM contacts list

Purpose:

- For dissemination to interested members of public
- More in-depth and specific education and resources about the process of ocean planning than the fact sheet.
- Topics to include:
    - Meeting notes and outcomes from full VOPC meetings
    - Outcomes of §309 grant projects – Ocean Data Collection, Grant to TNC for wind turbine siting tool, etc.
    - Fisheries community outreach on ocean planning (VCU Fisheries Coordinator)
    - DWR projects – marine mammal and sea turtle conservation plan
    - New MARCO or Coastal GEMS layers/ocean planning section – mapping projects

Method:

- Text files sent to CZM Outreach Coordinator for formatting and eventual distribution via Constant Contact email.
    - Assistance with garnering contacts will be necessary – shipping companies, internet forums of potentially interested parties, other sources as identified by VOPC members

5. Engagement with specific stakeholder groups - local governments, industries, NGOs, underserved communities

Timing:

- Fall 2022 and throughout 2023

Purpose:

- To gather sector-specific ideas for plan elements and potential policies, management measures or best practices to improve ocean management
- To distill comments into usable form for the VOPC members to address in the plan development process.
- To reach underserved communities with their thoughts, needs and ideas for ocean planning

Method:

- Small focus group meetings either in person or virtually
- Participatory mapping could be used as a tool to describe spatial needs
- DEQ's EJ Coordinator, Grace Holmes, is available to assist with reaching underserved communities

6. Engagement with General Public

Timing:

- Spring 2023 (?), again when the draft plan is available, and finally to unveil the final plan

Purpose:

- To gather public comments and distill them into usable form for the VOPC members to address in the plan development process.
- When draft plan is available to seek comments on the draft
- When plan is finalized to unveil and present final plan to the public

Methods:

- Hold open house events. Use combination of very brief presentation followed by self-selected topic tables (e.g., offshore wind energy, fishing, shipping, military, recreation, conservation, offshore aquaculture, etc.) where participants can discuss with a technical expert and leave comments and ideas on index cards
- Comments gathered from all public meetings, recorded, and summarized for VOPC use in a text file.
- Participatory mapping could be used for collecting spatially explicit data.
- Emailed surveys could be conducted by CZM and the results incorporated into public input compiled from public meetings.

Virginia Ocean Plan – Fall 2022 Lessons Learned & Path Forward

Written by:
Kacey Hirshfeld (VIMS '23)
Karlin Foor (W&M Law '23)
Chelsey Noble (W&M Law '23)

I. Introduction

"[T]he US National Ocean Council describes [marine planning] as an: 'opportunity for all coastal and ocean interests in a region to share information and coordinate activities [in order to] promote more efficient and effective decision-making and enhance regional economic, environmental, social, and cultural well-being.'"[1] In embarking on the drafting of an Ocean Plan, Virginia is aspiring to similar goals. Thus far, the Virginia Ocean Plan is in the very early stages of development. Last year two students from William & Mary Law School who were enrolled in the Virginia Coastal Policy Center Practicum, hereinafter referred to as VCPC, researched and wrote a white paper on other state Ocean Plans and what lessons Virginia could learn from both their successes and failures. In the Fall 2022 semester, two William & Mary Law students, Karlin Foor and Chelsey Noble, and one Virginia Institute of Marine Science (VIMS) student, Kacey Hirshfeld, built on the progress of last year's research. These three students developed research questions to support the development of Virginia's Ocean Plan. They then initiated engagement of seven state natural resource agencies, the Virginia Governor's Office, the Port of Virginia, the Ocean Fisheries Coordinator at Virginia Commonwealth University, Director of the Institute for Innovation and Entrepreneurship at Old Dominion University, and the Associate Dean for Research at VIMS, and asked each interviewee the same battery of questions. The answers were collated and uploaded to a VCPC database for future use during the drafting stage of the Virginia Ocean Plan. The students then further condensed the responses into a presentation for Virginia's Ocean Planning Committee composed of state and federal partners, all stakeholders in the outcome of the Plan. Kacey Hirshfeld from VIMS presented the condensed research on behalf of VCPC. Below is a written summary of the progress made by VCPC students in the Fall 2022 semester. Additionally, Karlin Foor conducted additional comprehensive research on the status of all coastal states' ocean plans and drafted a guide and list of the research that was conducted.

II. Agency Interviews

Interviews occurred with seven state agencies and four other stakeholder entities as identified by the VA Coastal Zone Management Program. A semi-structured approach was taken, with the same set of questions being posed to each agency, but with additional time and space for open conversation being retained. Topic areas included but were not limited to best management

[1] *Community and Environment in Marine Spatial Planning: What is Ocean Planning?*, DUKE UNIV., https://sites.duke.edu/planning/research/rop/.

practices, sources of and solutions for conflicts, and planning needs. Following each conversation, the main takeaways were summarized, creating a database of key input following the completion of all interviews. A presentation on the findings was given to the Ocean Planning Committee comprised of representatives of state agencies, federal agencies, and tribes following the completion of the interviews. The opportunity for additional input, either verbally or written, was also given following the presentation.

From the interviews, the five main topic areas were stakeholder engagement, data and reviews, authority and administration, comprehensive/holistic planning, and ocean siting. In addition to these high-level areas, specific input was received and organized and was included with the presentation materials. While specific input was sought from agencies, respondents often provided more high-level input. Due to this, the students completed additional research on other states' best management practices which can be found in the section below. Recommendations for soliciting specific information moving forward are also included below.

Stakeholder Engagement

Throughout multiple interviews, agencies highlighted the importance of early and frequent communication with stakeholders throughout the Ocean Plan development process. The mentioned stakeholders included state agencies, federal agencies, tribes, industry, other ocean users, community members, and the public. Through ongoing consultation with these stakeholders, the diverse perspectives they represent can be incorporated into the development of the Ocean Plan, allowing for a more effective and long-lasting plan. Interviewees felt written correspondence was particularly helpful, and praised MARCO, the Mid-Atlantic Regional Council on the Ocean, as an example of effective stakeholder collaboration.

Data & Reviews

The second most common topic heard from interviewees was the importance of decisions within the Ocean Plan being data-driven. Interviewees highlighted the breadth of research currently being done in Virginia and suggested that the Ocean Plan rely on existing technical groups, committees, and research for the basis of the plan. It was frequently suggested that baseline measurements be taken to create a comparison point as technological advances move forward and ocean uses become more diverse and encompassing. This was especially suggested for species and fisheries numbers. Consistency in funding was also mentioned as a need to ensure the continuity of key research for the success and longevity of the Ocean Plan. Periodic reviews were suggested, highlighting the need for continuously updated and robust data.

Authority & Administration

A major question from the state agencies centered on how the Ocean Plan would be administered and by whom. This also included questions pertaining to regulatory authority and jurisdiction. While agencies did not have recommendations in this area, this is a place where

Virginia can look to other states for suggestions. These recommendations can be found in the 'What We Have Learned from Other Coastal States' section below.

Comprehensive/Holistic Planning
The importance of comprehensive and holistic planning was emphasized in multiple interviews. It was suggested that multi-use of ocean space be prioritized, allowing for Virginia to become a leader in this type of planning. This type of overlap was also thought to allow capitalization of synergies for increased success in multiple sectors. Existing management plans, especially around fisheries, were suggested to be incorporated into the plan framework as well.

Ocean Siting
While only mentioned briefly, the importance of proper ocean siting came up in multiple conversations. This idea ties back to the importance of research, since information on fisheries and species will be necessary for decision-making. Agencies suggested that when separation of uses is not possible, that a multi-use approach be considered and encouraged where possible. Proper ocean siting can prevent negative impacts to marine wildlife and mitigate use conflicts before they arise and therefore is an important component of all planning conversations.

Specific Input
Specific input from agencies was received around fisheries/species, mining, and in the form of success stories on endangered species management and beneficial use of dredge material. These specific recommendations/inputs can be found in the appendix below.

III. Lessons from Other Coastal States

As mentioned above, there are many factors that impact the success or failure of a state's Ocean Plan. Review of Virginia Coastal Policy Center case studies of other state Ocean Plans' failures revealed some issues Virginia may face that can be overcome through proactive management. South Carolina's Ocean Plan, for example, is a great illustration of what can happen if an Ocean Plan lacks forward momentum, does not have directed milestones, and does not continually progress towards its objectives.

On the other hand, described below are some ways in which states combatted these problems and succeeded in implementing and maintaining their Ocean Plans. During the process of researching various states' Ocean Plans and best management practices, some key practices were found that, when properly implemented, led to success. A few of these practices are (1) creating and utilizing technical working groups, (2) establishing a detailed action plan, and (3) defining the entity with regulatory authority and responsibility for administration of the Ocean Plan.

Technical Working Groups

The first practice other states implemented with great success was the utilization of technical working groups. Massachusetts and New York both relied heavily on the usage of multiple technical working groups to advance the creation of the state's Ocean Plan. These technical groups were comprised of scientists and experts convened around a specific topic, creating an opportunity for detailed and focused planning in key areas of the Ocean Plan. For example, in Massachusetts, six technical work groups were established: Habitat, Fisheries, Transportation and Navigation, Sediment and Geology, Cultural Heritage and Recreational Resources, and Energy and Infrastructure.[2] In both states, establishing these groups allowed for detailed review, mapping, and planning using data focused on subsections of the plan. These groups then produced a report of their findings that was given to the overall planning body, creating a clear path from data utilization to planning implementation.[3]

In a different but similarly successful vein, Washington utilized multiple workshops held in succession to develop draft goals and objectives for the Marine Spatial Plan.[4] These workshops, convened by the State Ocean Caucus and Washington Sea Grant, included both "government officials and local stakeholders with a vested interest in or management authority over Washington's marine resources and waters."[5] Washington's use of these workshops allowed them to create a successful Ocean Plan that integrated the feedback received and provides another possible format for receiving important input.

Oregon's legislature created a "Task Force" that "held a series of community listening meetings on the Oregon coast to find out what issues were of concern to the public. Their study covered a wide variety of existing and potential ocean resource management issues off Oregon in both state and federal ocean areas."[6] They then integrated the identified problems into the Ocean Plan document.[7]

Action Plan

Another tool that helped to create success in other states was a step-by-step, highly-detailed action plan to clearly define which agencies and/or groups are responsible for what

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[2] *2021 Massachusetts Ocean Management Plan*, MASS. EXEC. OFF. OF ENERGY AND ENV'T AFFS. (2021), https://www.mass.gov/files/documents/2022/02/25/ma-ocean-plan-2021-vol-1a.pdf.

[3] *Review of The Massachusetts Ocean Management Plan*, MASS. EXEC. OFF. OF ENERGY AND ENV'T AFFS. (2020), https://www.mass.gov/files/documents/2021/01/08/ocean-plan-review-2020.pdf (providing a synopsis of the various working groups' input).

[4] Bridget Trosin, *Workshop Summary Report*, WASH. COAST MARINE SPATIAL PLANNING 9 (2013), https://www.msp.wa.gov/wp-content/uploads/2013/07/MSP_Workshop_Summary_Report_2013.pdf.

[5] *Id.*

[6] *Oregon Ocean Plan*, OREGON DEP'T OF LAND CONSERVATION AND DEV. 5 (1991), https://www.oregon.gov/lcd/OCMP/Pages/Ocean-Plan.aspx.

[7] *Id.*

components of establishing and implementing the state's Ocean Plan.[8] An example of a state where this was particularly successful was New York, which published a 128-page action plan that broke down their Ocean Plan's objectives, provided step-by-step directions on how to achieve a goal, the timeframe for that step, and which entities would be in charge of it.[9] Having such a clear, concise plan helped all involved parties work towards achieving their shared goal. In states that were unsuccessful in establishing their Ocean Plans it was often due to a loss of momentum, leading to failure of the overall creation and implementation of the plan. A detailed action plan, such as the one established by New York, helps to prevent a loss of momentum since each step of the process is clearly laid out and directed to one group or agency. While this tool does require a fair amount of initial time input, it proved to be a worthwhile investment.

Establishing Authority and Administration

As was mentioned in the first section on agency interviews, many state agency representatives were concerned regarding the authority and administration or enforceability of the Virginia Ocean Plan beyond the State's three nautical mile jurisdiction. Addressing this concern early on would result in a better end product, both through ensuring the success of the creation of the plan as well as the implementation and longevity of the plan. The approaches of other states offer excellent guidance and options for Virginia to pursue.

For example, the Oregon Ocean Resources Management Plan, "commonly referred to as the 'Ocean Plan'. . . was not confined just to state ocean waters," and in fact, "[a] number of issues involving the federal ocean area, such as oil and gas drilling and marine mineral exploration, were discussed and policies developed" with the intent that they would "apply to the continental margin off Oregon, not just state waters."[10] While "not 'mandatory' [i.e., there is no enforcement], the 1991 Legislature recognized that these policies were important guideposts or starting points for a more detailed plan and policies aimed at Oregon's Territorial Sea where the state does indeed have jurisdiction."[11] Oregon took the Coastal Zone Management Act's "consistency" requirements in section 307(c)(1) extremely seriously and stated the following: "[t]o achieve the full benefits of this expanded state authority, Oregon will need ['']enforceable['] policies within the Oregon Coastal Management Program pertaining to protection of ocean resources" . . . including "constitutional provisions, court decisions, statutes, regulations, administrative rules, acknowledged land use plans and implementing ordinances."[12] They went on to say, "this Plan establish[es] the policy framework for enacting

[8] *New York Ocean Action Plan*, N.Y. DEP'T OF ENV. CONSERVATION (2017), https://www.dec.ny.gov/docs/fish_marine_pdf/nyoceanactionplan.pdf.
[9] *Id.*
[10] *Oregon Ocean Plan*, OREGON DEP'T OF LAND CONSERVATION AND DEV. (1991), https://www.oregon.gov/lcd/OCMP/Pages/Ocean-Plan.aspx.
[11] *Id.*
[12] *Id*. at 8.

enforceable policies" and "[t]he new federal law is a strong incentive for the state to prepare a plan for Oregon's territorial sea which provides the needed procedural clarification and regulatory detail to assure policy enforceability."[13] In practice, Oregon included "the entire continental margin from mean high water along the coast across the continental shelf and down to the bottom of the continental slope" in their Oregon Ocean Stewardship Area and acknowledged that this "does not claim ownership or possession" and will not "change . . . the jurisdictional boundaries of the state nor the federal legal regimes."[14] However, they believe creating the Oregon Ocean Stewardship Area is "advancing the principles of ecologically sound ocean resources management."[15] In short, Oregon plans to take full advantage of the consistency review offered under the Coastal Zone Management Act and for the Ocean Plan to be their guide in executing this "strong incentive" in "new federal law."[16]

Washington State also enacted an Ocean Plan with a successful authority and administration scheme that extended beyond the traditional state jurisdiction of 3 nautical miles. Washington State's Plan study area covers "marine waters of the Pacific Ocean adjacent to Washington's coastline from the intertidal zone out to the continental slope. It extends from ordinary high water on the shoreward side out to a water depth of 700 fathoms (4,200 feet) offshore – a distance of 35 to 55 nautical miles."[17] Additionally, "[t]he Study Area was also based on the expected locations for potential new federal activities, and where effects on the state's coastal uses or resources from those new uses or activities are reasonably foreseeable."[18]

The Oregon and Washington approaches to establishing authority beyond the three nautical mile jurisdiction can help to inform how to develop Virginia's Ocean Plan so that it can have an impact beyond the three nautical mile jurisdiction line. While in some ways these policies seem to lack any force, they do act as guideposts and would serve as an announcement of the State's expectations. Additionally, while those lands are under federal jurisdiction, Virginia would still "ha[ve] the ability to impact decision-making in federal waters through authorities granted under the CZMA, and through participation in interstate and federal fisheries management councils, and other state-federal initiatives, such as those led by MARCO, Northeast Regional Ocean Council (NROC) and the Bureau of Ocean Energy Management (BOEM)."[19]

[13] *Id*.
[14] *Id*. at 13.
[15] *Id*.
[16] *Id*. at 8.
[17] *Washington Marine Spatial Plan* 20, WASH. DEP'T OF ECOLOGY (2017), https://apps.ecology.wa.gov/publications/documents/1706027.pdf.
[18] *Id.*
[19] *New York Ocean Action Plan*, N.Y. DEP'T OF ENV. CONSERVATION 7 (2017), https://www.dec.ny.gov/docs/fish_marine_pdf/nyoceanactionplan.pdf.

IV. Recommendations for Next Steps

Considering the current stage of the Virginia Ocean Plan, the best next step would be for the Virginia Ocean Planning Committee to create a thorough action plan. This plan should include details about: responsibilities of the various parties, Ocean Plan boundaries, authority for administration, timeframes, and steps to be taken. This action plan will help to create structure for the administration and authority of the plan in absence of an executive or legislative directive. The creation of an action plan will allow for a more streamlined process for the creation and implementation of the Ocean Plan.

Following this, technical work groups should be established around the current topical areas of the draft Ocean Plan. These technical groups, to be comprised of scientists, agency staff, and other stakeholders, should assist in the review of existing information within their area and the subsequent creation of written recommendations for the Ocean Plan. These recommendations should then be given to the existing larger Ocean Planning Committee which can then compile the information into a comprehensive Ocean Plan.

Finally, an independent board or commission could be created in Virginia to move the Ocean Plan forward through collaboration. This independent board or commission would be charged with executing the creation of the plan and would have the authority to compel action from necessary stakeholders. Such a step would require legislative action but would ensure clear authority for implementation and enforcement of a Virginia Ocean Plan.

V. Conclusion

In conclusion, Virginia stands to greatly benefit from a successful Ocean Plan. Such success could be ensured by Virginia establishing an independent board or commission tasked with focusing on technical working groups, action plans, and establishing authority for administration.

VI. Appendix - Specific Input from State Agencies

Wildlife

- Additional research on the impact of offshore wind development on fisheries was requested.
    - Particular interest included economically important migratory and species that use the Chesapeake Bay as a nursery habitat.
- Changes to species' ranges due to climate change were mentioned as a necessary consideration in future years.
- Commercial and recreational fisheries should be treated as separate entities since the management for each of these sectors will differ.
- Participation in the Regional Wildlife Science Collaborative for birds and bats is recommended.

Mining

- Interest in the Ocean Plan addressing a permitting system ahead of a potential first request for offshore mining.
    - Authority will need to be defined and research on impacts needs to be conducted.
- Data on potential sources of sand and minerals as a byproduct of dredging operations for use in emergency site restoration and routine beach nourishment should likely be included in the Ocean Plan and the root cause of erosion should be considered ahead of all beach nourishment considerations.

Port Authority

- After engaging in discussions with the Port Authority and the Virginia Maritime Association (VMA) to initiate collaboration on the identification and siting de-confliction for a new anchorage, students were alerted to the fact that there are already talks underway regarding potential new anchorage locations.
- These discussions are seemingly ongoing between the DOD, Coast Guard, Port Authority, and other commercial parties. At this time, students are waiting to see if any new developments arise from these discussions.

Success Stories

- Mining: In June 2022, the City of Virginia Beach partnered with the Port of Virginia to use their dredge spoil material from Thimble Shoals Channel maintenance dredging to replenish 400,000 cubic yards at Ocean Park Beach.
- Endangered Species: In North Carolina, through collaboration between state and federal agencies, authorities were able to determine that climate change caused a shift in the migratory timing of sea turtles, leading to increased mortality from interactions with

monkfishing gear. Limitations on gear types and timing were put in place and resulted in a drastic reduction of sea turtle mortality showing success in collaboration and stakeholder engagement.

State Ocean Plan Status Guide

- This guide to the 23 coastal states (and Vermont), is based on research conducted by VCPC law student Karlin Foor and is current to November 2022. It is organized alphabetically according to the level of progress the state has made towards their Ocean Plan from having an Ocean Plan, to being in progress towards an Ocean Plan, to not having an Ocean Plan. She included any additional facts found during her research for each state.

HAS AN OCEAN PLAN

- California: Water Quality Control Plan: Ocean Waters of California: California Ocean Plan
    - Link: https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf

- Hawaii: The Hawaii Ocean Resources Management Plan
    - Link: https://files.hawaii.gov/dbedt/op/czm/ormp/ormp_update_reports/2020_ormp_final_printable_lowres.pdf

- Massachusetts: The Massachusetts 2015 Plan
    - Link: https://www.mass.gov/files/documents/2016/08/ua/2015-ocean-plan-v1-complete-low-res.pdf and https://neoceanplanning.org/wp-content/uploads/2018/01/Northeast-Ocean-Plan_Full.pdf

- New York: The New York Ocean Action Plan
    - Link: https://www.dec.ny.gov/docs/fish_marine_pdf/nyoceanactionplan.pdf

- Oregon: Oregon Ocean Resources Management Plan
    - Link: https://www.oregon.gov/lcd/OCMP/Pages/Ocean-Plan.aspx
    - https://www.oregon.gov/lcd/OCMP/Pages/Ocean-Plan.aspx

- Rhode Island: Rhode Island Ocean Special Area Management Plan
    - Link: https://neoceanplanning.org/wp-content/uploads/2018/01/Northeast-Ocean-Plan_Full.pdf and https://seagrant.gso.uri.edu/oceansamp/pdf/samp_crmc_revised/RI_Ocean_SAMP.pdf
    - Additional Facts: Rhode Island is also a part of the Northeast Ocean Plan.

- Washington:
    - Link: https://apps.ecology.wa.gov/publications/documents/1706027.pdf

IN PROGRESS

- Florida:
  - Status: No ocean plan yet, but they will be developing one soon:
  - Link: https://floridapolitics.com/archives/299777-florida-oceans-and-coasts-strategic-plan-to-be-developed/

- Virginia:
  - Status: In progress as an outline.
  - Link: See above, no link yet, as it is just an unpublished outline at this stage.

HAS NO OCEAN PLAN

- Alaska:
  - Status: The below article speaks to Alaska's protest of federal attempts to create an Alaska Ocean Plan. In my research I was unable to find a state initiative to create an Ocean Plan.
  - Link: https://www.alaskajournal.com/business-and-finance/2013-05-02/final-draft-ocean-plan-out-management-details-unclear
  - https://www.commerce.alaska.gov/web/Portals/4/pub/CIAP-BSCA-Coastal_Management_Plan_Update-PN.pdf?TSPD_101_R0=0890181cafab2000e616520273dc6808f9719c2e59736a8749d93b80ab511395e5ad11d22f599f5b08b790ba7f143000f6ef157a21c27a28ee06b460b9a83643ec13675aa3382ff30b542d62924f2e6fc1e373662c1894b2636b16de1147de9e
  - Additional facts: Alaska does not have a coastal zone management program either.

- Texas:
  - Additional Facts: Texas has no Ocean Plan that I can find, but the Texas General Land Office has an Area Contingency Plan
  - Link: no link.

- Louisiana:
  - Additional Facts: No Ocean Plan that I could find, but they have a Comprehensive Master Plan for a Sustainable Coast
  - Link: http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan_Web-Book_CFinal-with-Effective-Date-06092017.pdf

- Mississippi:
  - Additional Facts: No Ocean Plan, but in 2021 their Governor announced the RESTORE Council to restore Coastal Water Quality and Nearshore Habitat. Mississippi and Alabama are also a part of the Sea Grant Mississippi-Alabama Sea Grant Consortium (see link below)

    - Link: https://www.mdeq.ms.gov/governor-tate-reeves-announces-approval-of-mississippi-restoration-projects/

- Alabama:
    - Additional Facts: No Ocean Plan, but there is a Sea Grant Mississippi-Alabama Sea Grant Consortium
    - Link: https://masgc.org/gmrp

- Georgia:
    - Additional Facts: Has a Coastal Management Program, but no Ocean Plan that I can find.
    - Link: https://coastalgadnr.org/CoastalManagement

- South Carolina:
    - Additional Facts: South Carolina started an Ocean Plan, but it is not currently in progress. Their drafting of the Ocean Plan failed; below is a link to the South Carolina Ocean Report.
    - Link: https://scdhec.gov/sites/default/files/Library/CR-010549.pdf

- North Carolina:
    - Additional Facts: Has no Ocean Plan, no progress since 2009.
    - Link: https://ncseagrant.ncsu.edu/ncseagrant_docs/products/2000s/developing_mgmt_strategy.pdf

- Maryland:
    - Additional Facts: Maryland is a part of the Mid-Atlantic Regional Ocean Action Plan, but does not have their own Ocean Plan, or any plans to create one.
    - Link: https://dnr.maryland.gov/ccs/Pages/coastal_resources/oceanplanning.aspx

- Delaware:
    - Additional Facts: Delaware is a part of the Mid-Atlantic Regional Ocean Action Plan, but they do not have their own Ocean Plan or any intentions of creating one at this time.
    - Link: https://dnrec.alpha.delaware.gov/coastal-programs/planning-training/oceanplanning/

- New Jersey:
    - Additional Facts: New Jersey has a Coastal Management Program through their Department of Environmental Protection, but no Ocean Plan.
    - Link: https://www.nj.gov/dep/cmp/

- Connecticut:
    - Additional Facts: Connecticut does not have their own Ocean Plan, but is a part of the Northeast Ocean Plan.
    - Link: https://neoceanplanning.org/wp-content/uploads/2018/01/Northeast-Ocean-Plan_Full.pdf

- Maine:
    - Additional Facts: Maine does not have their own Ocean Plan, but is a part of the Northeast Ocean Plan
    - Link: https://neoceanplanning.org/wp-content/uploads/2018/01/Northeast-Ocean-Plan_Full.pdf

- New Hampshire:
    - Additional Facts: New Hampshire does not have their own Ocean Plan, but is a part of the Northeast Ocean Plan
    - Link: https://neoceanplanning.org/wp-content/uploads/2018/01/Northeast-Ocean-Plan_Full.pdf

- Vermont:
    - Vermont does not have their own Ocean Plan (likely due to not having coastal land), but is a part of the Northeast Ocean Plan
    - Link: https://neoceanplanning.org/wp-content/uploads/2018/01/Northeast-Ocean-Plan_Full.pdf

State Ocean Plan Status Guide Image