



State of Rhode Island and Providence Plantations
COASTAL RESOURCES MANAGEMENT COUNCIL
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September 14, 2010

Coastal Resources Management Council
Chairman Michael M. Tikoian
Stedman Government Center- Suite 3
4808 Tower Hill Road
Wakefield, RI 02879-1900

Dear Chairman Tikoian:

Below please find a detailed summary of all proposed changes to date for the Ocean Special Area Management Plan. **Please note that this memo supersedes the memo submitted to the Council on August 24th, 2010.** All proposed changes listed here are suggested in response to public comments received through September 8th, 2010. Complete responses to these comments are available online on the URI Ocean SAMP website. **This memo does not respond to written comments received on or after September 9th, 2010.** We submit these to you for your review.

Chapter 1, Introduction:

1. **Section 140:** We recommend the inclusion of approximate coordinates representing the Ocean SAMP area, in response to comments from Ames Colt requesting the inclusion of this information, as follows:

“1. The Ocean SAMP study area boundary includes approximately 1,467 square miles (3,800 square kilometers) of portions of Block Island Sound, Rhode Island Sound and the Atlantic Ocean. The study area begins 500 feet from the coastline in state waters, from the mouth of Narragansett Bay seaward, and all federal waters within the boundary. [The study area, which is an irregularly shaped polygon, is encompassed by a box represented by the coordinates listed below. See Figure 1.1 for a more detailed map:](#)

[North: 41.497420°](#)

[South: 40.912180°](#)

[West: -71.907426°](#)

[East: -70.848987° “](#)

Chapter 2, Ecology of the SAMP Region:

1. **PAGE 80; 250.3.** New #1 proposed to address a comment submitted by the Conservation Law Foundation as well as feedback from the URI Ocean SAMP fish habitat research team led by Dr. Jeremy Collie and summarized in Malek et al.(2010); #2 altered to clarify and further address same comment; reference to Chapter 3 also inserted; Malek et al. (2010) reference inserted into Literature Cited as well, as follows:

“There is a diverse and dynamic fish community in Ocean SAMP area waters, [as recent work by Malek et al. \(2010\) suggests: Rhode Island Sound was found to have greater fish abundance and higher fish biomass than Block Island Sound, which corroborates a similar finding by Nixon et al. \(2010\) who suggest this to be so because Rhode Island Sound appears to have higher primary productivity than does Block Island Sound. Malek et al. \(2010\) also find that Block Island Sound has greater fish community diversity than does Rhode Island Sound, but Malek et al. \(2010\) further found that a community of larger, more evenly distributed fish are found at depth, while shallow waters contain more diverse communities of smaller fish. Finally, Malek et al. \(2010\) found a strong relationship between benthic habitat complexity and demersal fish community diversity, with complex habitats containing greater fish diversity. In considering fish community ecology in the Ocean SAMP area, it must be recognized that this community has been manipulated, and perhaps ecologically altered, by commercial and recreational fisheries practices that have taken place historically. It is therefore not fully possible](#)

to determine what fish community make up may have been in the past relative to what we see at present. “

“~~the~~The structure of the fish community in the Ocean SAMP area has undergone recent major change from a community dominated by demersal (near bottom) species to one dominated by pelagic (water column) species (Collie et al. 2008). A corresponding trend towards fish species with a preference for warmer water temperatures suggests that broad-scale warming trends may be a significant driving force of this fundamental ecosystem level change. These shifts are noted not only for commercially harvested species, but for species of non-commercial value as well. More research is needed to understand how other ecosystem variables outside of water temperature are being altered over time, and how the Ocean SAMP ecosystem at large is responding (see also Chapter 3, Section 330.1).”

“Malek, A., Collie, J., LaFrance, M., and King, J. 2010. Fisheries ecology and benthic habitat in Rhode Island and Block Island Sounds. Technical Report #14 of the Ocean Special Area Management Plan. Rhode Island Coastal Resources Management Council, Wakefield, RI.”

2. **PAGE 18, 210., #6:** amendment proposed to address a comment submitted by Conservation Law Foundation regarding a speculative statement as follows: “While the basic overall geology of the Ocean SAMP area can be considered to be static, the actual local, physical, benthic environment found on the bottom is not. Sediments and bottom features are continually subjected to physical forces that alter their characteristics, and their location on the seafloor. Upwelling and downwelling currents, the orbital motion of waves, and unidirectional lateral flows all act upon and alter bottom features. Likewise channels, bottom topographic high points, and other bathometric features will influence as well as create these flows and currents. The flows and currents promote the transport of sand-sized materials and the migration of large bedforms such as dunes, sand ripples and sand waves, across the bottom. The sorting, movement, and placement of seafloor sediments that occurs during these processes creates a patchwork of habitats ranging from fine silts to gravelly areas to boulder fields (Figure 2.4; and see Figures 2.25 and 2.26). The diversity of physical habitats is a powerful influence on benthic ecological make up, determining what species will reside in what habitats in the bottom community; most often, the greater the structural physical diversity of an environment, the greater the biotic diversity of that ecosystem (Eriksson et al. 2006). Since these ecological “shaping” processes are ongoing, the bottom community of the Ocean SAMP area is in a constant state of flux as habitat patches are altered or destroyed, moved or recreated along the bottom. The benthic community of the Ocean SAMP area is could therefore be expected to be composed of organisms that can withstand, and perhaps even thrive in an ever changing physical benthic environment. “

3. **PAGE 20, 210, #7:** amendment proposed to address a comment submitted by Conservation Law Foundation regarding a speculative statement, as follows: “In recent side scan sonar surveys of portions of Rhode Island Sound (Figure 2.4), McMullen et al. (2008) found a mosaic of sedimentary environments that are the result of erosion and sediment transport, deposition and sorting, and reworking, with large areas comprised of transitory coarse-grained materials. Boulders were found scattered throughout the study area, though there were areas where concentrations of boulders existed, and which create areas of increased habitat complexity which would promote higher species diversity. Depositional areas where sediments were sorted and reworked tended to be found along channels and bathymetric high points. A preponderance of commercial fish trawl marks in depositional areas suggests ~~a preference for this environment by an abundance of~~ commercially important demersal fish species in these habitat/environment types. This in turn suggests a highly productive benthic community which is providing a rich food source. McMullen et al. (2008) found sand waves to be a predominant feature, and infer they are a result of coarse-grained bedload transport as was noted previously in this section. These features highlight the glacial origins of the area, and the stability of various features, for example glacial till, but also the transitory nature of other features, such as sand waves. Both bottom types—transitory and stable—are important characteristics in defining benthic habitat, and the types of organisms that will thrive there.”

4. **PAGE 70, 250.2., #3, #4, #5, #6** amendment proposed to address comments submitted by the Conservation Law Foundation and in response to feedback received from the URI Ocean SAMP benthic habitat research team led by Dr. John King and summarized in LaFrance et al. (2010). Reference added to Literature Cited. See as follows:

“(3) Benthic communities in the Ocean SAMP area are largely dominated by various species of benthic, tube-dwelling amphipods (LaFrance et al. 2010). The bivalve *Nucula*, as well as various species of polychaetes, mysids and cumaceans, fill out benthic community species composition. Rhode Island Sound and Block Island Sound share many species, but ~~directed experimental work needs to be done to test for differences in dominant species and overall community make up between these two ecosystems~~ research survey work by LaFrance et al. (2010) suggests that benthic habitat in Block Island Sound is more variable than in Rhode Island Sound, and that Block Island Sound is more diverse (11 phyla and 156 genera vs. 8 phyla and 75 genera, respectively). LaFrance et al. (2010) suggest that fundamental differences in habitat make up and utilization exists between Block Island Sound and Rhode Island Sound, though they admit their present findings cover only a small section of each of these large ecosystems. Further ~~Such~~ such research ~~would~~ will provide ~~input to~~ greater understanding of sediment type–species relationships, which at present are only tenuously known. Having this information would greatly assist in a better understanding of the ecology of the region, and

could be a start towards the development of ground-truthed benthic habitat maps for the Ocean SAMP area.”

“(4) Several contemporary side-scan surveys have been made in Rhode Island Sound in relation to dredged materials site monitoring (Battelle 2003c), and also independently by the U.S. Geological Survey (McMullen et al. 2007; 2008). There was also a survey that was conducted in the western portion of Block Island Sound (Poppe et al. 2006), [and very recent benthic surveys of small portions of Block Island Sound and Rhode Island Sound by LaFrance et al. \(2010\)](#). These side-scan surveys reveal high resolution details of the sedimentary patch structure of the sea floor in Rhode Island Sound and Block Island Sound. This benthic patch structure is quite complex and comprised of a variety of topographic features shaped by the dynamic sedimentary environments (erosional, sorting and reworking, and transport, see Section 210; [LaFrance et al. 2010](#)). The biologic sampling and field ground-truthing needed to correlate side-scan imaging to benthic habitat types and probable species assemblages has ~~not been undertaken~~ [only recently begun](#), but ~~would will~~ provide a very useful ecological assessment and resource management tool [as it is conducted and results are released](#).”

“(5) Based on observed benthic change between surveys completed in 1991 and 1994, Driscoll (1996) suggested that anthropogenic effects have greater impact on reworking benthic surface sediments in Block Island Sound than large storms after finding an increase in the distribution and density of trawl door scars caused by fishing gear dragged across the seafloor in their survey area. Fishing can have local impacts on habitat as well as more wide-spread impacts on species biodiversity due to re-suspension of particulates, chemical impacts causing changes in nutrient cycling, and biological impacts from changes in species composition (DeAlteris et al. 2000). Of interest to note is that the dominant benthic invertebrates of the Ocean SAMP area—tube-dwelling, amphipods—appear to do well in disturbed areas; it is unclear if fishing activity that disturbs the bottom is having either a positive or negative impact, if any, on these species. [LaFrance et al. \(2010\) found that benthic habitat areas comprised of highly mobile sediments tended to have low diversity and low abundances, suggesting that organisms found in these habitat types must be able to withstand repeated disturbance events](#). This is an area where further study is needed [to better determine the impacts, both positive and/or negative, of disturbance events, both natural and of anthropogenic origin, on benthic communities and the ecosystem as a whole](#).”

“(6) Maps of benthic habitat can be an important element in understanding ecosystem dynamics, but are challenging to develop. While various classification schemes have been proposed, most existing schemes are based on physical factors such as bathymetry, sediment grain size, sediment texture and/or topographic features. [LaFrance et al. \(2010\) provide a summary description of the various approaches to mapping benthic habitats, their pluses and minuses, and limitations](#).

Regardless of the scheme, the intent is to assist in the identification of habitats of key importance to the ecosystem, and to guide both future research efforts as well as management initiatives. Several proxy maps have been developed for use in considering the ecology of Rhode Island and/or Block Island Sounds using sediment composition, and most recently “surface roughness,” a basic measure, interpreted from sidescan sonar imaging, of the unevenness of the seafloor bottom topography.”

[“LaFrance, M., Shumchenia, E., King, J., Pockalny, R., Oakley, B., Pratt, S., and Boothroyd, J. 2010. Benthic habitat distribution and subsurface geology of selected sites from the Rhode Island Ocean Special Area Management Study Area. Technical Report #4. Rhode Island Coastal Resources Management Council, Wakefield, RI.”](#)

5. **Section 250.1.2., #2. Page 59.** The following change is proposed made in response to a comment provided by RI Audubon/Eugenia Marks:

Contemporary measures of primary production and chlorophyll *a* concentrations in the Ocean SAMP area show fairly consistent peaks during late ~~summer-fall~~ and early ~~fall-spring, and-with~~ a distinct and significant fall bloom (Figure 2.22). However, no clear, consistent winter-spring bloom is seen (Hyde in prep), which is a deviation from historical observations. Rhode Island Sound seems to be mimicking Narragansett Bay in its loss of a consistent annual winter-spring diatom bloom; causes for this are not clear, but suggests that large-scale forces (e.g., changing climate) may be at work. Chlorophyll *a* concentrations and primary production show a fairly consistent minimum during summer months, which is in general agreement with nutrient availability patterns noted previously (Section 240.1).

6. **Section 250.2.1., #1. Page 76.** The following change is proposed in response to a comment provided by RI Audubon/Eugenia Marks:

Invertebrate species make up a large proportion of the biota found in the benthic ecosystem, and they play an important role as a food source for fishes, ~~and for birds in shallow waters~~. The invertebrate community is often quite patchy, largely because of the highly diverse nature of the sediment types that have been transported, sorted, and deposited in specific areas on the seafloor landscape. Sediment type is an important determinant regarding the form of benthic community that will exist in marine aquatic ecosystems. The patchwork nature of the benthic community similarly sets the stage for the distribution of fishes and larger organisms.

Chapter 3, Global Climate Change:

1. **Section 300, Introduction:** Section 300 paragraph 3 (p 6): In response to comments from Peter Bonk, propose adding reference to Anderegg et al. 2010 and Sills 2010 to cite evidence of a scientific consensus regarding anthropogenic climate change, and updated Section 360, Literature Cited, accordingly, as follows:

“Human activities since the start of the Industrial Age have caused a significant increase in greenhouse gases in the atmosphere. The most prevalent greenhouse gas in the atmosphere in terms of anthropogenic emissions, carbon dioxide has risen from a pre-industrial level of 280 parts per million (ppm) to 385 ppm in 2008, the highest it has been in 650,000 years. There is strong scientific consensus that carbon dioxide in the atmosphere warms the air and sea surface, accelerates sea level rise, makes the ocean more acidic, and causes shifts in precipitation and weather patterns, and leads to more extreme weather events, among other effects ([Anderegg et al. 2010](#); [Sills 2010](#)). These effects are already being witnessed globally and in Rhode Island and are projected to intensify in years to come.”

Reference in Section 360: [Anderegg, W.R.L., Prall, J.W., Harold, J., and Schneider, S.H. 2010. Expert Credibility in Climate Change. *Proceedings of the National Academy of Sciences of the United States of America \(PNAS\)* 107: 12107-12109.](#)

2. **Section 350.1, #1:** Policy revision proposed in response to comments from Carolyn Karp as follows:

“The Council recognizes that the changes brought by climate change are likely to result in alteration of the marine ecology and human uses affecting the Ocean SAMP area. [The Council encourages energy conservation, mitigation of greenhouse gasses and adaptation approaches for management.](#) The Council, therefore, supports the policy of increasing offshore renewable energy production in Rhode Island as a means of mitigating the potential effects of global climate change.”

3. If the Council approves the above-mentioned change to Chapter 3, Global Climate Change, Section 350.1, #1, the same policy will need to be changed in Chapter 11, The Policies of the Ocean SAMP, section 1150.2, as follows:

“The Council recognizes that the changes brought by climate change are likely to result in alteration of the marine ecology and human uses affecting the Ocean SAMP area. [The Council encourages energy conservation, mitigation of greenhouse gasses and adaptation approaches for management.](#) The Council, therefore, supports the policy of increasing offshore renewable energy production in Rhode Island as a means of mitigating the potential effects of global climate change.”

Chapter 5, Commercial and Recreational Fisheries:

1. **Section 560.1:** We propose amending Commercial and Recreational Fisheries General Policy #2, in section 560.1, p. 150, as follows, in response to the Conservation Law Foundation’s request that we add policy language explaining how CRMC will work to protect priority habitat areas as follows:

“The Council recognizes that finfish, shellfish, and crustacean resources and related fishing activities are managed by a host of different agencies and regulatory bodies which have jurisdiction over different species and/or different parts of the SAMP area. Entities involved in managing fish and fisheries within the SAMP area include, but are not limited to, the Atlantic States Marine Fisheries Commission, the RI Department of Environmental Management, the RI Marine Fisheries Council, the NOAA National Marine Fisheries Service, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council. The Council recognizes the jurisdiction of these organizations in fishery management and will work with these entities to protect fisheries resources. [The Council will also work in coordination with these entities to protect priority habitat areas.](#)”

2. If the Council approves the above-mentioned change to Commercial and Recreational Fisheries General Policy #2, this same policy will need to be revised in Chapter 11, Policies of the Ocean SAMP, section 1150.4 #2, as follows:

“The Council recognizes that finfish, shellfish, and crustacean resources and related fishing activities are managed by a host of different agencies and regulatory bodies which have jurisdiction over different species and/or different parts of the SAMP area. Entities involved in managing fish and fisheries within the SAMP area include, but are not limited to, the Atlantic States Marine Fisheries Commission, the RI Department of Environmental Management, the RI Marine Fisheries Council, the NOAA National Marine Fisheries Service, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council. The Council recognizes the jurisdiction of these organizations in fishery management and will work with these entities to protect fisheries resources. [The Council will also work in coordination with these entities to protect priority habitat areas.](#)”

Chapter 8, Renewable Energy and Other Offshore Development:

1. **Section 800:** We recommend adding the following language to Section 800: Introduction as paragraphs 3, 4 and 5 (pg. 8) in responses to comments from Caroline Karp. These paragraphs are proposed to clarify the objectives of this chapter, CRMC’s authority over energy facility planning, and emphasize to the reader that this chapter does not focus on any particular proposed project. Adding the text below is in response to comments received suggesting clarification on

CRMC's authority with respect to energy facility siting and numerous comments submitted referencing particular proposed projects, such as Deepwater Wind's proposed project. The addition of these paragraphs helps to define the scope of the chapter and how it relates to the authority of the CRMC. The proposed change is shown below:

"3. The objectives of this chapter are to: (1) provide an overview of renewable energy resources, and existing statutes, standards and initiatives in Rhode Island; (2) identify what offshore renewable resources in the Ocean SAMP area have the potential for utility-scale energy generation; (3) describe utility-scale offshore wind energy technology and stages of development; (4) identify areas within the Ocean SAMP area with the greatest potential to support utility-scale development; (5) delineate a Renewable Energy Zone within state waters of the Ocean SAMP; (6) summarize the current understanding of the potential economic and environmental effects of offshore renewable energy and; (7) outline CRMC policies and regulatory standards for offshore renewable energy and other offshore development in the Ocean SAMP area.

"4. CRMC's authority to plan for the future of energy facilities in the coastal zone is defined in the CRMC's 1978 Energy Amendments, which apply federal regulations governing approved coastal management programs (15 CFR 923 *et. seq.*). As stated in the 1978 Energy Amendments, the CRMC is required to identify and develop a planning process for energy facilities that are likely to be located in, or which may significantly affect, the coastal zone. This planning process must include procedures for assessing the suitability of sites for energy development, as well as policies and techniques to manage energy facilities and their anticipated impacts. The Ocean SAMP has been developed consistent with this authority.

"5. This chapter is not meant to be a state energy plan, as such plans are developed by the Rhode Island Statewide Planning Program and the Office of Energy Resources. Furthermore, this chapter does not focus on any one particular proposed project; rather it examines the potential for offshore renewable energy as one future use of the Ocean SAMP area. Any specific offshore renewable energy project will be examined specifically during the application process, outlined in Section 860. Moreover, the environmental impacts of any proposed offshore renewable energy project will be reviewed and evaluated under the National Environmental Policy Act (NEPA)."

2. **Section 850.1:** We suggest adding a sentence to the end of Section 850.1 Avoided Air Emissions, paragraph 3 (pg. 91) in response to comments from Caroline Karp suggesting that the carbon footprint of offshore renewable energy facilities be discussed within the chapter. The proposed change is shown below:

“The process of siting, constructing, and decommissioning an offshore renewable energy project of any kind would entail some adverse impacts to air quality through the emission of carbon dioxide and conventional pollutants. Construction activity in the offshore environment would require the use of fossil fuel-powered equipment that will result in a certain level of air emissions from activities including pile installation, scour protection installation, cable laying, support structure and turbine installation, and other activities required for the development of a wind farm. During the pre-construction and installation stages, there would be some air emissions in the Ocean SAMP area from fossil fuel fired mobile sources such as ships, cranes, pile drivers and other equipment. Decommissioning would also result in some air emissions from the activities involved in the removal of the wind turbines, although emissions from decommissioning would be lower than those involved in construction (MMS 2009a). [The size of an offshore renewable energy facility’s carbon footprint will vary depending on the project, as the carbon footprint of a facility depends on project specific factors \(e.g. size, location, technology, installation techniques, etc.\)](#)”

3. **Section 850.4:** We suggest modifying Section 850.4 paragraph 6 (pg. 110) in response to comments received from the Conservation Law Foundation. These changes clarify that the potential for permanent foraging habitat loss as a result of offshore renewable energy development and that foraging habitat should be avoided when siting any future projects. This also clarifies the rationale for designating sea duck foraging habitat as Areas Designated for Preservation in Section 860:

“Land-based surveys conducted by Paton et al. (2010) support the findings of the literature review, as large concentrations of seabirds (e.g. scoters and eiders) have been recorded in these nearshore areas, particularly off Brenton Point (see Figure 8.41). Because one potential effect of offshore renewable energy development may include [permanent](#) habitat [displacement/loss](#), identifying [and avoiding](#) potentially important foraging habitat prior to siting future projects may help to minimize any adverse impacts.”

4. **Section 850.4.4:** We suggest adding the following sentence to Section 850.4.4 Habitat Displacement or Modification paragraph 1 (pg. 122) based on comments received from the Conservation Law Foundation. This addition is recommended to clarify that current research suggests that the potential for permanent loss of foraging habitat may be significant to avian species. Ultimately, this finding and recommendations from our Ocean SAMP avian research team provides the basis for designating sea duck foraging habitat as Areas Designated for Preservation. In addition, we suggest adding the phrase “alternate habitat” as shown below based on feedback from the URI Ocean SAMP avian research team. See below:

“Offshore renewable energy development may result in temporary or permanent habitat displacement or modification during the construction, operation or decommissioning of a facility. Depending on the location of the facility, birds may potentially be displaced from offshore feeding, nesting, migratory staging, or resting areas. Displacement may be caused by the visual stimulus of rotating turbines, or the boat/ helicopter traffic associated with construction or maintenance activities (Fox et al. 2006). Habitat loss or modification on avian species may result in increased energy expenditures as birds may need to fly farther to access alternate habitat (MMS 2009a). Increased energy expenditures if severe may result in decreased fitness, nesting success, or survival (MMS 2009a). [Current research suggests that the permanent loss of habitat, particularly foraging habitat, has the potential to significantly impact certain avian species. However, t](#)The severity of the effects of displacement from foraging habitat depends on the amount of habitat lost, the distance to [alternate habitat](#), and the food resources available at the nearest alternate site (MMS 2009a). Siting offshore renewable energy facilities in areas to avoid important bird foraging areas may minimize any potential adverse impacts on birds (OSPAR 2006; MMS 2007a).”

5. **Section 850.4.4:** We suggest adding the following footnote to Section 850.4.4. Collisions with Structures, paragraph 4 (pg. 125) as well as the appropriate source to the Works Cited section. The addition of this footnote is in response to a comment received from Caroline Karp regarding the prevalence of fog in the Ocean SAMP area as it relates to the risk of collision to avian species in the area.

[“⁴⁹ Merrill \(2010\) reports that based on historical data sets, the Ocean SAMP typically experiences 3-4 foggy days per month during the months of March-May and October-December, and 6-10 foggy days during June, July and August.”](#)

New reference in works cited:

[Merrill, J. 2010. *Fog and Icing Occurrence, and Air Quality Factors for the Rhode Island Ocean Special Area Management Plan 2010*. Technical Report.](#)

6. **Section 860.2.2:** We propose the following change to Section 860.2.2, Areas of Particular Concern, #1, in response to comments from the Conservation Law Foundation regarding the rationale for designating areas as Areas of Particular Concern and Areas Designated for Preservation:

“Areas of Particular Concern ~~that~~ have been identified through the Ocean SAMP process [with the goal of protecting areas that have high conservation value, cultural and historic value, or human use value from Large-Scale Offshore Development. These areas maybe limited in their use by a particular regulatory agency \(e.g. shipping lanes\), or have inherent risk associated with them \(e.g. unexploded ordnance locations\), or have inherent natural value or value assigned by human interest \(e.g. glacial moraines, historic shipwreck sites\). Areas of Particular Concern](#)

have been identified by reviewing habitat data, cultural and historic features data, and human use data that has been developed and analyzed through the Ocean SAMP process. Additional Areas of Particular Concern may be identified and approved by the Council in the future as new datasets are made available. Areas of Particular Concern include:

7. If the Council approves the above-mentioned change to Section 860.2.2, #1, Areas of Particular Concern, this same policy will need to be revised in Chapter 11, Policies of the Ocean SAMP, Section 1160.2 #1, as follows:

“Areas of Particular Concern ~~that~~ have been identified through the Ocean SAMP process with the goal of protecting areas that have high conservation value, cultural and historic value, or human use value from Large-Scale Offshore Development. These areas maybe limited in their use by a particular regulatory agency (e.g. shipping lanes), or have inherent risk associated with them (e.g. unexploded ordnance locations), or have inherent natural value or value assigned by human interest (e.g. glacial moraines, historic shipwreck sites). Areas of Particular Concern have been identified by reviewing habitat data, cultural and historic features data, and human use data that has been developed and analyzed through the Ocean SAMP process. Additional Areas of Particular Concern may be identified and approved by the Council in the future as new datasets are made available. Areas of Particular Concern include:

8. We recommend the addition of the following sentence to 860.2.2 Areas of Particular Concern, Standard #2 (pg. 183) in order to make this standard consistent with other sections of the Red Book. This language is recommended to allow for more detailed maps created using finer resolution data to be used in place of the large scale maps of Areas of Particular Concern currently within the Ocean SAMP document. Maps created using finer resolution data may depict the location of protected features more accurately, and therefore should be used by the Council when assessing whether a proposed offshore development has avoided these areas:

“The Council has designated the areas listed in 860.2.2.3 as Areas of Particular Concern. The Council shall require applicants for Offshore Developments to avoid Areas of Particular Concern within the Ocean SAMP area. Avoidance shall be the primary goal for these areas for any Large-scale project. Small-scale or Other Offshore Development may also be required to avoid these areas. Where these Areas of Particular Concern cannot be avoided, the applicant shall be required to minimize to the greatest extent possible any impact, and as necessary, mitigate any significant impact to these resources. The applicant shall be required to demonstrate why these areas cannot be avoided or why no other alternatives are available. Proposed underwater cables will be subject to certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group. The maps listed below in 860.2.2.3 depicting Areas of

Particular Concern may be superseded by more detailed, site-specific maps created with finer resolution data.”

9. If the Council approves the above-mentioned change to Section 860.2.2.3, this same policy will need to be revised in Chapter 11, Policies of the Ocean SAMP, Section 1160.2 #2, as follows:

“The Council has designated the areas listed below in section 1160.2.3 as Areas of Particular Concern. The Council shall require applicants for Offshore Developments to avoid Areas of Particular Concern within the Ocean SAMP area. Avoidance shall be the primary goal for these areas for any Large-scale project. Small-scale or Other Offshore Development may also be required to avoid these areas. Where these Areas of Particular Concern cannot be avoided, the applicant shall be required to minimize to the greatest extent possible any impact, and as necessary, mitigate any significant impact to these resources. The applicant shall be required to demonstrate why these areas cannot be avoided or why no other alternatives are available. Proposed underwater cables will be subject to certain categories of Areas of Particular Concern, as determined by the Council in coordination with the Joint Agency Working Group. The maps listed below in 1160.2.3 depicting Areas of Particular Concern may be superseded by more detailed, site-specific maps created with finer resolution data.”

10. **Section 860.2.3:** The following proposed changes are recommended for 860.2.3 Prohibitions and Areas Designated for Preservation (pg. 194). These changes are in response to comments received from the Conservation Law Foundation recommending that the rationale behind designating sea duck foraging habitat as an Area Designated for Preservation be explained:

“Areas Designated for Preservation are designated in the Ocean SAMP area for the purpose of preserving them for their ecological value. Areas Designated for Preservation were identified by reviewing habitat and other ecological data and findings that have resulted from the Ocean SAMP process. Areas Designated for Preservation are afforded additional protection than Areas of Particular Concern (see section 1160.2) because of scientific evidence indicating that Large-Scale Offshore Development in these areas may result in permanent damage or habitat loss. The areas described in Section 1160.3 are designated as Areas Designated for Preservation. The Council shall prohibit any Large-Scale Offshore Development, mining and extraction of minerals, or other development that has been found to be in conflict with the intent and purpose of an Area Designated for Preservation. Underwater cables are exempt from this prohibition. Areas designated for preservation include:

“Ocean SAMP sea duck foraging habitat in water depths less than or equal to 20 meters [65.6 feet] (as shown in Figure 8.54) is designated as an Area Designated

for Preservation due to their ecological value and the significant role these foraging habitats play to avian species, [and existing evidence suggesting the potential for permanent habitat loss as a result of offshore wind energy development.](#)”

11. If the Council approves the abovementioned change to 860.2.3, the same language will also need to be changed in Chapter 11, Policies of the Ocean SAMP, Section 1160.3, as follows:

“Areas Designated for Preservation are designated in the Ocean SAMP area for the purpose of preserving them for their ecological value. [Areas Designated for Preservation were identified by reviewing habitat and other ecological data and findings that have resulted from the Ocean SAMP process. Areas Designated for Preservation are afforded additional protection than Areas of Particular Concern \(see section 1160.2\) because of scientific evidence indicating that Large-Scale Offshore Development in these areas may result in permanent damage or habitat loss.](#) The areas described in Section 1160.3 are designated as Areas Designated for Preservation. The Council shall prohibit any Large-Scale Offshore Development, mining and extraction of minerals, or other development that has been found to be in conflict with the intent and purpose of an Area Designated for Preservation. Underwater cables are exempt from this prohibition. Areas designated for preservation include:

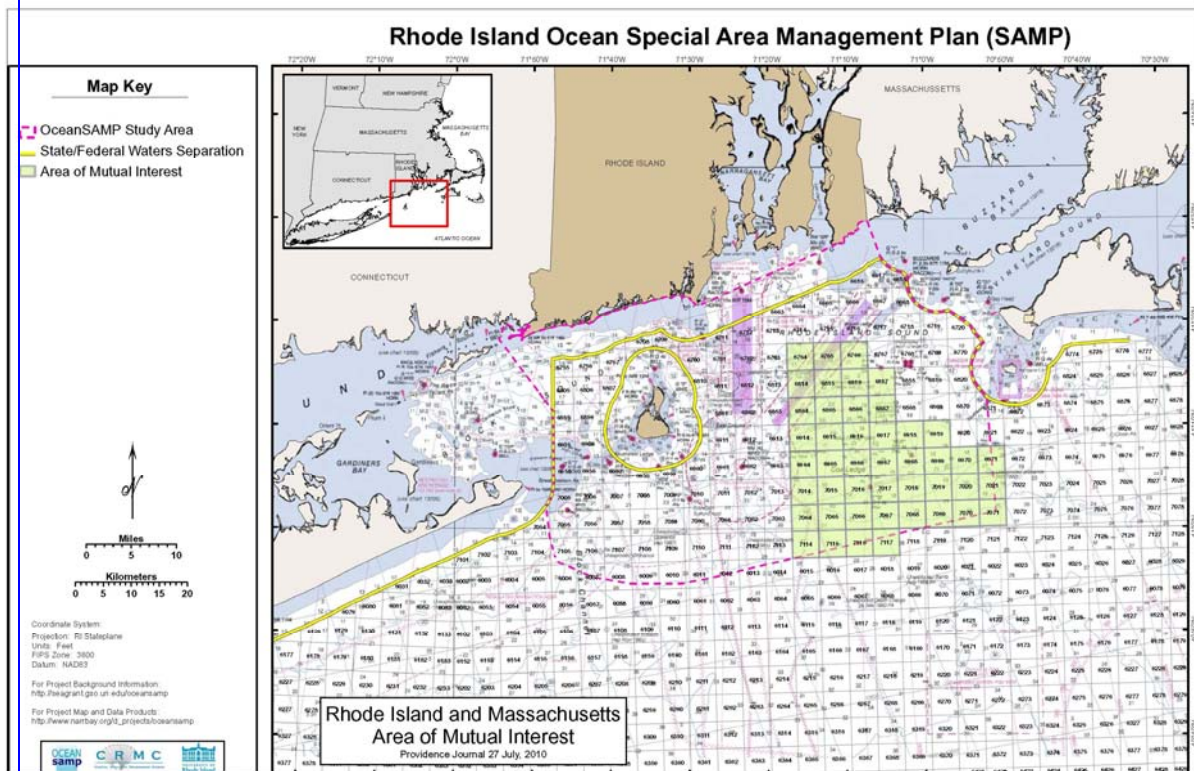
“Ocean SAMP sea duck foraging habitat in water depths less than or equal to 20 meters [65.6 feet] (as shown in figure 11.7) are designated as Areas Designated for Preservation due to their ecological value and the significant role these foraging habitats play to avian species, [and existing evidence suggesting the potential for permanent habitat loss as a result of offshore wind energy development.](#)”

12. In response to public comments and input from the Full Council, we propose the addition of a new section, 870, Potential Areas for Offshore Renewable Energy Development in Federal Waters of the Ocean SAMP Area, which will include text and a new figure, 8.56, as follows; this will also necessitate renumbering the Literature Cited section as 880:

[“Section 870. Potential Areas for Offshore Renewable Energy Development in Federal Waters of the Ocean SAMP Area.](#)

[“In addition to the Renewable Energy Zone in Rhode Island state waters depicted in 830.4, the states of Rhode Island and Massachusetts have expressed a mutual interest in the potential for renewable energy in a portion of federal waters along the eastern boundary of the Ocean SAMP area. This area is depicted on in Figure 8.56 below and is referred to as the Area of Mutual Interest \(AMI\) in the](#)

Memorandum of Understanding (MOU) between the two states, signed on July 26, 2010. The map of the AMI is provided in this document to show the level of interest in this area between the two states and is not intended to be interpreted to be an enforceable policy or enforceable component of the Ocean SAMP. While the AMI is of interest to the states based on a range of geological, oceanographic, climatic and other considerations, the discussion of the AMI in the Ocean SAMP cannot be used by the states as the basis for any future state decisions through the CZMA federal consistency provision; state CZMA federal consistency decisions must be based on the reasonably foreseeable coastal effects of a proposed activity and a state's enforceable policies approved by NOAA as part of the state's federally approved CZMA program. The lead federal agency with jurisdiction over the permitting of offshore wind energy in the federal waters of the Ocean SAMP area is the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE as described in detail in Section 820.4). BOEMRE, through state/regional task forces, has encouraged states to be engaged in and make recommendations on renewable energy development on the Outer Continental Shelf. Therefore, the AMI and the information on which Rhode Island's and Massachusetts's interest in the AMI is based, is available to BOEMRE and potential applicants when considering specific site locations within the AMI."



"Figure 8.56. Area of Mutual Interest for Future Offshore Renewable Energy Development Identified in the Memorandum of Understanding Signed Between Rhode Island and Massachusetts on July 26, 2010"

Chapter 11, Policies of the Ocean SAMP:

1. We propose a revision to section 1100, Introduction, #3, in response to comments from Carolyn Karp, as follows:

“The Ocean SAMP region lies at the convergence of two bio-geographic provinces - the Acadian to the north (Cape Cod to the Gulf of Maine) and the Virginian to the south (Cape Cod to Cape Hatteras). Due to this unique position, the Ocean SAMP area is more susceptible than other areas along the eastern seaboard to the effects of climate change. Cognizant of this fact, the CRMC integrates climate concerns and adaptation and mitigation responses into relevant policies and plans. CRMC believes that with advanced planning, [together with energy conservation](#), the harm and costs associated with these potential impacts can be reduced and may be avoided.”

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Grover J Fugate". The signature is written in black ink and is positioned above the printed name.

Grover Fugate