

Responses to Written Comments Submitted by Eugenia Marks at the 08/24/2010 Public Hearing

Record #	Chapter	Date Submitted	Name	Organization	Section	Sub Section	Comment	Response
1750	Renewable Energy	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island			Need to account for different uses – this area should be viewed as a continuous ecosystem – this document definitely has value as a “guidance document” (submitting written comments)	It is the intention of the Ocean SAMP to look at the SAMP area as a continuous ecosystem
1753	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island			Audubon Society of Rhode Island supports an orderly and thorough review of the impacts of off-shore development to the complex ecosystem in marine waters as well as to the above-water ecosystem, including humans, that rely on the marine ecosystem for natural, recreational, aesthetic, spiritual, and commercial value. Audubon Society representative has participated throughout the SAMP process, and although these comments have been presented previously, we submit them for the record this evening. The development of the Ocean Special Areas Management Plan was initiated by the proposal for off-shore wind generation, but it serves a larger purpose of accounting the multiple uses of Rhode Island’s state waters as well as the contiguous federal waters, a border that neither the natural resources nor the users benefit from the delineation, a managerial and political line. Thus it is good that this document addresses issues larger than the 3-mile limit. The size and technical issues are huge, but the document’s information is clearly presented. Issues are dynamic as climate, populations, and demands of both wildlife and humans change. This document will provide a base from which to assess, debate, and decide on projects within the Ocean SAMP boundary as well as indicators for assessment of projects in adjacent waters. The material of the Ecology Chapter appears comprehensive and well integrated. Thank researchers for basic data and staff and you for syntheses and for providing it for review. Following are comments from Audubon Society of RI on the Ecology Chapter of SAMP that have been previously submitted.	no response required
1754	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	210	5	Regarding benthic habitat as discussed in 210 (5): what impact does dumping dredge spoils have? I don’t see this impact mentioned. I did see the analysis of impact of trawling. Is trawling the same as drag-netting?	There is a discussion of dredge materials in Sec. 240.2. Discussion of trawling is in the Fisheries chapter; the term "drag-netting" is not used in the Ecology chapter.

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1755	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	220	1.1	Section 220.1 (1) Can the characterization of wind as diurnal be refined by speed ranges? Also can the sentence be rewritten without “during summer” in parenthesis? What is the character of winter wind regarding diurnal-nocturnal? What about winds of storms in any season regarding their nocturnal-diurnal duration? I think it would be more useful to break out the characterization by month or aggregates of months rather than 2 seasons. Now that I see chart below, perhaps referring to this figure in the text would help. For the chart, the average is over what period of time? While I understand that data may be scarce, since wind is a critical resource, greater detail should be provided.	1. Diurnal denotes periodicity, and speed varies greatly dependent upon a variety of climatologic factors. 2. Sentence was rewritten. 3. Wind pattern is not diurnal or nocturnal in winter. 4. Figure is referenced in the text. Data are from a 10 year record in recent times, though the exact time frame is not provided in the source document.
1756	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	230		Are there data for extremely high winds or waves generated by storms within the SAMP?	Section 220.2 provides a summary. Original NOAA sources would provide data for extreme wind events, and sporadically for waves, and original data used in the TDI analysis (results are reported in Chapter 8, Renewable Energy) may also provide insight into this.
1757	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	220	3	Section 220.3: For those of us over age 25, the statement “no hurricane strikes since the turn of the century” borders on amusing. I think the statement could be reworded on the order of “Despite the decade from 2000 – 2010 being labeled..., there has not been a direct hit of a hurricane to RI during that time.”	This sentence was rewritten, reference to turn of the century removed.
1758	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	230	3	Section 230. (3) (p.24): I am glad to see a reference to the complexity of ecological analysis and a model that has attempted to forecast some of the physical oceanographic characteristics. I hope that as I read the chapter, I will see some discussion of the biological connections to the physical oceanography so that the reader will have an appreciation for food- and breeding-driven behaviors that may depend on currents, temperatures, and other parameters of physical oceanography. [I see a section under circulation (230.3) that alludes to these relationships.]	Requires no direct response. The author has attempted, where possible, to forge such links as suggested.

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1759	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	230	1	Tides: Are there velocities or pressures associated with tides, especially as water moves around land bodies such as islands that would be useful to know for structure embedded in the substrate? There are some migrations of marine organisms that are based on moon stage that also causes tides. I think this is worth a sentence or two in that feeding behavior for pelagic birds, fish, and marine mammals may be related to these spring and fall migrations.	Any such analysis of current effect on structure (e.g., concrete pilings) are not ecological consideration and therefore not addressed. The author found no specific reference to moon phase impact on migration or feeding in the literature accessed, and it is therefore not mentioned. Potential effects of offshore renewable energy structures are discussed in Chapter 8, Renewable Energy and Other Offshore Development.
1761	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island			Some mention of the electrical conductivity of salt water? Electro-magnetic conductivity?	The potential effects of electromagnetic fields that may be generated by submarine transmission cables are discussed in Chapter 8, Renewable Energy and Other Offshore Development.
1762	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	230	4.1.3	Pg. 45 at 3: Battelle reported no acute response in amphipods. Do we have an data on concentrations of contaminants that would cause chronic or sub lethal impacts such as declining or depressed population?	None noted as reported in Sec. 240.2.
1763	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	250_240	3_1	Pg. 50-51: I cannot reconcile the text that says "chlorophyll a concentrations (the green pigment contained in the primary producers) in the Ocean SAMP area show fairly consistent peaks during late summer and early fall, and a distinct and significant fall bloom" and Figure 2.29. The royal blue (0.3ug/l—low concentration) occur in summer through September, and orders of magnitude greater concentrations in October - January. I do not understand the use of the word "peaks."	The mistake in the text was corrected to read "consistent peaks in late fall and early spring."
1764	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island			Will there be a process for adding new research over the years in the form of electronic links – or at least a list of researchers who are active in the mouth of the Bay, Block Island and Rhode Island Sounds? This question is applicable to the whole Ocean SAMP document. What is the procedure for periodic updates of the various SAMPs?	The Ocean SAMP includes an adaptive management approach which will include a major review and revision every five years from adoption. For further information see Chapter 11, The Policies of the Ocean SAMP.

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1765	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island			Is there any research on microhabitat of metal structures in the water absorbing enough radiant energy to affect the population organisms living on the metal? I would guess that any harmful algal bloom would need warm water, and with the constant change of water in the vast ocean, I would not think that metal superstructure in the water would affect ambient water conditions, but could affect a very small area on the metal itself. Or conversely, freezing from ocean action and air temperature in severe winter conditions could create a different microhabitat extreme. I think this is too minor to consider. Just musing.	See Chapter 8, Renewable Energy and Other Offshore Development, for information on the potential effects of offshore renewable energy structures on marine life and habitats.
1766	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	250	2.1.1	250.2.1 Invertebrates (1). Invertebrates in benthos also provide food for birds, but in fairly shallow waters. Common loons that winter in these waters forage for crabs as deep as 5.5 meters; Harlequin ducks are shallow divers foraging for invertebrates; Common Eider also feed on invertebrates up to a depth of 10 meters; and Scoters may dive up to 20 meters (White-winged), 9 meters (Surf), and "a few meters" (Black).	Avian feeding is addressed in Sec. 250.6. In Sec. 250.2.1., #1 the author inserted the following text "...and for birds in shallow waters." See additional information on the potential effects of offshore development on avian species in Chapter 8, Renewable Energy and Other Offshore Development.
1767	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	250	3.1	250.3 Fishes (1) Pelagic birds such as Petrels, Shearwaters, and Northern Gannets feed on small schooling fish such as herring, anchovies, and mackerel.	Fish as a food source for birds is mentioned in Sec. 250.3., #3.
1768	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island	250	4.1.1	Table 2.10 (pg. 83): are the blanks missing data? Data could be supplied by other sources, for example Peter Paton. Or do the blanks represent year-round use? Does not seem likely given the rarity of some of the species with blank. I see the graph below. What data set do these two figures represent? How many observations?	The Table has been corrected by Peter Paton and has no blank data. The source publication should be referenced for specifics on the research methodology (e.g., # observations, etc.)
1769	Ecology of the SAMP Region	8/24/2010	Eugenia Marks	Audubon Society of Rhode Island			Audubon continues to have concerns that food web connections between the resources in the Ocean SAMP area have not been made. Foraging habitat displacement is a major issue in the development of a wind farm. European data are inconclusive other than to note that displacement occurs. Research specific to the food web relationships among the various levels in the food webs within the SAMP is not complete. We urge the continuing relationship between academic researchers and the Council for the purpose of better understanding the resources of the SAMP area so as to conserve those resources as increasing human population and demands for food, energy, transportation, and national security, as well as climate change stress the region.	The author strived to make such connections where possible based on the published literature. Some description is provided in the Renewable Energy chapter. The remaining comment is beyond the scope of this chapter.