OCEAN SAMP CHAPTER 2. ECOLOGY OF THE SAMP REGION - COMMENTS & RESPONSES (as of 7/21/10)

Record #	Date	Name	Organization	Section	Comment	Response	Notes
664	4/9/2010	Allison Castellan	NOAA OCRM		Overall, this chapter is well researched and provides a very thorough overview of the physical, chemical and biological environments within the Ocean SAMP area.The current draft does not include any enforceable policies for CZMA purposes. Please make sure the policies and standards you develop are enforceable (see our comments on the policy section of other draft chapters). The Ocean SAMP chapters must include enforceable policies, otherwise, OCRM will not be able to approve any of the chapters for incorporation into your federally approved CZM program.	these are being developed and the comments will be considered throughout the policy & standards writing process	
665	4/9/2010	Allison Castellan	NOAA OCRM	240	This paragraph notes that toxins are typically limited to the benthos and would only be made available for uptake if the sediment was disturbed. What about consumption of benthic dwelling species? Is there any research to support uptake (or lack there of) by benthiovers?	paragraph rewritten to address this issue	
666	4/9/2010	Allison Castellan	NOAA OCRM	250	Table 2.9: Statements made in the paragraphs following this table don't always agree with information provided in the table. For example, the table lists humpbacks, minke and fin whales as "common" but para 2 states "all are relatively rare in the Ocean SAMP." The same is true for sea turtles. The table lists both loggerheads and leatherbacks s "common" but 250.5 para 2 notes that of the 4 sea turtle species, only 1 is common, 1 regular and 2 are rare. I understand data may not be refined enough to distinguish between the Ocean SAMP and nearby RI waters but, if possible, it may help to add another column to the table—one column for the species occurrence within the Ocean SAMP and another column for occurrence in nearby waters. I think it would be fine to say "unknown" if you don't have sufficient research for the Ocean SAMP area.	Table legend rewritten to be clear about this and to remove any confusion.	
667	4/12/2010	Caroly Shumway	BU		General comment on figures: I appreciate your effort to include figures in this draft. All figures, however, need to be large enough in this chapter that the reader can see all of the text in the legends and figure. In addition, a figure legend is needed for all and at a size that is legible (not legible in Fig. 2.6), particularly to explain acronyms, some scientific terms, and the colors or shading used in the figures.Fig. 2.3, define "end moraine" for user. Or have definitions at the end of this chapter.Fig. 2.5 What are the turquoise patches? The dark blue patches?Fig. 2.46. The legend is ridiculously small. Completely unreadable.Fig. 2.29 is much too small. This needs a full page. Figs. 2.39 and 2.40 are too small.	Figures have been reworked extensively with many removed, new ones inserted/created and made as large as possible within the document for improved readability and clarity.	
668	4/12/2010	Caroly Shumway	BU	200	General comment on Section 200. Introduction. This section is still lacking in summarizing the ecological importance of the facts provided. This chapter is likely to be the most widely read of the Ocean SAMP chapters nationwide. This section should highlight key patterns and processes that influence biological diversity and productivity in the region. Examples include:1) the front south of the Race;2) the freshwater input by Long Island Sound;3) the fact that the area is essentially an ecotone between two ecoregions;4) the sediment diversity in the region;5) the areas with channels and bathyemetric high points;6) the high productivity of the area;7) areas of highest habitat complexity.	The entire introduction has been extensively rewritted to act as an Executive Summary of the chapter.	
669	4/12/2010	Caroly Shumway	BU		Also, the chapter currently misses any discussion of regional or global importance of any our species. There should be a section on regional and global importance.	this comment is unclear as to intent/meaning; no changes made	
670	4/12/2010	Caroly Shumway	BU		Finally, each section should have a summary, but at the beginning of each section, not the end.	summaries are now at section beginning.	
671	4/12/2010	Caroly Shumway	BU	200	2nd sentence: Grammatical changes: Remove commas after "often warmer" and "several degrees" and add a comma after "while in summer." 3rd sentence: change "are" to "is" to match subject.	entire section rewritten	
672	4/12/2010	Caroly Shumway	BU	200	1st sentence: Grammatical changes: add "and" before "is bounded"…; 2nd sentence: delete "and" after "south" and add a comma after "31 mm"	entire section rewritten	
673	4/12/2010	Caroly Shumway	BU	210	Suggest reordering depositional types according to particle size for clarity (putting c before b), and noting this, by adding at end of 1st sentence: ", presented below in order of increasing size of sediment particles."Also, the colors in the figure need to be matched to a-d.	rewritten and corrected as noted; figure removed	
674	4/12/2010	Caroly Shumway	BU	210	Add additional sentence after 3rd sentence as follows. "Channels and bathymetric high points are likely to drive upwelling and vertical mixing (Barth et al. 2004; Wishner et al. 2006)."	corrected	
675	4/12/2010	Caroly Shumway	BU		FYI: Lough et al. (1989) showed that aggregations of juvenile cod and haddock move over time with non-tidal current patterns in Georges Bank. A rough sea floor also causes turbulent mixing in the deep layer of the water column (Massel 1999).	no action taken	
676	4/12/2010	Caroly Shumway	BU	210	4th sentence. Grammatical correction: Change "that given" to "than is given"	rewritten	
677	4/12/2010	Caroly Shumway	BU	210	Very nice summary. Would prefer such a summary at the beginning of each major section so that the reader knows what he/she is expecting to read in the details.	corrected, see above	
678	4/12/2010	Caroly Shumway	BU	220	2nd sentence: Grammatical correction: change "driving" to "drive"	corrected	
679	4/12/2010	Caroly Shumway	BU	220	1st and 2nd sentences. These seem contradictory. You say that the area has not had a single hurricane strike to RI, but then show hurricanes that made landfall in RI. Am I missing something here?	rewritten to be more clear	
680	4/12/2010	Caroly Shumway	BU	230	Terminology needs to be more precise here. There is no larger North Atlantic ecoregion. There IS a Northeast US Large Marine Ecosystem. There is also an Acadian and Virginian ecoregion. Suggest changing sentence to read, "contact with the larger Northeast US Large Marine Ecosytem…"	corrected	

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681	4/12/2010	Caroly Shumway	BU	230	Delete “limiting”	corrected	
682	4/12/2010	Caroly Shumway	BU	230	last sentence. Grammatical correction: change “and its interaction” to “and tidal interaction”	corrected	
683	4/12/2010	Caroly Shumway	BU	230	Figure 2.16. Add “seasurface” to the two figures at the top of this figure.	Figure legend was corrected	
684	4/12/2010	Caroly Shumway	BU	230	paragraph 5. Additional language and/or references for you (Shumway, C., Pfeiffer-Herbert, A., Eller, K., 2010, Physical Oceanography Of The Northwest Atlantic Region, Chapter 3b, Northeast Atlantic Marine Ecoregional Assessment, The Nature Conservancy.) Fronts are areas of particularly high biological activity due to cross-frontal mixing of nutrients, which stimulates high primary productivity (Mann and Lazier 2006). Observations consistently show that fronts are the location of high densities of phytoplankton (Munk et al. 1995; Mann and Lazier 2006), zooplankton (Munk et al. 1995; Wishner et al. 2006), fish larvae (Munk et al. 1995), marine mammals (Etnoyer et al. 2004) and seabirds (Haney 1986). Worm et al. (2005) also showed that SST gradients are positively correlated with tuna and billfish diversity. Why is stratification biologically important? The degree of stratification of the water column affects three important ecosystem processes. 1.Stratification increases the stability of the water column, providing conditions for seasonal accumulation of high density patches of phytoplankton, which may provide a rich food source for higher trophic levels (McManus et al. 2003). However, if stratification extends too long, the water masses become depleted of nutrients. Fortunately, winter winds cause stratification to break down. This has the advantage of enabling nutrients from deeper, colder waters to come to the surface. 2.Stratification controls the development of phytoplankton blooms. Because the surface layer is well mixed down to the pycnocline (the depth of maximum change in density), phytoplankton are physically mixed throughout the layer (Mann and Lazier 2006). If the surface layer is much thicker than the euphotic zone (the vertical zone where light intensity is high enough for photosynthesis to occur), phytoplankton populations cannot grow. Conversely, if the surface layer is thin enough relative to the euphotic zone, phytoplankton populations can grow rapidly, forming a bloom. This is the mechanism responsible for the spring phytoplankton bloom in the North Atlantic Ocean (Mann and Lazier 2006). 3.Stratification also increases the potential for hypoxia by preventing deep water from exchanging with the atmosphere (Rabalais et al. 2002). Hypoxia causes the exclusion of fish and other mobile organisms and mortality of many benthic organisms (Rabalais et al. 2002).	Figure legend was corrected appropriate materials was incorporated and sections rewritten and references updated.	
685	4/12/2010	Caroly Shumway	BU	240	What about emerging toxins, such as endocrine disruptors like bisphenol A (BPA)?	addressed in Sec 260.3	
686	4/12/2010	Caroly Shumway	BU	250	Plankton. Either in this section or in section 260.2., you need to discuss the fact that boreal phytoplankton have invaded from the north due to changing climate; we are also seeing southern species of phytoplankton. See Greene et al. (2008).		to be addressed
687	4/12/2010	Caroly Shumway	BU	250	1st sentence. It is a misconception that fishes passively drift as pelagic organisms. I would change to “spend some portion of their life cycle as planktonic organisms, with stochastic factors such as wind, tides and ocean currents as well as behavior influencing their horizontal and vertical distribution…” See text below, fyi. From Shumway, C. 1999. A neglected science. Environmental Biology of Fishes.We now know that the larval period of fishes is behaviorally complex and that both behavioral and stochastic factors play a role. Distributions of fish larvae are affected by six factors, the first four of which are behavioral: 1) adult spawning location and timing; 2) vertical distribution of larvae; 3) horizontal swimming by larvae; 4) behavioral capabilities and flexibility of larvae; 5) hydrography; and 6) topography (Leis, 1991). Some fishes can extend their larval period if they don’t encounter suitable habitat and post-settlement habitat shifts can occur as well (Kaufman et al., 1992; Kramer et al., 1997).	corrected and rewritten	
688	4/12/2010	Caroly Shumway	BU	250	paragraph 8. Grammatical correction: Add period and space after “see 250.3).	corrected	
689	4/12/2010	Caroly Shumway	BU	250	1st sentence; add, after “two biogeographic provinces”… “also known as ecoregions”	corrected	
690	4/12/2010	Caroly Shumway	BU	250	Suggest moving the dredging discussion to the end of this section, and put discussion of the benthic ecosystem first.	corrected	
691	4/12/2010	Caroly Shumway	BU	250	3rd sentence. Grammatical correction: Change to “Regardless of the scheme”; also change “and which can then guide” to “and to guide..”	corrected	
692	4/12/2010	Caroly Shumway	BU	250	figure 2.33. Why extrapolate grain size based on quahogs when you have an exact map of grain size based on USGS’s latest maps? The Nature Conservancy provided a map to CRMC of sediment grain size classes for the Ocean SAMP. It provides the exact size dimensions of the sediment type, based on the most recent US Seabed Grain Size Classes. Strongly suggest using the TNC map here, or in addition to Roman’s extrapolation.	TNC maps not available; using maps as provided by SAMP research outputs.	

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693	4/12/2010	Caroly Shumway	BU	250	Why not include The Nature Conservancy's benthic habitat map, and ecological marine unit map here? The statistical work has already been done at a high resolution to identify different ecological units for the Ocean SAMP region.Again, The Nature Conservancy has both maps of rugosity as well as maps of bathymetric complexity, that could be used to support the King/Collie map here.	Have been told these maps will not be available until May 2010, perhaps. No action taken	
694	4/12/2010	Caroly Shumway	BU	250	The Ocean SAMP boundaries should be put on this figure. How does the lobster distribution relate to habitat complexity?	figure and text removed, reference to Fisheries chapter inserted.	
695	4/12/2010	Caroly Shumway	BU	250	Can you relate the quahog densities not just to depth, but sediment type, and include that text here? Ditto for the sea scallops.	The groundtruthing to allow such a relationship to be made has not been completed and therefore this is not possible to do with any degree of surety.	
696	4/12/2010	Caroly Shumway	BU	250	2nd sentence. Grammatical correction: Change "were" to "where". 3rd sentence: insert comma after "Cape Cod".	corrected	
697	4/12/2010	Caroly Shumway	BU	250	The fishes section should be broken up into at a minimum, demersal fishes and pelagic fishes.	this was done in an earlier version and it was too confusing, leading to current layout/no action taken or changes made	
698	4/12/2010	Caroly Shumway	BU	250	Overall, the fish section is not sufficient. It needs to have a summary discussion on spatial patterns here, particularly areas of high diversity and high abundance, and relate them to the currents, habitat complexity, or sediment type.	Section has been revised and rewritten and addressed at least some of the issues raised; all cannot be addressed due to lack of referencable data to support the suggested relationships.	
699	4/12/2010	Caroly Shumway	BU	250	paragraphs 7 and 8. Can you compare the dominant fishes found in the 1950s with those that Brown found recently? Looks like only 3 of the 1950s species are still dominant: winter flounder; windowpane flounder; and longhorn sculpin. Were the surveys done at the same time of year, though? This would be important to consider before comparing.	Surveys not done in a fashion that would allow reliable comparisons across time, and the data are too spotty to allow more than simple conjecture on trends.	
700	4/12/2010	Caroly Shumway	BU	250	paragraphs 10-11. Can you relate the distributions of these to either the physical oceanography, habitat complexity, or sediment type, or is this being done in the fisheries chapter?	Published accounts are not available by which to make these kinds of relationships with any degree of certainty for the Ocean SAMP area.	
701	4/12/2010	Caroly Shumway	BU	250	paragraph 12. Think you mean Figure 2.41 here.	corrected	
702	4/12/2010	Caroly Shumway	BU	250	paragraph 13. Grammatical correction: Fourth sentence: add comma after "During the 1980s" and after "by 1994."	corrected	
703	4/12/2010	Caroly Shumway	BU	250	Add 3rd sentence. "Sightings occur primarily in the deeper waters of the Ocean SAMP area."	corrected	
704	4/12/2010	Caroly Shumway	BU	250	paragraph 2. The text here does not match table 2.9. Further, the names of the turtle species should be noted in this text. Change to: "two (2) can be considered common: the leatherback and loggerhead; one (1) as regular: the Kemps' ridley; and one (1) as rare: the green sea turtle."	text / table mismatch corrected; no change taken in order to stay consistent with similar description of marine mammals.	
705	4/12/2010	Caroly Shumway	BU	250	Don't we have maps of use, including abundance, in the Ocean SAMP area by birds? The only map to date is the seaduck map, and it basically maps every coastal area equally. This is an important addition to the phenology graphs. Policy section: Given the phenology graphs for the birds, it looks like it might be useful to restrict construction and/or use of the wind turbines from March 1-April 10th. That could eliminate any conflict between the wind turbines and the majority of the species of waterbirds, gull, and sea ducks.	there appear to be no other maps available at present; policy section amended with suggested information	

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706	4/12/2010	Caroly Shumway	BU	280	Literature CitedEtnoyer, P., D. Canny, B. Mate, and L. Morgan. 2004. Persistent pelagic habitats in the Baja California to Bering Sea (B2B) Ecoregion. Oceanography 17: 90-101.Greene, C.H., A.J. Pershing, T.M. Cronin, and N. Ceci. 2008. Arctic climate change and its impacts on the ecology of the North Atlantic. Ecology, 89(11) Supplement, S24–S38.Haney, J.C. 1986. Seabird segregation at Gulf Stream frontal eddies. Marine Ecology Progress Series 28: 279-285.Mann, K.H., and J.R.N. Lazier. 2006. Dynamics of Marine Ecosystems. 3rd edition. Blackwell, Malden, Massachusetts, USA.□McManus, M.A., A.L. Alldredge, A.H. Barnard, et al. 2003. Characteristics, distribution and persistence of thin layers over a 48 hour period. Marine Ecology Progress Series 261: 1-19.Munk, P., P.O. Larsson, D. Danielsen, and E. Moksness. 1995. Larval and small juvenile cod Gadus morhua concentrated in the highly productive areas of a shelf break front. Marine Ecology Progress Series 125: 21-30.Wishner, K.F., D.M. Outram., and D.S. Ullman. 2006. Zooplankton distributions and transport across the northeastern tidal front of Georges Bank. Deep-Sea Research II 53: 2570-2596. Worm, B., M. Sandow, A. Oschlies, H.K. Lotze, and R.A. Myers. 2005. Global patterns of predator diversity in the open oceans. Science 309: 1365-1369.	used as appropriate	
749	4/12/2010	Allen Gontz	UMASS Boston		Figures:1.If these are the final figures, the resolution is not of high enough quality. Figures appear pixilated and fuzzy.2.Figures should be larger. Difficult to see details and include the information required for full understanding of the concepts presented in text.3.Figures generally lack scales, legends, identification of locations4.Figures that show areas with greater spatial extend than the SAMP should/must include the outline of the SAMP.5.Should be internally consistent.6.All figures should have frames around the boundaries of the data7.All figures require lat/lon notation on tickmarks8.With respect to the Ocean SAMP report figures – remove text boxes on the figures that serve as secondary caption. If this information is critical to the figure, then it MUST be large enough for the reader to decipher. Consider moving this information into the caption9.Remove all secondary captions from figures. Figures should have only one caption and number.	1. Many figures redone or removed. 2. All remaining made as large as possible. 3. Being addressed where possible. 4. Being addressed where possible. 5. Comment unclear, no action. 6. Will be formatted in same fashion as all SAMP figures. 7. Not possible to do this; reader can reference Fig 2.1 for that. 8. This is standard format for all SAMP figures; no action taken. 9. Completed.	
750	4/12/2010	Allen Gontz	UMASS Boston		Content: 1.It seems like this entire work neglects the Inner Shelf. Every section should include a discussion of the Inner Shelf as it is a component of the SAMP. The exclusion of the Inner Shelf in this work makes it an INCOMPLETE document.2.Lots of overlap that could be combined. If they are not combined, the MUST be internally consistent with respect to information and interpretations. a.Sections on Toxins 240.2 and Benthic Ecology 250.2b.Geological framework and benthic habitat3.Remove areas where figures and text are in conflict with the presentation of the same information in other areas.4.I was left with a very poor understanding of how all of this information relates to the SAMP as a whole. It seems quite disjointed and focused primarily on BIS and RIS with the Inner Shelf left out of most discussions.5.Avoid use of “THE AUTHORS” in the text. It is confusing. Not sure if you are referring to a reference or the person who wrote this chapter	1. Some portions rewritten and new text added as suggested, but not possible in all sections due to lack of information; new info will be added as it becomes available. 2.All attempts will be made to achieve consistency. 3. Has been addressed. 4. This will be addressed when and where possible; some new information has been inserted in various sections. . 5. Done for entire document.	
751	4/12/2010	Allen Gontz	UMASS Boston	200	Remove the “and” between LIS and Buzzard Bay.Second sentence “To date, mainly…” is an extremely long sentence. Consider breaking it into 2 or three parts.Third sentence “For example…” PORT should be PART. Fourth and Fifth sentences – the order should be reversed	1. Done 2. Corrected. 3. Section rewritten	
752	4/12/2010	Allen Gontz	UMASS Boston	200	Third sentence “The area of…” Is there are outside of the RIS and BIS that are included in the SAMP?	Yes, that is correct.	
753	4/12/2010	Allen Gontz	UMASS Boston	200	Figure 2.1:Outline the SAMP,Label ALL of the features cited in the text ,Rhode Island Sound,Elizabeth Islands,Narragansett Bay□	Corrected	
754	4/12/2010	Allen Gontz	UMASS Boston	200	Rhode Island Sound is not labeled on Figure 2.1	Corrected	
755	4/12/2010	Allen Gontz	UMASS Boston	200	Lacks discussion of water exchange,Lacks details on interaction with LIS	Corrected; Long Island Sound is detailed later in the chapter	
756	4/12/2010	Allen Gontz	UMASS Boston	200	Lacks details on the area and average depth,Lacks discussion of key features	new information included to address details noted.	

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757	4/12/2010	Allen Gontz	UMASS Boston	210	This section seems very disjointed in the early paragraphs. There is no discussion of the glacial history as a whole, especially when the authors put so much evidence on the glacial landforms. It lacks a paragraph that sets the framework.There isn't a discussion of those areas that were not overridden by glacial ice and the landforms or sedimentary environments that results such as past terrestrial environments, submerged shorelines, outwash and the large areas of general reworking resulting from the transgression.The section is very disjointed discussions of glacial framework mixed with sedimentology. The relationship of the modern seafloor with the evolution from Late-Pleistocene is not clear. The section fails to include a discussion on the evolution of the areas based on sea-level change. In terms of the present seafloor, the surfical features are directly related to the reworking and modification resulting from transgression.THIS SECTION MUST INCLUDE A DISCUSSION OF THE SEA LEVEL HISTORY AND THE INFLUENCE OF SEA LEVEL CHANGES ON THE LANDSCAPE. GLACIAL GEOLOGY IS ONLY ONE PART OF THE STORY.	1. Intro paragraph inserted and some history / background follows later in the section. 2. Beyond the scope of this chapter, the reader can reference the primary literature.3. Said earlier; no action. 4. This may be addressed in following section text; comment a bit vague. 5. To be addressed if time and information is at hand. 6. partially rewritten and revised to better put sea level rise into context; new map added.	
758	4/12/2010	Allen Gontz	UMASS Boston	210	There should be a figure that shows the LGM margin and its location within the SAMP.Last sentence "The maximum extent…" contains a list of units based on sedimentary texture and one unit that is composed of a geomorphic unit that contains a genetic connotation. This last class "MORAINE" should be removed as it is merely a combination of the sedimentary textures. If you wish to go with a genetic classification scheme, then the sedimentary units must be removed and replaced with units such as beach, shallow marine…Lacks discussion of impact of reworking of terrestrial, estuarine, palustrine, lacustrine and fluvial environments during the most recent transgression. This is just as important if not more than the processes associated with glaciations.	1. Figure changed. 2. Comment unclear; no action taken. 3. Beyond the scope of this chapter.	
759	4/12/2010	Allen Gontz	UMASS Boston	210	Figure 2.2: Figure NOT required. It is not linked with the text.Comments on the margin are not readable. What do the arrows represent?The ice margin is not labeled.What is the solid black line that splits from the shoreline just to the left of the label "SHORELINE"?	Figure replaced with a new figure addressing concerns.	
760	4/12/2010	Allen Gontz	UMASS Boston	210	Figure 2.2 does not refer to 9.5 kya, but 17 kya. No information in the paragraph that relate to Figure 2.2. REMOVE. A sea level curve or figure detailing the flooding events of RIS and BIS is required.Third sentence "Current sea level…" (at Montauk, NY) the () are not required. Montauk rate requires errors and expansion to two significant figures. Without the similar precision, this reading does not add to the discussion. It should be equivalent or NOT used.What about a sea level rise reading on the eastern edge of the SAMP, ie Martha's Vineyard or Falmouth.	1. Corrected in new figure. 2. This is beyond the scope of this chapter and would not add significantly to understanding the ecology; no action. 3. corrected. 4. Corrected. 5. Corrected.	
761	4/12/2010	Allen Gontz	UMASS Boston	210	This paragraph is all about moraines and not the general geologic framework.Should include a broader discussion of the overall framework and discuss glacial, lacustrine and transgression-related landforms OR a discussion on the sedimentary environments.	The moraines are important features to the ecological layout and so are emphasized. Suggested elaboration would provide too much detail that is not needed. Reader can reference primary literature for details.	
762	4/12/2010	Allen Gontz	UMASS Boston	210	Figure 2.3:Remove title and caption for the lower right portion of the figure.Not a glacial geology map, only moraine location map and glacial lake, if this is to be a glacial geology map, it should include other glacial geological units that occur in the area, ie outwash, till, glacial lacustrine, Missing classifications around the tip of the Elizabeth Islands	1. Standard for SAMP maps. 2. New figure used; legends corrected.	
763	4/12/2010	Allen Gontz	UMASS Boston	210	CROSS-SHORE SWATHS – these have been referred to in the literature as RIPPLE SCOUR DEPRESSIONS.How does this paragraph relate to the previous paragraph?Lacks areas related to glacial lake sediments as referenced in Paragraph 3, Figure 2.3. This paragraph seems purely focused on this small area of the SAMP and not broadly applicable to the entire area. Does not seem to include all of the depositional environments that are found within the SAMP	1. Terminology kept as these are from the cited literature used here. 2, 3. The focus is on the sediment types. 4, 5. This correct but this was the information readily available and that was considered suitable for understanding the ecology.	
764	4/12/2010	Allen Gontz	UMASS Boston	210	Figure 2.4: Figure lacks legend, What are the red boxes, Where is this located within the SAMP, What areas are outside the SAMP	Figure removed	
765	4/12/2010	Allen Gontz	UMASS Boston	210	Figure 2.6: Boundaries of the SAMP, Cannot read the key to evaluate the figure, Unsure if the figure supports text	Figure removed	
766	4/12/2010	Allen Gontz	UMASS Boston	210	Paragraph is difficult to read. Consider rewriting, Very choppy,Key theme lost in list with Sentence 1,Sentence 1 – too long, the list at the end is extremely cumbersome. Reduce the components of the list or break into two sentences,Sentence 2 – awkward,Sentence 3,Are depositional areas always areas of reworking and sorting?,Depositional areas are typically found in bathymetric LOW areas. If depo areas exist on highs, state SIGNIFICANT evidence to support this.What about evidence from sidescan for disturbance and sorting based on trawling?	Enitre section rewritten.	
767	4/12/2010	Allen Gontz	UMASS Boston	210	Second sentence "Sediments and bottom…" sea floor should be seafloor, Focused on the shallow water areas in the inner areas of BIS and RIS. What about deeper water areas of the inner shelf, Lacks discussion of fair-weather processes and fine sediment deposition	figure removed and section rewritten	

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768	4/12/2010	Allen Gontz	UMASS Boston	210	Figure 2.5:What do the colors represent?Focused on shallow areas, what about deeper water areas of the inner shelf	Figure removed	
769	4/12/2010	Allen Gontz	UMASS Boston	210	Move figures 2.7 and 2.8 forward. Too much space between where they are cited in the text and where they are located	Corrected	
770	4/12/2010	Allen Gontz	UMASS Boston	210	Figures 2.7 & 2.8 referenced in the paragraph do not discuss or illustrate bathymetric control on seafloor geology, MUST include bathymetry on Figure 2.7 ,Show location of figure 2.8 on 2.7,Sentence 1 – no indication on Figure 2.7 or 2.8 of benches or scarps – how do these features relate to the basic units loosely defined on figure 2.7,Sentence 2 – Paleo-shorelines are trending WSW-ENE, where are the former fluvial channels,Sentence 3 – fluvial channels and paleo-shorelines do not relate to the glacial origins, but relate to sea level rise and reworking of older sedimentary deposits.,How does till relate to sand sheets?	1. Meaning unclear. 2. Bathymetry not possbile to add. 3. Figure 2.8 removed. 4, 5, 6. Intent of comments unclear.	
771	4/12/2010	Allen Gontz	UMASS Boston	210	Figures 2.7:General: Move forward in the text Imaged pixelated Location with respect to the RI SAMP and greater region? Present shorelines? Bathymetry? HOW DOES THIS FIGURE RELATE TO FIGURE 2.3? Without locational information, one could draw the conclusion that these two figures are in conflict!!! Relate the glacial features from Figure 2.3 with the sedimentary units on Figure 2.7 Top:Avoid mix of sedimentary unit, geomorphic units and geophysical units onstruct maps that contain one map unit type Low-Moderate-High backscatter = ??Bottom: How is sorting and reworking different from bed-load transport	new text has been added and rewritten to address comments; figures removed and text moved as well.	
772	4/12/2010	Allen Gontz	UMASS Boston	210	Sentence 1 – Who is the author? Savard or the author of this report?How does this paragraph relate to the “glacial features” of Figure 2.3. A figure with general bathymetry would be useful as would a locaitonal map indicating where this hole.Without an interpretation or relationship to processes this paragraph seems unneeded. Could easily be rolled into PARAGRAPH 9	1. Corrected. 2. Revised figure used with better bathymetry; hole not marked as is a minor feature.	
773	4/12/2010	Allen Gontz	UMASS Boston	210	Once again – mix of genetic and sedimentological units and descriptions. Stick with genetic or sediments for discussions. How are boulder fields different from moraines????	Text rewritten to clarify.	
774	4/12/2010	Allen Gontz	UMASS Boston	210	Figre 2.8: Move forward in text. To far removed from citation.Must be a higher resolution figure.To what does the backscatter scale relate? Dark = ?Location?Not sure I by the benches interpretation – the benches appear to have a radius of curvature very close to that of the interpreted mega ripples and sand waves that are in close proximity. Could this be an issue of look angle of the sidescan? Interpretation is not convincing and the text does not support the interpretation	Figure removed	
775	4/12/2010	Allen Gontz	UMASS Boston	220	Relationship of severe storms to alteration of the seabed and mobility of sediments	Mentioned in first sentence of section	
776	4/12/2010	Allen Gontz	UMASS Boston	220	What about the area within the SAMP from Block Island east to the Elizabeth Island and those areas seaward of the moraine?If you are going to discuss this in terms of one area, make the jump to the other areas	Corrected	
777	4/12/2010	Allen Gontz	UMASS Boston	220	Winds do not play a role in overall circulation? – Then states how the winds drive water flow out of LIS and exchanges through BIS and RIS. This is a confusing statement considering that there isn’t a discussion of what the overall circulation patterns are. Include the overall circulation and how these winds alter the overall circulation	Rewritten to correct and clarify	
778	4/12/2010	Allen Gontz	UMASS Boston	220	Figure 2.9: For what years are the months averaged or is the daily average over one year. If so, what year.	these are averaged over a 20 year span; see cited refernece	
779	4/12/2010	Allen Gontz	UMASS Boston	220	Keep the wind speed units consistent with Figure 2.9. Convert 4.0 km/hr to m/sec..What is the cause of the change in winds? Related to larger-scale climate?This paragraph leaves a hanging thread. Compete the thought and relate the change in wind speeds to something.	Corrected	
780	4/12/2010	Allen Gontz	UMASS Boston	220	Convert 97 kph to m/s for comparison to Figure 2.9. Why 60 m? Should it not be compared to the average depth of the SAMP area? It would make much more sense. Possibly relate to the areas of sediment defined in Section 210.Based on what grain size? Is it a reasonable grain size for the area?Sentence 4 – in order to make this statement, more details must be presented (see 1-3)	Section moved, rewritten and corrected. 60 m is from the mode runs and equals the depth of disturbance.	
781	4/12/2010	Allen Gontz	UMASS Boston	220	Figure 2.10:Difficult to follow trends of individual storms.Hurricane of 1938?Consider this as an inset in a detailed map of the SAMP area showing the hurricane trends	Intent is only show storm tracks, not detail. 38 hurricane was not a direct strike to RI. Figure legend was changed.	
782	4/12/2010	Allen Gontz	UMASS Boston	220	Sentence 4 – what is the size of the particle transported 40-80 km?Why no discussion on character of these systems and comparison to hurricanes. This paragraph makes the Hurricanes look more significant that Nor’easters.How may nor’easters have struck in the same time period as hurricanes, What are the typical wave climates and wind climates based on these storms.Potential for sediment transport, resuspension and mobilization of the seabed	1. Particle size not given. 2. Figure 2.11 removed. The intent is to provide reference to major forces that may have an influence on the ecology over the short term, not to go into great depth about the meteorology of those forces; other sources can provide that level of detail.	
783	4/12/2010	Allen Gontz	UMASS Boston	220	Figure 2.11: Why is this figure in FEET.What is the significance of the colored dots?	Figure removed	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
784	4/12/2010	Allen Gontz	UMASS Boston	220	What about coastal morphology for control of storm surge?Why is Figure 2.11 not cited in this paragraph. Why is the paragraph in meters and the figure in feet – CONVERT. What is the location of the estimated storm surges? Newport and providence are on Figure 2.11, both outside the SAMP and numbers in text do not match Figure 2.11.MUST reconcile the difference between Figure 2.11 and Paragraph 4. Considering Newport and Providence are outside the SAMP, you might want to remove Figure 2.11 and replace with something that is more closely related to the area of the SAMP	1. Not relevant to the discussion here. 2. Figure removed.	
785	4/12/2010	Allen Gontz	UMASS Boston	220	Does the rest of the subsection support this in terms of the figures of hurricane strikes and storm surge? Not clearly apparent. Seems like it might be a bit of a stretch.	This discussion is based on what is reported and the literature with possible further discussion in the Climate Change chapter	
786	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.12: Why is bathymetry in feet.Identify the warm core ring. Show the location of the SAMP	Figure has been redone.	
787	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.13: INADEQUATE,Poorly drafted and poorly reproduced,This figure should be redone with the same quality as 2.12,Are there bathymetric contours in the Gulf of Maine? If so, what is their depth,What do the number represent?,What's the scale?,Location? Lat-long marks?	Figure removed	
788	4/12/2010	Allen Gontz	UMASS Boston	230	Showa sample of the model output.,Cannot evaluate how the NECOFS might be useable without more information on the model and a sample. This paragraph requires more development, NECOFS could be a one of the most significant additions to this section and it requires more than just lip service	The model is much too complex to show in the chapter so the reader is provided the URL to the Umass website. The model has not been run for the Ocean SAMP area and therefore this would be pure speculation.	
789	4/12/2010	Allen Gontz	UMASS Boston	230	Any information of the tidal residence time of LIS, BIS, RIS and the SAMP area?Sentence 3 – "…every other flood and ebb tide"? remove other. Sentence 4 – "…geological topography and glacial origins" this reads really rough. Better said with "geomorphology" which encompasses both concepts.	1. No such information was found. 2. corrected. 3 corrected.	
790	4/12/2010	Allen Gontz	UMASS Boston	230	What are the velocities?	Corrected	
791	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.14: 1.Figure requires Outline,Numbers on the color scale for velocity,Identification of the Race and BIS,Lat Long grid, Scale	The intent it simply to show increased velocities in those areas and that they are important to overall circulation in Block Island Sound; the actual velocities are unimportant to the context.	
792	4/12/2010	Allen Gontz	UMASS Boston	230	Cites Figure 2.14 and references direction of flow. Figure 2.14 does not contain directional information. Either remove citation or update Figure 2.14 to include directions of tidal currents along with velocity.	Corrected	
793	4/12/2010	Allen Gontz	UMASS Boston	230	This section would benefit from a figure of summer and winter surface water temperatures	Detail is provided later in the section, this is an introduction	
794	4/12/2010	Allen Gontz	UMASS Boston	230	Cox Ledge has not bee identified on any figures, Figure 2.21 should be moved into this section or a comparable figure inserted here.	Fig 2.1 has Cox Ledge. Detail comes later in the section.	
795	4/12/2010	Allen Gontz	UMASS Boston	230	Should include figure with MARMAP stations	Readers can visit the MARMAP website for station locations rather than add another figure to the text.	
796	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.16: Figure requires Blocking/outlines, Geographic location (lat/lon), Location of SAMP area, Should be referenced in Paragraph 3	Fig blocking is not used in the SAMP; other changes not possible as they are not original figures.	
797	4/12/2010	Allen Gontz	UMASS Boston	230	Show location of station referenced in Sentence 1 on Figure 2.16	Corrected	
798	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.17: Show location on Figure 2.16, Expand vertical scale to show separation	Change not possible; not original figure	
799	4/12/2010	Allen Gontz	UMASS Boston	230	Last Sentence "…whether they are bluefish or right whales" to informal. Suggest replacing with "…largely determines where predators of all levels within the food chain will congregate to feed."	Corrected	
800	4/12/2010	Allen Gontz	UMASS Boston	230	Sentence 2 "-…-" is a very cumbersome sentence. Consider extracting the definition of buoyancy driven circulation into its own sentence	Rewritten	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
801	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.18: Figure pixilated, Scale figures the same, What are VS and NS,Current scales should be included and on the same scale to be able to compare between the figures	Figure resolution not problematic up checking; Figures cannot be scaled same as they are from separate sources. The intent is to show basic current flows and that they are most intense in those areas noted, not to go into the specifics of velocities, which the reader can get from the original soruce docuemnts if desired.	
802	4/12/2010	Allen Gontz	UMASS Boston	230	Sentence 1 – Cold deep current only present in winter. Warmer current in summer, See figure 2.16, Consider figure to illustrate the current residuals, ie cite Figure 2.19	No change; modelers are OK with this presentation.	
803	4/12/2010	Allen Gontz	UMASS Boston	230	Section focused on interaction between LIS and BIS, No discussion on interaction with RIS or NB,One sentence paragraph combine with paragraph2	The section is focused on BIS; no change made.	
804	4/12/2010	Allen Gontz	UMASS Boston	230	Is 24,000 m/s a net or gross, Sentence 3 – appears to be in potential conflict with Figure 2.17, Volume of exchange through Napatree Point	1. Gross. 2. Comment is unclear. 3. Velocity at Napatree not reported in the literature referenced.	
805	4/12/2010	Allen Gontz	UMASS Boston	230	Source of the remaining 14,000 m3/s?	This is the net ebb/flood that is not exchanged.	
806	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.20: Pixilated, Not sure this adds anything to the body of work. It is only referenced with respect to the annual mean. There isn't a discussion that speaks to the annual trends or why max'es and min'es occur. Suggest removing or expanding the discussion to include the annual trend	Text modified to better reference figure.	
807	4/12/2010	Allen Gontz	UMASS Boston	230	Locate observing station on a figure	No change, not original image.	
808	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.21: Pixilated, Include SAMP on the figure	No change, not original image.	
809	4/12/2010	Allen Gontz	UMASS Boston	230	Sentence 5 – Who are the "AUTHORS"	Corrected throughout the chapter	
810	4/12/2010	Allen Gontz	UMASS Boston	230	Cox Ledge must be located on a figure somewhere, Who are the "AUTHORS", Sentence 2 – add "THE" in "…and an average velocity of 5 cm/s along THE bottom", What is the significance of this paragraph? It outlines two bottom velocities and does not relate them to RIS circulation. Add something that returns the discussion to RIS Circulation	1. See Fig. 2.1. 2. corrected. 3. corrected. 4 The intent is to provide access to limited information and to put into context that velocity flows inshore and offshore appear to be rather different.	
811	4/12/2010	Allen Gontz	UMASS Boston	230	Who is the "AUTHOR", Remove km/day notation and use only cm/s. Introduces unneeded cumbersome notation, What is the average and max? Unable to compare to Paragraph 3	1. corrected. 2. This is how the author reports it. 3. Not reported by author.	
812	4/12/2010	Allen Gontz	UMASS Boston	230	Sentence 1 – why "upward mixing (upwelling)" Remove upward mixing, Sentence 2 – why "advected (movement in a horizontal direction)" Readers should be of sufficient knowledge to know the concept of advected. If you are writing this an audience who is not familiar with the concept of advection, then the entire CHAPTER must be rewritten to contain more a lay-style and language	1. corrected. 2. Advected is not a common term and so is defined; this is done throughout the chapter where appropriate.	TBA-- units need definition.
813	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.22: Not cited in text until Paragraph 6 – move to after paragraph 6, What are the units, Show lat/lon, Label Cox Ledge, Label Port Judith, What is the significance of arrow size, What is the significance of arrow color	Figure moved. 2. Unit definition added. 3. Not possible/not original figure.	
814	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.23 does not show water from the north. The figure is cropped at a point where the flow paths appear to trend from the south, turn west at the Vineyard and then continue WNW into RIS	Figure removed	
815	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.23: Resolution to low, Image cropped on right and bottom, Develop a frame around the entire data window, add missing lat/lon identification on tick marks, Expand figure to west to include all of RIS, See comments on Paragraph 7	Figure removed	
816	4/12/2010	Allen Gontz	UMASS Boston	230	Is this at odd with Paragraph 7? Signell (1987) weak interaction and now Hicks & Campbell (1952) net flow into RIS. How do the salinities relate to the outflow from BB?	Merged with paragraph 7 and rewritten.	
817	4/12/2010	Allen Gontz	UMASS Boston	230	This section would benefit from a terrestrial watershed map of LIS, BIS and RIS – very useful!! No discussion of BIS. No discussion of link to BB	Fig. 2.1 shows land area; other comments unclear.	
818	4/12/2010	Allen Gontz	UMASS Boston	230	Confused – freshwater return flow into RIS? Do you mean BIS? Other paragraphs suggest that LIS does not impact RIS but has a strong control on BIS.Avoid "THE AUTHORS" Not sure to whom you are referring. Impact of BB on RIS? Earlier paragraphs suggest a low salinity flow into RIS from BB (ie 230.4.8)	1. Reference removed. 2. Corrected. 3. Section rewritten.	
819	4/12/2010	Allen Gontz	UMASS Boston	230	Figure of AMO oscillation coupled with something that you mention in the text would be useful. Correlated to fish (Merriman & Sclar) or rainfall or salinity. Otherwise, this paragraph is just arm waving	Comment unclear. There is a link to fish ecology in the text.	
820	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.24: Panels too small, Pixilated, If these are important, they should be much larger, Does the white area represent no survey data or shallower than depth measurement, Bathymetric contours would be very useful on this figure, Add frames around each, Include labeled Lat/Lon ticks	figure made as large as possible given page size limitations	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
821	4/12/2010	Allen Gontz	UMASS Boston	230	Sentence 1 "…- because of differing thermal and/or salinity/density regimes…" Density is related to both salinity and temperature. It is not appropriate to link salinity to density and allow temperature to stand alone. Reword to indicate that DENSITY drives and that salinity and temperature are components of density.Could use some degree of references that support some of the statements made in this paragraph, including "Water column is a noted phenomenon" and "Stratification reduces interaction …"	1. Corrected. 2. This is an introduction; some text removed to be clearer.	
822	4/12/2010	Allen Gontz	UMASS Boston	230	"-strong" could be changed to remove the "-"	Unclear; no change	
823	4/12/2010	Allen Gontz	UMASS Boston	230	Reference ample evidence, Is there research on other areas that you could compare the SAMP to?	1. corrected 2. no further research found.	
824	4/12/2010	Allen Gontz	UMASS Boston	230	With the exception of paragraph 1, this section reads like a laundry list of observations without any link between them.It should really be either 2 or 3 paragraphs, not 4.There is not enough information to support the amount of paragraphs.Consider – Introduction, Stratified, Mixed and the three paragraphs.The section leaves me asking "SO WHAT?" – Must link this to something as has been done in other sections.	section rewritten to reflect suggestions and comment	
825	4/12/2010	Allen Gontz	UMASS Boston	230	Who are "THE AUTHORS".Is there data to support stratification break down in the fall?	Corrected throughout the chapter	
826	4/12/2010	Allen Gontz	UMASS Boston	230	One sentence paragraph – AVOID.Combine with other paragraphs, expand or remove."…along a line a few miles east of a line…" cumbersome. Avoid duplication of words, try "…along a transect that follows a line…".This suggests stronger stratification in the fall than summer and in direct conflict with other paragraphs in this section.	Section reorganized and rewritten	
827	4/12/2010	Allen Gontz	UMASS Boston	230	Where are the locations?	corrected	
828	4/12/2010	Allen Gontz	UMASS Boston	230	One sentence paragraph, AVOID	corrected	
829	4/12/2010	Allen Gontz	UMASS Boston	230	Why no discussion of the Inner Shelf? Its in the SAMP. If you are going to discuss stratification of BIS and RIS, why not Inner Shelf. The section is incomplete without it.	Description inserted.	
830	4/12/2010	Allen Gontz	UMASS Boston	230	Figre 2.25:Inset map with location required.Pixilated.Why no reading on bottom after Jan 97.If you suggest storms in your caption, indicate large storms on the figure that correlate with surface salinity lows, otherwise, do not mention the relationship to storms.Aren't increased precipitation events related to storms?.Move to after Paragraph 2	figure not original cannot be changed. Other comments addressed, corrected. Paragraph 2 reorganized.	
831	4/12/2010	Allen Gontz	UMASS Boston	230	Move ahead of Figure 2.25.See comments for Figure 2.25	Reorganized	
832	4/12/2010	Allen Gontz	UMASS Boston	230	Show mid-column readings if you are going to talk about them and show surface and bottom readings.Sentence 3 "…O'Dennell and Houk." Add the citation "(in prep)" or other	Section totally reorganized	
833	4/12/2010	Allen Gontz	UMASS Boston	230	Figure 2.26: Pixilated.Mid-column sample depth?.Remove gray background.What do the red "X" represent? Sample locations, if so, say it in the caption.Are all samples locations repeated on the two surveys?.Scale based on color ramp, are they the same?	Figure not original, cannot be altered. Section totally reorganized.	
834	4/12/2010	Allen Gontz	UMASS Boston	230	Doesn't really add anything to the discussion. Could be merged into your Summary, Paragraph 5	Section totally reorganized	
835	4/12/2010	Allen Gontz	UMASS Boston	230	Merge with Paragraph 4	Section totally reorganized	
836	4/12/2010	Allen Gontz	UMASS Boston	240	Not sure if this quote supports the section.Geologically speaking, it is a bit confusing with its timescale. Within a few centuries of WHAT	removed; corrected	
837	4/12/2010	Allen Gontz	UMASS Boston	240	Last half of paragraph is very choppy, consider better transitions between sentences 4 and 5	Corrected	
838	4/12/2010	Allen Gontz	UMASS Boston	240	Sentence 2 – "In trace amounts toxins…" should be "In trace amounts, toxins…". Impact on reproduction?	Corrected	
839	4/12/2010	Allen Gontz	UMASS Boston	240	Consider adding a figure that shows the location of sampling stations for this sub section.Overall, better refinement on the spatial and temporal scale of the reported measurement is required. Are they averaged over multiple readings, multiple locations, multiple surveys?References?"BENTHOS" are you referring to the epi and infauna or the geological processes of burial and sequestration?Sentence 3 – "…can be difficult to comprehend in well-studied ecosystems" consider adding "even" to the sentence – "…can be difficult to comprehend, even in well studied ecosystems"Sentence 4 – What about the Inner Shelf?	1/2. Figure not added; resources not available. 3. Introduction so references/details are following. 4. corrected. 5. corrected. 6. corrected.	
840	4/12/2010	Allen Gontz	UMASS Boston	240	Who are "THE AUTHORS"	Corrected throughout the chapter	
841	4/12/2010	Allen Gontz	UMASS Boston	240	Where were these measured. Point station or averages from broad scale survey? Include it in the Table caption, not just in Paragraph 4.for NO3, are these averages for the time reported? What was the variation?For NO2, what was the ranges for "SUMMER" in terms of reading and months. Average of single sample. Was this truly 0, or below the limit of detection.Must clarify how these samples were integrated to develop the single value or range presented.	Confusing comment-references a section and inappropriate Table. Table does show time frame and is it clear that the values are averages or ranges as presented.	

OCEAN SAMP CHAPTER 2. ECOLOGY OF THE SAMP REGION - COMMENTS & RESPONSES (as of 7/21/10)

Record #	Date	Name	Organization	Section	Comment	Response	Notes
842	4/12/2010	Allen Gontz	UMASS Boston	240	No samples for the Winter months.	Correct	
843	4/12/2010	Allen Gontz	UMASS Boston	240	Map with sample locations	Map not created; resources not available	
844	4/12/2010	Allen Gontz	UMASS Boston	240	Where were the samples collected?How important is this to the SAMP area?Based on link of Inner Shelf to BIS and RIS.How often does this process occur	This was a 1 time collection on the outer shelf so there is not context re: recurrance of such an event and it is not known how important it might be to the ecology overall.	
845	4/12/2010	Allen Gontz	UMASS Boston	240	How does this compare to “adjacent” areas – show numbers?What are the adjacent areas	Comment unclear; no action taken.	
846	4/12/2010	Allen Gontz	UMASS Boston	240	See comments for Table 2.1.Move closer to Paragraph 5.Move out of Subsection 240.2	Corrected	
847	4/12/2010	Allen Gontz	UMASS Boston	240	Are you referring to dredge sites or dredge spoil disposal sites.High potential for impact during disposal activities.High potential for reactivation of contamination sequestered below the seafloor during offshore construction and/or dredging	Corrected	
848	4/12/2010	Allen Gontz	UMASS Boston	240	Is the location the center of the site.Single disposal event or multiple events.What are the toxins associated with the disposed sediments.Was the site capped.What is the grain size of the sediments disposed of? Are the currents capable of remobilizing the sediments?.How susceptible to resuspension through storm events are the disposed sediments?.Show the traffic lanes on Figure 2.27	1/2. Not relevant to the discussion. Rest comments addressed and/or corrected.;	
849	4/12/2010	Allen Gontz	UMASS Boston	240	Figure 2.27: Resolution to low.Is the RIDS indicator box to scale?.What is the spatial limit of Brenton Reef.What is the spatial extent of impact from the North Cape spill	A new figure was inserted	
850	4/12/2010	Allen Gontz	UMASS Boston	240	What is the spatial extent of the site.What material was disposed there.What is the water depth.Does the sampling by Battle indicate if the dredged sediments have been capped by recent deposition or eroded and transported.How much material was emplaced.Source of material.What about chronic exposure	addressed and corrected noting toxins assessed.	
851	4/12/2010	Allen Gontz	UMASS Boston	240	Location of sites.What metals.What organic and inorganic contaminants were tested	locations and toxins tested noted	
852	4/12/2010	Allen Gontz	UMASS Boston	240	What was the scale of impacted areas.Is this spill in the SAMP.What is the possibility of other spills.What about movement of large vessels though the area toward Providence or BB	Corrected	
853	4/12/2010	Allen Gontz	UMASS Boston	250	The biological portion of this study is well outside of my realm of expertise. I will comment on Subsection 250.2 – Benthic Ecology, but not on the rest of the section.	No action needed	
854	4/12/2010	Allen Gontz	UMASS Boston	250	Choppy, poorly constructed introductory paragraph.Are you using benthos and benthic environment interchangeability.If you are specific about oil spills in BIS, why not specific about the location of the dredge disposal in RIS	Rewritten	
855	4/12/2010	Allen Gontz	UMASS Boston	250	This is a much better Paragraph 1 than the current Paragraph 1, Consider eliminating Paragraph 1 and start with this ass your introduction paragraph.Add some references to show the degree of previous studies and the degree of spatial and temporal limits	Rewritten	
856	4/12/2010	Allen Gontz	UMASS Boston	250	Who are “THESE AUTHORS” Avoid use.Replace “four million cubic meters” with the number cited in 240.2.2.Consider including a table showing the comparison between in and out of the RIDS	Paragraph moved and rewritten	
857	4/12/2010	Allen Gontz	UMASS Boston	250	Use the same terminology as in 240.2.3 – Brenton Reef.Remove “4 miles” and convert to kilometers to remain consistent with the rest of the document..Convert cubic yards to cubic meters to remain consistent	Paragraph moved and rewritten	
858	4/12/2010	Allen Gontz	UMASS Boston	250	Who are “THE AUTHORS” avoid.Refer to figure 2.9	Corrected throughout the chapter	
859	4/12/2010	Allen Gontz	UMASS Boston	250	Poorly written overall.Not sure why, organic content via loss on ignition is a common analytical technique on sediment cores and required on most USACE cores. Check for additional information. There should be LOI information available for portions of BIS, RIS and the Inner Shelf	paragraph removed.	
860	4/12/2010	Allen Gontz	UMASS Boston	250	Reference the schemes developed.Reference the proxy maps developed.Why are these good.Why are these bad.What else needs to be included in them to make them useful.Cite Table 2.6 as an example.Cite Figure 2.33 as an example.Cite Figure 2.34 as an example	1/2. To be addressed. 3-5 not relevant. 6-8 are explained in the following paragraphs of the text.	
861	4/12/2010	Allen Gontz	UMASS Boston	250	Table 2.6:Poor alignment of rows – Check Column 1 and ensure consistency in alignment with Column 2.Organize table based on increasing grain size.Only data on 7 species?.Figure 2.33 should add at least 1 more species.What about(Benthic fishes,Lobsters,Crabs,Mollusks,)Other invertebrates,Nothing lives in/on gravel?.VERY INCOMPLETE	1-4. Corrected.5. Unclear comment. 6. These are the data available, and Yes, it is incomplete.	
862	4/12/2010	Allen Gontz	UMASS Boston	250	Eliminate secondary caption and source in text box on figure.Show SAMP boundary.No other sources that could assist in filling in the western section of the SAMP?.How is this different from the figures in the geology section?.This figure does not match with those in the geology section.Resolve the apparent conflict between this and Figures 2.7, 2.6, 2.4, 2.3	1. This is the SAMP standard; no change. 2. No other sources found. 3. Other figures have been removed. 5/6 resolved by figure removal.	
863	4/12/2010	Allen Gontz	UMASS Boston	250	How was Figure 2.33 developed – samples or inferences from Quahogs?.Paragraph adds nothing mostly repeat of Paragraph 9 with a little site specific information. Combine with Paragraph 9 and remove	Reference added so reader can see orginal for the specifics requested here.	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
864	4/12/2010	Allen Gontz	UMASS Boston	250	Is this the Ocean SAMP Report? If not cite as King & Collie (YEAR).How does the features on Figure 2.34 align with the moraines mapped on Figure 2.7, 2.6, 2.4, 2.3	This analysis not yet completed by researchers.	
865	4/12/2010	Allen Gontz	UMASS Boston	250	Figure 2.34:What do the Quartiles represent.Does this correlate to bed relief, if so, suggest relief numbers.Might be good to correlate with grain size.Pixilated.Remove 2 text boxes from figure, unless they are an integral part of the figure for this purpose. If they are, then they MUST be readable.Cite as King & Collie, YEAR	To be addressed.	Define quartiles and correct map.
866	4/12/2010	Allen Gontz	UMASS Boston	260	Might want to consider an intro statement that sets the stage and outline the importance in a paragraph or two.No discussion of anthropogenic activities including .potential offshore drilling resulting in increased ship traffic.increased construction of offshore facilities like windfarms and pipelines.alteration of freshwater inputs through dam removal	1. Text added. 2. Discussion is in the Renewable Energy chapter.	
867	4/12/2010	Allen Gontz	UMASS Boston	260	Only address two invertebrate pelagic species.Are there others?Why only these?	These are the only ones addressed in the literature.	
868	4/12/2010	Allen Gontz	UMASS Boston	260	What is Skeletonema?	Corrected	
869	4/12/2010	Allen Gontz	UMASS Boston	260	One sentence paragraph – AVOID. Combine, expand or remove.Expand to indicate the significance of the species	removed; corrected	
870	4/12/2010	Allen Gontz	UMASS Boston	260	Are species brought in by wind, currents or wildlife truly invasive? Are these not the mechanisms that naturally distribute species throughout enhanced ranges?	Sentence removed	
871	4/12/2010	Allen Gontz	UMASS Boston	260	How does this species alter the benthic ecosystem ecology?	Corrected	
872	4/12/2010	Allen Gontz	UMASS Boston	260	Figure 2.53:Too small,Pixilated,Resolution too low,Frame the image,Scale?,Remove secondary figure caption that identifies the figure as Fig. 2,What do the number refer to?,How many of these sites are actually in the SAMP. It looks like only ~ 6.	Figure removed	
873	4/12/2010	Allen Gontz	UMASS Boston	260	How does this plan attempt to mitigate the species?Is there any documentation of any of these species in the SAMP? If you, include that information	Status of species not known as noted in text.	
874	4/12/2010	Allen Gontz	UMASS Boston	260	Are there others? Only 2?What about red tides?	these are the major ones of concern; red tide not a disease and addressed earlier in appropriate section	
204	1/11/2010	Craig Swanson	Applied Science Associates		I suggest separating Physical Oceanography and Meteorology into two major sections (2X0.). My experience with EISs (e.g., MMS 2007-046 Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf) presents the water environment separately from the air environment.	None	
205	1/11/2010	Craig Swanson	Applied Science Associates		I suggest you include the following subsections in the PO section: currents, waves, tides, and water properties (freshwater inputs, temperature, salinity, density). I suggest moving part of Para2 in 230.2 (Water Quality) to the PO section.	None	
206	1/11/2010	Craig Swanson	Applied Science Associates		I suggest you include the following subsections in the Met section: winds, temperatures, precipitation, visibility, mixing (stability and mixing height), and storms. Air quality may also be a possible subsection here.	None	
739	4/12/2010	Tricia Jedele	Conservation Law Foundation	210	CLF is concerned with the prominent opening quote of introduction to the Ecology Chapter. The quote is not at all reflective of the overarching principles of ecosystem based management; is dated and speaks to the dynamic water mass conditions and the transitory nature of fish in only one part of the SAMP planning area, i.e., Block Island Sound. The quote seems to suggest that any changes to the ecosystem, either human induced or natural will not have a deleterious impact on fish (or by implication, the ecosystem) residing in Block Island Sound as they can simply move out of the area. This broad statement seems wholly incorrect and inappropriate – particularly as the opening of such an important chapter of the Ocean SAMP. While the SAMP planning area may be characterized by intensive interaction among various water bodies, it is important to recognize and this Chapter should articulate that there are habitats, particularly benthic habitats and benthic communities that are relatively stable and therefore dependent on maintenance of ecosystem health– a point that is underscored in Section 210 (9) and 250.2.1 (4.d.). CLF's concern is that this misplaced emphasis on the dynamic aspects of the SAMP ecosystem may lead readers to a false expectation that any natural or human disturbance will have minimal impact on the ecosystem so characterized by dynamic natural forces. Instead, the opening should reemphasize the larger goals of the SAMP, i.e., to foster a properly functioning ecosystem; to maintain the ecological capacity, integrity, and evolution of the Ocean SAMP's biophysical and socioeconomic systems.	CRMC's primary guiding principle upon which environmental alteration of coastal resources will be measured, judged and regulated is the preservation and restoration of ecological systems. This is stated in the Introduction chapter and will be stated in the Ecology and New Policies chapters.	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
740	4/12/2010	Tricia Jedele	Conservation Law Foundation		Throughout the Chapter there are references to a lack of data and scientific understanding of various aspects of the SAMP ecosystem and the need for additional research on a variety of topics. The SAMP should be accompanied by a scientific research plan that puts forth priorities that will advance the SAMP and fill gaps in ecological knowledge in subsequent years. This Chapter, most especially, should cross reference the Global Climate Change Chapter and should specifically allow for the fact that its policy recommendations must be adjusted accordingly over time to account for things like ocean acidification, changes in use, etc…	Developing a scientific research plan is beyond the scope of this chapter; climate change informatoin is appropriately cross referenced. Introduction Chapter highlights that Ocean SAMP is an adaptive management tool meaning that policies will be revised based on new information. A research agenda will be created and implemented during year 1.	
741	4/12/2010	Tricia Jedele	Conservation Law Foundation	250	A fundamental characteristic of any comprehensive ocean management plan should be the consideration and identification of particular sensitive or unique areas within the overall planning area that would warrant particular protection from significant human disturbance. These could be areas of particularly complex habitat and associated high biodiversity or areas that are frequented by endangered or threatened species, or species of concern, such as the North Atlantic right whale, roseate, tern, or cusk – all species that reside or frequent the SAMP planning area during some part of the year. As the SAMP planning team considers policies and standards in the Ecology Chapter, there should be a recommendation for systematically identifying special, sensitive, or unique habitats and ocean life and recommendations for the protection of these special places in the SAMP planning areas. The Chapter notes that "habitat diversity promotes species diversity – the more complexity a habitat contains the greater the number of species the habitat can generally support." (Section 250.2 (11)). Considering that no comprehensive habitat assessment has been conducted, the chapter proposes that rugosity serve as a proxy for habitat complexity. To this end, the Chapter explains that "while only a first, rough approximation, areas of high surface roughness appear to roughly correspond to glacial moraines; these areas are often hot spots for commercial and recreational fishing activities, which while not necessarily suggesting increased diversity, does suggest highly productive areas of the Ocean SAMP area seafloor" (Section 250.2 (11)). The SAMP planning team should consider developing an Ecological Valuation Index to identify the most important habitats. We recommend that the planning team consult with the MA Coastal Zone Management Office on their work to develop an EVI for Massachusetts state ocean waters and build upon that work. In absence an EVI approach we recommend that Rhode Island identify key special, sensitive, and unique resources and habitats (including areas of high rugosity (as discussed in Section 250.2 (11)) and provide a high level of protection for these places, similar to the approach for Special, Sensitive and Unique resources employed in the MA Ocean Management Plan. This chapter should specify policy recommendations that ensure that impacts from future activities are minimal and acceptable to the scientific community and the people of Rhode Island, and should set the stage to monitor the consequences of decisions and adapt management to the monitoring results. It is incredibly important that this Chapter establish some meaningful standards and guiding principles for ecosystem based management within the SAMP area.	1) Please see Renewable Energy chapter where areas of particular concern and areas of preservation are identified based on the Ecology information; 2) RI is developing and EVI which will be completed in fall 2010 and appropriately incorporated into Ocean SAMP. For more infomration on EVI, please see description in Renewable Energy Chapter.	
742	4/12/2010	Tricia Jedele	Conservation Law Foundation	250	Given the intensity of commercial fishing with a variety of bottom tending mobile gear as well as various fixed gears and rod and reel, there is a surprising paucity of discussion about the impacts of fishing on the ecology of the SAMP planning area (Section 250 (7)). Not only is the ecology affected profoundly by the removal of biomass (through both commercial and recreational fishing), but the impacts of various fishing gears, particular bottom tending mobile gear such as otter trawls and shellfish dredges, can alter significant seafloor habitat (Section 250 (7)). The Ecology Chapter should include an extensive discussion of the types of impacts that the various types of fishing can have and is having on the ecology of the areas as well as a discussion of the impacts of biomass removal. This information should then be fed into the identification and protection of special, sensitive and unique areas of habitat and ocean wildlife. There should also be some discussion of climate change and its projected impact on the ecological health of the SAMP area. The Fisheries and the Future Uses chapters should be cited and cross-referenced in this Chapter and, more importantly perhaps, this Chapter should be used to guide the policy recommendations made in the Fisheries and Future Uses chapters.	1) The fisheries chapter includes information on impacts of fishing . This section was expanded based on public comments;2) The climate change chapter covers impacts on the ecological health; 3) The ecology chapters is serving as a guide for policy development for many of the ocean SAMP chapters; 4) Cross-referencing of chapters has increased.	

OCEAN SAMP CHAPTER 2. ECOLOGY OF THE SAMP REGION - COMMENTS & RESPONSES (as of 7/21/10)

Record #	Date	Name	Organization	Section	Comment	Response	Notes
743	4/12/2010	Tricia Jedele	Conservation Law Foundation	250	While there is some general discussion of fish distribution in various habitats, there is little discussion of the relationship of different habitats to spawning, juvenile and other critical life history stages of fish and other animals inhabiting the planning area. For example how important is rocky cobble bottom to certain bottom dwelling fish species at various life stages? Section 250.3 (15) notes that cusk, a highly depleted fish species currently undergoing a status review by NOAA Fisheries for consideration for listing under the Endangered Species Act, uses Block Island Sound as an important nursery area. The shallow ridge extending from Montauk Point to Block Island appears to be a heavily used habitat for winter flounder, a highly depleted and overfished species targeted by the groundfish fleet (Section 250.3 (10)). To the extent that data exists on important habitats for different species and different life history stages, this information should be fed into an analysis of and protection plan for various fish and other species, particularly those that are at risk such as cusk and winter flounder.	The fisheries chapter will be referenced as appropriate. Commend on cusk appears to be climate related, not habitat related; 2) The SAMPP process tries to provide a framework for these issues to be developed and dealth with in the OCean Samp; 3) Development section to the extent we could red identify habitats for protection we have done so.	
744	4/12/2010	Tricia Jedele	Conservation Law Foundation		Related to comment 5 above, the Ecology Chapter lacks a discussion of habitat vulnerability to anthropogenic stresses, including, but not limited to climate change. While there may not be a full understanding of this issue, it should be recognized that some habitats may be more vulnerable than others to various human induced stresses. We recommend that the SAMP planning team review the habitat vulnerability modeling now underway by the New England Fishery Management Council's Habitat Plan Development Team.	Such a dialog would be pure speculation, outside of those references already made in relation to climate change in the chapter. No action taken. Our understanding this that plan has not been completed.	
745	4/12/2010	Tricia Jedele	Conservation Law Foundation	200	The chapter describes how the SAMP Planning Area is located at the boundary of two biogeographic provinces (Section 200 (5) and 250.2 (2)). As such, it is expected that the area will be one of the first regions to be impacted by climate change as the ocean temperature increases and this boundary shifts. How will the management regime established by the SAMP plan for and address this expected shift? Generally speaking, this chapter should include a separate section on the expected impacts of climate change on the ecology of the SAMP ecosystem, including among other things, expected changes from water temperature increases, sea level rise, changing salinity and ocean currents and ocean acidification.	The Ocean SMAP is an adaptive managment tool and is based on the best avaiable science. Polices will be updated and new resaerch will be incorpated as it becomes known. The SAMP team will develop a reserch agenda and a monitoring and evalatoin plan during year 1.	
746	4/12/2010	Tricia Jedele	Conservation Law Foundation	230	The Chapter must acknowledge and address the impacts of land-based pollution on the ocean planning area. For example, this Chapter as does the Chapter on Global Climate Change documents the importance of freshwater input from the Connecticut and Thames Rivers on the planning area (Section 230.4), but does not detail the impacts of excessive nutrients runoff from activities taking place within the watersheds of these rivers. What are the impacts of stormwater pollution and effluent from the rivers on the ocean planning area and how will the SAMP address this critical issue?	There is little to no data for such a discussion; it would be pure speculation. No action taken.	
747	4/12/2010	Tricia Jedele	Conservation Law Foundation	250	Table 2.9 lists the marine mammals and sea turtles found in the Ocean SAMP / Rhode Island Area. While it is important to understand which species are present, it is also critical to understand the broader status of the species. For example, the table lists that the North Atlantic Right whale is common in the planning area. This may be true relative to other portions of the EEZ, but the SAMP should also describe that the whale is listed as an endangered species and that there are approximately 400 individuals currently living today. Further, the SAMP should document, as data allows, the distribution of endangered, threatened or at risk species across the planning area and their designated critical habitats, and propose protections for critical habitats or abundance hotspot areas. We note that the rating of occurrence in Table 2.9 does not mesh with the narrative in various places. For example, Table 2.9 lists North Atlantic right whales, and fin, humpback and minke whales all as "common" in the Ocean SAMP planning area, but then says that the these whales are "relatively rare" or "not common" in the SAMP planning area (Section 250.4 (2)).	I believe all these concerns are addressed, for the most part, in the rewritten and re-figured section on marine mammals.	
748	4/12/2010	Tricia Jedele	Conservation Law Foundation		In closing, if it is true that the SAMP is being designed to serve as a model for ecosystem-based management, then the Ecology Chapter is the linchpin of the SAMP. The significance of this Chapter should be reflected throughout the SAMP and should be featured in this Chapter. The reader should have a clear understanding that the ecology of the SAMP area is of critical importance and the policy recommendations made and conclusions reached in this Chapter should be referred to throughout the SAMP.	The preservation and restoration of the ecosystem is the guiding principle for the OCaen SAMP. The ecology chapters is the basis for many of the policies in the other chapters.	
1219	5/27/2010	Eugenia Marks	Audubon Society of RI	210	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? [I found a paragraph on pg. 62]	There were no specific references in the literature to studies of impacts when the dredged materials were placed, only after the fact and during the ecological recovery period post material placement. The reference to drag-netting has been removed as it was a confusing term—the discussion is with regard to trawling only.	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
1220	5/27/2010	Eugenia Marks	Audubon Society of RI	220	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.	The section on Wind has been rewritten and now addresses several of the concerns noted; the intent here is to provide information on winds only with regard to ecology of the area, so further detail on wind is provided in technical appendices and in the Renewable Energy chapter. The importance of wind is noted throughout the chapter text, where appropriate, with regard to shaping currents and its impacts on the water column; this puts it more in context with its impact on the ecology.	
1221	5/27/2010	Eugenia Marks	Audubon Society of RI		Are there data for extremely high winds or waves generated by storms within the SAMP?	Text has been added to the chapter that gives a better description of extremes for both wind and waves in the Ocean SAMP area.	
1222	5/27/2010	Eugenia Marks	Audubon Society of RI	220	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.”	Text has been revised to reflect the intent of this comment	
1223	5/27/2010	Eugenia Marks	Audubon Society of RI	230	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.]	No response required for this comment	
1224	5/27/2010	Eugenia Marks	Audubon Society of RI	230	Section 230.1 (p.24) 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? [I found on page 34.	In general, there is little if any information regarding tidal velocities and/or pressures around the shorelines of the islands in the Ocean SAMP area and so such information is not available. The Race and the opening between Fishers Island and Napatree Point have limited velocity information, and this is mentioned in context in chapter text.	
1225	5/27/2010	Eugenia Marks	Audubon Society of RI	230	Section 230.1 (p.24) Tides. 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.	There were no reports in the literature for the area describing what the reviewer notes; while such vertical migration behavior is a common occurrence in many areas of the ocean, it is not mentioned here as it is not known if such actually do occur in the Ocean SAMP area as they are not referenced in the literature.	
1226	5/27/2010	Eugenia Marks	Audubon Society of RI	230	Some mention of the electrical conductivity of salt water? Electro-magnetic conductivity?	It is presumed the reviewer is in reference to impacts of underwater transmission cables on marine biota; this is addressed in the Renewable Energy chapter and not in the ecology chapter as it is not currently a part of the existing environment and therefore not germane to the ecology at present.	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
1227	5/27/2010	Eugenia Marks	Audubon Society of RI	240	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?	No references testing specifically for chronic or sub lethal impacts were found; however, reports noting that the benthic community as a whole is responding in a positive direction suggests that chronic impacts are small, though this is implied only.	
1228	5/27/2010	Eugenia Marks	Audubon Society of RI	250	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.”	Figures have been removed, a table added, and the text rewritten in this section to better clarify and explain primary production in the Ocean SAMP area; it is hoped that the reviewers comments have been addressed through these revisions.	
1229	5/27/2010	Eugenia Marks	Audubon Society of RI		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?	This comment needs to be addressed by the Ocean SAMP management team and/or by the RICRMC; this is not a question the chapter author is able to answer.	
1230	5/27/2010	Eugenia Marks	Audubon Society of RI		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.	If this were to be addressed it would be most appropriate in the Renewable Energy section on impacts of energy development.	
1231	5/27/2010	Eugenia Marks	Audubon Society of RI	250	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).	This information is more specific to the Avifauna section of the chapter and will be considered for addition in that section, if not already mentioned.	
1232	5/27/2010	Eugenia Marks	Audubon Society of RI	250	250.3 Fishes (1) Pelagic birds such as Petrels, Shearwaters, and Northern Gannets feed on small schooling fish such as herring, anchovies, and mackerel.	A reference to the importance of baitfishes to pelagic birds will be added to the text.	
1233	5/27/2010	Eugenia Marks	Audubon Society of RI	250	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?	Reviewer comments will be incorporated, where possible, in the table.	
1234	5/27/2010	Eugenia Marks	Audubon Society of RI		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.	The Ocean SAMP team has included the most available accurate information on these topics. Please provide additional scientific references to literature that references this issue and we would be glad to consider adding it to the chapter.	
1236	6/1/2010	Donald Pryor	Brown	270	Section 270 on Policies and Standards simply states that it is “under development”. No statements or even suggestions are made about how ecological considerations should be factored into spatial planning or what aspects are most important.	Such statements, etc., would not be appropriate in the chapter text and will be addressed in the Policies and Standards section, currently in development.	
1237	6/1/2010	Donald Pryor	Brown		The recently released draft of “Chapter 8: Renewable Energy” (draft of May 6, 2010) refers to an “Ecological Value Map” (EVM), and an “Ecological Topology Map” (ETM) as well as a “Technology Development Index” (TDI). Unfortunately, that draft chapter does not fully describe the EVM; the reference for further information is described as “forthcoming” and thus not available; and the Appendix 3 described as dealing with the EVM is not included. Data sources and weighting factors are not described in that chapter nor are links to information in the Ecology chapter suggested either in the Renewable Energy or Ecology chapters.	Since the EVM is under development, it is not possible to include data sources, weighting factors, etc. These kinds of information will be part of the EVM report, when released. Any findings from that report will need to be addressed in the ecology chapter at some future date.	

OCEAN SAMP CHAPTER 2. ECOLOGY OF THE SAMP REGION - COMMENTS & RESPONSES (as of 7/21/10)

Record #	Date	Name	Organization	Section	Comment	Response	Notes
1238	6/1/2010	Donald Pryor	Brown		No results of any recent research under the Ocean SAMP are reported.	Appropriate information from ongoing Ocean SAMP research is used in the ecology chapter as it becomes available. As currently written, findings of Codiga and Ullman make up a large portion of the physical oceanography section of the chapter as are findings by Spaulding on some elements of meteorology, work by Collie and King on seafloor mapping is in the benthic ecology section, findings of Keeney are included for marine mammals and the section on avifauna is largely based on Paton et al. findings from their Ocean SAMP research.	
1239	6/1/2010	Donald Pryor	Brown		Almost every other page references papers prepared for the 2008 Sea vGrant Science Symposium but these are described as "in press". A request to make at least preliminary versions of these papers available has not been acknowledged or responded to (although Sea Grant has confirmed that they are not available).	The works cited are "in press" meaning that they are being developed for public release. While an exact date of availability cannot be provided, it is intended that Rhode Island Sea Grant will make that information available sometime during the summer of 2010. In revisions to the ecology chapter since release for public comment, many references linked to the 2008 Sea Grant Science Symposium have been replaced with references available in the literature to address similar comments provided by other reviewers.	
1240	6/1/2010	Donald Pryor	Brown		Technically, the Ecology draft chapter appears to have a number of errors such as misstatements of the biogeographic location of the Ocean SAMP area; contradictions between statements and data concerning winter temperature patterns; overlaps and contradictions with the Fisheries chapter; assertions of "rapid ecological change' in benthos while quoting references finding "relatively stable communities over decadal periods"; and failure to accurately describe observed patterns of pelagic-demersal ratios. The draft chapter fails to make any comparisons with studies of the ecology of the adjacent Buzzards Bay. It also fails to make connections with NMFS studies such as the recent "Ecosystem Status Report for the Northeast US Continental Shelf Large Marine Ecosystem". Unfortunately, given the lack of policies and recommendations or connections to other tools to be used in spatial planning, it is not possible to evaluate the significance of these apparent errors and omissions.	Revisions to the chapter have addressed similar contradictions and discrepancies noted by other reviewers, though with greater detail provided; without further elaboration regarding specific examples in the text these general statements cannot be directly addressed, though such contradictions, etc. will be corrected wherever noted. NMFS MARMAP data has been incorporated into the ecology chapter in subsequent revisions to the text.	
1241	6/1/2010	Donald Pryor	Brown		The Executive Director of CRMC indicated at the May stakeholder meeting that significant weight would be given to the foraging habitat for diving ducks. This chapter describes that habitat as all areas between 5m and 25m depth based on literature review (see figure 2.42). If, in fact, the intent is to prohibit structures in depths between 5m and 25m, that would have a significant impact on potential uses, including wind energy, in those relatively shallow waters. The data and information provided seem insufficient to base a policy which would, in effect, further commit the state to deepwater wind.	Subsequent work by Paton et al. have revised diving duck foraging depth from 25m to 20m, and this is reflecting in the chapter text. Since policies and standards are still development at this time, it is not possible to say if any attempt to "prohibit" structures at those depths will be included.	
1260	6/1/2010	Kathleen Wainwright	The Nature Conservancy	230	figure 2.10 needs to also show the path of the 1938 hurricane	The 1938 hurricane did not make a direct strike on Rhode Island and is therefore the track of that storm is not shown in the figure.	

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Record #	Date	Name	Organization	Section	Comment	Response	Notes
1261	6/1/2010	Kathleen Wainwright	The Nature Conservancy	250	should add that Fall on Block Island is extremely important to hatching year birds who are blown off course during their first migration. Due to this there is a much greater density of passerines in the fall on Block Island and migrating through the SAMP area. Also, there is no mention that Herring Gulls and Greater Black-backed Gulls BREED on Block Island. It is the largest rookery in the state for these two species, around 600 nesting pairs total.	This will be addressed in revisions, where appropriate and possible.	
1262	6/1/2010	Kathleen Wainwright	The Nature Conservancy	250	Fig. 2.39 Harbor seal haul-out sites are incomplete, given the scale it might make more sense to use smaller stars to really pinpoint the locations. We would be happy to provide detailed input. Also, this winter and spring until the present Block Island has had the largest group of gray seals to ever haul out on Sandy Point in 20 years.	The figure has been revised to address this comment.	
1263	6/1/2010	Kathleen Wainwright	The Nature Conservancy	250	Table 2.11. As mentioned in 3) above, it should indicate Herring Gulls and Greater Black-backed Gulls breed on Block Island, and we believe the Greater Black-backed Gulls are here year-round. Pacific Loons have been observed to winter off Block Island as a result of the Ocean Samp research, not sure why that isn't mentioned, possibly the information has not gotten from NJ Audubon to URI. This phenomenon could be a climate change impact of reduced sea ice in the arctic.	Pacific loon is not mentioned in the report by Paton et al., nor was reference found as such in the literature and so it is not mentioned. Gulls are not passerines and so are not mentioned in the table; this will be addressed in the text as noted above.	
1264	6/1/2010	Kathleen Wainwright	The Nature Conservancy		Given that this is the ecology chapter, and that it is a spatial planning exercise, we are concerned that there is no real coarse or fine identification of the most important or sensitive areas ecologically. TNC is happy to provide input and guidance on how to go about this. Obviously, the entire area is important but we feel that the most critical sites need to be identified, and the existing and future threats to those areas need to be addressed. It would make sense to try to map spawning and nursery areas for fish and shellfish species, for example. Further, with specific regard to fisheries impacts, given that the ocean SAMP is not a fisheries management document , the ecological impacts of the various fisheries need to be evaluated and stakeholders and resource managers should work collaboratively via cooperative research and other means to address these impacts to provide for a sustainable fisheries resource base as well as the necessary components for a degraded ecosystem to recover.	The data to undertake such an exercise have not been available for incorporation or consideration. The chapter does use bottom roughness and a few other features as possible points of interest, but without corresponding published accounts to reference it is not possible to present such information in a way that could be considered valid.	
1265	6/1/2010	Kathleen Wainwright	The Nature Conservancy		A concern after reading this chapter is that much of the data is fairly old (30+ years) and because the ocean system is dynamic we wonder how much difference there is between the old citations in this chapter and what is actually occurring now.	This is noted in numerous occasions throughout the chapter text, and outside of what is published to present as "now vs. then", it is not possible to make that link.	

Record #	Date	Name	Organization	Section	Comment	Response	Notes
1266	6/1/2010	Tricia Jedele	Conservation Law Foundation	210	The ecology chapter should be much more than a mere "stitching together" of "available patchwork data on the SAMP area." Of course, the ecology chapter should be an accurate reporting of the inventory of ecological assets that we have available to us in the SAMP area, but it should also be a road map for how we will foster a properly functioning ecosystem, maintain ecological capacity, integrity, and evolution of the SAMP area's biophysical and socioeconomic systems. Without the roadmap, the inventory exercise is essentially meaningless. As stated in our draft comments, the opening sections also continue to emphasize the dynamic aspects of the SAMP ecosystem (p. 8 and 210(6)) as well as the stability of the ecosystem (section 210(4)) and includes language about the potential impacts of climate change (page 10) – i.e., one example of how human activity can impact the ecology of the SAMP area. CLF continues to be concerned that this misplaced emphasis on the dynamic aspects of the SAMP ecosystem may lead readers to a false expectation that any natural or human disturbance will have minimal impact on the ecosystem so characterized by dynamic natural forces.	The chapter has been largely reorganized and rewritten in an attempt to better link together the various sections and to move from an "inventory" of habitats, etc. to one that better tells the story of the ecology of the Ocean SAMP area ecosystem. The Ocean SAMP area is indeed a dynamic area, and as with all ecosystems, change is imminent whether it be of natural or anthropogenic origin. Furthermore, "impact" is subjective and is most often considered in a negative sense, e.g., denigrating the system in some fashion. Throughout the ecology chapter every attempt has been made to refer to alterations as "change" to the ecosystem, not as an impact. Certainly ecosystems are, and will continue to change, due to changing climate and other influences. Ecosystems shift species, etc., in response to change and then continue on some new trajectory. That trajectory may or may not be one that some or all of the human populace is satisfied with (i.e., a shift to tubifex worms) or one that many are thrilled about (i.e., eelgrass and scallops). It is not the intent of the ecology chapter to make a subjective statement about the change, but rather attempt to present what change is occurring, why it is occurring, if known, and where it may be leading, if possible to say.	
1267	6/1/2010	Tricia Jedele	Conservation Law Foundation	240	There are still multiple references in this chapter to the lack of data (for example, Section 240.1(1) on page 42, Section 240.1(7) on page 44 and Section 250.1(1) on page 47), but CRMC did not draft a scientific research plan to fill the gaps in knowledge. CLF urges the CRMC to delay the finalization of the SAMP until it is able to adequately fill in the missing data or until it has established a scientific research plan to fill the gaps in knowledge.	This comment cannot be directly addressed by revisions to the ecology chapter. Data does not exist. However, as new information from Ocean SAMP sponsored research, and from other sources, it is being included, where possible and practical, into the chapter text.	

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1268	6/1/2010	Tricia Jedele	Conservation Law Foundation	270	It is essential that the State of Rhode Island through this key chapter identify and protect special, sensitive and unique areas of ocean habitat and wildlife from all damaging human activities, including, and especially, fishing. The ecology chapter should make strong habitat protection recommendations in the Policies and Standards section – a section, which unfortunately remains blank at the time these comments are filed. We highlighted this point in the comments we filed on the fisheries chapter on May 4, 2010, pages 2 and 3. At a minimum, the State should identify and protect "key ecological areas." A key ecological area should be defined as a geographically delineated area which by itself or in a network has distinguishing ecological or oceanographic characteristics, is important for maintaining habitat heterogeneity or the viability of a species, or contributes disproportionately to an ecosystem's health, including its biodiversity, function, structure, or resilience. For example, important ecological areas could include areas of high productivity or diversity; areas that are important for feeding, migration, or the life history stages of species; or areas of biogenic habitat, structure forming habitat, or habitat for (or high densities of) endangered or threatened species. Key ecological areas, if protected from harm, should be able to support and maintain the structure and function of the local surrounding coastal and offshore habitats.Areas that might be of special concern that are already referenced to in chapter 2 include the inner shelf south of Block Island, the glacial moraine areas with unique habitat diversity ("hot spots"), the shallow sill area with wave-buffering capacity, the Block Island canyon, and the "jet" 5 km south of Montauk Point. Montauk Point itself seems to lend itself to identification as a special area for protection, with its dense population of loons and occurrences of the Northern Gannett. The new draft continues to use the term "rugosity" as a proxy for "habitat complexity in Section 250.2(9). Habitat complexity is more accurate.CLF also suggested inclusion of an Ecological Valuation Index in this chapter (see CLF's April 6, 2010 comments).	The OCean SAMP now has identified areas of particular concern and preservation areas based on the data collectedn and input from researchers.	
1269	6/1/2010	Tricia Jedele	Conservation Law Foundation	250	There is still a surprising paucity of information regarding the impacts of fishing on the ecology of the SAMP area. The discussion of the Driscoll study remains unchanged, still failing to specifically refer to the effect of dredging on marine biomass removal and other anthropogenic effects besides trawl door scars. The chapter still does not include any discussion of the ecological impacts that different types of fishing can have on the SAMP area. Specifically, there is no mention of how the use of specific fishing gear correlates with habitat alteration. The Fisheries and Future Uses chapters are not cited or cross-referenced, except in relation to lobster population. The failure to connect ecosystem impacts with specific human activities severely undermines the usefulness of this chapter and virtually assures that it will not be able to be relied upon to support or guide future policy decisions with respect to habitat protection.	Ecology and fisheries chapter authors have been collaborating and working together to better cross reference information, and this will be incorporated into revisions. There was little if any literature available on ecosystem alterations due to the use of fishing gear within the Ocean SAMP area, and therefore that is not a significant portion of the chapter text. Limited reported showed that areas of high fish abundance/biological activity are those areas where trawl marks/fishing activity is abundant. It is not clear in the literature for the Ocean SAMP area if fishing is a cause of the fish abundance, or if abundance is a cause of fishing/trawling activity. There is some indication that a dominant tube-dwelling amphipod, reported to be a significant part of the diet of demersal fishes, actually does very well in habitats where the bottom is disturbed. However, the information is not robust enough to make inference in either a positive or negative direction for the relationship of fishing activity on benthic productivity, and so it is not elaborated upon in the chapter text.	

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1270	6/1/2010	Tricia Jedele	Conservation Law Foundation	250	In CLF's draft comments, we expressed concern that the general treatment of fish distribution in various habitats lacked meaningful discussion of the relationship of different habitats to spawning, juvenile and other critical life history stages of fish and other animals inhabiting the planning area. CLF is uncertain whether our initial comments were considered or rejected. The only reference to this important ecological character of the SAMP area is a brief mention in 250.1.5 (2) stating that invertebrates spend their larval stage adrift with plankton. CLF doesn't believe that this is adequate because the topic is important to a full understanding of the SAMP area to be managed under the SAMP plan. CLF suggests the ecology chapter cites specific examples of important relationship between habitat and life history stages. For example, rocky cobble bottom could be critical to certain bottom dwelling fish species at various life stages. It doesn't appear that the data on this point are lacking, because the ecology does make some brief mentions of such relationships. Section 250.3 (15) notes that cusk, a highly depleted fish species currently undergoing a status review by NOAA Fisheries for consideration for listing under the Endangered Species Act, uses Block Island Sound as an important nursery area. The shallow ridge extending from Montauk Point to Block Island appears to be a heavily used habitat for winter flounder, a highly depleted and overfished species targeted by the groundfish fleet (Section 250.3 (11)). To the extent that data exists on important habitats for different species and different life history stages, this information should be fed into an analysis of and protection plan for various fish and other species, particularly those that are at risk. In other words, the relationship between habitat and life history stage should be treated as its own section in order to facilitate development of a management policy that is sensitive to the importance of certain sub-areas within the SAMP area.	There is little information in the literature that provides data to develop specific links between, for example, fish and bottom habitat. There are generalizations made in chapter text, where possible and applicable as the reviewer notes, but without specific, referenced data to rely upon, further elaboration could be not only misleading, but perhaps untrue. All attempts have been made to provide detailed information regarding species–habitat relationships, where possible. Based on several reviewer comments, all species life-history descriptions were moved into the fisheries chapter, since this where such information was deemed most appropriate, and are now referenced as such in the ecology chapter.	
1271	6/1/2010	Tricia Jedele	Conservation Law Foundation	200	Our draft comments pointed out that the ecology chapter lacks a discussion of habitat vulnerability to anthropogenic stresses, including, but not limited to climate change. It appears that the only response to this comment was a cursory description of the potential impacts of climate change on the planning area in the introduction to the chapter (Section 200, p. 10). We continue to urge the State to review the habitat vulnerability modeling now underway by the New England Fishery Management Council's Habitat Plan Development Team. With a response to this comment, it is unclear whether the team seriously considered this suggestion.	Numerous inferences, where possible to do so based upon the literature, exist within the chapter text regarding possible change in the ecosystem from changing climate; other comments along the line of what the reviewer suggests are included in the climate change chapter. It is unclear what other anthropogenic stresses the reviewer is in reference to regarding habitat vulnerability; and see response to #1 above.Our understanding is this has not been completed.	
1272	6/1/2010	Tricia Jedele	Conservation Law Foundation	250	The chapter continues to describe the SAMP area as located at the boundary of two biogeographic provinces. (Section 200, 250(3) and 250.2(3)). As CLF noted in the draft comments, it is expected that the area will be one of the first regions to be impacted by climate change as the ocean temperature increases and this boundary shifts. The question still remains: how will the management regime established by the SAMP plan for and address this expected shift? Generally speaking, this chapter should include a separate section on the expected impacts of climate change on the ecology of the SAMP ecosystem. While the chapter does have a section entitled Emerging Issues (260), its topic headings are limited to Native Species Explosions, Invasive Species, and Marine Diseases. Climate change should be first on this list. In order to develop successful resource management policies, one must consider ecological changes from water temperature increases, sea level rise, changing salinity and ocean currents and ocean acidification. Another opportunity to discuss anthropogenic effects on the vulnerability of marine habitats is in the nutrient section of this chapter. CLF believes the section should be changed as such and also suggests two other changes. First, the term "sketchy" is unscientific and vague. Is the data geographically limited? Is the variance too high? Was there experimental error? Second, CLF believes that including a map displaying the nutrient concentrations geographically throughout the SAMP area is needed. This would shed some light on the effect of population and/or heavily fertilized regions on nutrient distribution in the SAMP area.	The climate change chapter provides greater elaboration on climate change and possible significance to the overall Ocean SAMP ecosystem, and that is referenced in the ecology in subsequent revisions. The emerging issues section points to some of the most pertinent and probable changes to the Ocean SAMP area ecology that are supported by reports in the literature. With regard to nutrients, no data were found that might lead to an assessment as suggested by the reviewer. Productivity and chlorophyll are presented as possible proxies of nutrient availability, and in general, the Ocean SAMP area appears to be slightly less productive than adjacent ecosystems. As such there does not appear to be any indication that nutrients are a major issue of concern, nor do existing sources of information suggest that land-based nutrient input is problematic.	

OCEAN SAMP CHAPTER 2. ECOLOGY OF THE SAMP REGION - COMMENTS & RESPONSES (as of 7/21/10)

Record #	Date	Name	Organization	Section	Comment	Response	Notes
1273	6/1/2010	Tricia Jedele	Conservation Law Foundation	230	Our comment that the ecology chapter must acknowledge and address the impacts of land-based pollution on the ocean planning area was not addressed. For example, this chapter as does the chapter on Global Climate Change documents the importance of freshwater input from the Connecticut and Thames Rivers on the planning area (Section 230.4), but does not detail the impacts of excessive nutrients runoff from activities taking place within the watersheds of these rivers. The only reference to runoff is the relation to freshwater influence on salinity, without any mention of the non-point pollution issue. The SAMP document should highlight the impacts of stormwater pollution and effluent from the rivers on the ocean planning area and address how these impacts should influence SAMP policies. It is not sufficient that there is only one reference to land-based sources of nutrients (Connecticut in 250.1.1 (3)), which seems only incidental, and does not adequately portray the true importance of this issue.	The influence of the Connecticut River, based on published accounts there is nothing to suggest that nutrients are problematic, though Block Island Sound, which is the "receiving area" for Long Island Sound outflow, is more productive than Rhode Island Sound. However, there is nothing in the published literature accessed that suggests nutrients are problematic and they are therefore not addressed as such in the ecology chapter. If anything, some inference might be able to be developed about nutrient inputs from Long Island Sound as improving the productivity of Block Island Sound and perhaps aiding in the development of biological hotspots (e.g., along the front) just south of Block Island, though again this is not reported as such in the literature and therefore is not elaborated upon in the chapter text.	
1274	6/1/2010	Tricia Jedele	Conservation Law Foundation	230	Table 2.10 lists the marine mammals and sea turtles found in the Ocean SAMP / Rhode Island Area. As we noted in our draft comments, while it is important to understand which species are present, it is also critical to understand the broader status of the species. The author did address one of CLF's specific examples of this by incorporating the following sentence: "Right whales, a particularly endangered species with approximately 400 individuals remaining, can be common offshore during the spring and fall migration, but are not common in the SAMP area." Given the appearance of approximately 1/3 of the Northern Right Whale population in Block Island Sound last month, this sentence may need to be amended. That being said, the chapter should highlight the importance of status of the endangered, threatened, or at-risk species that inhabit or may inhabit the planning area. Further, the SAMP should document, as data allows, the distribution of endangered, threatened or at risk species across the planning area and their designated critical habitats, and propose protections for critical habitats or abundance hotspot areas. The SAMP mentions several special habitat needs of endangered, threatened, and at-risk species. CLF suggests these areas be geographically identified in the ecology chapter. These include the feeding habitat for ducks in 25 m or less shallows; the near shore shallows habitat needs of terns in the summer; the inlets, bays, and estuary habitat of the harbor seals; and the cusk's southern habitat range, which will presumably move further south with the latitudinal migration of species due to climate change. Additionally, Block Island is an essential spawning ground for many fish species and the commercially-important American lobster relies on the eastern part of Rhode Island Sound for successful larval transport. Our unaddressed draft comment remains that the rating of occurrence in Table 2.9 does not mesh with the narrative in various places. For example, Table 2.10 lists North Atlantic right whales, and fin, humpback and minke whales all as "common" in the Ocean SAMP planning area, but then says that the these whales are "relatively rare" or "not common" in the SAMP planning area (Section 250.4.1(2)).	Text, tables and graphics in the marine mammal section of the chapter have been reorganized, rewritten and/or replaced, and should have addressed many if not all comments provided here. Discrepancies between table and text, as noted above, have been recognized and addressed in revisions to the chapter. Maps for diving duck foraging (revised to be 20m depth) are included in the chapter text and may be addressed in the policies and standards sections currently under development.	
1275	6/1/2010	Tricia Jedele	Conservation Law Foundation	240	Section 240.1(4) cites results from 2002 US Army Corps of Engineers data on toxic metals in the SAMP area. The section's only restatement of the results is the remark that the numbers were below RI Department of Environmental Management standards. CLF challenges the reliance on DEM's standards as the ultimate threshold for determining whether toxic metals are an issue significant enough to warrant further mention in the ecology chapter because it fails to address the potential for cumulative impacts.	There is no indication in the literature that any sediment in impacted sites (e.g., oil spill and/or dredged material placement) contains metals or other toxins at levels of concern for benthic organisms/habitat. Without further information available it is not possible to address this comment further.	

OCEAN SAMP CHAPTER 2. ECOLOGY OF THE SAMP REGION - COMMENTS & RESPONSES (as of 7/21/10)

Record #	Date	Name	Organization	Section	Comment	Response	Notes
1276	6/1/2010	Tricia Jedele	Conservation Law Foundation	250	Section 250.2(1) emphasizes the SAMP area's "capacity as a site for the disposal of dredged material." CLF notes that the language referring to dredging throughout this chapter tends to imply that the SAMP area is an ideal place for dredging. CLF strongly suggests correcting for the fact that the chapter does not appear to list any disadvantages associated with dredging or with disposing dredged material in the SAMP area. Section 250.2(1) also cites a study of rapid population recoveries that CLF believes is misleading. Have all the species recovered, or just the scientist's target species? Have species outside the immediate dumping area suffered? Have there been any changes to the primary productivity of the area due to changes in water clarity as it relates to light attenuation? Have there been any studies on the effect of particles disturbed by dredging interfering with the filtering mechanisms of bottom feeders? CLF suggests that the ecology chapter include a chart that compares and contrasts the information provided in the individual section discussing Rhode Island Sound and Block Island Sound found within section 230 and 250. For example, the species compositions could be positioned side by side to facilitate the reader's understanding of the key ecological differences between the two important areas within the larger SAMP area. Other examples of characteristics to compare/contrast between the two sub-areas are average water temperature, average depth, etc.	Dredging impacts are addressed in the Renewable Energy chapter and are therefore not addressed. The ecology chapter text does not in any way suggest, nor is there any attempt to suggest, that the area is a good place to place dredge materials; this has not been mentioned by any other reader, and therefore this reviewer may simply have misinterpreted the text. Chapter text reports what is provided in the literature, which suggests that the areas where dredged materials were disposed have recovered to a significant degree. An attempt to make comparisons between Block Island Sound and Rhode Island Sound as suggested by the reviewer were attempted, but the data sources are not able to be directly compared as suggested due to differences either in timing and/or methodology of sampling; it could be misleading to present the material is this way and it has therefore not been done.	
1277	6/1/2010	Tricia Jedele	Conservation Law Foundation		In closing, if it is true that the SAMP is being designed to serve as a model for ecosystem-based management, then the yet-to-be-completed ecology chapter is the linchpin of the SAMP. The significance of this Chapter should be reflected throughout the SAMP and should be featured in this chapter. The reader should have a clear understanding that the ecology of the SAMP area is of critical importance and the policy recommendations made and conclusions reached in this chapter should be referred to throughout the SAMP.	Chapters reference the Ecology chapter appropriately and is the first Ocean SAMP chapter to highlight its importance.	