

APPENDIX 1 – PUBLIC COMMENTS ON THE DEIS

As indicated in the NMFS NOA for Draft Amendment 1 and the Draft EIS, public comments on the drafts were accepted via oral comments at all of the Fishery Management Council meetings and public hearings, and written comments submitted electronically to HMSEFH@noaa.gov or mailed during the comment period. A total of 34 comment letters or postings were received from federal and state resource and environmental agencies, fishing industry, environmental groups, recreational fishing interests, and the public. In addition, NMFS received 1,035 form letters expressing support for the BFT HAPC in the Gulf of Mexico (an example is provided at the end of the chapter). All comments were considered by NMFS in development of this FEIS. For purposes of indicating how comments were considered in development of this FEIS and Final Amendment 1, the comments are grouped into comments on proposed EFH designations, comments on HAPCs, and comments on impacts on EFH. The comment letters are provided at the end of this chapter. The responses to each of the comments are provided below.

Essential Fish Habitat Designations

Comment 1: NMFS should include information from catches of blacktip, sandbar, and dusky sharks that appear to overwinter in Mexican waters. The data would indicate that NMFS should consider a secondary sandbar shark nursery ground off Brownsville, Texas.

Response: While NMFS agrees that considering habitat use by HMS and other federally managed species outside the U.S. EEZ is important, EFH cannot be designated outside the U.S. EEZ and therefore NMFS did not seek information on sharks from countries other than the United States. In fact, BFT is the only HMS for which NMFS has data from within Mexican waters. Adult BFT were tagged in the U.S. EEZ with popup satellite archival tags (PSATs) that recorded locations within Mexican waters and were then transmitted via satellites. Blacktip shark is the only shark species referred to be the commenter where available U.S. information was sufficient to identify EFH for all three life stages. Although there were isolated catches of sandbar and dusky sharks off southern Texas, there was insufficient information to identify EFH for either species off Brownsville, Texas. NMFS would need additional data or information to support an EFH designation for sandbar or dusky sharks off Brownsville.

Comment 2: NMFS should consider separate EFH areas for blacknose sharks in the Gulf of Mexico and those in the Atlantic, and consider incorporating shrimp trawl data.

Response: In the 2007 blacknose shark stock assessment, the assessment scientists decided after reviewing the available data, that blacknose sharks should be assessed as a single stock. The scientists noted that there was conflicting genetic data regarding the existence of two separate stocks, and they recognized the potential differences in the reproductive cycle for South Atlantic and Gulf of Mexico populations. However, given that the stock assessment did not consider blacknose to be comprised of two separate stocks, NMFS has decided to keep the EFH areas for blacknose sharks as a single EFH designation. It should be noted that the EFH

boundaries in the Atlantic and Gulf of Mexico are similar in size and scope, indicating that both areas play an important role in the life history and habitat requirements for blacknose sharks.

Comment 3: The disadvantage of the preferred alternative (alternative 3) is that data-poor species result in smaller, discontinuous areas than data-rich species. The species with limited data should be clearly listed, as well as an approach to try to verify or modify these EFH boundaries to ensure they are protective; the DEIS does not provide adequate information to show that this is a protective approach for all species covered.

Response: NMFS agrees that, depending upon the number of data points, data poor species tend to result in smaller, discontinuous areas than data rich species. To help address this concern, NMFS combined data from all three life stages for some of the data poor species. Examples include angel shark, basking shark, and bigeye thresher, among others. NMFS has provided a complete list of species for which data from two or more life stages were combined in Table 5.3 of the FEIS. In some cases, the increase in the number of data points helped alleviate some of the patchiness in the EFH boundaries. In other cases, it may not have helped, and NMFS scientists familiar with the habitat requirements for the species may have recommended that, where appropriate, and where there was specific knowledge of the habitat utilized by certain life stages, that the smaller discontinuous areas be manually combined into a single continuous area. Examples where this approach was used include smooth hammerhead sharks and common thresher shark. There may have been some species for which NMFS was unable to make further adjustments due to lack of additional data and smaller, discontinuous areas may still be evident.

Comment 4: A discussion should be provided to discuss the monitoring plans, data gaps, and how future data will be obtained and used.

Response: Chapter 7 of the FEIS provides an update of research and information needs for each of the major HMS stocks (tunas, swordfish, billfish, and sharks) as well as the information gaps and how best to address them.

Comment 5: How can NMFS illustrate EFH in state waters? Has NMFS ground truthed EFH in state waters with the research surveys being done by the states?

Response: Depending upon the species and life stage, NMFS may have identified portions of state waters as EFH. This is more likely to be the case for sharks, which use coastal bays and estuaries as nursery and pupping grounds, than for other HMS such as tunas and billfish which tend to be further offshore and occur less frequently in state waters. It may also depend upon the extent of the state's seaward boundary. Both Florida (west coast) and Texas have 9 nautical mile territorial sea boundaries which may encompass EFH for a number of HMS. For sharks that occur in state waters, many of the data points used to designate EFH were drawn from individual researchers who may have contributed to the NMFS Cooperative Atlantic States Shark Pupping and Nursery Areas (COASTSPAN) program and the synthesis document "Shark nursery grounds of the Gulf of Mexico and the east coast waters of the United States" (McCandless *et al.*, 2007). Although not every research survey done in a state may have been included in the analysis, a considerable amount of data was included from surveys or data

collected by other means in state waters, including fishery independent surveys conducted by states.

Comment 6: What kind of data was used to map EFH in estuaries?

Response: As described in the previous response and more thoroughly in Chapters 2 and 4 of the FEIS, NMFS used observer program data, data from individual researchers, scientists participating in the COASTSPAN program, tag/recapture data from various tagging programs, and state fishery independent monitoring to generate the initial probability boundaries. NMFS then consulted with scientists familiar with the habitat requirements for the species to determine whether specific bays and estuaries should be included as EFH boundaries. NMFS also cross-checked the resulting probability boundaries with scientific data from peer-reviewed publications and collaborated with scientists to ensure the correct data were used and that appropriate areas were delineated. Finally, NMFS had an extended 90-day comment period for the DEIS during which all of the proposed boundaries were available for viewing in hard copy and electronic format, and on an interactive internet mapping site. NMFS received a number of comments during that period which further helped to determine whether specific estuaries should be included.

Comment 7: Does HMS EFH encompass the entire water column?

Response: Yes, at this point, HMS EFH is considered to encompass the entire water column. At some point in the future, NMFS may have the necessary data and technology to differentiate between different water depths utilized by HMS and further refine the exact habitat within the water column that is essential; however, NMFS does not yet have that capability. EFH from some species of sharks also includes benthic habitat in coastal areas for shark pupping and nursery grounds.

Comment 8: Do the lead weights used on deep sea trawls have an impact on HMS EFH?

Response: No, lead weights used on deep sea trawls do not have an impact on HMS EFH because HMS EFH does not include benthic habitat in deep sea areas. HMS EFH is instead defined by the water column and not benthic habitat.

Comment 9: Were the bottom longline vessel locations near the coral reefs collected with GPS or some other means? The locations may not be accurate depending on how the locations were obtained or recorded.

Response: Depending on the year, latitude and longitude coordinates may have been collected using either a Global Positioning System (GPS) or U.S. Coast Guard Long Range Aid to Navigation (LORAN-C). LORAN was used widely throughout the 1980s and early 1990s before most vessels began to switch to GPS. Since the data are from the mid 1990s it is possible that some data were collected by LORAN-C which may be subject to error.

Comment 10: Did NMFS use vessel trip reports or pelagic longline logbook data in the analysis?

Response: NMFS did not use vessel trip reports or pelagic longline logbook data because neither data set includes size information which is necessary to identify EFH by life stage as required by the EFH regulations.

Comment 11: The EFH mapper is great, loads quickly, and is a good way to present the data.

Response: NMFS received many favorable comments about the EFH mapping tool. NMFS considers the EFH mapper to be an effective way to make HMS EFH boundaries available to the public, state, and federal agencies that need to consider whether a proposed project may occur within EFH boundaries. The high resolution and detail that is available on the EFH mapper is far superior to static, hardcopy maps. By zooming in and out on specific coastal areas, it is possible for interested parties to determine the exact location of HMS EFH boundaries. This in turn will help applicants determine whether consultation may be required. In addition, the internet mapping site provides a cost-effective alternative to the high cost associated with printing color maps.

Comment 12: Will NMFS be able to provide the spatial EFH files to the public or interested parties?

Response: Yes, NMFS plans to continue using the EFH mapping site that was used during the DEIS comment period. In addition, there is another EFH mapping tool that includes EFH for all federally managed species, not just HMS, that will provide downloadable spatial EFH files. Even prior to development of the internet site, NMFS regularly provided spatial Geographic Information System (GIS) EFH files to interested parties upon request, and will continue to do so.

Comment 13: Did NMFS do a statistical analysis of whether there were sufficient points or adequate sample size to determine EFH based on presence/absence data? If not, at the least, NMFS should include the number of data points used for each of the species.

Response: NMFS did not perform a statistical analysis to determine whether there were sufficient data points to determine EFH, but did provide the number of data points used by data source for each species on the hardcopy maps in the FEIS. NMFS also included the number of data points represented by each species and life stage in the electronic PDF versions of the maps, but could not include them on the EFH internet mapping site.

Comment 14: Are there any plans to consider HAPCs for any other species?

Response: NMFS is not considering additional HAPCs at this time, however that does not preclude future HAPC designations.

Comment 15: NMFS should consider forage species as EFH.

Response: According to the Magnuson-Stevens Act, EFH is defined as areas necessary for spawning, breeding, feeding, and growth to maturity. As part of the analysis in determining EFH, NMFS considered areas that were important feeding areas and where prey species play an important role. However, NMFS is not required to designate EFH for a particular species based purely on the availability, or primary habitat of, prey species. Prey species are one component that is taken into consideration when determining EFH.

Habitat Areas of Particular Concern (HAPCs)

Comment 1: NMFS received numerous comments in support of the HAPC designation for BFT in the Gulf of Mexico including 1035 letters from members of the Monterey Aquarium's Ocean Action Team.

Response: NMFS recognizes that HAPCs are intended to focus conservation efforts and bring heightened awareness to the ecological importance of special areas and their vulnerability to degradation through fishing and non-fishing activities. Designating the bluefin spawning area in the Gulf of Mexico should highlight the importance of the area and foster added conservation measures to reduce impacts from these activities. By establishing the EFH provisions, the Magnuson-Stevens Act clearly recognized and acknowledged the importance of habitat in maintaining healthy fish stocks. The EFH provisions provide a tool by which NMFS has greater oversight of development activities that have the potential to impact EFH. Specifically, Section 305(b)(1)(D) of the Magnuson-Stevens Act requires all Federal agencies to consult with the Secretary on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH.

Comment 2: We support designation of the HAPC for BFT in the Gulf of Mexico. Each of the criteria under the EFH HAPC guidelines is satisfied. Bluefin spawning habitat in the Gulf of Mexico is vulnerable to a number of sources of human-induced degradation, including: 1) reduced availability of prey fish for feed should offshore aquaculture be developed (EFH guidelines identify actions that reduce the availability of major prey species as adverse effects on EFH); 2) expanded offshore oil drilling and liquefied natural gas development; 3) threats to sargassum habitat, which studies have found support larvae of BFT and other pelagic species; 4) and dead zones that potentially could pose a long-term threat to spawning success. The area designated for HAPC is in need of additional levels of protection from such adverse impacts.

Response: NMFS agrees that there are a number of activities that have the potential to impact EFH and HAPCs, not just in the Gulf of Mexico, but in all areas. The Gulf of Mexico Fishery Management Council (GMFMC) is currently developing an Aquaculture FPEIS. The purpose of the plan is to establish a regional permitting process to manage the development of an environmentally sound and economically sustainable aquaculture industry in federal waters of the Gulf of Mexico. Any aquaculture projects in federal waters of the Gulf of Mexico would need to be authorized and receive a permit from the GMFMC. Permit applicants would be required to conduct a baseline environmental assessment of the proposed site prior to permit

review by NMFS. If a permit is authorized, permittees would have to conduct routine monitoring of a site based on NMFS protocols and procedures developed in coordination with other federal agencies. Aquaculture operations would also be required to report to NMFS within 24 hours of the discovery of: major escapement; entanglements or interactions with marine mammals, endangered species and migratory birds; and findings or suspected findings of pathogens. Other activities such as oil and gas development are subject to the consultation provisions under the Magnuson-Stevens Act. Section 305(b)(1)(D) of the Magnuson-Stevens Act requires all federal agencies to consult with the Secretary on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH.

Comment 3: Designating a HAPC for BFT populations will be a critically important step if it is to have any semblance at returning to viability. Other actions NMFS should take include: 1) developing an EIS for offshore aquaculture in federal waters; 2) reigning in permits for offshore aquaculture in federal waters; 3) reducing fishing for feedfish; and, 4) designating the area identified as preferred alternative 2 as a HAPC.

Response: As discussed in the previous response, the GMFMC prepared a FPEIS for offshore aquaculture, which evaluates the potential environmental impacts of a range of alternatives and describes potential impacts to water quality, wild stocks, and fishing communities. Potential impacts resulting from offshore aquaculture may include increased nutrient loading, habitat degradation, fish escapement, competition with wild stocks, entanglement of endangered or threatened species and migratory birds, spread of pathogens, user conflicts, economic and social impacts on domestic fisheries, and navigational hazards. The preferred alternatives selected by the Gulf Council are intended to prevent or mitigate to the extent practicable these potential adverse environmental impacts.

Comment 4: We believe that recent studies by Dr. Barbara Block of Stanford University indicate designation of the Atlantic BFT HAPC is necessary to prevent further depletion of the western population.

Response: In addition to Dr. Block's research, a number of other publications, studies, and data collections by NMFS and other state and Federal institutions have highlighted the importance of the Gulf of Mexico for spawning BFT. Combined, all of these sources provide support for the designation of a HAPC for BFT in the Gulf of Mexico.

Comment 5: We support the designation of the BFT HAPC in the Gulf of Mexico, but recommend that the area be amended to include all waters west of 86 degrees West longitude and off the continental shelf (*e.g.*, offshore of the 200 m contour) to the boundary of the U.S. EEZ, which is more scientifically accurate and is based on analyses of the combined electronic tagging and fishery data sets.

Response: Based on public comment, and further review of the data, NMFS has modified the HAPC boundary that was originally proposed in Draft Amendment 1 to follow the 100 meter (m) isobath west of 86 degrees West longitude in the Gulf of Mexico, and include all

waters seaward of the 100m isobath to the EEZ boundary. NMFS believes that the changes to the boundary reflect the areas that are most important for BFT spawning in the Gulf of Mexico.

Comment 6: Why are there straight lines for the BFT HAPC in the Gulf of Mexico? Does NMFS have data to support a BFT HAPC in waters off western Louisiana? Spawning areas do not follow straight lines, and the northernmost portion should be moved further south. It would be better to follow existing contour lines.

Response: As described in the previous response, NMFS has modified the HAPC boundary to follow the 100m isobath in the Gulf of Mexico. Although straight lines are sometimes useful for management and enforcement purposes, NMFS agrees that in this case, the best representation of the HAPC boundary in the Gulf would be to follow existing contour lines to better reflect habitat useage by BFT.

Comment 7: Is using larval data as a proxy for adult BFT spawning areas appropriate?

Response: NMFS used a variety of data sources to establish the HAPC boundary for BFT spawning areas in the Gulf of Mexico. As described in the FEIS, a number of alternatives were proposed, including a non-preferred alternative of using the 95 percent probability boundary for BFT larval data collections to which the commenter is referring. Instead, NMFS preferred alternative 2 which relied on a number of data sources, one of which included BFT larval data collections.

Comment 8: We support NMFS preference of HAPC alternative 2 over Alternatives 3 and 4; alternative 3 is biased due to larval sampling stations, and alternative 4 does not capture the entire spawning ground.

Response: NMFS agrees that alternative 2 is the best alternative for designating a HAPC for BFT spawning areas in the Gulf of Mexico because it encompasses the most important areas where BFT spawning is occurring rather than the areas where BFT eggs and larvae may be dispersed.

Comment 9: We request that you remove the Teo *et al.* (2007) overlay from the HAPC maps, as it misrepresents the data, the layers are not digitized accurately, and including the data overemphasizes the location of 28 individuals displaying breeding behavior as compared to thousands of points from the observer program, logbooks, and electronic tagging.

Response: NMFS has removed the Teo *et al.* (2007) overlay from the HAPC maps in the FEIS. The original intent of including the area in the Draft Amendment was to demonstrate the importance of the western Gulf of Mexico as one of the key areas for BFT spawning, and to indicate that the HAPC preferred alternative would encompass portions of the area within the U.S. EEZ considered primary breeding areas in the Teo *et al.* (2007). publication.

Comment 10: I support the creation of a HAPC for BFT in the Gulf of Mexico; I think NMFS should put the entire area off limits to development, fishing, and oil drilling.

Response: Section 305(b)(1)(D) of the Magnuson-Stevens Act requires all federal agencies to consult with the Secretary on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. Sections 305(b)(3) and (4) direct the Secretary and the Councils to provide comments and EFH conservation recommendations to federal or state agencies on actions that affect EFH. Such recommendations may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH resulting from actions or proposed actions authorized, funded, or undertaken by the agency or the activities of other agencies such as the Army Corps of Engineers or Mineral Management Service for development or offshore drilling. Section 305(b)(4)(B) requires federal agencies to respond in writing to such comments. Although NMFS has the regulatory authority to minimize fishing activities that are demonstrated to have more than a minimal and not temporary effect on EFH, NMFS has not proposed, nor implemented any measures to minimize fishing impact on EFH in this FEIS because NMFS has determined that BFT EFH is in the water column and fishing is not having more than a minimal impact on water column properties.

Comment 11: NMFS received a number of comments regarding the HAPC and fishing effort including: 1) I support the HAPC and recommend closure of the Gulf of Mexico and Atlantic to longlining of any type; 2) this type of fishing is non selective and is destroying the fish and other wildlife indiscriminately; 3) BFT spawning grounds in the Gulf of Mexico need to be closed to purse seine and longline commercial fishing during the breeding season; and 4) NMFS should consider a seasonal closure for pelagic longlining in the HAPC during the bluefin spawning season.

Response: The EFH guidelines require NMFS to identify fishing and non-fishing activities that may adversely affect EFH. Since most HMS EFH is comprised of the water column, of which the characteristics of temperature, salinity, and dissolved oxygen are unlikely to be affected by fishing gears, NMFS concluded that fishing gears were not having a negative effect on most HMS EFH. As a result, NMFS did not propose any measures to regulate fishing in association with EFH. NMFS has provided a list of conservation recommendations for fishing and non-fishing activities that have the potential to impact EFH in the FEIS. Since the focus of this amendment is EFH, NMFS did not consider any alternatives or regulatory measures to limit fishing effort in order to reduce bycatch. Such an action would need to be considered in a separate rulemaking or amendment. The Consolidated HMS FMP does contain measures to reduce bycatch. NMFS is continuing to monitor bycatch of BFT in the Gulf of Mexico, and has implemented 100 percent observer coverage on pelagic longline vessels during the spawning season. Although NMFS issues permits for tuna purse-seining, targeting of BFT in the Gulf of Mexico is prohibited and purse-seining for BFT, or any other HMS, is not authorized in the Gulf of Mexico.

Comment 12: Despite the clearly recognized importance of Gulf spawners, NMFS has allowed continued bycatch mortality of mature BFT on their spawning ground by the U.S. pelagic longline fleet. We hope that by deciding to focus future conservation efforts for BFT on the Gulf of Mexico, NMFS will take even more proactive steps towards protecting these spawners.

Response: Targeting BFT is prohibited in the Gulf of Mexico. Vessels are currently subject to target catch requirements in order to retain any incidentally caught BFT. As indicated in the previous response, NMFS has implemented 100 percent observer coverage in the Gulf of Mexico during BFT spawning season (April-June) during the previous two years and will have 100 percent observer coverage again this year. This information will help NMFS to better understand the scope of the bycatch, the areas most likely to result in incidental catch of bluefin, and the temporal variability in bycatch.

Comment 13: NMFS has incorrectly stated that the HAPCs for sandbar sharks in the Chesapeake Bay as being in the State of Maryland. In actuality, the HAPCs were identified in waters of Virginia.

Response: The commenter is correct that the majority of the HAPC for sandbar sharks is in state waters off Virginia, however a portion of the HAPC is also located in Maryland state waters. As a result, NMFS has amended the language in the FEIS so say that the HAPC for sandbar sharks occurs in both Maryland and Virginia state waters of the Chesapeake Bay.

Fishing and Non-Fishing Impacts on Essential Fish Habitat

Comment 1: NMFS states that if future analyses indicate certain fishing gears are having a more than minimal and not temporary effect on EFH, NMFS will propose alternatives to avoid or minimize those impacts in a subsequent rulemaking; in this regard, we note that Atlantic BFT are subject to indirect fishing pressure within the spawning grounds during the spawning season, in particular as bycatch in pelagic longline fisheries targeting other species.

Response: NMFS is aware of the incidental catch of BFT in the Gulf of Mexico and is continuing to monitor the situation in the Gulf of Mexico with 100 percent observer coverage on pelagic longline vessels during the spawning season. Since the focus of this amendment is habitat, NMFS did not consider any alternatives or regulatory measures to limit fishing effort in order to reduce bycatch, however the Consolidated HMS FMP did implement measures to reduce bycatch. Such an action would need to be considered in a separate rulemaking or amendment, as appropriate.

Comment 2: We are concerned that NMFS' evaluation of the non-fishing threats to the proposed BFT HAPC in the Gulf of Mexico is incomplete – NMFS has completely failed to address the potential threat posed by seismic exploration activities associated with the expansion of oil and gas development in the Gulf.

Response: NMFS agrees that seismic exploration has the potential to affect habitat use by a number of species including HMS, and has therefore included conservation recommendations for seismic exploration activities associated with the expansion of oil and gas development in the Gulf of Mexico. During the normal course of consultation, habitat experts would review all available data to determine whether potentially harmful habitat effects had been adequately addressed prior to approval of any applications.

Comment 3: Additional information should be provided on how determinations will be made regarding impacts from fishing gear; further assurance should be given as to how any impacts will be addressed.

Response: Determination of impacts from fishing gears would be done in a manner similar to the analysis completed in the current Amendment for shark bottom longline gear. That is, NMFS would analyze the nature, scale, scope, duration, and frequency of impacts of fishing gears on specific habitat types and make a determination as to whether the impacts are considered more than minimal and not temporary in nature. If such an effect is demonstrated, then NMFS would propose measures to minimize those impacts. Impact would be addressed on a case-by-case basis based on analysis of existing data.

Comment 4: The GMFMC is considering offshore aquaculture projects that should be considered a fishing impact, and could have an impact on BFT EFH.

Response: NMFS is aware of the Programmatic EIS for offshore aquaculture that the GMFMC is finalizing and has included a discussion of offshore aquaculture, including conservation recommendations, in the Final EIS.

Comment 5: Did the EFH analysis include fishing effort? If not, this could be why there is no EFH identified for adult swordfish off the southeast corner of Florida.

Response: NMFS provided a detailed description of the data and approach used to update EFH boundaries in Chapter 4 of the FEIS, including inherent limitations in certain data sets and why others were not included. To summarize, NMFS did not include fishing effort in the EFH analysis for a variety of reasons. Most of the presence/absence data available for HMS does not include fishing effort. Some of the data sets that do include fishing effort, such as the Pelagic Longline Logbook data, do not include the size information required to identify EFH by lifestage as required by the EFH regulations. Other data sets that include fishing effort, such as the Pelagic Observer Program (POP) data, comprise only a small proportion of the overall data available for pelagic species. Thus, relying on fishing effort from the POP data alone would have precluded the use of other datasets and would have reduced the potential range of EFH.

Comment 6: “Dead zones” due to hypoxia could pose a significant long-term threat to spawning success for BFT. NMFS should include additional information on the dead zone in the Gulf of Mexico and potential impacts on BFT EFH and the HAPC.

Response: NMFS is aware of dead zones due to hypoxia in the Gulf of Mexico. Dead zones typically occur in benthic or near-benthic environments where they would be unlikely to affect BFT habitat. NMFS has examined this issue in more detail and included a discussion on hypoxia in the Final EIS.

Comment 7: What would the process be if there is a proposed aquaculture project in the BFT HAPC? Would the project still be allowed to happen?

Response: The GMFMC regulates non-HMS fisheries, including aquaculture, in the U.S. Gulf of Mexico EEZ, which extends from state waters to 200 miles offshore. Landings or possession of species managed under an FMP for purposes of commercial marine aquaculture production in the EEZ constitutes “fishing” as defined in the Magnuson-Stevens Act. Permit applicants would be required to conduct a baseline environmental assessment of the proposed site prior to permit review by NMFS. If a permit is authorized, permittees would have to conduct routine monitoring of a site based on NMFS protocols and procedures developed in coordination with other federal agencies. Aquaculture operations would also be required to report to NMFS within 24 hours of the discovery of: major escapement; entanglements or interactions with marine mammals, endangered species and migratory birds; and findings or suspected findings of pathogens.

Comment 8: Has NMFS considered harmful algal blooms (HABs) in the non-fishing impacts section?

Response: While HABs are a concern for number of species, in general they are less likely to affect habitat for HMS because HABs tend to occur closer to shore in areas where HMS are less likely to occur. In addition, given their highly mobile nature, HMS are more likely to avoid prolonged contact with HABs in affected areas. However, NMFS considers this an important issue and has included additional information on HABs in the non-fishing impact section of the FEIS.