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**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**50 CFR Part 226**

**[Docket No. 110207102-5657-03]**

**RIN 0648-BA81**

**Endangered and Threatened Species: Final Rulemaking to Revise Critical Habitat for Hawaiian Monk Seals**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Final rule.

**SUMMARY:** We, the National Marine Fisheries Service (NMFS), issue a final rule to revise the critical habitat for the Hawaiian monk seal (*Neomonachus schauinslandi*) pursuant to the Endangered Species Act. Specific areas for designation include sixteen occupied areas within the range of the species: ten areas in the Northwestern Hawaiian Islands (NWHI) and six in the main Hawaiian Islands (MHI). These areas contain one or a combination of habitat types: preferred pupping and nursing areas, significant haul-out areas, and/or marine foraging areas, that will support conservation for the species.

Specific areas in the NWHI include all beach areas, sand spits and islets, including all beach crest vegetation to its deepest extent inland, lagoon waters, inner reef waters, and including marine habitat through the water's edge, including the seafloor and all

subsurface waters and marine habitat within 10 meters (m) of the seafloor, out to the 200-m depth contour line around the following 10 areas: Kure Atoll, Midway Islands, Pearl and Hermes Reef, Lisianski Island, Laysan Island, Maro Reef, Gardner Pinnacles, French Frigate Shoals, Necker Island, and Nihoa Island. Specific areas in the MHI include marine habitat from the 200-m depth contour line, including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, through the water's edge 5 m into the terrestrial environment from the shoreline between identified boundary points on the islands of: Kaula, Niihau, Kauai, Oahu, Maui Nui (including Kahoolawe, Lanai, Maui, and Molokai), and Hawaii. In areas where critical habitat does not extend inland, the designation ends at a line that marks mean lower low water. Some terrestrial areas in existence prior to the effective date of the rule within the specific areas lack the essential features of Hawaiian monk seal critical habitat because these areas are inaccessible to seals for hauling out (such as cliffs) or lack the natural areas necessary to support monk seal conservation (such as hardened harbors, shorelines or buildings) and therefore do not meet the definition of critical habitat and are not included in the designation. In developing this final rule we considered public and peer review comments, as well as economic impacts and impacts to national security. We have excluded four areas because the national security benefits of exclusion outweigh the benefits of inclusion, and exclusion will not result in extinction of the species. Additionally several areas are precluded from designation under section 4(a)(3) of the ESA because they are managed under Integrated Natural Resource Management Plans that we have found provide a benefit to Hawaiian monk seals.

**DATES:** This final rule becomes effective [*Insert date 30 days after date of publication in the FEDERAL REGISTER*].

**ADDRESSES:** The final rule, maps, and other supporting documents (Economic Report, Endangered Species Act (ESA) Section 4(b)(2) Report, and Biological Report) can be found on the NMFS Pacific Island Region's website at [http://www.fpir.noaa.gov/PRD/prd\\_critical\\_habitat.html](http://www.fpir.noaa.gov/PRD/prd_critical_habitat.html).

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**SUPPLEMENTARY INFORMATION:**

**Background**

The Hawaiian monk seal (*Neomonachus schauinslandi*) was listed as endangered throughout its range under the ESA in 1976 (41 FR 51611; November 23, 1976). In 1986, critical habitat for the Hawaiian monk seal was designated at all beach areas, sand spits and islets, including all beach crest vegetation to its deepest extent inland, lagoon waters, inner reef waters, and ocean waters out to a depth of 10 fathoms (18.3 m) around Kure Atoll, Midway Islands (except Sand Island), Pearl and Hermes Reef, Lisianski Island, Laysan Island, Gardner Pinnacles, French Frigate Shoals, Necker Island, and Nihoa Island in the NWHI (51 FR 16047; April 30, 1986). In 1988, critical habitat was expanded to include Maro Reef and waters around previously designated areas out to the 20 fathom (36.6 m) isobath (53 FR 18988; May 26, 1988).

On July 9, 2008, we received a petition dated July 2, 2008, from the Center for Biological Diversity, Kahea, and the Ocean Conservancy (Petitioners) to revise the Hawaiian monk seal critical habitat designation (Center for Biological Diversity 2008) under the ESA. The Petitioners sought to revise critical habitat by adding the following areas in the MHI: key beach areas; sand spits and islets, including all beach crest vegetation to its deepest extent inland; lagoon waters; inner reef waters; and ocean waters out to a depth of 200 m. In addition, the Petitioners requested that designated critical habitat in the NWHI be extended to include Sand Island at Midway, as well as ocean waters out to a depth of 500 m (Center for Biological Diversity 2008).

On October 3, 2008, we announced a 90-day finding that the petition presented substantial scientific information indicating that a revision to the current critical habitat designation may be warranted (73 FR 57583; October 3, 2008). On June 12, 2009, in the 12-month finding, we announced that a revision to critical habitat is warranted because of new information available regarding habitat use by the Hawaiian monk seal, and we announced our intention to proceed toward a proposed rule (74 FR 27988). Additionally, in the 12-month finding we identified the range of the species as throughout the Hawaiian Archipelago and Johnston Atoll.

Following the 12-month finding, we convened a critical habitat review team (CHRT) to assist in the assessment and evaluation of critical habitat. Based on the recommendations provided in the draft biological report, the initial Regulatory Flexibility Analysis and section 4(b)(2) analysis (which considers exclusions to critical habitat based on economic, national security and other relevant impacts), we published a proposed rule on June 2, 2011 (76 FR 32026) to designate sixteen specific areas in the Hawaiian

archipelago as Hawaiian monk seal critical habitat. In accordance with the definition of critical habitat under the ESA, each of these sixteen areas contained physical or biological features essential to conservation of the species, and which may require special management consideration or protections. In the proposed rule, we described the physical or biological features that support the life history needs of the species as essential features, which included 1) areas with characteristics preferred by monk seals for pupping and nursing, 2) shallow, sheltered aquatic areas adjacent to coastal locations preferred by monk seals for pupping and nursing, 3) marine areas from 0 to 500 m in depth preferred by juvenile and adult monk seals for foraging, 4) areas with low levels of anthropogenic disturbance, 5) marine areas with adequate prey quantity and quality, and 6) significant areas used by monk seals for hauling out, resting, or molting. We requested public comments through August 31, 2011, on the proposed designation and then published a notification of six public hearings (76 FR 41446; July 14, 2011). In response to requests, we reopened the public comment period for an additional 60 days and accepted all comments received from June 2, 2011 through January 6, 2012 (76 FR 68710l; November 7, 2011).

During the public comment periods, we received comments that indicated that substantial disagreement existed over the identification of the essential features in the MHI. On June 25, 2012, we announced a 6-month extension for the final revision of critical habitat for the Hawaiian monk seal and committed to evaluating information provided through comments and additional information from over 20 GPS-equipped cellular transmitter tags deployed on seals in the MHI (new MHI GPS tracking information) to aid in resolving the disagreement (77 FR 37867).

The CHRT was reconvened to review comments, information used to support the proposed rule, and newly available information, including new MHI GPS tracking information. This final rule describes the final critical habitat designation, including the responses to comments, CHRT recommendations, a summary of changes from the proposed rule, supporting information on Hawaiian monk seal biology, distribution, and habitat use, and the methods used to develop the final designation.

For a complete description of our proposed action, including the natural history of the Hawaiian monk seal, we refer the reader to the proposed rule (76 FR 32026; June 2, 2011).

### **Statutory and Regulatory Background for Critical Habitat**

The ESA defines critical habitat under section 3(5)(A) as: “(i) the specific areas within the geographical area occupied by the species, at the time it is listed..., on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed...upon a determination by the Secretary that such areas are essential for the conservation of the species.”

Section 4(a)(3) of the ESA precludes military land from designation, where that land is covered by an Integrated Natural Resource Management Plan that the Secretary has found in writing will benefit the listed species.

Section 4(b)(2) of the ESA requires us to designate critical habitat for threatened and endangered species “on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other

relevant impact, of specifying any particular area as critical habitat.” This section also grants the Secretary of Commerce (Secretary) discretion to exclude any area from critical habitat if she determines “the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat.” However, the Secretary may not exclude areas that “will result in the extinction of the species.”

Once critical habitat is designated, section 7 of the ESA requires Federal agencies to insure they do not fund, authorize, or carry out any actions that will destroy or adversely modify that habitat. This requirement is additional to the section 7 requirement that Federal agencies insure their actions do not jeopardize the continued existence of listed species.

### **Summary of Changes From the Proposed Critical Habitat Designation**

After considering public comments received and updating the best scientific information available, we have 1) eliminated “areas with low levels of anthropogenic disturbance” as an essential feature; 2) combined the marine and terrestrial essential features that describe Hawaiian monk seal reproduction and rearing sites to clarify how these habitats are interconnected in supporting Hawaiian monk seal conservation; 3) clarified the location of pupping and nursing areas essential to Hawaiian monk seals by providing further description for the term “preferred;” 4) clarified the location of haul-out areas essential to Hawaiian monk seals by providing further description for the term “significant;” 5) combined the marine areas and prey features that support Hawaiian monk seal foraging areas to describe better how these features are interrelated; 6) refined the boundaries for depth and height of marine foraging areas to describe better those areas that support the foraging ecology and conservation of the Hawaiian monk seal; 7)

refined the description of critical habitat areas in the NWHI to eliminate areas that are inaccessible to seals or manmade structures that do not support monk seal conservation, such as hardened harbors and shorelines or buildings, and 8) refined the boundaries of preferred pupping and nursing areas and significant haul-out habitats. These changes from the proposed rule are discussed further below.

1. The essential feature “areas with low levels of anthropogenic disturbance” was included in the proposed rule to protect habitat areas used by Hawaiian monk seals, which are sensitive to disturbance caused by human activity. Public comments received about this essential feature requested clarification about what role this feature plays in Hawaiian monk seal ecology; some noted that this feature does not appear to align with monk seal behavior or habitat use in the MHI, and other comments questioned whether development or access would be restricted in areas with low anthropogenic disturbance that are not used by seals. Such comments triggered a reevaluation of this proposed essential feature. To consider the significance of this feature to Hawaiian monk seal conservation the CHRT re-examined the information that was used to support this feature in the NWHI and considered the information available regarding monk seal habitat use in the MHI. The historical examples from military settlement in the NWHI highlight that chronic disturbance in sensitive monk seal habitat, such as pupping and nursing sites or important haul-out areas, can alter the conservation value of these areas. In the proposed rule we also noted that three aerial surveys of the MHI in 2000 and 2001 indicate that seals showed a preference for more remote areas (Baker and Johanos 2004). However, since 2004, seal use of the MHI has continued to increase and review of the more recent sighting and cell phone tracking data indicate that monk seals regularly haul-out in both

highly trafficked and relatively remote areas of the MHI. For example, Kaena point experiences relatively low levels of human activity in comparison with White Plains Beach, yet both of these areas remain important haul-out sites for seals on Oahu. Upon further consideration of available information, the CHRT was unable to define the service or function that “areas with low levels of anthropogenic disturbance” would provide to Hawaiian monk seal conservation as a singular or stand-alone feature. We agree that this feature does not appear to provide a service or function for monk seal conservation, which would support identification as an independent essential feature. We have removed this as an essential feature for monk seal conservation, but recognize that this may be a characteristic important to some preferred pupping and nursing areas or significant haul out areas.

2. The proposed rule identified two essential features that support reproduction: “areas with characteristics preferred by monk seals for pupping and nursing” and “shallow sheltered aquatic areas adjacent to coastal locations preferred by monk seals for pupping and nursing.” Public comments expressed criticism about the description of where these two areas exist and the role these two areas play in supporting Hawaiian monk seals. Comments suggested that we should identify known areas of significance for pupping and nursing, because these areas are limited based on available information and that a more precise designation would ensure that protections are focused on those important areas. Other comments suggested that “shallow, sheltered aquatic areas” could be found throughout the State and that the current description was insufficient to identify areas that were important to Hawaiian monk seal reproduction. The CHRT determined that these two proposed essential features describe a terrestrial and marine component of

a single area that supports Hawaiian monk seal reproduction and growth. The CHRT recommended, and we agreed, that combining these two features would better identify these areas as interconnected habitats that support Hawaiian monk seal mothers and pups through birth, lactation and weaning. The revised feature is now described as, “Terrestrial areas and the adjacent shallow sheltered aquatic areas with characteristics preferred by monk seals for pupping and nursing.”

3. After considering public comments, the CHRT also examined how “preferred” pupping areas may be better defined for the species. As identified in the proposed rule (76 FR 32026; June 2, 2011), monk seals generally return to the same site year after year for birthing, and those sites with characteristics including a shallow and sheltered area protected from predators and weather, may draw multiple females to the same site. Still, some females prefer to use more solitary locations for pupping, returning to these sites multiple times throughout their reproductive lifetime to birth and rear pups. The CHRT determined that both of these types of favored reproductive sites remain essential to Hawaiian monk seal conservation to support reproduction and population growth. After considering public comments requesting a more accurate location for these areas in the MHI, the CHRT reviewed pupping data from throughout the range to consider how these two types of reproductive sites may be best described to match the description from the proposed rule.

In the NWHI, terrestrial pupping areas are well established and over 30 years of data identify pupping areas on the various islands and islets. Records indicate that some pupping areas support multiple mothers in any given year, while other pupping areas may support a single female for multiple years and/or multiple females spanning multiple

generations. In the MHI, pupping habitat has not been clearly established for all the specific areas. For example, data indicate that some MHI mothers have given birth in one location and have chosen an alternative birth site in subsequent years. To avoid applying unnecessary protections to areas that monk seals found unsuitable for repeat pupping, the CHRT recommended that preferred pupping and nursing areas be defined as those areas where multiple females have given birth or where a single female has given birth in more than one year. This allows for the protection of areas that are used by multiple mothers year after year, and protection of those areas where individual females have returned to a more solitary pupping site. We agree that this description of “preferred” provides clarity to the public about which areas are likely to support Hawaiian monk seal conservation and also helps to conserve sufficient habitat to support Hawaiian monk seal recovery.

4. The proposed rule incorporated all coastal terrestrial areas from the water’s edge to 5 m inland of the shoreline in the MHI, with the exception of those areas that are manmade structures (e.g., harbors or seawalls) and/or inaccessible to seals (e.g., cliffs), to ensure that all existing “significant haul-out areas” would be captured in the designation. We relied upon this approach, rather than using voluntary MHI monk seal data to identify favored haul-out areas, due to concerns we expressed in the proposed rule regarding potential biases associated with the collection of MHI voluntary monk seal sighting information (i.e., highly trafficked areas by humans are likely to report monk seal sightings more often than remote areas that seals may still use) and the limited information available regarding habitat use in areas with a small number of seals (76 FR 32026; June 2, 2011). Public comments expressed criticism of this expansive approach. In particular, comments pertaining to terrestrial essential features suggested that the 2011

proposed designation was too broad, and that all areas of MHI coastline could not possess the features “essential” to Hawaiian monk seal conservation. Some comments suggested that there was insufficient analysis to support the identification of all areas of coastline for the designation, as monk seal habitat use indicates that not all coastlines in the MHI can be accessed by seals and therefore not all habitat should be considered essential. Other comments suggested that the analysis was insufficient because the designation does not match known habitat use patterns of Hawaiian monk seals in various areas of the MHI, nor does it identify habitat that will support recovery of the population.

In reviewing these comments and considering the available data, the CHRT agreed that the 2011 proposal was too broad for stakeholders to be able to distinguish those features that are essential to Hawaiian monk seal conservation from other areas of coastline, and that available data suggest that significant haul-out areas and preferred pupping areas may be described with more precision. The CHRT acknowledged that, although Hawaiian monk seals may use many accessible areas of coastline to haul-out, not all haul-out areas of the MHI are of the same value to Hawaiian monk seal conservation and not all areas would be described as essential. To be responsive to comments requesting more precision in identifying the essential features and to use the best available information for describing the essential features, the CHRT re-evaluated information relied upon in the proposed rule to describe significant haul-out areas. As indicated in the proposed rule, Hawaiian monk seals do not congregate in large numbers at particular sites like some other pinnipeds such as sea lions. However, Hawaiian monk seals reliably return to stretches of coastline that are favored for resting, molting, and socializing, and multiple individuals are likely to use the same stretches of

coastline around a particular island. Identifying the combination of characteristics that are common to stretches of coastline that monk seals favor for hauling out is difficult, because habitat characteristics are not uniform from one favored haul-out area to another. For example, the relatively remote stretches of beach along Laau point on Molokai do not display all of the same characteristics as the beaches along Oahu's busy southwestern shoreline; however, both of these areas are consistently used by monk seals for hauling out and are recognized by scientists, managers, and the public as important haul-out habitat. For this reason, the CHRT determined that stretches of coastline that maintain a combination of characteristics favored by monk seals for resting, molting and socializing may best be identified by evaluating actual monk seal usage of each island and using the frequency of use as a proxy for identifying those areas with significant characteristics. Since the June 2, 2011 publication of the proposed rule (76 FR 32026), the number of monk seals instrumented with cell phone tracking devices has doubled and this information supplements information regarding MHI monk seal habitat use in the MHI that was available at the time that the proposed areas were delineated. Spatial comparisons of these available data sets demonstrate that the voluntary sighting data successfully captures areas frequented by monk seals throughout the MHI, alleviating our previous concerns that significant haul-out areas may be missed due to the remote nature of a particular site (or the lack of human reporting). To describe better where significant haul-out areas exist using the available data, the CHRT reviewed spatial patterns of monk seal locations by mapping available cell phone tracking data, the past voluntary sighting information, and aerial survey data from across the MHI. The mapped data displayed

where seal sightings were concentrated and allowed the CHRT to evaluate areas of higher use and importance to Hawaiian monk seals.

The CHRT determined that the number of seals using each particular island varies; therefore, the importance of particular habitats also varies from island to island. To account for this variation and to ensure that significant areas used by monk seals for hauling out and thus essential to monk seal conservation were included for each specific area, the CHRT defined “significant” as those areas where monk seals use is at least 10 percent or greater than the area(s) with highest seal use for each island. This description of significant haul-out areas allows for inclusion of contiguous stretches of coastline regularly used by monk seals where experts agree that monk seals are more likely to haul-out, accounts for data that may be underrepresented in frequency due to a lower likelihood of reporting, and, in areas with lower seal numbers, provides sufficient habitat for monk seals to use as the population expands to meet recovery goals. A detailed description of the evaluation of the information used to refine the description of this essential feature may also be found in the biological report (NMFS 2014).

5. Comments raised questions regarding how foraging areas were described in the proposed rule. First, comments from Hawaii’s Department of Land and Natural Resources (DLNR) identified that “marine areas from 0 to 500 m in depth preferred by juvenile and adult monk seals for foraging” and “marine areas with adequate prey quantity and quality” are two features describing the same type of area and should be combined. Having reviewed this comment, the CHRT acknowledged, and we agree, that these features were both proposed to provide protection for monk seal foraging areas which support prey items important to Hawaiian monk seal conservation. After

considering this comment and to provide clarity regarding those features that support Hawaiian monk seal conservation, we have combined these two overlapping features into a single feature that describes important Hawaiian monk seal foraging areas.

6. Numerous comments expressed disagreement with the scope of the designation in marine habitat, stating that the designation was too broad and did not adequately take into account the best available information about monk seal foraging in the MHI to describe those foraging depths that are “essential” to the conservation of the species. Comments questioned the depths at which Hawaiian monk seals forage, and the types of activities that may affect Hawaiian monk seal foraging features.

With regard to the depths at which monk seals forage, one commenter suggested that the current information indicates that depths out to 200 m are the primary foraging habitats for monk seals in the MHI, not 500 m in depth. In addition, new MHI cell phone tracking information that supplemented information examined for the proposed rule indicates that deeper areas are used less frequently by monk seals in the MHI. This suggests that deeper foraging areas may not play as significant a role in Hawaiian monk seal conservation as previously thought. After considering these comments, the CHRT reviewed the information from the proposed rule and information received since 2011 from seals tracked throughout the MHI to re-evaluate the information that describes marine foraging areas that are essential to Hawaiian monk seal conservation.

As noted in the proposed rule, Hawaiian monk seals exhibit individual foraging preferences and capabilities (Iverson 2006), but the species has adapted to the low productivity of a tropical marine ecosystem by feeding on a wide variety of bottom-associated prey species across a wide expanse of habitat. The 2011 proposed rule relied

on maximum dive depths demonstrated in the NWHI and limited diving data available from the MHI to identify the outer boundaries of where Hawaiian monk seal foraging areas exist. The proposed designation focused on incorporating adequate areas to support the conservation of a food-limited population in the NWHI and a growing population in the MHI.

In the NWHI the best available information indicates that monk seals are regularly feeding at depths that are deeper than 20 fathoms (approximately 37 m), the depth boundary for the 1988 critical habitat designation. From 1996 to 2000 a total of 147 seals were tracked for several months at a time in the NWHI using satellite-linked radio transmitters (Stewart *et al.* 2006). Additionally, at French Frigate Shoals, seals were outfitted for shorter time periods with Crittercams (mounted cameras) to provide more information about monk seal foraging ecology. Dive data throughout the NWHI indicate that seals spend a great deal of time in waters less than 40 m, but that in most areas seals are regularly diving at depths greater than 40 m, sometimes even exceeding depths of 550 m (Stewart *et al.* 2006). From Crittercam observations, Parrish *et al.* (2000) describe greater than 50 percent of seal behavior as sleeping or socially interacting and note that these behaviors are exhibited at depths as deep as 80 m. While seals with Crittercams displayed active foraging behavior at various depths, at deeper depths behaviors were focused on foraging, i.e., seals spent more time actively searching along or near the bottom for prey at these depths (Parrish *et al.* 2000). Specifically, Parrish *et al.* (2000) observed most feeding between 60-100 m at French Frigate Shoals, with seals focusing on the uniform habitat found along the slopes of the atoll and neighboring banks. A low percentage of dives also occurred in the subphotic habitats greater than 300 m. Across the

NWHI, Stewart *et al.* (2006) described various modes represented in the dive data that suggest depth ranges where foraging efforts may be focused, but describe a majority of diving behavior occurring at depths less than 150 m. The deeper diving behavior was exhibited at French Frigate Shoals, Kure, Midway, Lisianski, and Laysan, where seals displayed various modes at deeper depth ranges, many of which occurred at less than 200 m in depth (Abernathy 1999, Stewart and Yochem 2004a, Stewart and Yochem 2004b). However, modes also occurred at 200 to 400 m at Midway and Laysan and at 500 m at Kure (Abernathy 1999, Stewart and Yochem 2004a, Stewart and Yochem 2004b). Although these modes in the data suggest a focus around particular depth ranges in the various locations, the deeper areas are used less frequently; data from French Frigate Shoals, Laysan, and Kure demonstrate that less than 10 percent of all diving effort recorded in these areas occurred in depths greater than 200 m (Abernathy 1999, Stewart and Yochem 2004a, Stewart and Yochem 2004b). The NWHI data demonstrate that seal foraging behavior is focused beyond the boundary of the 1988 designation and that depths beyond 100 m provide important foraging habitat for this species. While foraging areas deeper than 100 m remain important to the species' conservation, the variation in diving behavior displayed among the NWHI subpopulations made the significance of these areas difficult to determine.

Information from the MHI taken across multiple years indicates that monk seal foraging behavior is similar to the behavior of seals in the NWHI, but that foraging trip duration and average foraging distance in the MHI is shorter (Cahoon 2011). Although a few monk seals have been recorded as diving to depths around 500 m in the MHI, these dives are rare and do not describe the majority of diving behavior in the MHI (NMFS

2012). Cell phone tracking data received within the last 2 years in the MHI indicate that approximately 95 percent of all recorded dives in the MHI have occurred at 100 m or less, and that approximately 98 percent of dives occur at 200 m or less (NMFS 2012). These numbers indicate a relatively low frequency of use for foraging areas between 100 m and 200 m; however, monk seal population numbers in the MHI are acknowledged to be low but increasing.

Although the frequency of use of deeper foraging areas is different from the NWHI, seal foraging behavior in the MHI is described as similar in nature to their NWHI counterparts, with seals' core areas focused over submerged banks and most seals focusing efforts close to their resident islands (Cahoon 2011). Baker and Johanos (2004) suggest that monk seals in the MHI area are experiencing favorable foraging conditions due to decreased competition in these areas, which is reflected in the healthy size of animals and pups in the MHI. This theory is supported by Cahoon's (2011) recent comparisons of foraging trip duration and average foraging distance data. For both the recommendations for proposed and final rules, the CHRT indicated that marine foraging areas that are essential to Hawaiian monk seal conservation are the same depth in the NWHI and in the MHI. Although MHI monk seal foraging activity currently occurs with less frequency at depths between 100-200 m than their NWHI counterparts, MHI seal numbers are still low (approximately 153 individuals) and expected to increase (Baker *et al.* 2011). As seal numbers increase around resident islands in the MHI, seals' foraging ranges are expected to expand in order to adjust as near-shore resources are shared by more seals whose core foraging areas overlap. Given that 98 percent of recorded dives are within 200 m depth in the MHI, and the lack of information supporting a 500 m dive

depth, we are satisfied that the 200 m depth boundary provides sufficient foraging habitat to support a recovered population throughout the range.

Accordingly, we have revised the foraging areas' essential feature to reflect the best available information about monk seal foraging to, "Marine areas from 0 to 200 m in depth that support adequate prey quality and quantity for juvenile and adult monk seal foraging."

After considering public comments, we recognize that many activities occur in the marine environment and are unlikely to cause modification to the bottom-associated habitat and prey that make up essential Hawaiian monk seal foraging areas. As noted in the proposed rule and the biological report (NMFS 2014a), monk seals focus foraging efforts on the bottom, capturing prey species located on the bottom within the substrate of the bottom environment or within a short distance of the bottom (such that the prey may be easily pinned to the bottom for capture). In other words, the proposed rule recognized that the features that support Hawaiian monk seal foraging exist on and just above the ocean floor. The proposed rule identified foraging areas as essential to the Hawaiian monk seal and not those marine areas where monk seals travel and socialize. To clarify for the public where Hawaiian monk seal essential features exist and where protections should be applied, we have revised the delineation to incorporate the seafloor and marine habitat 10 m in height from the bottom out to the 200 m depth contour. That portion of the water column above 10 m from the bottom is not included within the critical habitat designation.

7. All terrestrial areas in the NWHI, with the exception of Midway harbor, were included in the proposed designation; however, in the MHI we identified that major

harbors and areas that are inaccessible to seals or that have manmade structures that lack the essential features of Hawaiian monk seal critical habitat were not included in the designation. We received comments indicating that the NWHI, similar to the MHI, also have areas that are inaccessible to seals or that have manmade structures that do not support monk seal conservation (such as, seawalls and buildings), and that these areas should similarly not be included in the designation. We agree and have revised the designation of the final rule to acknowledge that areas that are inaccessible to seals and/or have manmade structures that lack the essential features are not included in the designation for Hawaiian monk seal critical habitat throughout all sixteen specific areas.

8. Last, to ensure that the boundaries of the designation reflect the revisions to the definitions of preferred pupping and nursing areas and significant haul-out habitats we reviewed NMFS Pacific Islands Fisheries Science Center (PIFSC) records from the NWHI and the MHI. These records indicate that seals in the NWHI have preferred pupping and nursing sites and significant haul-out areas on the islands and islets of eight of the ten areas designated in the 1988 designation. Since the low-lying islands and islets of the NWHI provide characteristics (e.g., sandy sheltered beaches, low-lying vegetation, and accessible shoreline) that support terrestrial essential features, we have included the entire land areas in the designation (with the exception of inaccessible areas and/or manmade structures as stated above). Identification of where these features exist in the specific areas may be found in the biological report (NMFS 2013). We identified significant haul-out areas using sighting and tracking information mapped across the MHI displaying frequency of seal use as described above. Final areas of terrestrial critical habitat within the MHI were delineated to include all significant haul-out areas and

preferred pupping and nursing sites. Segments of the coastline in the MHI that include these features and which are delineated and included in this final designation are described in the Critical Habitat Designation section below.

### **Summary of Comments and Responses**

We requested comments on the proposed rule and associated supporting reports to revise critical habitat for the Hawaiian monk seal as described above. The draft biological report and draft economic analysis were also each reviewed by three peer reviewers. We received 20,898 individual submissions in response to the proposed rule (including public testimony during the six hearings). This included 20,595 form letter submissions in support of revising Hawaiian monk seal critical habitat and 303 unique submissions. The majority of comments concerned economic and other impacts for consideration for exclusions, the regulatory process for critical habitat designation, legal issues, essential features, additions to critical habitat and biological issues. Additionally, among the 303 submissions we received multiple petitions in opposition and support of the proposed rule; in all we received 2,950 signatures in opposition to the proposed rule and 5,872 signatures in support.

We have considered all public and peer reviewer comments, and provide responses to all significant issues raised by commenters that are associated with the proposed revision to Hawaiian monk seal critical habitat.

We have not responded to comments or concerns outside the scope of this rulemaking. For clarification purposes, a critical habitat designation is subject to the rulemaking provisions under section 4 of the ESA (16 U.S.C. 1533). When finalized, a critical habitat designation creates an obligation for Federal agencies under section 7 of

the ESA to insure that actions which they carry out, fund, or authorize (permit) do not cause destruction or adverse modification of critical habitat. Research and management activities for endangered species are subject to provisions described under section 10 of the ESA, which requires the issuance of a Federal permit to allow for activities that may otherwise be prohibited under section 9 of the ESA. Because the research and management actions in the PEIS are carried out by a Federal agency and they require Federal permitting, these actions have been reviewed in accordance with section 7 to ensure that the actions would not jeopardize the continued existence of a listed species or cause destruction or adverse modification to critical habitat. Accordingly, critical habitat designations in no way authorize research and management activities to occur and do not ease or secure the authorization of such activities.

#### Peer Review

*Comment 1:* One peer reviewer questioned whether there are temporal differences in the use of Hawaiian monk seal habitat features. The reviewer suggested that if temporal aspects exist, such as changes in prey abundance or availability, variations in weather or environmental conditions, which make some areas inaccessible or less preferable to seals, or seasonal differences that may influence human-seal interactions, that we describe these aspects in more detail in the biological report.

*Response:* Factors that influence when Hawaiian monk seals use habitat features are described in the Habitat section of the biological report (NMFS 2014). Life-history stages influence when and how Hawaiian monk seals use habitat features; consequently, annual changes in habitat use may reflect the demographics of the resident population of seals. Differences, or peaks, in habitat use of preferred pupping areas or significant haul-

out areas may occur when resident seals are reproductively active or experiencing their molt. Some preferred pupping areas may be used more frequently by females and pups during common birthing months between February and August (Johanos *et al.* 1994, NMFS 2007). Additionally, significant haul-out areas may be used more as resident animals of various ages and each sex undergo their annual molt (see NMFS 2014a).

Little information is available to indicate that monk seal use of foraging areas is influenced annually by seasonal variations in weather. Stewart *et al.* (2006) noted seasonal variation in core foraging areas for individual seals, but not for others tracked during a single year at Pearl and Hermes reef. Cahoon (2011) tested the summer and winter diets of seals and found no statistical differences in composition between seasons. However, in both studies sample sizes are limited and additional data may provide more clarity.

No information suggests that there is a seasonality associated with human-seal interactions, or that Hawaiian monk seal habitat use is currently influenced in a seasonal way by human activities. Historical factors associated with human-use of the NWHI and impacts to Hawaiian monk seal habitat use are discussed in the Population Status and Trends section of the biological report (NMFS 2014).

*Comment 2:* Several peer review comments suggested that we provide additional information about the ecology of Hawaiian monk seals to better demonstrate how habitat supports behaviors that are important to Hawaiian monk seal conservation. Specifically, reviewers requested that additional information be provided about resting, molting, and socializing behaviors.

*Response:* We have added additional information to the Habitat section of the biological report (NMFS 2014a) to better identify how specific habitat features support Hawaiian monk seal behaviors, such as resting, molting, and socializing and to describe the significance of these activities to Hawaiian monk seals. With regard to the significance of these behaviors, we provide the following information. Resting provides energetic benefits by allowing these phocids' recovery from the energetically demanding marine environment (Brasseur *et al.* 1996). Molting is considered a metabolically demanding process whereby pinnipeds renew skin, fur, and hair for critical waterproofing and insulation purposes. Studies indicate that seals may minimize energetic costs of heat loss during this demanding transition by hauling-out on land (Boily 2002). Monk seals are a relatively solitary species, and the most substantial social bonding occurs between the mother and pup throughout the nursing period, which is important for early nourishment and protection. In addition to this early pairing, Hawaiian monk seals do socialize from time to time with other conspecifics. In later years pairing activities are directed towards reproductive output. In summary, seals haul-out for a variety of reasons including rest, thermoregulation, predator avoidance, social interaction, molting and pupping and nursing. Generally, the objective of natural behaviors is believed to enhance the animals' fitness by providing energetic, survival, and reproductive benefits to the species.

*Comment 3:* A peer reviewer questioned what studies are being done on monk seal prey species and whether changes in Hawaiian monk seal prey abundance have been recorded.

*Response:* It is still difficult to determine the relative importance of particular prey items given the variation that is seen in the diets of Hawaiian monk seals and the dynamic nature of the marine ecosystem across the range of the Hawaiian monk seal. To better characterize Hawaiian monk seal foraging ecology, NMFS' Hawaiian Monk Seal Research Program directs foraging research towards evaluating monk seal diet, foraging behavior and habitat use, and understanding linkages between foraging success and changing oceanographic conditions. Information gained from the foraging program is discussed throughout the Habitat section of the biological report (NMFS 2014a).

Generally, climate patterns (e.g., El Nino) drive changes in temperatures and/or ocean mixing that result in changes to ocean productivity. This influence extends up the food web, altering prey abundance for top predators like the Hawaiian monk seal, which eventually affects juvenile survival (Baker et al. 2012). Researchers found that variation in Hawaiian monk seal abundance trends across the NWHI appears to reflect shifts in ocean productivity that are driven by various climate patterns (Polovina et al. 1995; Polovina & Haight 1999; Antonelis et al. 2003; Baker et al. 2007; Baker et al. 2012). The final biological report provides updated information about Hawaiian monk seal foraging ecology and additional information on how various climate patterns may influence productivity and prey abundance.

*Comment 4:* One peer reviewer expressed concerns that NMFS had overlooked discussing the adverse effects of anthropogenic noise on Hawaiian monk seal habitat. The reviewer stated that literature documents the adverse effects of underwater activities (e.g., military training, dredging, and pile driving) as well as in-air acoustics (e.g., jet landing and takeoff, boats, construction related, and live firings) on pinnipeds, including

responses such as avoidance, startle, generalized disturbance, and auditory damage. The reviewer recommended including information in the biology section of the report and in other sections as appropriate.

*Response:* We have updated the Natural History section of the biological report to provide additional information about the hearing capabilities and vocalizations of Hawaiian monk seals. Limited information suggests that Hawaiian monk seal hearing is less sensitive than that of other pinnipeds (Southall *et al.* 2007). Seals communicating in the airborne environment rely largely on short-range signals to alert conspecific animals, or to keep them informed of a signaler's location or general behavioral state (Miller and Job 1992). In addition, vocalization occurs between moms and pups, but studies indicate that females do not distinguish their pups' vocalizations from other pups (Job *et al.* 1995). Note that impacts to Hawaiian monk seals, including those associated with sound, are already analyzed in accordance with obligations to avoid jeopardy during ongoing section 7 consultation.

*Comment 5:* Several peer reviewers commented that marine debris is a threat to Hawaiian monk seals and their habitat and requested that additional information about this threat be provided in the biological report. Specifically, reviewers commented that lost fishing nets and gear may affect Hawaiian monk seal foraging areas by reducing the abundance of prey species due to entanglement or habitat loss. A reviewer also commented that lost fishing gear washing ashore in critical habitat areas could impact either where seals haul out or cause injury and mortality if they become entangled in debris onshore.

*Response:* We agree that marine debris is a threat to Hawaiian monk seals and their critical habitat and that fishery associated debris may affect Hawaiian monk seal foraging areas by reducing the abundance of prey species due to entanglement or habitat loss. We have added additional information about this threat and the activities associated with this threat into the Special Management Considerations or Protections section of the biological report (NMFS 2014a) under fisheries activities and environmental response activities.

Fisheries related debris can affect Hawaiian monk seal critical habitat and this threat is prevalent in the NWHI where the combination of prevailing ocean currents (in the North Pacific Subtropical Gyre) and wind patterns causes marine debris, including fishing gear from fisheries throughout the Pacific Rim, to accumulate. Lost fishing gear may be snagged in coral reefs causing damage to these areas and/or entangling monk seal prey species within Hawaiian monk seal foraging areas. Additionally, marine debris may accumulate on land, reducing the quality or availability of terrestrial habitat. Although some gear is lost from Hawaii's fisheries, a majority of the gear observed from the NWHI marine debris removal efforts includes trawl netting, monofilament gillnet, and maritime line from other Pacific Rim fisheries (Donohue *et al.* 2001). Similar gear also accumulates around the main Hawaiian Islands; areas of heavy accumulation include the windward coasts of many of the islands (PIFSC 2010). Due to the widespread nature of these problems, and the number of species and ecosystems affected by this threat, the NOAA Marine Debris Response Program encourages partnerships among agencies to address marine debris response.

*Comment 6:* One reviewer commented that the biological report should make a distinction between impacts from initial construction versus the on-going operation of new energy-generating devices. This reviewer also questioned whether short-term activities would be allowed within critical habitat areas or if the vulnerability of the population would forbid all activities due to the lack of experimental research on the response of Hawaiian monk seals to such activities.

*Response:* We agree that energy development projects may have impacts associated both with construction and with on-going operations and we have revised the Special Management Considerations or Protections section of the biological report (NMFS 2014a) to reflect these potential impacts to essential features.

Protections for critical habitat are applied under section 7 of the ESA. In Federal section 7 consultations, the Services (NMFS and the U.S. Fish and Wildlife Service (USFWS), the agencies that implement the ESA) may recommend specific measures or actions to prevent or reduce the likelihood of impacts to the important resources in designated areas. Recommendations to protect critical habitat depend on how a project or activity might affect the quantity, quality, or availability of essential features, and this is determined through a thorough review of the action to identify any environmental stressors and to assess the responses to exposure and risk from the activity. Generally, if short term impacts are anticipated, the section 7 process will assist in minimizing those impacts. For projects in which impacts of the activity are more uncertain, Federal agencies are still held to the same standards to avoid destruction and adverse modification. During section 7 consultations, agencies meet this standard by using the

best available information to determine the likely impacts of the activity on a listed species and its critical habitat.

*Comment 7:* Peer review comments indicated that an expansive designation meets the biological needs of the species, but questioned how large areas would be managed adequately. Among these comments, a reviewer questioned if regulations would be in place to limit new structures built right up to the shoreline in critical habitat.

*Response:* Protections for critical habitat are applied under section 7 of the ESA as described above in the response to comment 6. The designation does not establish new regulations specific to a type of activity, such as building a structure on the shoreline.

*Comment 8:* Peer review comments stated that the draft economic analysis (ECONorthwest 2010) did not clearly describe the overall impacts of the proposed designation with regard to the spatial distribution of expected impacts and the types of activities. One reviewer questioned whether impacts are uniformly distributed.

*Response:* The draft economic analysis (ECONorthwest 2010) did note that potential impacts are expected to be largely associated with in-water and construction activities; however, we agree that the discussion of spatial distribution of the expected impacts resulting from the proposed designation could be improved. The final economic analysis (Industrial Economics 2014) has been revised to describe more clearly the spatial distribution of economic impacts associated with the designation as well as how individual activities are expected to be affected.

*Comment 9:* A peer reviewer questioned whether impacts associated with the 1988 designation were used to inform the economic analysis. The reviewer recommended that the economic analysis more clearly identify the types of activities that occur within

the current designation and use past consultation history from these areas to inform the full analysis.

*Response:* Since the 1988 designation, there is a limited history of activities in the NWHI from which to inform the revised designation, because little human activity occurs within the NWHI. This is due to the remoteness of the region as well as the fact that the areas have received environmental protections as a national wildlife refuge and then later as a national monument. The economic analysis uses NMFS' section 7 consultation history to anticipate the types, number, and location of activities that may occur within the areas designated for this final rule. This includes those areas from the 1988 designation in the NWHI, where consultations have already considered the effects of actions on Hawaiian monk seal critical habitat. After considering this and other comments, the final economic analysis (Industrial Economics 2014) was revised to articulate more clearly the impacts anticipated for each specific area, including those areas in the NWHI. Activities in these areas are described in Chapter 12 of the economic analysis as research permits, education activities, recreation management, and maintenance of existing structures (Industrial Economics 2014). Annual anticipated impacts range from less than \$177 per year at Nihoa Island to \$1,090 per year at French Frigate Shoals.

#### Public Comments

#### *Legal Comments*

*Comment 10:* We received comments questioning why NMFS did not prepare an Environmental Impact Statement (EIS) and/or an Environmental Analysis (EA) in compliance with the National Environmental Policy Act (NEPA). Comments voiced

concerns that NMFS completed an EIS for the original 1986 designation, which analyzed the impacts of five alternatives, but did not complete an equivalent NEPA analysis for the current proposed designation. One of the comments further noted that the proposed critical habitat expansion to the main Hawaiian Islands has potential for greater social, cultural, and economic impacts than the original designation, and that the sheer number of section 7 consultations and associated biological opinions with this designation could be debilitating to the State. An additional comment questioned NMFS' reliance on *Douglas County V. Babbitt* 48 F.3d 1495 (9<sup>th</sup> Cir. 1995), cert. denied, 116 S. Ct. 698 (1996), to determine that an environmental analysis as provided for under NEPA compliance was not required. This comment noted that NEPA requirements associated with critical habitat designations remain unsettled because the 10<sup>th</sup> circuit's decision in *Catron County Board of Commissioners v. United States Fish & Wildlife Service* 75 F.3d 1429, 1433 (10<sup>th</sup> Cir. 1996) required the U.S. Fish and Wildlife Service to prepare an Environmental Assessment for the Mexican Spotted Owl designation.

*Response:* We disagree that NMFS is required to complete analysis under NEPA for the current designation. In 1980, when we first considered providing habitat protections for the Hawaiian monk seal we wished to evaluate the benefits and impacts associated with either designating a sanctuary under the National Marine Sanctuaries Act (NMSA), or critical habitat under the ESA in the NWHI. Section 304 of the NMSA requires the Secretary to prepare a draft EIS, in compliance with NEPA, when proposing to designate a national marine sanctuary; therefore, a draft EIS was prepared to evaluate this option for Hawaiian monk seal habitat protection. The alternatives were presented to the public in 1980 in compliance with the NMSA and NEPA. Comments received mostly

supported the designation of critical habitat under the ESA; however, the boundaries for designation remained undecided and we postponed further action to await recovery team recommendations (51 FR 16047; April 30, 1986). In 1985, in accordance with recommendations from the 1983 recovery plan, NMFS proposed critical habitat for the Hawaiian monk seal under the ESA and then finalized the action in 1986. The 1986 final rule (51 FR 16047; April 30, 1986) determined that NEPA was not necessary to move forward with the designation of critical habitat under the ESA. Nonetheless, however, we elected to complete the EIS process since a draft and supplemental report had already been prepared to meet the requirements of NMSA.

Since the original designation of monk seal critical habitat, in *Douglas County v. Babbitt* 48 F.3d 1495 (9<sup>th</sup> Cir. 1995), cert. denied, 116 S. Ct. 698 (1996), the Ninth Circuit Court of Appeals directly addressed the question of whether NEPA applies to critical habitat designations. The Ninth Circuit held that because it was apparent that Congress intended the comprehensive ESA procedures for designating critical habitat to replace the NEPA requirements, NEPA does not apply to critical habitat designations. In particular, the Ninth Circuit noted that ESA procedures for critical habitat designations, including a “carefully crafted congressional mandate for public participation” through extensive public notice and hearing provisions, renders NEPA procedures superfluous. Although we recognize that the 10<sup>th</sup> Circuit Court of Appeals disagrees with the *Douglas County* decision, we note that recently in *Bear Valley Mutual Water Company, et. al., v. Jewell*, F.3d, 2015 WL 3894308 (9<sup>th</sup> Cir. June 26, 2015), the Ninth Circuit reaffirmed its decision in *Douglas County* as controlling law. Accordingly, NMFS was not required to prepare an environmental impact statement for the revision of monk seal critical habitat.

*Comment 11:* Several comments suggested NMFS did not comply with various legal requirements associated with other laws while preparing this rulemaking, including the National Historic Preservation Act (NHPA), the Clean Water Act, and the Hawaii Environmental Policy Act, Chapter 343, HRS, as amended by Act 50. Comments regarding the NHPA either indicated that Native Hawaiians or indigenous people were not consulted in accordance with section 106 prior to this proposal or requested that Native Hawaiian organizations be a part of a consultation process.

*Response:* The designation of critical habitat merely establishes an additional consideration to existing Federal ESA section 7 consultation processes. The designation would not alter the physical characteristics of areas within the boundaries and would not authorize a specific project, activity, or program to occur. As stated above, the critical habitat designation only establishes additional consultation considerations for Federal agencies to ensure that actions undertaken do not destroy or adversely affect Hawaiian monk seal critical habitat. Accordingly, the designation and associated consultation has no potential to alter the characteristics of any historic properties, or otherwise authorize the discharge of pollutants that may degrade the water; therefore, the requirements of the above-referenced authorities are not triggered. Notably, any future Federal actions that are subject to section 7 consultations would remain subject to the consultation provisions of section 106 of the NHPA, provided such action has the potential to cause effects to historic properties.

Furthermore, the associated ESA section 7 consultation process does not preclude any applicable protections or requirements associated with the Clean Water Act. Finally, while HEPA does not directly apply to NMFS' designation of critical habitat, applicants

for state permits in designated critical habitat areas must continue to comply with all applicable Hawaii state requirements.

*Comment 12:* One comment indicated that NOAA's declaration of critical habitat in the State's ocean resources constitutes a taking of resources.

*Response:* We disagree. Executive Order (E.O.) 12630 requires Federal agencies to consider the impact of proposed actions on private property rights. The Classification section of this rule and the proposed rule provides a summary of our determination on E.O. 12630 with regard to takings. This final rule does not result in a physical invasion of private property, nor does it substantially affect the value or use of private property. Rather, in designating critical habitat for Hawaiian monk seals, this final rule establishes obligations on Federal agencies to consider the impact of their proposed actions, and to avoid destroying or adversely modifying areas designated as critical habitat. Accordingly, we disagree that this designation would constitute a taking of resources.

#### *Need to Designate*

*Comment 13:* Several comments indicated that we are not required to designate critical habitat for the Hawaiian monk seal, because the species was listed in 1976 prior to the 1978 amendment to the ESA (which required critical habitat be designated concurrent with listing). These comments cited *Southwest Florida Conservancy v. United States Fish and Wildlife Service* (citation: No. 11-11915) (11<sup>th</sup> Cir. 2011), which upheld the USFWS' discretion to not designate critical habitat for the Florida panther because the species was listed prior to 1978. One of these comments indicated that this case proves we incorrectly identified in public meetings that the petition gave us no choice but to declare critical habitat for the Hawaiian monk seal.

*Response:* The comments correctly identify that the Hawaiian monk seal was listed in 1976, prior to the 1978 amendment to the ESA, which required to the maximum extent prudent and determinable that critical habitat be designated for newly listed species. However, we do have the discretion to designate critical habitat for species listed before the amendment, and we exercised that discretion in 1986 (51 FR 16047; April 30, 1986). Due to the existing monk seal critical habitat designation, our obligations under the ESA are different than those of the USFWS in the case of the Florida panther, in which critical habitat was never designated for the species. Under the 1982 amendments to the ESA, the Services “may” revise critical habitat designations “from time-to-time ... as appropriate.” 16 U.S.C. 1533(a)(3)(A).

Although the Services are not compelled to revise critical habitat for a listed species, we were required by the petition response process under the ESA to make a decision as to whether substantial scientific information indicates that a revision may be warranted (U.S.C.1533(b)(D)(i)). As we announced in our 12-month finding, new information about Hawaiian monk seal foraging and habitat use in the MHI indicates that physical and biological features essential to the conservation of the Hawaiian monk seal (which may require special management considerations or protections) are located outside of the boundaries of the 1988 critical habitat designation and throughout the Hawaiian Archipelago (74 FR 27988; June 12, 2009). Consistent with the standards for announcing our 12-month finding (U.S.C.1533(b)(D)(ii)) we announced our intention to proceed with the requested revision. As we noted in public meetings, applying the best available science, we believe that a revision is necessary to define more accurately the essential features and areas that support Hawaiian monk seal conservation. Additionally,

we believe that this revision will facilitate better Federal, State, and local planning for monk seal recovery.

*Comment 14:* A number of comments maintained that a revised critical habitat designation was unnecessary because existing protections both on the Federal and State level already adequately protect Hawaiian monk seals. Among these comments Hawaii's DLNR identified such existing management measures as those provided for under the ESA (including section 7), the existing critical habitat designation, protections under the MMPA, and State zoning and land use protections in place for Special Management Areas under the Coastal Zone Management Act (CZMA). Additionally, some of the comments questioned the need for the designation because they did not understand how protections for critical habitat would differ from those protections that already exist.

*Response:* The ESA defines critical habitat in relevant part, as “the specific areas within the geographical area occupied by the species, at the time it is listed. . . on which are found those physical and biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection,” 16 U.S.C. 1532(5)(A)(i). The phrase “may require” indicates that critical habitat includes features that may now, or at some point in the future, be in need of special management or protection.

As explained in the proposed rule, we determined that each essential feature may require special management considerations or protections. We agree that certain laws and regulatory regimes already protect, to different degrees and for various purposes, the essential features identified for Hawaiian monk seals. However, in determining whether essential features may require special management considerations or protection, we do

not base our decision on whether management is currently in place, or whether that management is adequate. That is, we cannot read the statute to require that “additional” special management be required before we designate critical habitat (See *Center for Biological Diversity v. Norton*, 240 F.Supp.2d 1090 (D. Ariz. 2003)). That habitat may be under an existing conservation program is not determinative of whether it meets the definition of critical habitat.

Moreover, we do not believe that existing laws and regulations adequately ensure that current and proposed Federal actions will not adversely modify or destroy Hawaiian monk seal critical habitat, currently or into the future. While the MMPA provides protections to Hawaiian monk seals, the MMPA offers little direct protection to the features upon which their survival and recovery depend. Additionally, while Hawaii’s Special Management Areas may provide some protections for Hawaiian monk seal habitat, they do not inform Federal agency decisions that may directly affect monk seal essential features.

Under the ESA, Hawaiian monk seals receive other protections for the species itself. “Take” of the species is broadly prohibited unless authorized by a permit or incidental take statement, and Federal agencies must ensure that their activities do not result in “jeopardy” to the species. In some circumstances “take” may be described as harm, which may include habitat modifications, but ESA prohibitions apply only when the modification or degradation is significant and “actually kills or injures” the species by “significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering,” (See 50 CFR 222.102).

The revision and expansion of critical habitat for this species also informs Federal agencies, State and local governments, and the public of the importance of these areas to the species' recovery. Additionally, the designation helps to ensure that Federal activities are planned and conducted in a manner that safeguards Hawaiian monk seal essential features, and becomes one tool in a suite of conservation measures to support recovery goals for this species (NMFS 2007a). Finally, the consultation process under section 7 of the ESA will provide NMFS with a powerful tool with which to propose project modifications and, as appropriate, reasonable and prudent alternatives, before adverse impacts occur.

*Comment 15:* Some commenters asserted that the proposed critical habitat designation is unnecessary, misguided, and/or will be ineffective, because the designation would not address the major threats to the species in either the NWHI or the MHI, including those identified in the recovery plan. Among these comments Hawaii's DLNR expressed that the designation would provide no additional benefits to the species than already exist, and suggested that we should concentrate our efforts on more active or valid management techniques that address the major threats to the species, including those threatening the status of the seals in the NWHI, such as juvenile food limitations, shark predation, and mobbing. Similarly, another comment suggested the designation would not address the main management problem for monk seals, which is the destruction of the monk seals' main food source by the commercial lobster fishery in the NWHI, and proposed enhancing lobster stocks as a solution. An additional comment stated that the most detrimental threats to the species cannot be addressed through the designation because the threats are not caused by federally funded, authorized, or

permitted activities, or because they are not issues of habitat. Another comment stated that the proposed designation did not align with our recovery plan for the species, and this commenter stated that the designation would fail to remove the “sociological problems” that the recovery plan lists as threats to the MHI seals.

*Response:* The Hawaiian Monk Seal Recovery Plan (NMFS 2007a) acknowledges multiple threats to the species, and ranks those threats as crucial, serious, and moderate. The plan additionally provides prioritized recommendations on conservation actions or programs that support recovery. Generally, conservation actions that address crucial threats are given top priority. We recognize that a revision to critical habitat does not necessarily address all of the crucial threats that are outlined in the recovery plan, such as food limitation, entanglement, and shark predation; however, we disagree with comments that suggest that the revision to critical habitat provides no benefit to this species and/or does not align with the goals of the recovery plan.

Because just over a thousand Hawaiian monk seal individuals remain in the population, priority management actions and recommendations in the Hawaiian monk seal recovery plan focus on diminishing the population-limiting threats, such as food limitations, entanglement, and shark predation in the NWHI. While management actions to address crucial threats are necessary to ensure the survival of the species, other management actions are also necessary to plan for and accomplish recovery of the species throughout its range. In the Recovery Plan, habitat loss is considered a serious threat to the species, and the recovery plan provides recommendations, which received priority 2 ranking, to maintain protections for existing critical habitat with possible

expansions as information is available (NMFS 2007a). Accordingly, contrary to comments received, the revision to critical habitat does align with the recovery plan.

With regard to the benefits of the designation, critical habitat uniquely protects the essential features that a listed species needs to survive and recover. These protections are applied through Federal section 7 consultation when an activity carried out, funded or authorized by a Federal agency may affect critical habitat. During consultation the activity is carefully planned in order to avoid impacts to the essential features, such that the critical habitat areas remain functional for the species' use now and in the future. While a critical habitat designation may not be able to prevent the priority threats to the Hawaiian monk seal, it is a valuable tool that helps to ensure that Federal planning and development does not limit recovery for the species.

As stated in our response to Comment 13, we were required to respond to the 2008 petition to revise critical habitat. Moreover, we believe that any effective, broad-based conservation program must address threats not only to the listed species but also to the habitat upon which the species depends. We believe that a revision to critical habitat will support recovery of the species because it will provide information about and protections for habitat and resources that are not exclusively detailed and protected under the 1988 critical habitat designation.

In addition to revising critical habitat for the species, we plan to continue to work towards addressing other obstacles to recovery through other directed research, management, and educational initiatives.

With regard to the comment about lobsters in the NWHI; we acknowledge that food limitations appear to limit juvenile survival in the NWHI; however, we do not have

information to confirm the commenter's theory that the declines in the Hawaiian monk seal population are a direct result of the decreased lobster population. Moreover, we note that all commercial fishing within the Papahānaumokuākea Marine National Monument, including crustacean fishing, ceased in 2011, removing competition for those resources by commercial fishermen.

Current information indicates that Hawaiian monk seals are foraging generalists feeding on a wide variety of species; the relative importance of lobster in the diet is not clear. Alternatively, both of these populations may have experienced similar declines due to changes in productivity in the region associated with climate and ocean variability following periods of overexploitation (Schultz *et al.* 2011), and seal declines may have occurred regardless of any influence that lobsters have on the diet. In addition, by referring to "sociological problems" we assume the commenter was referring to obstacles associated with improving co-existence between humans and monk seals in the MHI. We recognize that successful recovery efforts for monk seals in the MHI depends on cooperation from Hawaii's communities and we have been and will continue to work with the public to address concerns that hinder monk seal conservation and peaceful co-existence in the MHI.

*Comment 16:* Some of the comments stated that the proposed expansion of critical habitat was not justified, or that it was unnecessary for reasons relating to the status of the species. Specifically, some of these comments stated that the 1988 critical habitat designation has proven to be unnecessary or ineffective, because the species is declining within critical habitat in the NWHI and increasing in the MHI, where critical habitat is not designated. One such comment stated that NMFS had not adequately demonstrated

that the existing critical habitat in the NWHI had contributed to conservation and recovery of the monk seal, nor demonstrated how the revision would contribute to the recovery goals of the species. Another comment stated that the proposed designation did not meet the definition of critical habitat, because the proposed areas were not essential to the conservation of the species and that the 1988 designation has not proven to be essential to the recovery of the species. Additional comments stated that the increasing numbers and the health of the population in the MHI suggest that seals are adequately protected and that no additional protection is necessary in the MHI.

*Response:* As noted in the biological report (NMFS 2014a), the difference in the status between these two areas of the Hawaiian monk seal's range is believed to be a reflection of the differences in environmental conditions between these two regions. Evidence evaluating seal health, growth, survival and fecundity in various regions of the NWHI indicates that food limitations may be influencing the lack of recovery in this region (Craig and Ragen 1999; Harting *et al.* 2007; Baker 2008). Researchers suggest that climate-ocean variability leads to variable ocean productivity, which in turns affects these top predators (Polovina *et al.* 1995; Polovina and Haight 1999; Antonelis *et al.* 2003; Baker *et al.* 2007; Baker *et al.* 2012). We recognize that protections established under a critical habitat designation have not and will not alone ameliorate the primary threat of food limitations in the NWHI. However, this does not mean that critical habitat protections are not an important component of an effective recovery program. Critical habitat protections are designed to protect a listed species' habitat from Federal activities that may result in destruction or adverse modification. Therefore, the success or effectiveness of each particular designation may only be measured by determining how

agencies were able to minimize the impacts of their activities, or prevent adverse modification or destruction of critical habitat. Contributions to Hawaiian monk seal conservation resulting, at least in part, from the 1988 designation include the continued existence of monk seal essential features in the NWHI and the various measures that Federal agencies have taken over the past 26 years to mitigate or minimize the potential impacts to this habitat. We believe that this revision to critical habitat is supported by new information that is available regarding the ecological needs of the Hawaiian monk seal and that a revised designation will support Federal agencies (as well as State and local governments) in planning for the protection of resources for Hawaiian monk seal conservation.

The comment that stated that the proposed areas did not meet the definition of critical habitat has incorrectly applied the definition of unoccupied habitat to the areas proposed for designation. The ESA defines critical habitat in part, as “the specific areas within the geographical area occupied by the species...on which are found those physical and biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection.” 16 U.S.C. 1532(5)(A)(i). Critical habitat includes areas outside of the geographical areas occupied by the species if such areas are essential for the conservation of the species. 16 U.S.C. 1532(5)(A)(ii). Habitat proposed for Hawaiian monk seal critical habitat designation within the MHI meets the definition of occupied critical habitat. Specifically, these areas are within the range used by the species, have features essential to conservation of the species, and these features may require special management considerations or protections from certain activities, as outlined in the biological report (NMFS 2014a). Regarding the comment

that suggested that the previous designation has not proven to be essential to recovery of the Hawaiian monk seal, we think this statement fails to appreciate the complexity of recovering a species from a depleted status. We maintain that recovery for a listed species most often requires a suite of recovery actions and that critical habitat is just one tool that maintains the habitat to support the recovered population, as intended by Congress (see our response to comment 4). We refer back to our previous discussion about calculating the effectiveness of the 1988 designation and maintain that the former designation has played a role in conserving the essential features within the NWHI portion of the species range. Further, we believe that by expanding the 1988 designation to other significant areas of the Hawaiian monk seals' range, we can more effectively conserve the habitat that is necessary to support a recovered population.

Concerning comments that suggest that increasing numbers of seals in the MHI indicate that additional protections are unnecessary, we refer back to our responses to comments 15 and 16, which describe how the best available information indicates that Hawaiian monk seal essential features exist throughout the MHI and that they require special management or protection. Therefore, we believe a revised critical habitat designation including habitat throughout the species' range will help to safeguard resources Hawaiian monk seals will need for recovery.

*Comment 17:* Several comments appear to confuse the protections that monk seals are afforded under a critical habitat designation with those that currently exist to protect the species under the MMPA and other parts of the ESA, or other habitat protections. One comment stated that the critical habitat designation was not warranted because “human-seal interaction” and enforcement in the MHI was too low to clearly establish a

need for additional regulations. Other comments suggested that there was not information to indicate a need for a reserve or for the Federal government to own the land. Still other comments suggested that the designation was unnecessary because of the thousands of square miles that are already protected within the National Marine Monument and the Sanctuary.

*Response:* The comments indicate that at least some protections for critical habitat may be misunderstood and/or misconstrued. We have grouped these comments in an effort to clarify the protections that exist with a critical habitat designation and to express how critical habitat protections differ from other forms of protections that were mentioned.

Critical habitat designations identify those areas where features exist that are essential to the conservation of the species and which may require special management considerations or protection. Protections for critical habitat are applied under section 7 of the ESA (see Statutory and Regulatory Background section). These designations are used as a planning tool for Federal agencies to protect the essential features such that the areas may support survival and recovery of the listed species. In section 7 consultation, the Services may recommend specific measures or actions to prevent or reduce the likelihood of impacts to the important resources in these areas. Recommendations to prevent harm to critical habitat depend on how a project or activity might impact the essential features, and for this reason, recommendations may be project or activity specific.

A critical habitat designation does not create a reserve or a preserve. Critical habitat designations do not change the ownership of land, and they do not change the other local or State jurisdiction over a particular area. A critical habitat designation

generally has no effect on property where there is no Federal agency involvement; for example, a private landowner undertaking a project that involves no Federal funding or permit.

We assume that the comment referencing “human-seal interaction” and enforcement is referring to incidents of “take” where people interact with seals on the beaches or in the water, resulting in harm or disturbance to the species. The commenter is suggesting that low “take” enforcement records in Hawaii implies that critical habitat protections are unnecessary. To clarify, a critical habitat designation protects essential features and habitat; it does not regulate day to day “human-seal interaction” where take may occur, nor does it change the existing regulations that prevent take or harassment of monk seals under the ESA or the MMPA.

The Papahānaumokuākea Marine National Monument was established by Executive Order in 2006 to protect the exceptional array of natural and cultural resources that include the NWHI and the surrounding marine resources. The area is managed jointly by the State, NOAA, and the USFWS. The 1988 monk seal critical habitat designation, as well as the proposed expansion in the NWHI, falls entirely within the boundaries of Papahānaumokuākea. We agree that the Hawaiian monk seal and the essential features of its critical habitat receive some protections from the ecosystem approach to management that is used by the Papahānaumokuākea Marine National Monument. However, these areas continue to meet the definition of critical habitat for the species because the essential features exist within these areas and they require special management or protection. The ecosystem in this area has experienced a great deal of perturbation and it falls on the managing agencies to ensure that current and future

management efforts support the vast array of species that use this habitat, including the Hawaiian monk seal. A revision to critical habitat and acknowledgment of its existence within these protected areas, at a minimum, provides the management authorities with the information necessary to responsibly plan for the specific protection of monk seal critical habitat essential features, while using the ecosystem approach to management.

The Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) was established in 1992 and is jointly managed by NOAA and the State of Hawaii. While covering key areas that are significant to the humpback whale, HIHWNMS waters do not encompass the entirety of areas in the MHI that support Hawaiian monk seal essential features. Management within HIHWNMS waters currently focuses on providing protections for humpback whales and their habitat. Recently the National Ocean Service proposed to expand the boundaries and scope of the HIHWNMS to include an ecosystem-based management approach, including providing specific regulatory protections for various locations. Although existing protections and proposed measures, if finalized, may provide some form of protection for Hawaiian monk seal essential features; they do not, ensure that current and proposed actions will not adversely modify or destroy Hawaiian monk seal critical habitat within the HIHWNMS boundaries.

#### *Natural History*

*Comment 18:* Multiple comments referenced the historical use of MHI habitat by Hawaiian monk seals, and the proposed designation in these areas. These comments expressed divergent perspectives including the belief that Hawaiian monk seals are not native to the MHI, or the belief that MHI habitat has supported Hawaiian monk seals for many years.

We received many comments referring to Hawaiian monk seals as not native, as introduced, or as invasive in the MHI. Some of these comments questioned the origin of the name, and whether it is an indigenous species due to a lack of Hawaiian cultural references. Other comments attributed the increase in the number of seals in the MHI and their use of MHI habitat to historical translocation efforts. Additionally, a couple of comments speculated that seals were not found historically in the MHI, because Hawaiians would likely have extirpated the seals to prevent competition for resources.

In contrast, other comments acknowledged that Hawaiian monk seals exist throughout the Hawaiian Islands, and that historical accounts of monk seals in the MHI indicate that the species has been using the habitat for longer periods of time than previously acknowledged. A couple of these comments indicated that the seals' use of the Main Hawaiian Islands predates human presence in Hawaii, and other comments expressed the importance of educating the public about the historical information that is available. One of these comments theorized that seals were driven from the MHI due to hunting pressures. One comment acknowledged that they were unsure about historical monk seal use of the MHI, but noted that the current increase in the number of seals in the MHI signifies that MHI habitat does not have the same problems for monk seal growth as NWHI habitat; consequently, monk seals are going to continue to use the MHI habitat. This commenter also noted that the MHI was part of the same chain as the NWHI and that these areas represent the same ecosystem.

*Response:* We recognize these conflicting views regarding the Hawaiian monk seal's historical use of the MHI in the biological report (NMFS 2014a); however, we

agree with comments that note that Hawaiian monk seals are native to the Hawaiian Islands and a natural part of the ecosystem in this region.

An invasive or non-native species most commonly refers to species that are human-introduced in some manner to an ecosystem. However, Hawaiian monk seals have been in the Pacific basin for millions of years and express ecological adaptations to Hawaii's tropical marine environment in their foraging ecology, reproductive behavior, and metabolism. "Hawaiian" describes the geographical area where the species, found nowhere else on earth, was first recorded by European explorers in the late 1800s and fossils have been found on the Island of Hawaii dating back 1,400 – 1,760 years ago, well before any of the historically written accounts of seals (Rosendahl, 1994). Early historical accounts of seals in the MHI, the fossil evidence, and the similarities in ecology between the NWHI and the MHI, indicate that MHI habitat is within the species' natural range.

As noted in the biological report, we translocated 21 males to the MHI in 1994 to alleviate male aggression issues at Laysan Island. However, Hawaiian monk seals were already established in the MHI prior to the 1994 translocation efforts. This is corroborated by reports of seals on Niihau in the 1970s and public sighting reports received throughout the MHI in the 1980s (Baker and Johanos 2004), which included eight seal births in the MHI prior to the male-only translocation effort in 1994. Hawaiian monk seal numbers in the MHI have continued to grow naturally with births on seven of the MHI. While some of the 1994 translocated males may have sired pups in the MHI, the naturally occurring female monk seals in the MHI are responsible for the propagation of seals in the MHI.

*Comment 19:* We received multiple comments that questioned the accuracy of the description of monk seal use of the MHI habitat. In general these comments questioned how seals arrived in the MHI, how many seals are moving on their own to the MHI, whether the species is migratory, and whether we have ever translocated seals to the MHI in the past, or present.

*Response:* As noted in the biological report (NMFS 2014a), the current population of monk seals in the MHI is believed to have been founded by seal dispersal from the NWHI to under-documented areas of the MHI, such as Niihau or Kaula. Local accounts from Niihau indicate that seals were regularly using the Island as early as the 1970s (Baker and Johanos 2004). In the past 40 years seal numbers have grown in the MHI and seals have begun to utilize habitat throughout the MHI. Since early tagging efforts began in the NWHI in the 1980s, only a small number of seals have been documented moving from the NWHI to the MHI. The growth of the MHI seal population cannot be explained by this small number of migrations; instead, the population is growing due to high survival and reproduction of the local MHI population. As noted in our response to comment 18, 21 male seals were translocated to the MHI to manage an aggression problem at Laysan Island, but female seals have not been translocated to the MHI.

*Comment 20:* We received several comments regarding Hawaiian monk seal foraging behaviors. Some of these comments expressed concerns or stated that monk seals may be damaging to the reef environment or competing directly with humans for fishing resources. Other comments wished to clarify what monk seals eat, and how much they eat to better understand their impacts on various resources.

*Response:* The biological report (NMFS 2014a) provides information about Hawaiian monk seal foraging behavior and preferences that we summarize here.

Video footage of foraging monk seals indicates that the species uses a variety of techniques to capture prey species, including probing the bottom with their nose and vibrissae, using their mouth to squirt streams of water at the substrate, and flipping small loose rocks with their heads or shoulders in uniform bank, slope, and sand habitats (Parrish *et al.* 2005). However, there is no evidence to suggest that these natural seal foraging behaviors that may cause some disturbance to the bottom are causing damage to the coral reefs or the surrounding environment. In fact, the largest numbers of seals exist in the NWHI (around 900 animals) and the reefs in this area of the Archipelago are generally understood to be more diverse and less degraded than in the MHI (Friedlander *et al.* 2009).

In general, Hawaiian monk seals are considered foraging generalists that feed on a wide variety of bottom-associated prey species. Goodman and Lowe (1998) identified inshore, benthic, and offshore teleost or bony fishes, as the most represented prey items in monk seal scat, followed by cephalopods (squid, octopus and cuttlefish); from the 940 scats sampled, the study identified 31 families of teleosts or bony fishes and 13 families of cephalopods. It is difficult to precisely determine the degree of overlap between MHI fisheries and the Hawaiian monk seal diet, because the available data only show the families of fishes that monk seals eat and the species of fish caught by MHI fisheries. These data do not clarify whether competition exists for the same types or size of fish, in the same geographic areas, or at the same depths or time. Importantly, pelagic fisheries, such as tunas, mahi-mahi, and wahoo, which make up a majority of commercial and

recreational landings in Hawaii, are not considered in competition with Hawaiian monk seals because seals focus on much smaller, bottom-associated prey species found closer to shore.

To consider how monk seal prey items may overlap with Hawaii's near-shore commercial and recreational fisheries Sprague *et al.* (2013) compared fish families landed in the Hawaiian monk seal diet with the most prevalent fish families found in the near-shore commercial and recreational fisheries. This evaluation excluded pelagic species, which make up 95 percent of commercially reported landings and 90 percent of recreational landings, and are not Hawaiian monk seal prey species. Of the 32 fish families found in the Hawaiian monk seal diet or in commercial or recreational near-shore landings, there was overlap in 15 families (Cahoon 2011; Sprague *et al.* 2013). With all pelagic landings excluded, these 15 families make up about 27 percent of the remaining reported commercial fishery landings by weight, and 39 percent of the remaining reported recreational fishery landings by weight (Cahoon 2011; Sprague *et al.* 2013). In other words, only about 27 percent of the near-shore commercial fishery landings and 39 percent of the near-shore recreational fishery landings are from families of fish also known to be eaten by monk seals. In summary, based on currently available data, it appears that Hawaiian monk seals are not likely to have a large impact on the available biomass in the MHI.

Sprague *et al.* (2013) also estimated that the maximum current MHI population of about 200 seals consumes around 1300kg/day (2900 lbs/day, or about 15lbs/day per seal); this is about 0.009 percent of the estimated available prey biomass in the near-shore waters (<30 meters) around the MHI. Spread out over their likely foraging habitat in the

MHI (out to 200 m depth), the estimate above translates to about 0.17 kg per square kilometer per day (or about 1 lb/square mile per day). In perspective, apex predatory fishes in the MHI are estimated to consume at least 50 times more biomass daily and recreational and commercial fisheries in the MHI (excluding pelagic species) are estimated to land approximately three times more near-shore marine resources than are consumed by the current monk seal population (Sprague *et al.* 2013).

*Comment 21:* One comment stated that the proposed rule process was presenting misinformation regarding the seals' population and their pending extinction. This comment goes on to cite a 2007 report, that presented the number of seals at about 1,200 animals with a computer generated decline of 4 percent and a 2011 report that gives the numbers as 1,100 with a decline again given as 4 percent. This commenter concluded that the projected extinction has no bearing in fact, and that the population has been essentially constant over the last five years.

*Response:* We disagree with the commenter's conclusion, because the commenter has incorrectly applied information presented on the NWHI population to the entire monk seal population estimates and has associated an incorrect time scale to the data presented. The population estimates and percent decline estimates referred to in the comment are taken from the annual Stock Assessment Reports (SARs). The approximate 4.5 percent decline (2009 SARs) referred to in the proposed rule is based solely on the six NWHI subpopulations (using a log-linear regression of estimated abundance on year for the past 10 years) and does not represent a percent decline for the entire population. The population numbers presented by the commenter are for the entire population of seals located throughout the Archipelago, including estimates for Necker, Nihoa, and the MHI.

The proposed rule did not use the decline rate for the NWHI to predict the extinction of the species, but rather to demonstrate the status of the declining population in the NWHI in comparison with the increasing MHI population. Population projections of the Hawaiian monk seal indicate that these two populations could equalize in less than 15 years (Baker *et al.* 2011). We believe the different trajectories between these two sub-populations expresses the critical role that the MHI population plays in supporting the survival of this species and emphasizes the importance of protecting MHI habitat.

#### *Essential Features*

*Comment 22:* We received several comments regarding the essential feature describing low levels of anthropogenic disturbance. Some comments suggested that human activity in MHI habitat makes some or all of MHI areas not conducive to monk seal population recovery because the areas do not offer low levels of anthropogenic disturbance. One comment suggested that the 1986 designation did not include the MHI, because the NWHI areas were sparsely populated by humans in comparison to the MHI.

*Response:* After considering these and other comments, we further evaluated the role that areas with low levels of anthropogenic disturbance play in supporting monk seal conservation. We have determined that low levels of anthropogenic disturbance are not a physical or biological feature that is essential to Hawaiian monk seal conservation because they do not independently provide a service or function for Hawaiian monk seal conservation. Instead we find that low levels of anthropogenic disturbance may be a characteristic that describes some preferred pupping and nursing areas or significant haul-out areas, which are the two terrestrial features that were found to be essential to

Hawaiian monk seal conservation (see Summary of Changes from the Proposed Designation section above for more details).

Areas designated as critical habitat for Hawaiian monk seals in the MHI support the three essential features: preferred pupping areas, significant haul-out areas, and/or foraging areas. In response to the comment regarding the 1986 designation, the areas identified as part of the 1986 designation in the NWHI were included due to the existence of five essential features found throughout these areas (51 FR 16047; April 30, 1986), based on the then-available scientific information, not because the area is sparsely populated by humans.

*Comment 23:* We received a couple of comments that questioned how the boundaries of critical habitat were determined and/or what data support the designation. One of these comments questioned why the 1988 boundary of 20 fathoms could not also apply to the revised designation.

*Response:* As identified in the proposed rule and the biological report (NMFS 2014a), we identified habitat features essential to the conservation of Hawaiian monk seals, and delineated specific areas within the geographical area occupied (or range) which contain at least one essential feature. Since the proposed designation, and after considering public comments, we have refined our description of the essential features to identify more precisely those areas where these features exist. As described in the Changes from the Proposed Designation section of this rule, we believe that depths up to 200 m, used by monk seals for foraging, support features essential to Hawaiian monk seal conservation. At this time, we do not have sufficient available information to conclude that waters deeper than 200 m support these essential features. Consequently, the

boundaries of this designation are set at 200 m depth to encompass this refined essential feature. The terrestrial boundaries are set to encompass preferred pupping and nursing areas as well as significant haul-out areas. The information that supports the designation is described more fully in the Habitat section of the biological report (NMFS 2014a) and includes information on foraging ecology to describe where preferred marine foraging areas exist and monk seal sighting and tracking information to describe where preferred pupping and nursing areas and significant haul-out areas exist.

The 20 fathom (37 m) boundary in marine areas in the NWHI was established in 1988 at a time when our understanding of monk seal foraging ecology was limited. Advances in technology since the 1980s has led to a better understanding of Hawaiian monk seal ecology and we believe that the best available information indicates that foraging areas essential to Hawaiian monk seal conservation exist outside the 20 fathom (37 m) boundary established for the 1988 designation. For example, data from the NWHI indicates that seals are regularly diving at depths greater than 40 m, that at deeper depths behaviors are focused on foraging and that a majority of deeper diving behavior is captured at depths less than 200 m (Parrish *et al.* 2000; Stewart *et al.* 2006).

*Comment 24:* The DLNR submitted comments stating that the detail provided and/or the analysis associated with five of the proposed six essential features was inadequate to meet the regulatory requirements of the ESA to establish critical habitat. In these comments the DLNR identified that pupping and nursing areas appear to meet the definition of “essential,” but that shallow aquatic sites occur everywhere and that these sites can be decreased in number based on the occurrence of pupping and nursing areas. The DLNR also suggested that two of the essential features regarding foraging habitat are

identical in nature and should be consolidated. Additionally, they contend that the designation of critical habitat is not necessary because adequate protections are in place in the MHI where Hawaiian monk seal food availability is not constrained. The DLNR also identified that haul-out areas need to be physically accessible to seals and that areas such as high cliff shorelines should not be included in the proposed designation. The DLNR concluded that in considering this information that the designation should be revised to reduce the coastal areas proposed.

*Response:* We agree with the DLNR and other comments suggesting that some of the essential features could be refined or combined to eliminate unnecessary duplication. To address these comments, we reconvened the CHRT to review comments, information used to support the proposed rule, and newly available information, including more recent MHI GPS tracking information. The Summary of Changes from the Proposed Designation section of this rule provides more specific information about refinements to the essential features.

We note that these comments indicate some confusion about the role of certain essential features in Hawaiian monk seal ecology. The proposed rule may have contributed to that confusion by identifying certain habitat features as separate essential features, even though they defined similar features that are used by monk seals to support a specific life-history stage or ecological function. For example, in the proposed designation “areas with characteristics preferred by monk seals for pupping and nursing” described the terrestrial component and “shallow sheltered aquatic areas adjacent to coastal locations preferred by monk seals for pupping and nursing” described the marine component of the areas that support Hawaiian monk seal mothers and pups throughout

birth, lactation and weaning. To simplify and clarify the role of this habitat in Hawaiian monk seal ecology we have combined the two features in this final rule to describe the entire area that supports Hawaiian monk seal reproduction and rearing as, “Terrestrial areas and the adjacent shallow, sheltered, aquatic areas with characteristics preferred by monk seals for pupping and nursing. Similarly, we have combined the two proposed essential features that described marine foraging areas that are essential to Hawaiian monk seal conservation as a single feature.”

With regard to the comment that the critical habitat designation is unnecessary where existing habitat protections exist, we incorporate the response to comment 14. The purpose of critical habitat is to identify the occupied areas that contain features that are essential to the conservation of a listed species and the unoccupied areas that are essential to the conservation of the species. The best available information indicates that marine foraging areas out to 200 m are essential to support conservation of the Hawaiian monk seal throughout its range. While the ESA provides NMFS with broad discretion to exclude areas from designation based on consideration of national security, economic, and other relevant impacts, it does not provide authority to exclude areas where essential features are found merely because those areas may be subject to existing conservation measures.

Finally, we agree with the DLNR that haul-out areas need to be physically accessible to seals. In the proposed designation we indicated that those areas in the MHI that were inaccessible, such as cliffs, were not considered to meet the definition of Hawaiian monk seal critical habitat. However, as noted in the Summary of Changes From the Proposed Rule section, we did not clearly state that these areas are not included in the

NWHI portion of the designation. Accordingly, we have revised the final rule to clarify that areas found within the boundaries of this final designation that are inaccessible to monk seals, such as cliffs and manmade structures, are not designated Hawaiian monk seal critical habitat because they do not meet the statutory definition.

*Comment 25:* One comment argued that the low survival rate of pups and juvenile monk seals is the primary factor contributing to the decline of the population in the NWHI and recommended that the essential features focus on the habitat requirements of pups and juveniles, not adults. This comment went on to recommend that critical habitat in the MHI be revised to depths between 0-100 m to match preferred juvenile foraging habitat. Additionally, this comment went on to acknowledge if the 500 m depth is considered “essential” on the basis of a few dive records from the MHI, then NMFS should equally include all shoreline and adjacent marine areas with previous records of monk seal haul outs as these would also be considered essential, including Waikiki Beach, Kaneohe Bay, and Hanalei Bay.

*Response:* The ESA defines critical habitat to include occupied areas that contain those physical or biological features essential to the conservation of the species, and which may require special management considerations or protections. We believe that providing protections only to those features that provide a service to a particular life-history stage of the species, without regard to the habitat needs of the listed species as a whole, is inconsistent with the ESA.

With regard to the depth contour selected for the designation, we have re-evaluated NWHI dive data and supplementary MHI tracking and dive data after considering this and other comments received regarding the clarity of the described

essential features (see Summary of Changes from the Proposed Designation section of this rule). We have determined that foraging habitat that supports all age classes of Hawaiian monk seals and is essential to the conservation of the species is best described as foraging areas out to a depth of 200 m. This depth boundary encompasses foraging habitat that supports a majority of diving behavior throughout the island chain and includes foraging habitat that will support recovery of seals in the MHI. Additionally, in the Critical Habitat Review Team Process section of the biological report (NMFS 2014a) we have clearly described the significant haul-out areas essential feature to better describe those coastal areas that support important terrestrial habitat for Hawaiian monk seal conservation.

*Comment 26:* One comment agreed that pupping and nursing areas are essential features for Hawaiian monk seals, but disagreed that haul out areas may be described as equally essential and contended that identifying most of the coastline as critical habitat is misleading or inadequate. This comment asserted that seal terrestrial use is most sensitive during pupping and rearing stages, and that seal haul out locations are not as resource/site specific or sensitive. The comment went on to further state that areas with no known seal activity cannot be assumed to be critical habitat and that haul-out habitat and reproductive habitat need to be delineated and mapped.

*Response:* We agree with the commenter that pupping and nursing areas are an essential feature for Hawaiian monk seal critical habitat, but maintain that the evidence shows that haul-out areas are an essential feature as well. A feature is essential if it provides an essential service or function to the conservation of the listed species and may require some form of management or protection. As noted in the biological report, monk

seals use haul-out areas for resting, molting, and as a refuge from predators. Additionally, frequented haul-out areas provide space for social interactions with other seals and support behaviors associated with mating and reproduction. Although monk seals may use a variety of accessible areas of coastline for hauling out, there are areas of coastline where monk seal haul out activity is more prevalent, and we believe these areas are essential to promote natural monk seal behaviors. In the proposed rule, we recognized that preferred pupping and nursing areas and significant haul-out areas do not occur continuously along the coastlines and, after considering public comments, we recognized that we could provide greater clarity on where features are found (see Summary of Changes from the Proposed Designation section of this rule). These more precise descriptions were then used to identify where the essential features exist within each specific area and we have revised the boundaries of the designation to reflect more accurately those areas that meet the definition of Hawaiian monk seal critical habitat. We are satisfied that this approach has identified sufficient haul-out habitat to meet the needs of a recovered monk seal population in the MHI.

*Comment 27:* One comment asserted that the proposed rule failed to take into account the “Hawaii reef strategy: Priorities for the management in the main Hawaiian Islands 2010-2020” (State of Hawaii 2010) when considering food limitations in the NWHI as a basis for including marine foraging areas as an essential feature. The commenter indicated that the State of Hawaii (2010) publication states that standing fish stock in the NWHI is 260 percent greater than in the MHI, and that most of the dominant species that are present, regardless of trophic level, are nearly always larger in the NWHI

than in the MHI. The commenter questioned whether food limitations were a threat to the species.

*Response:* We believe that the commenter incorrectly equates the numbers presented in the Hawaii reef strategy to available prey resources for monk seals. These numbers are taken from a study by Friedlander and DeMartini (2002), which compared density, size, and biomass of reef fishes between the NWHI and the MHI to consider how fishing has affected assemblages in the MHI. The NWHI numbers include the apex predator biomass, which was reported as 54 percent of the total fish biomass in the NWHI (Friedlander and DeMartini 2002), as well as other fish species that are generally not considered prey resources for Hawaiian monk seals. While we agree that total fish biomass is greater in the NWHI than the MHI, this difference in biomass does not equate to available prey resources for monk seals and does not take into account the number of predators competing for those resources.

As noted in the proposed rule, the best scientific information available, including evidence of seal health, growth, survival, and fecundity in the NWHI (Baker 2008), indicates that food limitations are primarily responsible for the decline of the monk seal population in the NWHI.

*Comment 28:* We received a few comments in agreement with the proposed essential features, and these comments identified the important role that critical habitat plays in providing protections for features and habitat to support recovery. Among these comments, the Marine Mammal Commission asserted that the descriptions of the physical and biological features are adequate and that the list of habitat types are complete and appropriate for consideration as essential.

*Response:* We acknowledge these comments. We have further evaluated the role that each proposed feature plays in monk seal survival and recovery and have made minor clarifications to resolve confusion over differences between identified features, the importance of specific habitat areas, and the characteristics which describe these areas. We refer to the Summary of Changes from the Proposed Designation section of this rule and our responses to the comments regarding the essential features 35-39 for additional details.

*Best Available Science*

*Comment 29:* A commenter argued that the rationale behind the 500 m depth boundary in the MHI was inconsistent with section 4(b)(2) of the ESA requiring the use of the best available information. This comment went on to note that current diving information indicates that monk seals forage within the 200 m isobaths in the MHI and that the unpublished MHI diving data presented in the proposed rule is limited and only demonstrates that monk seals are capable of diving to these depths, not that these depths are “preferred.” This commenter also argued that there is no literature to indicate that intra-specific competition plays a role in food limitation in the NWHI; therefore, NMFS’ rationale for expanding MHI boundaries to 500 m to accommodate both population increase and intra-specific competition in the MHI is speculative.

*Response:* We have re-evaluated the information used to support the proposed essential feature for marine foraging areas and agree that only those marine foraging areas in water depths of 0 to 200 m are essential to the conservation of the Hawaiian monk seal (see discussion in the Summary of Changes from the Proposed Designation section of this rule for further information).

As noted in the proposed rule, decline of the monk seal population in the NWHI has been attributed to food limitations, and evidence supporting this conclusion has been demonstrated by evaluating seal health, growth, survival, and fecundity in the NWHI (Baker 2008). Several factors may influence the availability of prey resources and intraspecific competition (competition between the same species) has been one of the factors indicated in the literature as playing a role in food limitations in the NWHI. For example, Craig and Ragen (1999) indicated that an earlier population boom at French Frigate Shoals Atoll may have led to more pronounced declines in juvenile survival in the late 1980s-1990s in comparison to Laysan Island's subpopulation, because juvenile seals at French Frigate Shoals faced more competition during periods of low productivity. We believe that the substantial overlap demonstrated in the generalized home ranges of seals within resident areas of the NWHI (Stewart *et al.* 2006) indicate that these seals are using similar resources and that some degree of intraspecific competition is occurring. The literature also indicates that interspecific competition with other predatory fishes is occurring (Parrish *et al.* 2008) and that changes in overall abundance and distribution of prey due to climate-ocean factors is influencing food availability for Hawaiian monk seals in the NWHI (Polovina *et al.* 1999, 1995; Antonelis *et al.* 2003, Baker *et al.* 2007; Baker *et al.* 2012). Within the complexity of ecosystem dynamics it is difficult to measure how much any one of these factors is influencing food limitations for Hawaiian monk seals; however, all factors contribute to Hawaiian monk seals' ability to successfully forage.

As noted earlier, dive data collected in the MHI indicate that seals are using areas from 100-200 m less frequently than their NWHI counterparts; however, Hawaiian monk

seals are capable of diving and foraging at depths exceeding 550 m (Stewart *et al.* 2006). Available scientific information indicates that foraging behaviors in the MHI are similar to seals in the NWHI in that seals' foraging focuses on submerged banks and most seals focus their foraging efforts close to their resident island (Cahoon 2011). Baker and Johanos (2004) suggest that monk seals in the MHI area are experiencing favorable foraging conditions due to decreased competition (both interspecific and intraspecific) in these areas, which is reflected in the healthy size of animals and pups in the MHI. This theory is supported by Cahoon's (2011) recent comparisons of foraging trip duration and average foraging distance data between these two areas, which indicates that MHI seals do not travel as far or as long as NWHI seals.

In both the proposed and this final rule, we noted that marine foraging areas that are essential to Hawaiian monk seal conservation are at the same depth in the NWHI and in the MHI. Although a majority of MHI monk seal foraging activity currently occurs at depths that are shallower than their NWHI counterparts, MHI seal numbers are still low (approximately 153 individuals) and expected to increase (Baker *et al.* 2011). We anticipate that as seal numbers increase around resident islands in the MHI, seals' foraging ranges will expand in order to adjust as near-shore resources become shared by more seals whose core foraging areas may overlap. As density-dependent factors are known to influence large mammals and have been shown to influence pinnipeds within specified geographic areas (Kuhn *et al.* 2014), NMFS is satisfied that foraging areas out to 200 m depth are essential for monk seal conservation throughout the species' range.

*Comment 30:* We received one comment that NOAA had not met its obligations for decision making under the ESA to use the best available scientific information

because the CHRT considered factors such as economic and societal impacts in the biological report.

*Response:* The commenter is misinformed about the role of the CHRT and the biological report in our decision making process. Our decision to designate critical habitat is consistent with the requirements of section 4(b)(2) of the ESA, which requires that we designate critical habitat using the best scientific data available after taking into consideration economic, national security and other relevant impacts. Our CHRT, consisting of biologists from NMFS PIFSC and PIRO with expertise in Hawaiian monk seal research and management, was responsible for using the best available scientific data to identify the features that are essential to Hawaiian monk seal conservation and this information was summarized in the biological report (NMFS 2014a), which was peer reviewed by independent scientific experts. A complete economic analysis was separately conducted by consultants with expertise in economics and reported in an economic analysis report (Industrial Economics 2014). The draft economic analysis report was subjected to rigorous review by three independent peer reviewers, and the report was revised for this designation in response to comments received from peer reviewers and the public. Our decision to designate critical habitat was based on a thorough consideration of public comments as well as all information contained in the biological report, the economic report, national security impacts identified by the DOD or Department of Homeland Security, and other relevant impacts, and the weighing process for this is outlined in the 4(b)(2) report as well as this final rule.

*Areas Proposed*

*Comment 31:* Several comments questioned the rationale behind expanding the critical habitat designation to the MHI because of differences in environmental conditions between the NWHI and the MHI. Some of these comments question the seals' ability to recover in areas of high human use, when they are not recovering in the "pristine" areas of the NWHI. Still other comments propose that the inability to survive in a "pristine" environment indicates that the seals are naturally headed towards extinction.

*Response:* Our response to comment 15 clearly outlines the regulatory and scientific rationale that generated this revision. Additionally, as previously stated, the proposed critical habitat areas were selected by identifying those areas that have the features essential for monk seal conservation, in accordance with the definition under the ESA.

Habitat throughout the MHI meets the definition of critical habitat because it contains features essential to Hawaiian monk seal conservation, including preferred pupping and nursing areas, and foraging areas. Since the 1988 designation of critical habitat, Hawaiian monk seals have naturally increased in numbers in the MHI. The continued growth and health of monk seals in these areas demonstrate that monk seals are doing well in MHI habitat, despite any perceived conflicts with human uses. As indicated in the Hawaiian monk seal recovery plan (NMFS 2007a), MHI habitat must support a minimum of 500 seals as part of the recovered population for this species. Critical habitat provides a mechanism to protect some of the habitat necessary for this recovering population.

We disagree with comments that imply that the decline of the Hawaiian monk seal is a natural progression to extinction because the decline is occurring in a "pristine"

environment. Although often portrayed as pristine, the NWHI ecosystem has been subject to intense anthropogenic perturbations including harvesting of seabirds, turtles, monk seals, sharks, fish, invertebrates, and island resources (Schultz *et al.* 2011), which have impacted the integrity of this complex marine ecosystem. Historical records of extraction give a rough estimate of the difference in biological assemblages of commercially sought after species, but there is not enough information to understand how key relationships in this environment may have been altered. However, the lack of recovery in certain species such as Hawaiian monk seals, pearl oysters, and two lobster species (Schultz *et al.* 2011) provides evidence that the current assemblage of species continues to reflect an altered system. While human extraction has been mostly eliminated as a threat in the NWHI, historical perturbations left remnants of these populations to survive in a habitat that was undoubtedly altered by human activities. Small population size leads to instability in population dynamics, which leaves small populations more vulnerable to the changes that occur within their ecosystem, especially to changes in resource availability (Copenhagen 2000). Although the current decline in the NWHI monk seal population appears to be a result of resource limitations that may be associated with climate and ocean variability (Baker *et al.* 2012), the populations' natural ability to withstand ecological shifts in their environment was most likely altered by earlier human exploitation. Describing the decline of the Hawaiian monk seal as a natural event overlooks the impacts that historical human exploitation has had on this population and its environment.

Regardless of the cause of the decline, the ESA requires that we work to mitigate the threats to this species to assist in its survival and recovery. Recovery in the NWHI may require additional time for the ecosystem to stabilize, but active management efforts

are important to bolster the resilience of the monk seal population. As previously stated in our response to comment 15, we recognize that a critical habitat designation will not alone mitigate these problems in the NWHI; however, the designation is required by the ESA and is expected, along with other conservation efforts, to facilitate the survival and recovery of the monk seal.

*Comment 32:* Hawaii's DLNR submitted comments stating the proposed designation was overly broad and not consistent with the actual physical and biological needs of the Hawaiian monk seal. They suggested that NMFS take a more targeted approach to designate critical habitat by identifying the "best available habitat" that can be protected and managed for the species. The DLNR identified six qualities important for targeted areas. These included: 1) relatively intact off-shore coral beds for feeding; 2) relatively secluded beaches and shorelines to provide haul-out; 3) resting, loafing, and pup rearing sites; 4) areas with low levels or potential for discharge of urban and industrial pollutants, erosion, and mammalian disease pathogens (they suggested we investigate Class AA water and exclude Class A waters identified by the State Department of Health to meet this quality criterion); 5) areas with low or infrequent human use of beach, ocean recreation, and surface boat traffic; and 6) areas where the above activities can be controlled. They additionally suggested directing management efforts towards those targeted areas to tie into the overall recovery efforts. Additional comments from the DLNR, received during the second public comment period, provided more detail about this targeted approach, noting that 34 percent of Hawaii's coastlines and adjacent reef habitat could provide more than enough high quality habitat and food for the Hawaiian monk seal consistent with the goals of the Federal recovery plan.

*Response:* After considering this and other comments, we have further evaluated the proposed essential features and have refined them to better describe how these features provide a service or function to the conservation of the Hawaiian monk seal. Additionally, we have revised the delineation of the designation to accurately reflect where these essential features exist, providing more precision to the designation. Some of the qualities recommended by the DLNR are already incorporated in the designation, including resting and pupping sites. However, other qualities recommended by the DLNR focused on the human-use of the area and, although we did consider human-uses when conducting our exclusion analyses for national security, economic, and other relevant impacts under our section 4(b)(2), we believe that the approach described by DLNR does not adequately consider the ecology of the species or the best scientific information available regarding Hawaiian monk seal habitat use, as required by the ESA. In particular, under the ESA, if the occupied habitat contains those features that are essential to conservation of the species and NMFS determines that they may require special management considerations or protection, then the habitat area is subject to critical habitat designation, unless an appropriate exclusion applies, regardless of human use of the area. We disagree that the ESA would have us designate only a portion of occupied habitat where there might be sufficient forage, haul-out, and area to support the needs of the species within that habitat area, particularly when there are sizeable undesignated areas of occupied habitat that contain essential features outside that area. Moreover, we believe that the DLNR's assessments are unlikely to reflect the foraging needs of a recovered population of the Hawaiian monk seal, because their assessment includes all

available biomass and focuses on fish species that have limited overlap with the Hawaiian monk seal diet.

Focusing on the ecological patterns and needs of the species, we have identified preferred pupping areas, significant haul-out areas, and foraging areas to 200 m. The areas designated meet the definition of critical habitat and this designation will support Federal agencies (as well as State and local agencies) in planning for the protection of resources for Hawaiian monk seal conservation throughout the areas designated.

*Comment 33:* A few comments requested that additional occupied areas be considered for inclusion in the proposed designation to provide further protections for areas that monk seals use or for important habitat features.

A couple of these comments noted that monk seals currently occupy beaches with disturbance and manmade structures, including Waikiki and Maunalua Bay on Oahu, and one comment even noted that a monk seal pup had been born at the Honolulu airport on property not proposed for designation. These comments suggested adding such areas to the designation because they are important to monk seals despite the presence of manmade structures.

One comment requested that we include marine areas a specific distance from land rather than at a specified depth. This comment expressed concern that the 500m depth contour is reached quickly off the Island of Hawaii, and that monk seals have been seen in these areas and should be protected. Another comment recommended including areas further inland than 5 meters in order to provide adequate vegetative habitat for monk seals to use as shelter. Lastly, a comment recommended that areas with poor

habitat quality be included in the designation, and questioned whether improved water quality and other factors could make an area eligible for designation.

*Response:* The definition of critical habitat requires us to identify the specific areas within the geographical area occupied by the species at the time of listing that contain physical and biological features essential to the conservation of the Hawaiian monk seal, and which may require special management considerations or protections, or identify those specific areas outside the geographical area occupied by the species at the time of listing which are essential to conservation of the species. We did not include in this designation portions of the coastline that include large stretches with manmade structures, such as Waikiki, because these areas do not support features essential to the conservation of Hawaiian monk seals (not because these areas are high human use areas). We acknowledge that individual monk seals may use some manmade areas throughout the range for various purposes because these areas are accessible to seals; however, monk seal sighting data indicate that these areas are used at a lower frequency than other areas, and do not have the same importance to monk seal ecology. Monk seals still receive protections under the ESA throughout their range (see response to comment 11), including in areas with manmade structures that are not included in the designation; however, these areas would not receive the protections provided by a section 7 consultation to ensure that critical habitat is not likely to be destroyed or adversely modified by an action with a Federal nexus.

The marine boundary for the critical habitat designation is set to encompass those areas where essential features exist; specifically, in the marine environment this includes preferred foraging areas to a depth of 200 m. While we acknowledge that monk seals may

use habitat outside of these depth boundaries and at various distances from shore throughout its range, we have not identified the existence of essential features in other areas of the range. Because monk seals' preferred prey species are bottom-associated, essential foraging areas are described using the depth contour where monk seals' preferred prey species and foraging areas exist. Tracking information from across the MHI, including off the Island of Hawaii, indicates that a majority of diving behavior occurs within the 200 m depth boundary. In some areas, such as areas off the Island of Hawaii, the bathymetric gradient increases quickly; however, we have no information to indicate that deeper areas are essential to Hawaiian monk seals or that features a specific distance from shore are in some way essential to the ecology of the Hawaiian monk seal.

We have considered the request to include areas further inland than 5 m from the shoreline to provide adequate vegetative habitat as shelter for Hawaiian monk seals; however, we have determined that the areas 5 m inland from the shoreline provide adequate space to encompass significant haul-out and preferred pupping areas as features that are essential for the conservation of Hawaiian monk seals. Monk seals occasionally haul out under vegetation, presumably for shelter; however, we have not determined that vegetation is itself an essential feature, although it is certainly a characteristic found in certain preferred areas.

Lastly, with regard to the comment about poor habitat quality, we emphasize that areas that were not included in the designation lack the features essential for monk seal conservation. Nevertheless, we are not precluded from revising the designation in the future should information indicate that features (which may require special management)

essential to Hawaiian monk seal conservation, such as natural preferred pupping areas, or significant haul out areas, exist outside of the areas designated as critical habitat.

*Comment 34:* One comment expressed concern that the exclusion of manmade structures and its description in the proposed rule is vague, and may lead to unintended adverse impacts on monk seal critical habitat. This comment recommended that we be more explicit that new Federal actions in the vicinity of such manmade structures may still trigger consultation requirements.

*Response:* We acknowledge that our list of potential existing manmade structures is not exhaustive, but that it is important for providing effective notice to recognize that these structures do not have the features essential to Hawaiian monk seal conservation. To provide further clarity we have included a more complete list of examples to include docks, seawalls, piers, fishponds, roads, pipelines, ramparts, jetties, groins, buildings, and bulkheads. With regard to concerns about unintended impacts to critical habitat, we anticipate that most Federal actions will already be undergoing consultation to consider the effects that the activities may have on Hawaiian monk seals. Accordingly, in most cases, we will be able to identify any potential impacts to critical habitat during the existing consultation process. Even so, we recognize that protection for these features includes continued outreach and we have noted in this designation that activities that are carried out, funded, or authorized by a Federal agency which have the potential to affect Hawaiian monk seal critical habitat are subject to section 7 consultation under the ESA.

*Comment 35:* One comment stated that the proposed rule's exemption of military bases, Waikiki Beach, and Kaneohe Bay "implies that there is no specific critical habitat as proposed, to be *essential to the conservation of the Hawaiian monk seal*" (emphasized

by commenter). The comment goes on to state that Waikiki beach is an excellent haul out and pupping area and that the exemption of this area suggests that it is to avoid consultation for sand replenishment activities for the State of Hawaii. The comment states that monk seals haul out, pup, and occupy waters wherever they choose, so specifically exempting areas is unrealistic.

*Response:* As indicated in our response to comment 14, within occupied habitat, the definition of critical habitat includes those areas where features exist essential to the conservation of the species which may require special management consideration or protection. We note that the features, not the area in which they are found, are what are considered essential to conservation of the species, and a critical habitat designation identifies those features that are to be protected from destruction or adverse modification. As identified in the biological report, monk seals may use accessible terrestrial habitat throughout their range for the purposes of hauling out or pupping; however, we have included only those areas that meet the definition of critical habitat in the designation; in other words, those areas that contain features that are essential to the conservation of the species.

Waikiki was not included in the proposed designation because this area does not contain those essential features of Hawaiian monk seal critical habitat, i.e., the area does not have features that support a preferred pupping area or significant haul-out area. As noted in the *Summary of Changes From the Proposed Critical Habitat Designation* section, we have refined the description of preferred pupping areas and significant haul-out areas to clarify the roles that these features play in Hawaiian monk seal ecology and to identify better where these features are located. Although monk seals may occasionally

haul out along Waikiki, monk seal sighting information indicates low use of the area in comparison to other areas on Oahu, such that it does not meet the criteria established for a significant haul-out area. Contrary to the commenter's assertion, we have no record of pupping occurring on Waikiki beach. Further, large portions of this coastline contain manmade structures, such as harbors, seawalls, groins or buildings that do not support monk seal conservation and are not included in the designation. This final designation includes portions of marine habitat in Kaneohe Bay that support Hawaiian monk seal foraging areas; however, the 500-yard buffer of marine area that surrounds the Marine Corps Base Hawaii (MCBH) on the Mokapu peninsula is ineligible for designation under 4(a)(3) of the ESA (see the *Military Areas Ineligible for Designation (4(a)(3) Determinations* section of this rule). In conclusion, we have not exempted these areas due to the human activities associated with these sites; rather we have not included these areas because either they lack the features that are essential to monk seal conservation, or they have been precluded from designation under 4(a)(3) of the ESA.

*Comment 36:* Several comments suggested that the proposed designation was inappropriate due to the excessive size of the designation. Among these, a couple of the comments also indicated that the proposed designation was contrary to section 3(5)(C) of the ESA. A comment received by the State DLNR argued that critical habitat should not include the entire geographic area of the State of Hawaii, and that the designation of all marine habitat everywhere is an abdication of responsibility to make an affirmative judgment regarding which areas are best suited for recovery and then actively manage those areas. Additionally, another comment indicated that the designation of critical habitat is limited to habitat that is essential for the conservation of a species that may

require special management or protection, and that the entire area occupied may not be designated unless determined necessary by the Secretary. The comment argues that the Secretary must be discriminating when designating critical habitat and the decision must be supported by conclusive evidence.

*Response:* According to section 3(5)(C) of the ESA, “critical habitat shall not include the entire geographical area which can be occupied,” by the listed species, except in rare circumstances where determined necessary. In other words, we are generally prevented from designating all occupied (i.e., the current range) and unoccupied areas as critical habitat. The range for the Hawaiian monk seal includes the entire Hawaiian Archipelago and Johnston Atoll. The proposed designation was limited to 16 specific areas within the Hawaiian Archipelago, including foraging areas in greater depths. Therefore, we did not designate the entire geographical area which can be occupied by the Hawaiian monk seal.

In addition, as more fully explained in the biological report (NMFS 2014a), we have refined the essential features to account for supplemental information regarding habitat use in the MHI, and to clarify the description and location of essential features after considering public comment. These targeted changes have further reduced the overall size of the designation, while ensuring that the features identified in the original proposal as essential for monk seal conservation receive the full protection of critical habitat designation. We are satisfied that the final designation will appropriately meet the ecological needs of this wide-ranging species. As we have not designated the entire range of the species, nor have we designated any unoccupied critical habitat, the designation complies with section 3(5)(c) of the ESA.

With regard to the comment which suggests that habitat must be “essential,” we refer to our response to comment 14, and note that the definition of occupied critical habitat requires that the areas contain those physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. These essential features are identified in this rule and in the biological report (NMFS 2014a), and the information about where those features exist provides evidence of why areas are designated as critical habitat that will support the survival and recovery of the species.

*Comment 37:* A few comments stated that MHI habitat was not suitable for designation because seals will face more threats in these developed areas of the archipelago. The commenters identified that increasing seal numbers in the MHI would increase the likelihood that seals will encounter or be affected by these threats and that the MHI habitat may be of poor quality due to pollution, risk of disease transferred from domestic animals, and increased risk of human interactions. One of these comments suggested that the negative impacts make MHI habitat not qualify as critical habitat. Another comment suggested that the designation is based on the narrow-sighted view that it is “better” for the monk seals to live and reproduce in the MHI. The last of these comments stated that the population of tiger sharks has increased due to an increase in turtles around the MHI, and that these sharks would be likely to prey on juvenile monk seals.

*Response:* We disagree that MHI habitat is unsuitable for designation. As noted in our response to comment 14, MHI areas were included in the designation with NWHI areas because all of these areas meet the definition of critical habitat. In the biological

report and the 2007 recovery plan, we acknowledge that some threats differ between the MHI and the NWHI. The threats facing seals in the MHI may be significant, but this fact alone does not indicate that the habitat is of such poor quality that it does not meet the definition of critical habitat. In fact, the monk seal population in the MHI is increasing despite identified threats and in contrast to their NWHI counterparts. We believe this growth is attributable to favorable environmental conditions (see response to comment 16).

By designating critical habitat in the MHI, we are not suggesting that it is “better” for seals to live and reproduce in the MHI; rather, we have determined that essential features exist within occupied areas of the MHI which are important to monk seal survival and recovery, and that these features may require special management considerations or protection. As noted in the 2007 recovery plan for the species, healthy populations of seals will be necessary in both the NWHI and the MHI to meet recovery goals. Accordingly, critical habitat protections in both of these areas will assist in conservation efforts for this species.

*Comment 38:* A number of comments suggest that expansion of critical habitat to the MHI is inappropriate or not beneficial to recovery, because the promotion of seal populations in the MHI increases the risk of harmful impacts to people and/or seals. Some of these comments expressed concern that seals will behave aggressively towards people, either harming residents and tourists, or stealing food from fishermen, especially as seal numbers increase. Other comments suggested that aggressive seal behavior or increased restrictions will create animosity towards seals and may cause people to retaliate, consequently increasing the risk of harm to seals and hindering recovery efforts.

Additional comments suggested that increased seal numbers in the MHI would increase the number of predatory sharks found in MHI waters, which may result in more shark attacks on people. One additional comment suggested that seals may affect people by bringing disease.

*Response:* See our above discussion of the rationale for finding that HMS critical habitat exists in the MHI and recovery benefits of MHI critical habitat. With regard to effects of Hawaiian monk seal critical habitat and seals in the MHI on people, see our response to comment 37.

With regard to challenges associated with human interactions in the MHI, all scientific evidence, field observations, and public reports to date indicate that public safety risks associated with Hawaiian monk seals in the wild are extremely low. Monk seals are not aggressive by nature and only exhibit aggressive behavior toward humans when they feel threatened or when previous interactions have been encouraged, causing the animal to seek out human contact. Through our MHI management efforts and planning we will continue to conduct activities to prevent and mitigate these human-seal interactions, and work with the public to increase awareness and understanding to foster peaceful coexistence in Hawaii's coastal areas. With regard to the concern about sharks, there is currently no evidence that more monk seals in the MHI will lead to more shark attacks on humans. While the monk seal population has increased in the MHI over the past 10 years, incidents of shark attacks on people have shown no corresponding increase. Additionally, there is no evidence that the population growth of Hawaiian monk seals in the MHI presents an increased disease risk to humans.

*Activities Affected by the Designation*

*Comment 39:* The National Defense Center of Excellence for Research in Ocean Research (CEROS) program requested that categorical exceptions be considered for routine ocean science field activities, which they suggested could be seriously affected by the proposed designation. CEROS requested clarification about the procedural steps associated with the section 7 consultation process and noted concerns that the procedure could include reviews or public comment periods that may make it impossible for the research to be carried out within the 12-month contracted period of performance.

*Response:* In designating critical habitat we are not able to provide categorical exceptions from section 7 obligations for specific activities. Although section 4(b)(2) of the ESA allows for the consideration of exclusion for particular areas where the benefits of exclusion may outweigh the benefits of designation, impacts to these types of activities are expected to be low (Industrial Economics 2014). Therefore, we did not exclude areas where these activities are prevalent (see also response to comment 52).

For clarification, procedural steps associated with the Section 7 process may be found at the following website: [http://www.fpir.noaa.gov/PRD/prd\\_esa\\_section\\_7.html](http://www.fpir.noaa.gov/PRD/prd_esa_section_7.html). A final critical habitat designation does not create new or unknown procedures, nor does it create a new public comment period associated with Federal actions. The final critical habitat designation creates an additional obligation for Federal agencies under section 7 of the ESA to insure that actions that they carry out, fund, or authorize (permit) are not likely to destroy or adversely modify critical habitat. As consultation is already required for federally funded research activities under the jeopardy standard, we do not anticipate the additional consultation standard of destruction or adverse modification of critical habitat to result in significant, additional project delays.

*Comment 40:* Comments requested that restrictions be placed on jet skis, long-term camping and permanent structures, such as homes with leaking septic systems, to prevent disturbance and pollution in critical habitat areas.

*Response:* Protections for critical habitat are established under section 7 of the ESA and are specific to Federal activities that may affect Hawaiian monk seal critical habitat, including those activities that are authorized, funded or carried out by a Federal agency. Private activities, such as jet skiing or camping that are not linked to a Federal activity are not subject to section 7 consultation requirements. See our response to comment 14 for further information on the protections that critical habitat provides for a listed species.

*Comment 41:* We received comments from the Center for Biological Diversity and KAHEA: The Hawaiian-Environmental Alliance expressing concerns and providing details about the threats of sea level rise, global warming and ocean acidification to monk seal critical habitat. The comment asserted that the global scope of these threats did not excuse the need to manage anthropogenic greenhouse gas contributions that are affecting monk seals and their habitat.

*Response:* The biological report (NMFS 2014a) recognizes that processes associated with global climate change may alter the availability of coastal habitat and/or the range and distribution of Hawaiian monk seal prey species. Unfortunately, at this time, the scope of existing science does not allow us to predict the resultant impacts to Hawaiian monk seal critical habitat with any certainty. We recognize the need to manage for this threat and as impacts from these forces are better understood, activities that exacerbate impacts to the essential features will be further scrutinized and associated

management efforts may be pursued. At this time, no single activity has been identified as contributing specifically to these threats in the economic analysis (Industrial Economics 2014). Nonetheless, climate change impacts will be accounted for through the individual consultation process when individual project details are known.

*Comment 42:* One comment stated that the proposed critical habitat and the 2007 Hawaiian Monk Seal Recovery Plan do not adequately factor future critical habitat loss to erosion and global sea level rise, especially in the low elevation of the NWHI. This comment suggested that the recovery plan must be revised before implementing critical habitat.

*Response:* We disagree. Both the 2007 Hawaiian Monk Seal Recovery Plan and the critical habitat designation consider the impacts of habitat loss to erosion and sea level rise, based on the best available science at the time of publication. The Hawaiian monk seal recovery plan (NMFS 2007) recognizes the threat of habitat loss to Hawaiian monk seal habitat and provides recommendations to assist in conserving habitat throughout the species' range. Among these, the plan recommends maintaining and expanding the current ESA critical habitat designation and recommends exploring habitat restoration in the low lying areas of the NWHI.

For this critical habitat designation we considered the threat of habitat loss linked to erosion and sea level rise in both the proposed rule (74 FR 27988; June 12, 2009) and the biological report (NMFS 2014), and how these threats may affect the features essential to Hawaiian monk seal conservation. Specifically, we considered how habitat in the NWHI and the MHI may be affected by this threat and we incorporated features that

will support recovery for the Hawaiian monk seal in this predominantly low-lying coastal and marine habitat.

The low lying areas of the NWHI experience erosion and saltwater inundation throughout the year due to storm activity and storm surges, and we anticipate flooding and inundation from future storm activities and/or future variations in sea level (Baker 2006). With these considerations in mind, we determined that essential features exist across these low-lying and dynamic islands and islets and we included all islands and islets existing within the specific areas previously designated in 1988. In the MHI where coastal habitat may not shift as dramatically, we have determined that essential features exist within a relatively short distance from the shoreline, where Hawaiian monk seals haul out to rest, molt, or pup. We included habitat 5 m inland of the shoreline to ensure that terrestrial habitat inland of the shoreline which provides space for hauling out remains incorporated in the designation.

We believe that we have considered the threats identified in the comment using the best available information to inform this designation. We find no reason to support delaying the critical habitat revision until such time that the Recovery Plan is updated. A revised designation assists recovery efforts by providing protections from some activities that may exacerbate threats associated with habitat loss and provides important planning information for government agencies. Further, should additional information become available regarding features or areas that are essential to conservation of the Hawaiian monk seal outside of this designation we may revise the designation to protect those features or areas.

*Comment 43:* A few comments requested clarification about whether the following activities may be subject to section 7 consultations as a result of the proposed designation: all Army Corps of Engineers Clean Water Act section 401 and section 404 permits, National Pollutant Discharge Elimination System (NPDES) permits, Federal highway projects in proximity to the ocean or which cross waters flowing to the ocean, state programs that are funded by Federal money such as the Dingell-Johnson funds, open ocean effluent dumping, and federally funded community and education programs. One comment questioned whether consultation could result in delays in funding or if permitting or increased fees were possible. Additionally, this commenter asked whether NMFS has the capacity to process such permits or consultations.

*Response:* The requirement for section 7 consultation is triggered when an activity is 1) carried out, funded, or authorized by a Federal agency (i.e., a Federal nexus is established), 2) the agency retains discretionary involvement or control over the activity, and 3) the activity may affect an ESA-listed species or its designated critical habitat. In some cases, Federal agencies may determine that the action will have no effect on a listed species or its critical habitat, in which case the agencies' obligations under section 7 are satisfied. The activities identified in the comment have a Federal nexus and therefore must undergo section 7 consultation.

As noted in the economic report (Industrial Economics 2014), Clean Water Act section 404 permits are issued by the Army Corps of Engineers for the discharge of dredged or fill material into wetlands and other waters of the U.S. Any Federal permit or license authorizing a discharge into the waters of the United States also requires a Clean Water Act section 401 Certification from the State of Hawaii indicating that State water

quality standards have been met. Activities subject to this type of federal permit and which may have the potential to impact Hawaiian monk seal essential features are described under three activity categories in the economic report: in-water and coastal construction, dredging and disposal of dredged materials, and energy projects (discussions about these activities may be found in Chapters 3, 5, and 6 of the economic report respectively). Federal highway projects in proximity to the ocean or which cross waters flowing to the ocean are also discussed under Chapter 3, in-water and coastal construction. Impacts to these three activities (in Chapters 3, 5, and 6) from the consultation process are described as largely administrative in nature; however, depending on the location and scope of the project (e.g., adjacent to preferred pupping and nursing areas) additional project modifications may be required to avoid impacts to Hawaiian monk seal critical habitat.

As identified in Chapter 9 of the economic report (Industrial Economics 2014), the EPA has delegated its authority to implement and enforce the Clean Water Act to the Hawaii Department of Health Clean Water Branch (CWB), which includes the issuance of NPDES permits. Once EPA has approved a state's NPDES permitting program and transfers responsibility for issuing water pollution permits to that state, section 7 will not apply to permitting decisions. Recognizing this, the EPA signed a Memorandum of Agreement with the Fish & Wildlife Service and NMFS (66 FR 11202, February 22, 2001) through which the EPA, in exercising its continuing oversight of state permitted discharges, may communicate and address protected species concerns to state pollution permitting agencies and work collaboratively to reduce the detrimental impacts of those permits. In appropriate circumstances, and where consistent with the EPA's CWA

authority, EPA may object to and federalize the permit. However, in no circumstances are states bound to directly consult under section 7 with NMFS or USFWS on their permitting decisions.

State programs that are funded by Federal money such as the Dingell-Johnson funds, and federally funded community and education programs may be subject to section 7 consultation if activities associated with the funding may affect Hawaiian monk seals or their designated critical habitat. The USFWS issues funding under the Sport Fish Restoration Act (commonly referred to as the Dingell-Johnson Act) and consults with NMFS on activities that receive funding under this Act which may affect Hawaiian monk seals. Impacts to these types of fisheries-related Federal aid activities are described in Chapter 4 of the economic report and the anticipated administrative costs of these types of consultations are factored into the overall costs to fisheries activities, which are described as largely administrative in nature.

In general, during the consultation process the Services assist Federal agencies in fulfilling their duties to avoid jeopardy and destruction of critical habitat, and to otherwise minimize the impacts of their activities. The Effects of Critical Habitat Designation section of this rule provides information about the consultation process. There is no additional permitting process established with the designation of critical habitat, just the additional process associated with section 7 consultation, which may result in some administrative costs that are estimated for identifiable activities in the final economic analysis report (Industrial Economics 2014). As consultation is already required for many federally funded activities that may affect Hawaiian monk seals, we expect to meet our stakeholders' needs for consultation and do not anticipate the

additional consultation standards associated with Hawaiian monk seal critical habitat to result in significant, additional project delays. Accordingly, we anticipate that Federal funding associated with these activities will be received in a manner similar to years past.

*Comment 44:* A commenter wished to clarify if the proposed designation would end or affect a variety of activities, including ocean fish-farming, and fishpond restoration or creation, or if it would affect 501(c)3 funding (for tax-exempt nonprofit organizations), the National Park Service's lands and trails, and underwater heiaus (Hawaiian temple).

*Response:* Because the categories of activities identified by the commenter may be expected to vary in place, scope, and duration, and involve different authorizing agencies, we cannot specifically address particular consultation requirements here. However, as a general statement, if such activities are carried out, funded, or authorized by a Federal agency (i.e., a Federal nexus is established), the agency retains discretionary involvement or control over the activities, and the activities may affect an ESA-listed species or its designated critical habitat, then consultation is required. While the great majority of activities that require a Federal agency to consult with us can proceed upon satisfaction of section 7 (a)(2) requirements, in some cases modifications may be necessary to avoid adversely affecting critical habitat, and to otherwise minimize the impacts of their activities.

The final economic analysis report (Industrial Economics 2014) provides additional detail regarding activities in the Hawaiian Islands that are anticipated to require critical habitat considerations during the section 7 consultation process. In particular, activities associated with ocean fish-farming are discussed under the

aquaculture/mariculture section of the report, and impacts associated with fish pond restoration or creation are discussed under activities associated with the in-water and coastal construction section of the report.

To the extent that the other activities identified meet the criteria established to require section 7 consultation (i.e., they have a Federal nexus and may affect Hawaiian monk seal essential features), we will work with the Federal action agency, and where appropriate other entities, to ensure that activities are not likely to destroy or adversely modify Hawaiian monk seal critical habitat.

*Comments on Ineligibilities and Exclusions*

We received a number of comments regarding DOD activities and their potential impacts on cetaceans and other marine mammals. Because these comments are outside the scope of this revision of critical habitat for Hawaiian monk seals, no response is provided.

*Comment 45:* Several comments expressed concern and confusion over the areas that were ineligible for designation under section 4(a)(3) of the ESA, in comparison to those areas that were proposed for exclusion under section 4(b)(2) of the ESA. Many of these comments requested clarification in the rule (and on maps) to distinguish how and why areas were omitted from the designation and to understand the protections that would exist in those areas for monk seals. Among these comments people also questioned why military areas were the only ones excluded, how those areas or protecting monk seals is related to national defense, why Nimitz and White Plains Beach were excluded given the areas are not used for national defense, and how monk seals would be affected if wave energy projects go forward and Kaneohe Bay is omitted from the designation.

Additionally, one comment identified that all DOD areas should be included in the revision of critical habitat, while another comment asserted that seals should not be more important than protecting national security.

*Response:* Section 4(a)(3) and section 4(b)(2) of the ESA establish two different standards under which areas that otherwise qualify for critical habitat will not be incorporated into a final designation of critical habitat. Standards under section 4(a)(3) are unique to areas managed under a Department of Defense (DOD) integrated natural resources management plan (INRMP) and review focuses on whether the INRMP provides a benefit to the listed species and its habitat. Standards under section 4(b)(2) focus on the impacts of the critical designation and review focuses on the economic, national security and other relevant impacts of designating critical habitat in any particular area. We provide additional information below to help distinguish these two review processes and to address associated concerns identified above.

Section 4(a)(3)(B)(i) of the ESA was amended by the National Defense Authorization Act (NDAA) of 2004. This section of the ESA does not allow the Services to designate critical habitat in areas where we have determined that a DOD INRMP provides a benefit to the listed species for which critical habitat is proposed for designation. Section 4(a)(3) requires that we evaluate INRMPs that overlap with areas under consideration for critical habitat and make a determination as to whether the INRMP provides adequate conservation measures, programs, and/or plans to support the conservation of a listed species. Areas managed under INRMPs that we determine to be a benefit to a listed species and its habitat are often referred to as “ineligible” or “precluded” from critical habitat designation for that species. During the 4(a)(3) review

for this designation, we evaluated three INRMPs that overlapped with areas under consideration for Hawaiian monk seal critical habitat (see *Military Areas Ineligible for Designation* section) using specific criteria to ensure that Hawaiian monk seals and their habitat are provided conservation benefits through structured management programs. Those areas that have been identified as “ineligible” for this designation (under 4(a)(3)), are managed under DOD INRMPs that we have determined provide benefits to Hawaiian monk seals’ and their habitat, because these INRMPs implement conservation measures that support Hawaiian monk seal recovery. Examples of conservation measures that are implemented in these areas include seal monitoring programs, marine debris removal, feral animal control, and public education. In addition to these conservation measures, Hawaiian monk seals continue to receive protections associated with listing throughout these ineligible areas and the military must consult with NMFS under section 7(a)(2) of the ESA, as appropriate, to ensure that their activities do not jeopardize the species.

Section 4(b)(2) of the ESA requires that we consider the economic, national security, and any other relevant impacts of designating any particular area as critical habitat. Under this section of ESA, we have the discretion to exclude particular areas from a critical habitat designation if the benefits of excluding the area outweigh the benefits of designating the area, as long as exclusion will not result in the extinction of the species. During the designation process we considered the impacts relevant to the aforementioned categories and we describe the exclusion process in the ESA Section 4(b)(2) Analysis section of this rule. In our analysis of impacts, we found four areas (Kingfisher Underwater Training area, the Pacific Missile Range Facility Offshore Areas, the Puuloa Underwater Training, and the Shallow Water Minefield Sonar Training

Range) where we determined that the benefits of exclusion (e.g., avoiding modifications to DOD activities) outweighed the benefits of designation. Specifically, the Navy considers these particular areas as important for national defense because the areas are used for military training exercises that support troop preparedness (see Exclusions Based on Impacts to National Security section below). Although these areas are identified for exclusion because military activities have some likelihood of causing impacts to habitat, these areas are not devoid of protection for Hawaiian monk seals. The DOD is subject to Federal ESA consultation for actions that have the potential to adversely affect Hawaiian monk seals in all areas where the species exists and their activities are evaluated during consultation to ensure that these activities are not likely to result in jeopardy to the species. Additionally, as identified in our 4(b)(2) weighing process for national security exclusion, the DOD sometimes already provides some protection for Hawaiian monk seal essential features through existing DOD environmental safeguards. For example, standard operating procedures may already work to minimize the impacts to marine habitat from military activities, and Hawaiian monk seals may inherently receive some protections from other threats (e.g., hookings) due to the limited access to certain military sites.

With regard to Nimitz and White Plains Beach, in the proposed rule we included these areas despite the Navy's request for national security exclusion under section 4(b)(2) of the ESA because the areas are not used for military training activities and we were provided no specific justification for national security exclusion (76 FR 32026; June 2, 2011). This remains true; however, since the 2011 proposal the Navy enhanced their conservation measures implemented under the Navy's Joint Base Pearl Harbor-Hickam

(JBPHH) INRMP, and we have determined that the INRMP provides a benefit to the Hawaiian monk seal and its habitat in accordance with section 4(a)(3) of the ESA.

Because Nimitz and White Plains Beach are managed under the JBPHH INRMP, these areas are ineligible for designation under section 4(a)(3). At these publicly used beaches the Navy maintains conservation benefits for Hawaiian monk seals, including supporting monitoring, education, and enforcement efforts.

We recognize that opinions vary regarding the balance to be struck between national security concerns and the conservation needs of listed species; however, we believe that we have properly evaluated these two needs such that areas excluded for national security reasons can support troop preparedness while not impeding the recovery of Hawaiian monk seals. Finally, in response to public recommendations we have distinguished those areas that are ineligible for critical habitat under 4(a)(3)(B)(i) of the ESA, from those areas that have been excluded from the critical habitat designation under 4(b)(2) of the ESA in the maps that depict this designation.

*Comment 46:* Several comments expressed concern about whether the DOD would provide adequate protection for monk seals in areas that were ineligible for designation under 4(a)(3)(B)(i) of the ESA. Citing military settlement impacts on the NWHI population, one comment suggested that NMFS should ensure that DOD conservation actions are commensurate with the standards that would otherwise have been afforded under a critical habitat designation. Another comment warned that review of INRMPs should include not only whether a plan exists, but also whether the plan is implemented and funded. An additional comment argued that 4(a)(3)(B)(i) ineligibilities

undermined protections for listed species and that NMFS should analyze the potential impacts of excluding military areas and voice its criticism.

*Response:* As identified in the *Military Areas Ineligible for Designation* section of this rule and our response to comment 45, during review of DOD INRMPs we consider the conservation benefits to the species. Specifically, we consider whether the responsible division of DOD has a demonstrated history of implementation, whether the plan is likely to be implemented (funded), as well as whether the plan is likely to be effective. We have found plans to be effective when they have a structured process to gain information (through monitoring and reporting), a process for recognizing program deficiencies and successes (review), and a procedure for addressing any deficiencies (allowing for management adaptation to suit conservation needs). In some cases, we identified concerns about the management plans and provided recommendations that would strengthen the overall effectiveness of these plans. In all cases in which we have determined that a management plan provides a benefit to the Hawaiian monk seal and its habitat, the military installations have dedicated natural resource staff that have worked to ensure that procedures, programs, and/or staff are available to implement the various conservation measures that support Hawaiian monk seal conservation. As previously stated, a critical habitat designation implements a consultation process that ensures that Federal agencies are not likely to destroy or adversely modify critical habitat. The benefits of the conservation measures implemented under an INRMP may not directly replicate the benefits of a critical habitat designation; however, in our reviews of the INRMPs, we have emphasized the importance of Hawaiian monk seal essential features and the importance of implementing conservation measures that would protect those

features. Further, we will continue to work with DOD staff to provide guidance with regard to Hawaiian monk seal management issues through participation in annual INRMP review processes, through outreach and education efforts, and as requested by the various military installations.

*Comment 47:* Earthjustice submitted a comment in opposition to the Department of Army's request for 4(a)(3)(B)(i) INRMP review and/or 4(b)(2) exclusion for the Makua Military Reservation (MMR). The comment indicated that there is no basis for review pursuant to 4(a)(3)(B)(i), because the shoreline areas near MMR are State lands which are neither "owned" nor "controlled by the Department of Defense, or designated for its use," as required by the ESA. The comment also indicated that the Army did not provide a valid reason for excluding the area under 4(b)(2) of the ESA because the live-fire exercises that the Army's letter claimed would be affected by the designation were unlikely to occur at MMR.

*Response:* The coastal areas of Makua Military Reservation are not included in the final designation, because these areas do not support the refined essential features for significant haul-out areas or preferred pupping areas and therefore do not meet the definition of Hawaiian monk seal critical habitat. Therefore, we provide no further consideration regarding this area.

*Comment 48:* Several comments expressed concern about areas that were proposed for national security exclusions under 4(b)(2) of the ESA, and questioned the protections that would be in place for monk seals or their habitat in these areas, now and in the future. Among these comments, one noted that NMFS should take additional precaution in reviewing military actions in the excluded areas since the habitat won't

receive protections. Another comment suggested that we should impose additional mitigation measures to protect monk seals from the adverse effects (as described in Nowacek and Tyack 2007; NRC 2003; Richardson *et al.* 1995; Weilgart 2007) associated with sound generated by military active sonar in excluded areas in order to ensure that seals are offered adequate protections from all activities, including noise pollution. Lastly, a comment expressed particular concerns that the exclusion does not take into account the possibility that military facilities, such as PMRF, could be closed, leaving the areas without protection.

*Response:* As noted in our response to comment 45, monk seals continue to remain protected under the ESA throughout areas that are excluded from a critical habitat designation, because Federal agencies, including the DOD, remain subject to Federal ESA consultation for actions that may affect Hawaiian monk seals wherever they exist. Additionally, as identified in the ESA Section 4(b)(2) Analysis section of this rule and our response to comment 45, existing DOD safeguards may provide additional protections for habitat in these areas.

With regard to the comment on active sonar, the articles referenced by the commenter are more specific to cetaceans, a group of marine mammals known to be highly dependent on sound as their principal sense, and the associated impacts described in these references are not necessarily relevant to Hawaiian monk seal critical habitat or Hawaiian monk seals themselves. The commenter's concerns regarding sonar appear to be focused on impacts to individual animals and not to the essential features of Hawaiian monk seal critical habitat. Impacts to Hawaiian monk seals, including those associated with sound, are already analyzed during ongoing section 7 consultations.

Finally with regard to the comment that expressed concern that the 4(b)(2) exclusion process could leave areas unprotected if military facilities were to close, section 4(b)(2) of the ESA provides the Services with discretion to exclude areas when the benefits of exclusion outweigh the benefits of designation, as long as the exclusion does not result in extinction of the species. Although activities and use of areas may be subject to change, we are limited by the available information to inform our 4(b)(2) decision-making process. We have received no information to indicate that the military would discontinue use of areas that were excluded from monk seal critical habitat designation for national security reasons. Although we may exercise discretion and include areas where national security impacts are expected to occur, we cannot exercise our discretion based on speculation or surmise that a future event may occur. Further, if future circumstances were to change regarding the use of particular areas, we may consider revising the designation to protect features and areas that are essential to Hawaiian monk seal recovery.

*Comment 49:* The USFWS Hawaiian and Pacific Islands National Wildlife Refuge Complex submitted comments stating that they do not believe there is any conservation value to the Hawaiian monk seal from designation of critical habitat within the Papahānaumokuākea Marine National Monument, especially at Midway Atoll National Wildlife Refuge. These comments highlighted the existing protections for monk seals throughout this area, and stated that the designation would delay impending necessary repairs to the failing cap in the bulky dump on Midway or create additional administrative burdens, which would take away from other necessary conservation management actions over time. The comment further stated that, at a minimum, the final

rule should not include a majority of the shoreline at Sand Island, because these shoreline areas either do not meet the definition of critical habitat for Hawaiian monk seals or will not provide an increased conservation benefit to the species compared to current conservation benefits being implemented by the Refuge and Monument.

*Response:* First, while we acknowledge that the protected areas identified by USFWS may provide various forms of protection for different aspects of the environment or for wildlife, under the ESA, the protections within these areas may not serve as a substitute for a critical habitat designation nor is the benefit of designation negated by other existing protections. If the occupied habitat contains those features that are essential to conservation and we determine that they may require special management considerations or protection, then the habitat area is subject to critical habitat designation, unless an appropriate exclusion applies. We believe that the benefits from designation described in this final rule will accrue to the Hawaiian monk seal, even in those areas currently protected by Papahānaumokuākea Marine National Monument and USFWS National Wildlife Refuges. However, because of the level of protection already afforded the monk seal and other protected species in these areas, we do not anticipate that significant conservation measures or project modifications will be needed above and beyond those already required to avoid jeopardy to the species.

As noted in our response to comment 1, the revision and expansion of critical habitat for this species, at a minimum, informs Federal agencies and the public of the importance of these areas to the species' recovery, and through the consultation process, allows for the consideration of specific project modifications and best management practices that reduce impacts to habitat areas. We acknowledge that the designation of

critical habitat may create some additional administrative burdens; however, given the clear directive to Federal agencies to avoid jeopardy and adverse modification under section 7, we do not believe that the administrative cost and burden of the consultation process alone justifies relief from critical habitat designation. The consideration of impacts to critical habitat during consultation allows for improved planning for Federal agencies and is a benefit of the designation.

However, we have conferred with USFWS Hawaiian and Pacific Islands National Wildlife Refuge staff and are aware that manmade structures exist within the NWHI similar to those areas which were not included in the MHI designation because the areas fail to meet the definition of critical habitat for the species. To address the inconsistency in the proposed designation between the two geographic regions of the monk seal's range, and in response to this comment, we have revised the description of critical habitat in the NWHI to no longer include those areas of manmade structures in the NWHI which do not meet the definition of critical habitat for the Hawaiian monk seal. Refer to the Summary of Changes from the Proposed Designation section of this rule for these revisions.

Additionally, we have considered concerns raised by USFWS staff about delays to impending projects; however, as consultation is already required under the jeopardy standard, we do not anticipate the additional consultation standard of destruction or adverse modification of critical habitat to result in significant, additional project delays. In the specific example provided (delays to the repairs for the failing bulky dump cap), the area of Sand Island where repair is necessary is not included in the designation because it is a manmade landfill that is surrounded on the three seaward sides by

approximately 10-foot-thick bands of concrete and stone rip rap. As noted above, this area does not meet the definition of critical habitat for the species. Provided this project is planned carefully to avoid impacts to any nearby essential features, we anticipate no delays to this project that would be attributed to the designation.

*Comment 50:* The Hawaii DLNR submitted comments requesting the exclusion of multiple areas, including unsuitable habitat areas and those areas that are already protected by the State of Hawaii and which effectively serve to protect monk seals. DLNR recommended exclusion of heavily populated areas and areas of high runoff because these areas present the highest risk of frequent human interaction, and exposure to contaminants and disease, and because these areas do not enhance monk seal's health and vitality. Heavily populated areas were described as Hilo and Kailua-Kona, on Hawaii; Kahului, Kihei, and Lahaina, on Maui; Kanakakai, Kamalo, and Pukoo, on Molokai; Manele, and Kumalapau harbors on Lanai; Waikiki, Honolulu, Pearl Harbor, Ewa, Kalaeloa, Nanakuli, Maili, Waianae, Haleiwa, Kaneohe, Kailua, Waimanalo, and Maunulua Bay, on Oahu; and Lihue, Kapaa, Hanalei Bay, and Hanapepe, on Kauai. Additionally, high runoff areas were described as those areas with consistently high rainfall and runoff.

The areas identified as protected by the State by the DLNR include 11 Marine Life Conservation Districts, Fishery Management Areas that occupy 30 percent of the West Hawaii coastline, a marine environment natural area reserve on Maui, "no-netting" areas on all islands, the Hawaiian Islands Humpback Whale National Marine Sanctuary, and protective subzone designations of coastal and submerged land areas within the State's conservation district.

*Response:* Section 4(b)(2) of the ESA provides the Secretary of Commerce with the discretion to exclude areas from critical habitat if the Secretary determines the benefits of such exclusion outweigh the benefits of designation, provided the exclusion would not result in extinction of the species. The State's request that we exclude the above identified areas does not specifically describe the benefit of excluding these particular areas with regard to the impacts of the designation.

In consideration of the request to exclude heavily populated areas, we note that either the entire area or large portions of the areas that the State has asked us to exclude were not included in the proposed Hawaiian monk seal critical habitat because the harbors and manmade structures that are found throughout many of the identified areas do not meet the definition of critical habitat. The same is true for the final designation: many of the identified areas do not meet the definition of critical habitat and were not included in the designation. However, significant haul-out areas have been identified along the coastline of Ewa, Nanakuli, Maili, and Waianae on Oahu and on Kapaa on Kauai. Additionally, significant haul-out areas have been identified in coastal areas adjacent to Hilo and Kailua-Kona on Hawaii and Kahului on Maui. Coastal habitat segments (but not including manmade structures within these segments) have been included in the designation along these areas because they meet the definition of Hawaiian monk seal critical habitat by supporting Hawaiian monk seal essential features which may require special management considerations or protections. We recognize that some areas present higher risks to monk seals and we will continue to work with our State partners to try to ameliorate those threats. However, we believe that the State's method of excluding habitat from the designation based on the presence of threats would

eliminate large portions of the Hawaiian monk seals' range upon which essential features are found and that may require protection to support recovery. Additionally, we believe the State's approach does not adequately consider the ecology of the species or the best scientific information available regarding Hawaiian monk seal habitat use to identify areas that are consistently used to support resident populations of seals.

With regard to State protected areas, the State argues that the benefits of including these areas are reduced because they already offer protections to Hawaiian monk seal critical habitat. We acknowledge that the protected areas identified by the State may provide various forms of protection for different aspects of the environment or for wildlife; however, under the ESA, the protections within these areas may not serve as a substitute for a critical habitat designation, nor is the benefit of designation negated by other existing protections. The phrase "which may require special management considerations or protection" does not mean that designation must provide "additional" protection to already existing conservation measures. Furthermore, as noted in our response to comment 15, we know of no such State area whose purpose specifically includes the conservation of monk seal habitat or their essential features. We believe that the benefits from designation described in this final rule will accrue to the Hawaiian monk seal, even in those areas currently protected for other purposes by the State of Hawaii, such as the MLCDs and the sanctuary.

Although the State did not provide specific evidence of the benefits of excluding the identified protected areas, in responding to this comment we also considered economic impacts associated with the designation in areas identified by the State and included in the designation; however, the analysis indicates that the majority of impacts

are associated with the requirement to consult on Federal actions under section 7 of the ESA, which would occur regardless of the critical habitat designation. In the Hawaiian Islands, most Federal actions that require consultation tend to occur in those areas that were not included in the designation (because the area did not meet the definition of critical habitat). Within the areas identified for designation, most costs were estimated to be minimal and associated with administrative costs. In conclusion, we find that the benefits of designating the areas identified by the DLNR for exclusion, including those benefits associated with section 7 consultations that may occur in the areas, and the educational benefits associated with the designation, outweigh the benefits of exclusion.

*Comment 51:* We received a comment that stated that fishing communities would benefit greatly from exclusion. Specifically this comment identified that traditional konohiki fishing grounds, marine kuleana awards, and traditional limu and opihi beaches should be excluded from the designation.

*Response:* We disagree that an exclusion for the referenced areas, which support traditional and customary fishing and gathering practices, is warranted, and we note that the commenter does not describe specifically how these areas may benefit from exclusion (i.e., describe impacts or harms from the designation). We are unable to base an exclusion under section 4(b)(2) on speculative impacts. We emphasize that where no Federal authorization, permit, or funding exists (i.e., there is no Federal nexus), the activity is not subject to section 7 of the ESA and therefore effects to these activities due to designation are not anticipated.

In an attempt to identify potential impacts we considered, through our economic impacts analysis, whether a particular activity or area may be affected by the designation.

Chapter 12 of the final economic analysis (Industrial Economics 2014) discusses the potential impacts to Native Hawaiian activities (in response to concerns raised through public comments), such as changes to beach or other coastal area access and fishing activities. The chapter identifies that Native Hawaiians may be affected by the designation if they are engaged in activities which already are subject to section 7 consultation, such as fishing activities or fishpond restoration, both of which have a Federal nexus. However, as described in the Benefits of Exclusion Based on Economic Impacts section of this rule, economic impacts involved with these activities are expected to be low and we found the impacts did not outweigh the benefits of designating critical habitat for the Hawaiian monk seal. Therefore, no areas were excluded for economic reasons.

With no additional information to suggest that the above activities may be subject to other relevant impacts as a result of the designation, we cannot conclude that the benefits of excluding these areas from designation outweigh the benefits of inclusion as critical habitat for other reasons.

*Comment 52:* CEROS is a State of Hawaii program that is supported by Federal funds. CEROS has provided more than \$100 million in research contracts to the Hawaiian high-technology sector in 19 years to carry out basic and applied ocean science research. The commenter suggested the CEROS program could be seriously affected by the proposed designation and noted that the proposed rule does not adequately evaluate the potential adverse effects on routine ocean research activities such as use of ocean gliders, seafloor surveys, current surveys, underwater cabling, moored or seabed instrument arrays, research and installation of renewable energy equipment and systems,

use of submersibles and other activities. CEROS requested that coastal areas of historically high research activity (e.g., the leeward coasts of the islands of Oahu and Hawaii) be excluded.

*Response:* We have considered CEROS' comments about federally funded research efforts, and note that the draft economic report did use historical section 7 consultations to determine the potential costs of the designation, which included consultations on federally funded research efforts throughout Hawaii, similar to those described by CEROS. However, these consultations on research activities were grouped under other activity headings based on the type of activity that this research supported. For example, we considered past consultations for research efforts associated with renewable energy development off Hawaii and added those costs into our predicted costs for future energy development in those areas. For clarification, the final economic report does consider impacts to research activities separately; however, the final analysis found the costs associated with these efforts to be minimal. This is because most Federal actions (funded, authorized or carried out) associated with research activities are already subject to section 7 consultation to ensure that Federal actions are not likely to jeopardize Hawaiian monk seals (and other listed species).

We have considered the exclusion of areas with historically high research activities based on economic impacts from the designation; however, we have not excluded these areas because the economic impacts are expected to be generally low (Industrial Economics 2014) and areas off the leeward coast, such as Oahu, are highly used by monk seals and therefore are of high conservation value to the species.

Therefore, we have determined that the benefits of exclusion do not outweigh the benefits of designation.

*Comment 53:* We received a comment that agreed with our decision to not propose areas for economic exclusions. This commenter noted that although baseline protections are strong, they are not enough to protect critical habitat for monk seals. Additionally, the commenter noted that the uncertainty associated with the impacts of future activities on critical habitat requires project-by-project consideration to prevent harm to critical habitat.

*Response:* The economic report describes the baseline protections as including those habitat protections already afforded the monk seal, either as a result of its listing as an endangered species or as a result of other Federal, State, and local regulations (Industrial Economics 2014). The report does provide evidence that baseline protections are strong for marine and coastal areas in Hawaii; however, as noted in our response to comment 15, these protections do not provide specific protections for Hawaiian monk seal essential features. Accordingly, we believe that this designation will ensure that Federal actions are not likely to destroy or adversely modify Hawaiian monk seal critical habitat.

#### *Economic Impacts and Effects of the Designation*

*Comment 54:* Several comments expressed concerns that there may be unanticipated impacts that result from the designation. Concerns expressed included the designation of critical habitat being a stepping stone for future restrictions or closures either at the State or local level, or the designation being used by nonprofit organizations to file lawsuits.

*Response:* We recognize that local, State and Federal agencies may choose to manage areas differently once aware of a critical habitat designation; however, in our discussions with local, State, and other Federal agencies we have been made aware of no plans to institute future restrictions or closures to provide habitat protections for monk seals. We cannot speculate regarding future management actions that may be taken in response to this critical habitat revision. Moreover, we cannot speculate regarding the likelihood of future litigation resulting from this critical habitat revision, and the mere risk of litigation is not a legal basis for refusing to designate critical habitat supported by the best available scientific information under the processes of the ESA.

*Comment 55:* A couple of comments suggested that we had inadequately considered the economic impacts of the proposed designation on offshore and inshore aquaculture industries. These comments stated that aquaculture projects invest millions of dollars and require investor confidence which may be derailed by a critical habitat designation.

*Response:* The final economic analysis (Industrial Economics 2014) includes additional information regarding the impacts of this designation on aquaculture/mariculture activities. The report describes the industry in Hawaii, including both offshore and inshore activities, and acknowledges that the industry is expected to continue to grow in the future. Impacts associated with this designation are expected to be largely administrative in nature and experienced by those projects that require cages or pens to be anchored to the seafloor, where Hawaiian monk seal foraging habitat may be disturbed by such activities. To the extent that a project avoids disturbance of benthic habitat, using anchorless systems offshore, the activity will be less likely to affect monk

seal foraging habitat and therefore less likely to be affected by the monk seal critical habitat designation. For those projects using anchors, Best Management Practices and compliance with existing regulations and permits (see Chapter 8 of the economic analysis) help to mitigate or avoid major impacts to the seafloor. While ESA section 7 consultation is expected to occur for those projects that are funded, permitted, or carried out by Federal agencies, additional project modifications beyond those that are implemented under the current regulatory environment are not anticipated. Given the relatively low impacts described, we have no reason to believe critical habitat designation will diminish investor and/or public support for marine aquaculture in Hawaii, particularly where NMFS and the State have also committed resources to supporting this emerging industry.

*Comment 56:* Many comments expressed concern that restrictions on beach access and ocean use activities may result from the proposed designation. Some comments expressed concern that beaches or campgrounds would be closed due to the designation. One of these comments suggested that beach closings or restrictions will affect tourism, which is one of the top industries in Hawaii. Other comments suggested that restrictions or bans may be placed on certain activities such as fishing, diving, or surfing. Another comment asserted that critical habitat will encourage seal population growth and that blocked areas of beach will increase with 10 to 20 animals on the beach.

*Response:* Chapter 12 of the economic analysis report addresses concerns with regard to beach recreation and tourism (Industrial Economics 2014). We emphasize that critical habitat designations do not restrict beach access or place bans on the areas identified or on specific activities. As previously noted, the designation of critical habitat

creates a second obligation under section 7 of the ESA for Federal agencies to ensure that activities that they carry out, authorize, or fund are not likely to destroy or adversely modify critical habitat. Those activities that have a Federal connection may be subject to Federal section 7 consultation if the activity has the potential to impact critical habitat; however, these projects are likely already undergoing Federal section 7 consultation to ensure that actions that they take are not likely to jeopardize Hawaiian monk seals or other listed species (see our response to comment 43).

With regard to the comment about blocked areas of beach due to large numbers of seals, we refer to our response to comment 38 regarding the likelihood that critical habitat will influence population growth in a measurable manner. Monk seals are known to be a relatively solitary species, and it is rare for a large number of monk seals to haul out in a given area. Even with increased numbers in the MHI, seals using this habitat are unlikely to congregate in large numbers. In addition, we will continue to work on addressing ocean resource conflicts as they pertain to Hawaiian monk seals through our MHI management planning efforts.

*Comment 57:* One comment questioned whether the designation may affect property values for shoreline property.

*Response:* Critical habitat has been shown to have both positive and negative impacts on property values, depending on local land use regulations (Auffhammer and Sunding 2009). We anticipate that the critical habitat designation is not likely to have a large impact on shoreline property values, in part because most future residential, commercial, and resort development activity in Hawaii is anticipated to occur outside of the designated areas (Industrial Economics 2014). Even within designated critical habitat,

we anticipate that the consultation process will result in recommendations to mitigate impacts to essential features, and largely duplicate those existing recommendations and measures for the listed species. We refer the commenter to Chapter 7 of the Economic analysis, which discusses development along shoreline areas of the designation in more detail.

*Comment 58:* One comment suggested that the protection of areas with low levels of anthropogenic disturbance would prevent plans for increasing public access to an area now or in the future. The commenter also expressed concern about what this would mean for the island of Hawaii which has a lot of undeveloped land that is privately owned with little public access.

*Response:* As more fully discussed in our response to comment 22, we have removed low levels of anthropogenic disturbance as an essential feature (see response to comment 22); therefore, only those locations which support preferred pupping and nursing areas and/or significant haul out areas will be evaluated when planning for development in coastal areas to ensure that the development is not likely to destroy or adversely modify critical habitat.

*Comment 59:* The Western Pacific Regional Fishery Management Council (the Council) provided multiple comments regarding the insufficiency of the draft economic analysis and the lack of a systematic approach for the economic analysis in the draft 4(b)(2) report.

The Council commented that the draft economic report is incomplete, because it does not sum the impacts by area, as outlined in the analysis approach of the report. Additionally, the Council argued that the quality of the draft economic analysis is not

comparable to recent similar analyses and does not meet the regulatory analysis guidelines set forth by the Office of Management and Budget (OMB), which notes that a cost effective analysis (CEA) should be conducted when primary benefits cannot be expressed in monetary units. They argue the report also underestimates the impacts to fishing and aquaculture activities. With regard to fisheries, the Council commented that the report does not quantify the value of federally managed fisheries as an activity, the potential costs of modification to the fisheries, or the economic value of recreational and subsistence fisheries (which have a Federal nexus in the form of the new National Saltwater Angler Registry). Additionally, the Council argued that the report does not properly consider the impacts to offshore aquaculture operations, which are promoted through the National Offshore Aquaculture Act of 2007.

The Council also noted that the draft 4(b)(2) report lacks a rigorous and systematic approach in weighing the benefits of designation against the benefits of exclusion to determine if any area should be excluded based on economic impacts. The Council requested that NMFS reconsider the analysis for the draft 4(b)(2) report so that determination of exclusion due to economic impacts is conducted in a thorough manner consistent with other recent critical habitat designations.

*Response:* After considering this and other comments received, we have revised and updated the final economic analysis (Industrial Economics 2014) to better demonstrate the spatial distribution of the economic impacts across the specific areas (see our response to peer review comments 8 and 9 on economics). The final economic analysis also provides additional information about the types of activities that are likely to be affected by the designation. This includes a thorough discussion and evaluation of

the economic value of fisheries activities in Chapter 4 and aquaculture related activities in Chapter 8.

The final economic analysis (Industrial Economics 2014) provides an assessment of both monetized and unquantified impacts, a framework that allows us to apply a modified cost-effectiveness analysis for the purposes of 4(b)(2) decision-making. In the ESA Section 4(b)(2) Analysis section of this rule and the 4(b)(2) report (NMFS 2014b), we further describe how the economic impacts were considered for the analysis and provide conservation values for the particular areas, similar to other NMFS critical habitat designations, in weighing the benefits of exclusion against the benefits of designation.

*Comment 60:* Several comments suggested that impacts to the bottomfish fisheries were not fully considered. Specifically, comments indicated that the proposed rule did not quantify economic impacts to this fishery and did not address the impacts that monk seal foraging would have on the fishery. One comment claimed that the economic impacts to the bottomfish fishery should outweigh the benefits of the designation. This commenter stated that the MHI critical habitat designation could result in restrictions to, or closure of, this fishery. This comment also claimed that the rule would provide conservation groups with another opportunity to file suit when the Hawaiian monk seal population within the MHI exceeds carrying capacity of resources and will result in closure of the well-managed bottomfish fishery, as was done in the NWHI.

*Response:* We do not believe that the economic impacts of this designation outweigh the benefits of designation based on this fishery because expected economic impacts are relatively low overall, including fishery-related impacts, and we believe that

areas in the MHI are of medium to high conservation to the Hawaiian monk seals and therefore are appropriate for designation. The impacts to all fishery activities, including specifics on the bottomfish fishery, are discussed in Chapter 4 of the economic analysis (Industrial Economics 2014). As discussed later in this rule, we do not anticipate modifications to Federal fisheries management programs in order to avoid adverse modification of critical habitat because these activities generally do not use destructive gear or fishing practices that may significantly alter foraging areas, or their essential features. To date, ESA consultations on listed species and federally managed fisheries in the MHI have not identified jeopardizing impacts for monk seals. Moreover, MHI seals do not appear to face food limitations in MHI foraging areas where fishery activities overlap with the designation, and the overlap between targeted species for these fisheries and monk seal diet is considered low and may not extend beyond the family taxonomic level (Cahoon 2011; Sprague *et al.* 2013). In addition, as noted by the commenter, the bottomfish fishery is actively managed under annual catch limits in order to ensure a sustainable market supply of fish on a continuing basis.

We acknowledge that environmental conditions in the future are difficult to predict and some uncertainty remains regarding the relative importance of particular prey species for Hawaiian monk seals. Consequently, we cannot rule out the possibility that future modifications to these fisheries may be required, either to avoid jeopardy or destruction or adverse modification of critical habitat. Nor can we speculate on the likelihood of future litigation resulting from this critical habitat revision.

*Comment 61:* One comment indicated that fishermen are already affected by seals in the MHI (referring to near-shore interactions with gear and fishing spots) and that

designating critical habitat in the MHI will cause more impacts to fishing, including impacts to jobs and food resources. Another commenter suggested that the designation could be linked to increased Hawaiian monk seal population growth and that this growth will deplete MHI fisheries.

*Response:* We recognize the importance of fishing to the lives of many Hawaii residents and our Hawaiian monk seal recovery program is working on mitigation measures designed to address concerns regarding the adverse impacts of fisherman-monk seal interactions. However, as noted in the above responses to comments about fishing activities, economic impacts in the MHI area that will result from this critical habitat designation are expected to be low, because impacts are expected to be largely administrative in nature and limited to those activities with a Federal nexus. See also Chapter 4 of the economic analysis (Industrial Economics 2014) for further detail on fishery-related impacts.

With regard to the comment on resource depletion associated with Hawaiian monk seal growth in the MHI, the Hawaiian monk seal has been an integral part of a healthy Hawaiian marine ecosystem for many millions of years. We have no information to indicate that competition from a recovered Hawaiian monk seal population in the MHI would deplete MHI fisheries resources, which are managed to ensure sustainability. We refer the commenter to our response to comment 20 for further information about Hawaiian monk seal feeding habits.

*Comment 62:* Multiple comments expressed concerns about impacts to Hawaii's fisheries activities, especially near-shore fisheries and fisheries-related actions that receive Federal funding. Many of these comments requested additional information about

the types of fishery activities that may be impacted by designation. Some comments claimed that the proposed rule would result in impacts such as fishery restrictions, economic impacts, restrictions on tours, closed fishing areas, new fishing licenses, or decreased fishing seasons or limits. Comments noted that consultation on potential impacts to critical habitat could cause unnecessary delays in the management of ongoing Federal fisheries programs such as the National Saltwater Angler Registry, or add additional costs for federally-funded processes like the Dingle-Johnson and Wallop-Breaux Funds. The latter commenter noted that a registry for shoreline fishers was discussed when the National Saltwater Angler registry was created and the commenter claimed it is not inconceivable that shore fishermen may have a Federal nexus in the future.

*Response:* As noted in our response to comments above, the impacts to Fishery activities are discussed in Chapter 4 of the economic analysis (Industrial Economics 2014). The report identifies that there have been at least 14 past section 7 consultations on fisheries programs potentially affecting the Hawaiian monk seal within the designated areas; three were consultations related to fisheries management plans, five were related to fishery plan amendments, and five were related to Federal aid for recreational fishing. As discussed in our response to comment 59 above, the impacts to fisheries activities associated with this designation are expected to be low and largely administrative in nature. At this time, we have no reason to anticipate modifications to Federal fisheries management programs in order to avoid adverse modification of critical habitat (see our response to comment 60).

The consultation process requires Federal agencies to consider the potential impacts on monk seal critical habitat of programs that they fund, authorize, or carry out, so as to reduce and, where possible, avoid adverse impacts to its critical habitat. In many cases, we expect that the designation of critical habitat will impose little or no additional burden on agencies where consultation is already required for the listed species. Although we cannot eliminate all potential for Federal project delays, we are prepared to work closely with Federal agencies to ensure that consultations are completed as thoroughly and efficiently as possible. Moreover, while we cannot predict future determinations by Federal action agencies, we expect that many Federal projects, federally-administered grant programs, and Federal administrative activities will have no impact on monk seal critical habitat, and therefore will not be subject to formal consultation at all. In any event, because we designate critical habitat to support species' recovery needs (subject only to limited exceptions), and because Federal agencies are required by the ESA to ensure that their Federal activities are not likely to jeopardize the species or destroy or adversely modify critical habitat, the possibility that consultations may result in additional administrative delay is not a basis for failing to designate critical habitat.

*Comment 63:* One comment expressed concern that the boundary of critical habitat 5 m inland from the shoreline will migrate mauka (towards the mountains or inland) as sea level rise continues and will result in more economic impacts to Federal projects. The commenter also asked whether there must be a State certified shoreline to determine where 5 m begins, and if there is a setback or management criteria associated with this.

*Response:* We recognize that as sea levels change, the boundary of the designation may shift over time at the inland extent as well as the seaward extent of the designation. The boundaries of the designation were identified to incorporate those features that are essential to the conservation of the Hawaiian monk seal and we anticipate that Hawaiian monk seal use of areas will reflect shifts in habitat and biological communities over time. The economic analysis considers the impacts of this designation out to 10 years because the activities and resulting impacts across the study area become uncertain beyond this timeframe (Industrial Economics 2014). Although we are limited in our ability to predict future impacts, we do expect that development patterns will also migrate inland overtime to reflect the changing shoreline in Hawaii and to ensure stability of the project as well as to protect Hawaii's natural coastlines and resources.

Critical habitat applies only to section 7 of the ESA, which applies only to Federal agencies (see Comment 17). During consultations, Federal agencies use the best available information to avoid destruction or adverse modification of critical habitat. For purposes of section 7 consultation under the ESA, there is no requirement to obtain a State certified shoreline. We are satisfied that our definition provides sufficient notice to the public and Federal agencies that their activities may affect essential features within designated areas and may require consultation. We note, however, that projects may be required to provide this certification to meet other Federal or State regulatory or permitting requirements independent of this critical habitat designation. As noted in earlier responses to comments and the economic analysis, modification recommendations associated with Hawaiian monk seal critical habitat, if any, are likely to be project-specific, based on the location

and scope of the project. Accordingly, there are no designation-wide established setback guidelines.

*Comment 64:* Several comments stated that the impacts to the State's energy projects were not fully realized in the draft economic analysis for this proposed rule. Particularly, the State Department of Business, Economic Development and Tourism (DBEDT) presented concerns that the Hawaii Clean Energy Initiative to reduce Hawaii's dependence on imported fossil fuels by 70 percent by 2030 may be hindered by the designation. Renewable energy projects that would help support this goal include on-shore wind, solar, geothermal, wave energy, ocean energy, and off-shore wind resources. Currently there are several projects in the areas of ocean thermal energy conversion on the island of Hawaii and off the coast of Oahu, wave energy projects near Kaneohe Marine Corps Base and off the coast of Maui, sea water air conditioning on Oahu, as well as proposed off-shore wind energy in Hawaii's windward areas. The proposed rulemaking could hinder progress in developing a new energy industry and affect jobs or job growth in Hawaii.

*Response:* We have updated the economic analysis after considering public comments requesting a more complete description of the economic impacts of this designation. For energy impacts in particular, the Hawaii State Energy Office provided additional information which is captured in Chapter 6 of the final economic analysis (Industrial Economics 2014). The expected impact to energy projects over the next 10 years is \$7,740 per year. This cost reflects additional administrative effort to consider critical habitat designation as part of formal consultation on seven proposed energy developments in marine or coastal habitat in the MHI, including wind, geothermal, and

wave energy projects mentioned in the comment. Even with the additional information provided by the State, the final economic analysis indicates that impacts to these types of activities are expected to be low, in part because these activities are already subject to many conservation requirements that provide existing baseline protections for Hawaiian monk seal essential features. Further, the protective measures that have been identified for the PEIS prepared by the State and the Bureau of Ocean Energy Management, for Hawaii's energy development provides best management practices that largely complement our recommendations to avoid adverse modification (Industrial Economics 2014). In addition, recommendations for this PEIS also include avoiding Hawaiian monk seal pupping and haul-out areas.

*Comment 65:* Comments submitted through the public comment process by the Hawaiian monk seal recovery team noted that there is a common misconception that critical habitat may affect every activity that occurs within it, when in fact many activities will not be affected at all. They recommended that NMFS develop some tentative positions describing what will be involved in management of critical habitat that provide potentially affected parties with a clearer understanding of what this means to them, particularly with regard to fisheries that have a Federal nexus and would be subject to section 7 review.

*Response:* We agree that protections associated with critical habitat are commonly misunderstood and we have revised the biological report (NMFS 2014a) and economic analysis (Industrial Economics 2014), as well as provided information throughout this rule to clarify the types of activities that have a Federal nexus and are likely to be subject to Federal ESA section 7 consultation as a result of this designation. In particular,

Chapter 4 of the economic analysis provides an in-depth look at activities, including federally managed fisheries, which have a Federal nexus, and the expected impacts associated with future consultations.

*Comment 66:* Several comments indicated that the draft economic analysis (EcoNorthwest 2010) did not adequately address impacts of the designation to specific Native Hawaiian activities. One comment noted that impacts to Native Hawaiian activities, including traditional and cultural practices, traditional fishing, taro farming and gathering practices were not adequately addressed.

*Response:* The final economic analysis (Industrial Economics 2014) provides an in-depth analysis of the potential impacts of this designation on Native Hawaiian activities in Chapters 4 and 12 as they relate to fishing activities. As noted in our response to Comment 51, if there is no Federal authorization, permit, or funding associated with the activity (i.e., no Federal agency action exists), the activity is not subject to section 7 of the ESA. To the extent that Native Hawaiian activities may seek Federal grants or approval, ESA consultation may be required and we will work with Federal agencies to ensure that the federally-funded or approved activity would not result in destruction or adverse modification of Hawaiian monk seal critical habitat.

*Comment 67:* Comments requested that NMFS clarify how fishponds may be affected by the designation. One comment requested clarification regarding what “existing” structures means in the proposed rule, and whether repairs, restorations or extensions of existing fishponds will be affected by the designation. Another commenter questioned whether fishponds are excluded from the designation.

*Response:* The Hawaiian monk seal critical habitat designation does not include areas of manmade structures in existence prior to the effective date of the rule (see DATES section), including fishponds. These manmade structures do not meet the definition of Hawaiian monk seal critical habitat (see the revisions to 50 CFR §226.201 below). This exclusion includes structures that are in disrepair, but persisting in the environment. As noted in the economic analysis (Industrial Economics 2014) activities associated with building, repair, or restoration of fishponds in Hawaiian waters are subject to Federal permitting under the U.S. Army Corps of Engineers and already undergo section 7 consultation to ensure that activities are not likely to jeopardize Hawaiian monk seals. All past consultations have been informal in that adverse impacts to monk seals are unlikely to occur, and only one has been along a coastline included in the designation.

Fishponds in need of repair or restoration that are present prior to the effective date of the designation are not within Hawaiian monk seal critical habitat and ESA consultations are expected to remain largely similar to the current requirements, though the economic analysis (Industrial Economics 2014) conservatively estimates that these consultations may be subject to some administrative costs associated with ensuring that activities are not likely to destroy or adversely modify adjacent areas of critical habitat. These costs are calculated with expected impacts to aquaculture activities in the Hawaiian Islands and are projected to be approximately \$1,120 per year. For new fishponds (where no previous structure exists), similar to new construction, location and the scope of the activity will play the largest roles in determining what essential features may be affected and what modifications may be recommended to meet Federal obligations under the

ESA. We found no information to indicate that new fishponds are under consideration within areas being designated for Hawaiian monk seal critical habitat.

*Comment 68:* The Clean Islands Council indicated that the use of dispersants is pre-authorized for oil spill response in and around a majority of the Hawaiian Islands, and it provides a powerful tool to help mitigate the potential impacts of a large oil spill. Currently a “net environmental benefit” decision is made by the Unified Command, which weighs the impacts to multiple elements, including wildlife, and decides if dispersants are appropriate for a specific spill incident. The Clean Islands Council expressed concern that the proposed regulation would be used by some individuals as a means to prevent the use of dispersants in the event of a large oil spill and requested that the rule include language that recognizes the special circumstances of an emergency oil spill response, reinforces the current policies of the Regional Response Team, and recognizes the value of enabling the cognizant Unified Command to use all the response tools at their disposal.

*Response:* We have added additional information to the Special Management Considerations or Protection section of the biological report (NMFS 2014a) detailing how decisions are made consistent with Hawaii’s Area Contingency Plan to protect sensitive habitat, including those areas used by Hawaiian monk seals. As recognized by the comment, decisions during an oil spill are made by the Unified Command, under the direction of the Federal On-scene Coordinator. We note, however, that in an oil spill, the Federal action is the response activity, not the spill itself. Accordingly, under the ESA, Federal agencies continue to have the responsibility to ensure that their response activities are not likely to jeopardize listed species or destroy or adversely modify critical

habitat and, to this end, must consult with NMFS and/or the USFWS when adverse impacts may result. The ESA and its implementing regulations recognize the necessity to respond immediately to emergencies and provide special procedures that allow Federal agencies the latitude necessary to complete their emergency responses in order to secure human life and property, while still providing them with protections that normal compliance under the ESA would have afforded. In addition, an inter-agency Memorandum of Agreement sets forth principles for cooperation and understanding among agencies involved in ESA compliance at every stage of oil spill planning and response (available at <http://www.nmfs.noaa.gov/op/pds/documents/02/301/02-301-25.pdf>). To this end, NMFS provides expertise during the emergency response planning process, as well as through emergency consultation, to identify any measures that may minimize and mitigate impacts on the species and their habitat. We do not expect the designation to alter this planning process as decisions are made based on area-specific factors associated with the spill.

#### *Benefits of Critical Habitat*

*Comment 69:* Twenty-eight nongovernmental organizations submitted a comment suggesting that the designation would protect seals' habitat by providing a refuge for monk seals and protect Hawaii's beaches by preventing projects from interfering with beach access, degrading ocean quality, or contributing to shoreline armament.

*Response:* As noted in our response to comment 16, the protections associated with a critical habitat designation are limited to activities that are carried out, funded or authorized by a Federal agency. We agree that these protections are meant to safeguard the essential features that will support Hawaiian monk seal recovery and that natural

coastal areas may be provided some ancillary benefits from these protections. To the extent that the activities mentioned above are linked to Federal activities that are likely to result in destruction or adverse modification of Hawaiian monk seal critical habitat, this designation may provide protections for Hawaii's beaches.

Finally, while we agree that this critical habitat designation may be expected to provide conservation benefits to monk seals, we want to be clear that it does not establish a refuge for monk seals. As discussed above, a critical habitat designation requires Federal agencies to consult to ensure that their activities are not likely to destroy or adversely modify critical habitat. A critical habitat designation does not directly limit private activities conducted on designated lands, nor does it restrict, regulate, or prohibit access to those areas. References to critical habitat areas as being refuges or preserves can be misleading and can potentially undermine public support for designation.

*Comment 70:* We received several comments that either expressed concern or disbelief that a revised critical habitat designation would provide benefits to the Hawaiian monk seal. Comments that expressed concern often questioned what additional benefits the designation could provide the species, especially in the MHI where the population appears to be doing well. One such commenter requested further explanation of the benefits to the species and questioned whether a critical habitat designation is actually something that is going to help or if it's required. One of these commenters suggested that NMFS did not consider this designation to be a necessary action because it was not included in the suite of recovery and management actions listed under the PEIS and was instead initiated by petition. This commenter went on to assert that the USFWS identified

in the final critical habitat rule for the Mexican spotted owl that designation of critical habitat provides little additional protection to most listed species.

*Response:* We disagree that there are no benefits to the designation of critical habitat. At a minimum, this designation protects the essential features that will support Hawaiian monk seal recovery and ensures that Federal agencies, through the Federal section 7 consultation process, consider the impacts of their activities and projects on Hawaiian monk seal critical habitat. Further, including the MHI in this revised designation indicates the significant role that this habitat will play in Hawaiian monk seal recovery and provides stakeholders with educational information to support Hawaiian monk seal conservation.

The Benefits of Designation section of this final rule provides a description of the benefits associated with the designation of critical habitat for the Hawaiian monk seal. In addition, our response to comment 5 discusses why these protections are different and important compared to other protections that are currently in place for coastal and marine resources, and our response to comment 4 describes our purpose for revising this designation.

*Comment 71:* We received many comments that acknowledged the benefits that critical habitat designation provides for listed species as well as the benefits it provides for the listed species' resources and communities using those resources. Some of these comments described critical habitat as a planning tool for future development. These comments generally expressed approval for providing increased scrutiny on large development or government projects and often mentioned that the protections established through this review may benefit communities using those resources. One comment stated

that critical habitat would disseminate enhanced information for natural resource planning at the Federal, State, and local levels as well as increase access to information about projects or activities that may affect the coastal areas, and raise public awareness about the ecosystem in general.

*Response:* We agree that critical habitat may be seen as a tool to support thoughtful and well planned development at the Federal, State, or local levels because critical habitat designations provide important information about the resources that listed species depend upon for recovery. Additionally, we agree that protections associated with the designation of Hawaiian monk seal critical habitat may provide some ancillary benefits to communities or species using the same resources.

*Comment 72:* One comment acknowledged the important role that critical habitat plays in incorporating seal protection into Hawaii's local planning and developing decisions and stated that the critical habitat rule change was an important step in educating the government officials and civic and business leaders who design Hawaii's communities. This commenter also asserted that, currently, only a handful of Hawaii's leaders have taken an interest in the decline of the monk seal and more leadership is needed to develop public policies that secure Hawaiian monk seal critical habitat rather than hinder seal habitat. The commenter also suggested that the designation would provide further education and a cultural acknowledgement to the public about sharing resources with the monk seal, which is important to the public's understanding of their role in the recovery of the monk seal.

*Response:* We agree that a revised Hawaiian monk seal critical habitat designation provides important and up-to-date educational information about the

ecological needs of the species to support thoughtful and well planned development at the Federal, State, or local levels, regardless of whether these entities are bound by the provisions of section 7 of the ESA. We believe that successful recovery planning for Hawaiian monk seals will depend on the support of all levels of government as well as Hawaii's communities. To gain this support, we will continue to work with all stakeholder groups to provide further education about the ecology of this endangered seal and encourage stakeholders to take an active role in the recovery of this species.

*Comment 73:* One comment stated that the draft economic analysis (EcoNorthwest 2010) may have undervalued the benefits of the critical habitat designation. This commenter suggested that the designation may lead to more monk seal related tourism, enhance a tourist's experience, and/or bring additional tourism to areas commonly used by seals. The designation also provides an educational benefit, which may create a greater general awareness of anthropogenic threats to the ocean and increase ocean conservation. This commenter also agreed with the draft economic analysis that the critical habitat designation could lead to cleaner water, reductions of pollution, and limits on coastal development that will benefit ocean goers and users.

*Response:* As noted in the final economic analysis (Industrial Economics 2014), the benefits of a critical habitat designation are difficult to quantify and monetize, because we are unable to measure how this designation may support Hawaiian monk seal population growth and recovery separately from all other actions that are taken to support this species. We also lack data on the public's willingness to pay for any incremental change to support Hawaiian monk seal recovery. Lacking this information, the final economic analysis (Industrial Economics 2014) does not attempt to place a value on these

benefits; rather it provides a qualitative discussion regarding the value that the public may place on Hawaiian monk seal conservation as well as the ancillary benefits that may result from designation. We have no information that suggests that the designation will affect tourism either by enhancing or detracting from the industry specifically. However, the economic analysis report (Industrial Economics 2014) does recognize, and we agree, that conservation efforts taken for the monk seal to minimize impacts to the marine and/or coastal environment may protect the health of these ecosystems and as well as those people or species that use these areas for other purposes.

#### *General Comments*

*Comment 74:* The Marine Mammal Commission commented that “critical habitat is one of the least well understood recovery tools that Federal agencies have to promote species recovery. Given the anxiety that the term often causes among the public, it is worth noting that critical habitat regulations apply only to actions that Federal agencies authorize, fund, or carry out. They do not apply directly to the public, nor are they aimed at restricting the activities of the public.”

*Response:* We agree that the protections associated with critical habitat are often misunderstood and/or misconstrued. Our response to comment 14 provides further detail about the protections that apply to critical habitat, and attempts to clarify misconceptions that we received in public comments.

*Comment 75:* We received multiple comments that requested that NMFS provide additional outreach and education about critical habitat to allay common misconceptions or fears about the proposed designation. Several of these comments noted that this regulatory effort was easily confused with the Hawaiian Monk Seal Recovery Action

PEIS and that NMFS should attempt to clarify the two conservation initiatives. One comment questioned why the PEIS was not included as part of the critical habitat proposal and suggested that there must be an administrative policy to minimize duplication.

*Response:* We recognize that the proposed critical habitat rule and the Hawaiian Monk Seal Recovery Action PEIS may have confused some people because these two conservation actions were moving forward at the same time. However, the two actions are distinct in the role they play in supporting Hawaiian monk seal conservation and proceed under separate legal authorities. Below we provide more detail about the distinct nature of these actions.

Critical habitat is a regulatory protection established to protect habitat from the adverse impacts of Federal activities under section 4 of the ESA. The Services are required, when prudent and determinable, to identify critical habitat for newly listed species and from time to time the Services may revise a designation to reflect current information about the species' recovery needs. This revision to Hawaiian monk seal critical habitat was prompted by a petition under section 4 of the ESA (see our response to comment 13). As discussed in our response to comment 10, we are not required to complete a NEPA analysis for the proposed rule. The final designation is codified in the Code of Federal Regulations (CFR), and identifies the critical habitat areas subject to section 7 requirements. Once critical habitat is designated, all Federal agencies are responsible for insuring that actions that they carry out, authorize, or fund are not likely to destroy or adversely modify critical habitat for a listed species under section 7 of the ESA.

The PEIS for Hawaiian Monk Seal Recovery Actions was an analysis to evaluate the impacts of research and management actions to be executed by NMFS to support Hawaiian monk seal recovery over a 10-year period that require scientific research and enhancement permits under section 10 of ESA, as well as under the MMPA. Actions proposed in the PEIS were subject to NEPA and a draft PEIS was prepared and released to the public for review and comment, identifying the potential environmental impacts of the proposed actions on the environment. Because the research and enhancement activities are separate and distinct from the critical habitat revision, and involve different public processes to implement, they were not combined as one action. However, since NMFS will be funding and authorizing the research activities within designated areas of Hawaiian monk seal critical habitat (in the NWHI), NMFS is responsible for ensuring that the activities carried out under research and enhancement permits, as analyzed in the PEIS, are not likely to destroy or adversely modify critical habitat. More information about these activities may be found at:

*<http://www.nmfs.noaa.gov/pr/permits/eis/hawaiianmonkseal.htm>.*

Finally, we reopened the public comment period for the proposed critical habitat rule for an additional 60 days after the PEIS comment period was closed to ensure that the public was able to comment on both the PEIS and the proposed critical habitat designation. In addition, we increased our efforts to provide clarification to the public, and local, State and Federal agencies and officials.

*Comments 76:* We received several comments regarding the regulatory process associated with the critical habitat designation and how public comments were received and considered. Some comments expressed concern that the public was not given an

appropriate amount of time or opportunities to provide input to the process, while other comments suggested that the decision had been finalized prior to coming out for public comment. One comment requested public hearings on all main islands.

*Response:* Our discussion at the beginning of the Summary of Comments and Responses section describes the number and timing of opportunities for public comment. We provided 150 days for public comment, well in excess of the minimum 60 days required for a proposed rule to revise critical habitat (50 CFR 424.16(c)(2)). We believe that this process allowed for robust public participation and meaningful opportunities for concerned citizens to comment on this proposed action. We considered all comments received throughout the comment period and at the public hearings pertaining to Hawaiian monk seal critical habitat prior to issuing this final rule.

### **Critical Habitat Identification**

In the following sections, we describe our methods for evaluating the areas considered for designation of critical habitat, our final determinations, and the final critical habitat designation. This description incorporates the changes described above in response to public comments and peer reviewers' comments.

#### *Methods and Criteria Used to Identify Critical Habitat*

In accordance with section 4(b)(2) of the ESA and our implementing regulations (50 CFR Part 424), this final rule is based on the best scientific information available concerning the range, habitat, biology, and threats to habitat for Hawaiian monk seals.

To assist with the final Hawaiian monk seal critical habitat, we reconvened the CHRT. The CHRT used the best available scientific data and its best professional judgment to help us (1) identify the physical and biological features essential to the

conservation of the species that may require special management considerations or protection; (2) identify specific areas within the occupied area containing those essential physical and biological features; and (3) identify activities that may affect any designated critical habitat. The CHRT's evaluation and conclusions are described in the following sections, as well as in the final biological report (NMFS 2014a). We then did the remaining steps of the designation including military exclusions and 4b2.

### **Physical or Biological Features Essential for Conservation**

The ESA does not specifically define physical or biological features; however, consistent with recent designations, the Services have published a proposed rule giving examples and describing the physical or biological features as those habitat features which support the life history needs of the listed species (79 FR 27066; May 12, 2014). Physical or biological features may include, for example, specific prey species, water conditions, temperatures, or sites that support reproduction, rearing of offspring or shelter. In considering whether features are essential to the conservation of the species, the Services may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the listed species. Accordingly, the description of physical and biological features varies from one listed species to another and may be described simply by a single element or by a complex combination of characteristics depending on the ecological needs of the species. As described earlier, throughout this rule we describe the physical and biological features essential to the conservation of the Hawaiian monk seal as essential features.

#### *Essential Features*

As described above in the section, Summary of Changes From the Proposed Designation, public comments and supplementary information about Hawaiian monk seal habitat use in the MHI led us to take a closer look at the essential features we proposed for designation to protect important reproductive, resting, and foraging habitat. We have identified two terrestrial and one marine essential feature for the conservation of Hawaiian monk seals, which are described below.

*1. Terrestrial areas and adjacent shallow, sheltered aquatic areas with characteristics preferred by monk seals for pupping and nursing.*

Hawaiian monk seals have been observed to give birth and nurse in a variety of terrestrial coastal habitats; however, certain beaches may be preferred for pupping at the various atolls and islands within the range. Preferred pupping areas generally include sandy, protected beaches located adjacent to shallow sheltered aquatic areas where the mother and pup may nurse, rest, swim, thermoregulate, and shelter from extreme weather. Additionally, this habitat provides relatively protected space for the newly weaned pup to acclimate to life on its own. The newly weaned pup uses these areas for swimming, exploring, socializing, thermoregulatory cooling and the first attempts at foraging. Characteristics of terrestrial pupping habitat may include various substrates such as sand, shallow tide-pools, coral rubble, or rocky substrates, as long as these substrates provide accessibility to seals for hauling out. Some preferred sites may also incorporate areas with low lying vegetation used by the pair for shade or cover, or relatively low levels of anthropogenic disturbance. Characteristics of the adjacent sheltered aquatic sites may include reefs, tide pools, gently sloping beaches, and shelves or coves that provide refuge from storm surges and predators. Certain coastal areas with

these characteristics may attract multiple mothers to the same area year after year for birthing; however, due to the solitary nature of the species, some mothers may prefer to return to a lesser used location year after year. Accordingly, preferred areas that serve an essential service or function for Hawaiian monk seal conservation are defined as those areas where two or more females have given birth or where a single female chooses to return to the same site more than one year.

*2. Marine areas from 0 to 200 m in depth that support adequate prey quality and quantity for juvenile and adult monk seal foraging.*

Hawaiian monk seals are considered foraging generalists that feed on a wide variety of bottom-associated prey species and use a wide range of benthic habitat to maximize foraging efficiency in tropical ecosystems, which are characterized by low and variable productivity. Inshore, benthic and offshore teleosts, cephalopods, and crustaceans are commonly found in monk seal scat with 31 families of teleosts and 13 families of cephalopods currently identified (Goodman and Lowe 1998). Relative importance of particular prey species is uncertain and may vary between individuals and/or according to environmental conditions that influence productivity. Knowledge of the foraging habits of seals helps to identify areas and habitat types that are regularly used for foraging, including sand terraces, talus slopes, submerged reefs and banks, nearby seamounts, barrier reefs, and slopes of reefs and islands (Parrish *et al.* 2000; Parrish *et al.* 2002). Foraging techniques vary among individuals, but monk seals use bottom habitats to flush or pin desired prey; therefore, areas of importance to monk seals are limited in vertical height from the bottom. Although monk seals may forage at deeper depths, nearly all foraging behavior is captured at depths less than 200 m in the NWHI

and in the MHI (Stewart *et al.* 2006; NMFS 2012). Within these essential foraging areas, habitat conditions support growth and recruitment of bottom-associated prey species that support monk seals. As a marine mammal, the Hawaiian monk seal has adapted to a tropical system defined by low productivity and environmental variability by feeding on a wide variety of bottom-associated prey species across a wide range of depths; accordingly, foraging areas essential to this species incorporate a wide range of foraging areas.

### *3. Significant areas used by monk seals for hauling out, resting, or molting.*

Hawaiian monk seals use terrestrial habitat to haul out for resting and molting. Although many areas may be accessible for hauling out and are occasionally used, certain areas of coastline are more often favored by Hawaiian monk seals for these activities as demonstrated by non-random patterns in monk seal haul-out observations. These favored areas may be located close to preferred foraging areas, allow for relatively undisturbed periods of rest, and/or allow small numbers of Hawaiian monk seals to socially interact as young seals and reproductive adults. These haul-out sites are generally characterized by sandy beaches, sand spits, or low shelving reef rocks accessible to seals. Significant haul-out areas are defined by the frequency with which local populations of seals use a stretch of coastline or particular beach. To accommodate the ecology of this species as a solitary but wide-ranging pinniped, significant haul-out areas are defined as natural coastlines that are accessible to Hawaiian monk seals and frequented by Hawaiian monk seals at least 10 percent as often as the highest used haul out site(s) on individual islands, or islets. Significant haul-out areas are essential to Hawaiian monk seal conservation, because

these areas provide space that supports natural behaviors important to health and development, such as resting, molting, and social interactions.

### **Geographical Area Occupied and Specific Areas**

One of the first steps in the critical habitat process was to define the geographical area occupied by the species at the time of listing and to identify specific areas within this geographically occupied area that contain at least one of the essential features that may require special management considerations or protections. The range of the Hawaiian monk seal was defined in the 12-month finding on June 12, 2009 (74 FR 27988) as throughout the Hawaiian Archipelago and including Johnston Atoll. Using the identified range, we identified “specific areas” within the geographical area occupied by the species that may be eligible for critical habitat designation under the ESA. For an occupied area to meet the criteria of critical habitat, it must contain one or more of the essential features that may require special management considerations or protection.

We reviewed all available information on Hawaiian monk seal distribution, habitat use, and features essential to the conservation of the species. Within the occupied geographical area we identified sixteen specific areas as potential critical habitat for the Hawaiian monk seal for the proposed rule. These specific areas were identified across the NWHI and MHI. After considering public comments we did not change the definition of the geographical area occupied by the species at the time of listing. We did refine the essential features to clarify further how each feature supports Hawaiian monk seal ecology and conservation. Consequently, we re-examined the sixteen specific areas identified in the proposed rule and revised the boundaries of the specific areas to identify more precisely where those features exist. The biological report describes in detail the

methods used to assess the specific areas and provides the biological information supporting the assessment (NMFS 2014a). We present brief descriptions of the specific areas identified and reasons why they meet the definition of critical habitat for the Hawaiian monk seal, below.

#### *Specific Areas in the NWHI*

Within the NWHI, we identified ten specific areas that contain essential features for Hawaiian monk seals. Each specific area in the NWHI, unless otherwise noted, includes beach areas, sand spits and islets, including all beach crest vegetation to its deepest extent inland, lagoon waters, inner reef waters, and marine habitat through the water's edge, including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, out to the 200-m depth contour line (relative to mean lower low water) around the following 10 areas: 1) Kure Atoll, 2) Midway Islands, 3) Pearl and Hermes Reef, 4) Lisianski Island, 5) Laysan Island, 6) Maro Reef, 7) Gardner Pinnacles, 8) French Frigate Shoals, 9) Necker Island, and 10) Nihoa Island. Some areas of coastline in the NWHI lack the essential features of monk seal critical habitat because these areas are inaccessible to seals for hauling out (e.g., cliffs on Nihoa and Necker), or they lack the areas necessary to support monk seal conservation (e.g., buildings on Tern Island, Sand Island, and Green Island). Accordingly, cliffs, and manmade structures (and the land on which they are located) in existence prior to the effective date of this rule do not meet the definition of critical habitat and are not included. In areas where essential features do not extend inland, the specific area ends at a line that marks mean lower low water.

*Specific Area 1:* Located at the northwestern end of the archipelago and within the Papahānaumokuākea Marine National Monument, Kure atoll is comprised of the major island, Green Island, and a few small sand spits. Kure atoll supports one of the 6 major NWHI breeding subpopulations described under the NMFS stock assessment for the species (Carretta *et al.* 2013). The Atoll provides habitat and characteristics that support all three essential features for Hawaiian monk seal conservation, and the specific area is estimated to include 124 mi<sup>2</sup> (321 km<sup>2</sup>) of marine and terrestrial habitat. Manmade structures (and the land on which they are located) in existence prior to the effective date of this rule do not meet the definition of critical habitat and are not included in the specific area.

*Specific Area 2:* Located northwest of Honolulu and within the Papahānaumokuākea Marine National Monument, Midway Islands consists of three islands, Sand, Eastern, and Spit, located within a circular-shaped atoll. Midway Islands support one of the 6 major NWHI breeding subpopulations described under the NMFS stock assessment for the species (Carretta *et al.* 2013). The islands and surrounding atoll provide habitat and characteristics that support all three essential features for Hawaiian monk seal conservation, and the specific area is estimated to include 137 mi<sup>2</sup> (354 km<sup>2</sup>) of marine and terrestrial habitat. Although not included in the 1988 critical habitat designation, Sand Island is included here because it supports Hawaiian monk seal preferred pupping areas and significant haul-out areas. Today Sand Island supports a full time refuge staff, including residents that support and maintain a runway and a visitor program. Manmade structures (and the land on which they are located) in existence prior

to the effective date of this rule do not meet the definition of critical habitat and are not included in the specific area.

*Specific Area 3:* The first land area southeast of Midway and within the Papahānaumokuākea Marine National Monument, the atoll of Pearl and Hermes Reef, consists of numerous islets, seven of which are above sea level. Pearl and Hermes Reef's support one of the 6 major NWHI breeding subpopulations described under the NMFS stock assessment for the species (Carretta *et al.* 2013). The islands and surrounding atoll provide habitat and characteristics that support all three essential features for Hawaiian monk seal conservation, and the specific area is estimated to include 289 mi<sup>2</sup> (749 km<sup>2</sup>) of marine and terrestrial habitat. Manmade structures (and the land on which they are located) in existence prior to the effective date of this rule do not meet the definition of critical habitat and are not included in the specific area.

*Specific Area 4:* The single island of Lisianski and its surrounding reef is located about 1,667 km northwest of Honolulu within the Papahānaumokuākea Marine National Monument. This low sandy island measures approximately 1.8 km long and 1.0 km wide (NMFS 1983). Lisianski supports one of the 6 major NWHI breeding subpopulations described under the NMFS stock assessment for the species (Carretta *et al.* 2013). The island and surrounding marine areas provide habitat and characteristics that support all three essential features for Hawaiian monk seal conservation, and the specific area is estimated to include 469 mi<sup>2</sup> (1,214 km<sup>2</sup>) of marine and terrestrial habitat.

*Specific Area 5:* Laysan Island is the second largest land area in the NWHI located within the Papahānaumokuākea Marine National Monument. This coral-sand island encloses a hyper-saline lake in the middle of the island. Laysan supports one of the

6 major NWHI breeding subpopulations described under the NMFS stock assessment for the species (Carretta *et al.* 2013). The island is about 1.5 miles long (2.4 km) and 1 mile (1.6 km) wide and is partially surrounded by a fringing reef. The island and surrounding marine habitat provide habitat and characteristics that support all three essential features for Hawaiian monk seal conservation, and the specific area is estimated to include 220 mi<sup>2</sup> (570 km<sup>2</sup>) of marine and terrestrial habitat. Manmade structures (and the land on which they are located) in existence prior to the effective date of this rule do not meet the definition of critical habitat and are not included in the specific area.

*Specific Area 6:* Maro Reef is the largest coral reef in the NWHI, located on top of a seamount and within the Papahānaumokuākea Marine National Monument. The reef is a complex maze of linear reefs that radiate out from the center and provide foraging habitat for the Hawaiian monk seal. This specific area incorporates approximately 776 mi<sup>2</sup> (2,009 km<sup>2</sup>) of marine habitat.

*Specific Area 7:* Gardener Pinnacles consists of two pinnacles of volcanic rock between Maro Reef and French Frigate Shoals and within the Papahānaumokuākea Marine National Monument. Underwater shelves surround the pinnacles, and land and the marine habitat within this specific area was estimated to be approximately 957 mi<sup>2</sup> (2,478 km<sup>2</sup>). Home to a wide variety of prey species, Gardner Pinnacles provides marine foraging habitat and haul-out area for the Hawaiian monk seal (NMFS 1983).

*Specific Area 8:* French Frigate Shoals atoll, open to the west and partially enclosed by a crescent-shaped reef to the east, is located within the Papahānaumokuākea Marine National Monument. The Atoll lies about midpoint in the Hawaiian Archipelago and consists of several small sandy islets, the largest of which is Tern Island. French

Frigate Shoals supports one of the 6 major NWHI breeding subpopulations described under the NMFS stock assessment for the species (Carretta *et al.* 2013). The islands and surrounding marine habitat provide all three essential features for the Hawaiian monk seal conservation, and the specific area is estimated to include 367 mi<sup>2</sup> (950 km<sup>2</sup>) of marine and terrestrial habitat. Manmade structures (and the land on which they are located) in existence prior to the effective date of this rule do not meet the definition of critical habitat and are not included in the specific area.

*Specific Area 9:* The Island also known as Mokumanamana is a small basalt island that is about 46 acres (19 hectares) in size and is located within the Papahānaumokuākea Marine National Monument. Habitat used by Hawaiian monk seals includes accessible rocky benches for hauling out, marine habitat for foraging, and areas where pupping has been recorded. Although the island is small in size, marine habitat surrounding the island is large. The islands and surrounding marine habitat provide habitat and characteristics that support all three essential features for Hawaiian monk seal conservation, and the specific area was estimated to be approximately 592 mi<sup>2</sup> (1,533 km<sup>2</sup>), including land and marine habitat.

*Specific Area 10:* Nihoa is the easternmost island described in the NWHI within the Papahānaumokuākea Marine National Monument. The Island consists of a remnant volcanic peak with large foot cliffs, basalt rock surface, and a single beach. Hawaiian monk seals use the single beach and some accessible rock ledge areas for hauling out and giving birth. The islands and surrounding marine habitat provide habitat and characteristics that support all three essential features for Hawaiian monk seal

conservation. The specific area is estimated to be approximately 214 mi<sup>2</sup> (554 km<sup>2</sup>) incorporating all land and marine habitat.

### *Specific Areas in the MHI*

Within the MHI, we identified six specific areas that contain essential features for Hawaiian monk seals. In the MHI, unless otherwise noted, specific areas are defined in the marine environment by a seaward boundary that extends from the 200-m depth contour line (relative to mean lower low water), including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, through the water's edge into the terrestrial environment where the inland boundary extends 5 m (in length) from the shoreline between identified boundary points listed in the table below around the following areas: (i) Kaula Island, (ii) Niihau, (iii) Kauai, (iv) Oahu, (v) Maui Nui (including Kahoolawe, Lanai, Maui, and Molokai), and (vi) Hawaii. The shoreline is defined as the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth or the upper limit of debris. Locations for coastal segments included in the designation of each MHI specific area are described in Table 1. Some areas of coastline in the MHI lack the essential features of monk seal critical habitat because these areas are inaccessible to seals for hauling out or they lack the natural areas necessary to support monk seal conservation (e.g., cliffs on Lanai, buildings set close to the water, seawalls, riprap, or breakwaters). Accordingly, cliffs and manmade structures such as docks, seawalls, piers, fishponds, roads, pipelines, boat ramps, platforms, buildings and pilings in existence prior to the effective date of the rule, do not meet the definition of critical habitat and are not included in the designation. In

areas where essential features do not extend inland, the specific area ends at a line that marks mean lower low water.

*Specific Area 11:* This specific area includes only the marine areas that surround the island of Kaula. These marine areas provide important foraging areas for Hawaiian monk seal conservation, which likely supports seals that are resident to the island of Niihau, but may also support some NWHI seals. The islet is located on a shoal that supports a large variety of marine life and is surrounded by 26 mi<sup>2</sup> (66 km<sup>2</sup>) of marine habitat that falls within the 200-m depth contour. The U.S. Navy has jurisdiction over the island and the 3-nautical mile (5.6 km) danger zone surrounding the island.

*Specific Area 12:* This specific area includes marine habitat from 10 m in depth out to the 200-m depth contour line around the island of Niihau and including the marine habitat and terrestrial shorelines surrounding Lehua islet. The specific area is located southwest of Kauai and provides approximately 115 mi<sup>2</sup> (298 km<sup>2</sup>) of marine foraging habitat that supports the largest number of seals in the MHI. As a privately owned island, access to Niihau is limited to Niihau residents, the U.S. Navy, and invited guests. Lehua Island, a tuff crater located a half mile (0.8 km) north of Niihau, provides shelves and benches that provide significant haul-out areas for Hawaiian monk seals. Lehua is administered by the U.S. Coast Guard, and activities are subject to Hawaii Department of Land and Natural Resources regulations because it is a Hawaii State Seabird Sanctuary. The coastal habitat around Lehua is included in the specific area.

*Specific Area 13:* Kauai's beaches and coastline are used by Hawaiian monk seals, and approximately 28 mi (45 km) of the Island's coastline provides habitat that supports preferred pupping and nursing areas and significant haul-out areas that are

essential to Hawaiian monk seal conservation. In addition, marine waters surrounding the Island of Kauai provide marine foraging areas that are essential to Hawaiian monk seal conservation. The specific area incorporates 215 mi<sup>2</sup> (557 km<sup>2</sup>) of marine habitat.

*Specific Area 14:* Oahu is the third largest island in the MHI chain. Oahu's beaches and coastline are used by Hawaiian monk seals and approximately 48 mi (78 km) of the Island's coastline provides habitat that supports preferred pupping and nursing areas and significant haul-out areas that are essential to Hawaiian monk seal conservation. In addition, marine waters surrounding the Island of Oahu provide marine foraging areas that are essential to Hawaiian monk seal conservation. The specific area incorporates 363 mi<sup>2</sup> (940 km<sup>2</sup>) of marine habitat.

*Specific Area 15:* Maui Nui includes the islands Molokai, Lanai, Kahoolawe, and Maui and the surrounding marine waters. This specific area incorporates 1,445 mi<sup>2</sup> (3,742 km<sup>2</sup>) of marine habitat, 72 mi (116 km) of coastline on Maui, 7 miles (12 km) of coastline on Molokai, 31 miles (49 km) of coastline on Lanai, and 7 miles (12 km) of coastline on Kahoolawe. Molokai and Kahoolawe's coastlines provide habitat that supports preferred pupping and nursing areas and significant haul-out areas that are essential to Hawaiian monk seal conservation. Coastlines on Lanai and Maui provide significant haul-out areas that support Hawaiian monk seal conservation, and marine waters surrounding the Maui Nui area provide marine foraging areas that are essential to Hawaiian monk seal conservation.

*Specific Area 16:* Hawaii is the largest island in the MHI. The specific area incorporates 404 mi<sup>2</sup> (1048 km<sup>2</sup>) of marine habitat. Although the number of seals using this habitat is small, Hawaii's beaches and coastline are used by Hawaiian monk seals

and approximately 49 mi (79 km) of the island's coastline provides habitat that supports preferred pupping and nursing areas and significant haul-out areas that are essential to Hawaiian monk seal conservation. In addition, marine waters surrounding the Island of Hawaii provide marine foraging areas that are essential to Hawaiian monk seal conservation.

**TABLE 1 – MAIN HAWAIIAN ISLAND TERRESTRIAL SPECIFIC AREA SEGMENT LOCATIONS.**

<i>Area</i>	<i>Island</i>	<i>Textual Description of Segment</i>	<i>Boundary Points</i>	<i>Latitude</i>	<i>Longitude</i>
13	Kauai	Southeast coast of Kauai (Nomilu Fishpond area through Mahaulepu)	KA 11	21°53'08"N	159°31'48"W
			KA 12	21°53'34"N	159°24'25"W
13	Kauai	Kaweliko Point to Molehu	KA21	21°54'26"N	159°23'26"W
			KA22	21°54'48"N	159°23'08"W
13	Kauai	Lydgate Park through Wailua canal	KA 31	22°02'11"N	159°20'08"W
			KA 32	22°02'41"N	159°20'11"W
13	Kauai	Wailua canal through Waikaea canal	KA 41	22°02'45"N	159°20'10"W
			KA 42	22°04'14"N	159°18'60"W
13	Kauai	Waikaea canal through Kealia	KA 51	22°04'15"N	159°19'01"W
			KA 52	22°05'59"N	159°18'08"W
13	Kauai	Anahola and Aliomanu areas	KA 61	22°07'46"N	159°17'35"W
			KA 62	22°09'28"N	159°18'18"W
13	Kauai	Moloaa Bay through Kepuhi Point	KA 71	22°11'38"N	159°19'46"W
			KA 72	22°12'52"N	159°21'14"W
13	Kauai	Southeast of Kilauea	KA 81	22°13'48"N	159°23'52"W
			KA 82	22°13'55"N	159°24'06"W
13	Kauai	Wainiha Beach Park through Kee Beach Park	KA 91	22°12'60"N	159°32'30"W
			KA 92	22°13'13"N	159°35'01"W
13	Kauai	Milolii State Park Beach Area	KA101	22°09'13"N	159°42'52"W
			KA102	22°08'59"N	159°43'21"W
14	Oahu	Keana Point Area	OA 11	21°34'43"N	158°15'37"W
			OA 12	21°32'45"N	158°14'25"W
14	Oahu	Maili Beach through Kalaeloa Barbers Point Harbor	OA 21	21°25'43"N	158°10'48"W
			OA 22	21°19'24"N	158°07'20"W
14	Oahu	Kalaeloa Barbers Point Harbor through Iroquois Point	OA 31	21°19'18"N	158°07'17"W
			OA 32	21°19'20"N	157°58'17"W
14	Oahu	Diamond Head area	OA 41	21°15'27"N	157°49'05"W
			OA 42	21°15'24"N	157°47'45"W
14	Oahu	Hanauma Bay through Sandy Beach	OA 51	21°16'05"N	157°41'50"W
			OA 52	21°17'45"N	157°39'27"W
14	Oahu	Makapuu Beach Area	OA 61	21°18'36"N	157°39'31"W
			OA 62	21°18'58"N	157°39'55"W
14	Oahu	Lori Point through Waimea Bay	OA 71	21°40'26"N	157°56'00"W
			OA 72	21°38'18"N	158°03'56"W
14	Oahu	Kapapa Island (Kaneohe Bay)	OAi1	21°28'36"N	157°47'55"W
14	Oahu	Mokulua - Moku Nui	OAi2	21°23'30"N	157°41'56"W

14	Oahu	Mokulua - Moku Iki	OAI3	21°23'16"N	157°41'52"W
14	Oahu	Manana (Rabbit Island)	OAI4	21°19'44"N	157°39'24"W
15	Molokai	Laau Point Area	MO 11	21°07'49"N	157°17'47"W
			MO 12	21°05'21"N	157°15'50"W
15	Molokai	Kalaupapa Area	MO 21	21°12'33"N	156°58'52"W
			MO 22	21°11'28"N	156°59'06"W
15	Molokai	Moku Hooniki	MOi1	21°07'59"N	156°42'10"W
15	Lanai	Shipwreck Beach Area	LA 11	20°54'45"N	156°53'45"W
			LA 12	20°55'20"N	156°56'45"W
15	Lanai	Northwest Lanai (Including Polihua Beach)	LA 21	20°55'42"N	156°59'47"W
			LA 22	20°52'02"N	157°02'33"W
15	Lanai	North of Kamalapau Harbor	LA 31	20°48'38"N	156°59'15"W
			LA 32	20°47'17"N	156°59'24"W
15	Lanai	Kamalapau Harbor through Kaholo Pali	LA 41	20°47'13"N	156°59'27"W
			LA 42	20°46'59"N	156°59'31"W
15	Lanai	Kaholo Pali through Manele Harbor	LA 51	20°44'13"N	156°58'01"W
			LA 52	20°44'29"N	156°53'15"W
15	Lanai	Manele Harbor through Nakahale Cliff	LA 61	20°44'35"N	156°53'14"W
			LA 62	20°44'49"N	156°52'16"W
15	Lanai	Nakahale Cliff through Lopa Beach	LA 71	20°45'07"N	156°51'50"W
			LA 72	20°48'21"N	156°48'24"W
15	Lanai	Puupehe*	LAi1	20°44'04"N	156°53'25"W
15	Kahoolawe	Mid-North coast (including Kaukamoku and Ahupuiki)	KH 11	20°34'36"N	156°37'36"W
			KH 12	20°34'10"N	156°38'15"W
15	Kahoolawe	Eastern coast of Kahoolawe (Honokoia through Sailer's Hat)	KH 21	20°33'08"N	156°40'35"W
			KH 22	20°30'04"N	156°40'23"W
15	Maui	Kuloa Point through Hana Wharf and Ramp	MA 11	20°40'02"N	156°02'27"W
			MA 12	20°45'21"N	155°58'54"W
15	Maui	Hana Wharf and Ramp through Kainalimu Bay	MA 21	20°45'20"N	155°58'56"W
			MA 22	20°46'08"N	155°59'04"W
15	Maui	Keanae Peninsula to Nauailua Bay	MA 31	20°51'56"N	156°08'46"W
			MA 32	20°51'41"N	156°08'55"W
15	Maui	Maliko Bay through Papaula Point	MA 41	20°56'11"N	156°21'11"W
			MA 42	20°54'30"N	156°25'06"W
15	Maui	Kahului Harbor West through Waihee Beach Park	MA 51	20°53'53"N	156°28'47"W
			MA 52	20°56'04"N	156°30'15"W
15	Maui	Punalau Beach through to Mala Wharf	MA 61	21°01'20"N	156°37'28"W
			MA 62	20°53'09"N	156°41'10"W
15	Maui	Southeast of Mala Wharf through to Lahaina Harbor	MA 71	20°53'04"N	156°41'12"W
			MA 72	20°52'26"N	156°40'43"W
15	Maui	Southeast of Lahaina Harbor through to	MA 81	20°52'12"N	156°40'39"W
			MA 82	20°47'34"N	156°34'00"W

		Papalaua			
15	Maui	East of Maalaea Harbor through to Kihei boat ramp	MA 91	20°47'32"N	156°30'34"W
			MA 92	20°42'29"N	156°26'46"W
15	Maui	South of Kihei Boat Ramp through Ahihi Bay	MA 101	20°42'27"N	156°26'47"W
			MA 102	20°37'39"N	156°26'40"W
15	Maui	La Perouse Bay from Kalaeloa Point through Pohakueaea Point	MA 111	20°35'43"N	156°25'33"W
			MA 112	20°34'45"N	156°23'29"W
15	Maui	Molokini Crater	MAi1	20°37'51"N	156°29'43"W
16	Hawaii	Waimanu through Laupahoehoenuei	HA 11	20°08'35"N	155°37'59"W
			HA 12	20°09'54"N	155°39'18"W
16	Hawaii	Keokea Bay through Kauhola Point	HA 21	20°13'39"N	155°44'49"W
			HA 22	20°14'44"N	155°46'18"W
16	Hawaii	Kapaa Beach County Park to Mahukona Harbor	HA 31	20°12'16"N	155°54'06"W
			HA 32	20°11'04"N	155°54'05"W
16	Hawaii	South of Mahukona Harbor	HA 41	20°10'60"N	155°54'03"W
			HA 42	20°10'51"N	155°54'07"W
16	Hawaii	Pauoa Bay to Makaiwa Bay area	HA 51	19°57'03"N	155°51'49"W
			HA 52	19°56'38"N	155°52'10"W
16	Hawaii	Anaehoomalu Bay area through Keawaiki Bay area	HA 61	19°54'42"N	155°53'26"W
			HA 62	19°53'09"N	155°54'34"W
16	Hawaii	Puu Alii Bay Area through Mahaiula Bay	HA 71	19°47'37"N	156°01'33"W
			HA 72	19°46'53"N	156°02'18"W
16	Hawaii	Keahole Point through Kaloko-Honokohau National Historic Park	HA 81	19°43'54"N	156°03'26"W
			HA 82	19°40'28"N	156°01'34"W
16	Hawaii	South of Oneo Bay area through to Holualoa Bay area	HA 91	19°38'10"N	155°59'29"W
			HA 92	19°36'31"N	155°58'41"W
16	Hawaii	Kahaluu Bay Area through Keauhou Bay Area	HA 101	19°34'49"N	155°57'59"W
			HA 102	19°33'43"N	155°57'43"W
16	Hawaii	Kealakekua Bay Area	HA 111	19°28'38"N	155°55'13"W
			HA 112	19°28'25"N	155°55'10"W
16	Hawaii	Honaunau Bay Area	HA 121	19°25'35"N	155°55'02"W
			HA 122	19°25'01"N	155°54'42"W
16	Hawaii	Milolii Bay Area through Honomalino Bay Area	HA 131	19°11'07"N	155°54'29"W
			HA 132	19°10'04"N	155°54'35"W
16	Hawaii	Ka Lae National Historic Landmark District through Mahana Bay	HA 141	18°54'54"N	155°40'59"W
			HA 142	18°55'00"N	155°40'09"W
16	Hawaii	Papakolea Green Sand Beach Area	HA 151	18°56'10"N	155°38'47"W
			HA 152	18°56'11"N	155°38'45"W

16	Hawaii	Kaalualu Bay Area	HA 161	18°58'14"N	155°37'01"W
			HA 162	18°58'18"N	155°36'49"W
16	Hawaii	Whittington Beach Area through Punaluu Beach Area	HA 171	19°05'04"N	155°33'03"W
			HA 172	19°08'06"N	155°30'09"W
16	Hawaii	Halape Area through Keauhou Point Area	HA 181	19°16'14"N	155°15'20"W
			HA 182	19°15'45"N	155°13'59"W
16	Hawaii	Kapoho Bay Area	HA 191	19°29'38"N	154°49'01"W
			HA 192	19°30'10"N	154°48'46"W
16	Hawaii	Lehia Beach Park through to Hilo Harbor	HA 201	19°44'07"N	155°00'38"W
			HA 202	19°43'56"N	155°03'02"W
16	Hawaii	Papaikou Area	HA 211	19°46'39"N	155°05'18"W
			HA 212	19°46'43"N	155°05'18"W
16	Hawaii	Onomea Bay Area	HA 221	19°48'33"N	155°05'34"W
			HA 222	19°48'37"N	155°05'22"W
16	Hawaii	Hakalau Area	HA 231	19°54'02"N	155°07'32"W
			HA 232	19°54'05"N	155°07'43"W

## **Unoccupied Areas**

Section 3(5)(A)(ii) of the ESA defines critical habitat to include “specific areas outside the geographical areas occupied by the species at the time it is listed” if those areas are determined to be essential to the conservation of the species. In our proposed rule we stated that we did not identify any specific areas outside the geographic area occupied by Hawaiian monk seals that may be essential for the conservation of the species. We did not receive any public or peer review comments on this topic; therefore, no unoccupied areas will be included in this analysis.

## **Special Management Considerations or Protections**

An occupied area may be designated as critical habitat only if it contains physical or biological features essential to the conservation of the species that “may require special management considerations or protection.” We have identified a number of activities that may threaten or adversely affect our identified essential features and which, therefore, may require special management considerations or protection. In our proposed rule, we grouped these activities into eight categories: 1) In-water and coastal construction, 2) dredging and disposal of dredged material, 3) energy development (renewable energy projects), 4) activities that generate water pollution, 5) aquaculture, 6) fisheries, 7) oil spills and vessel groundings response activities, and 8) military activities.

We received several comments that suggested that impacts for certain activities were not recognized within the scope of our impacts analysis. In review we noted that several of these activities were included in our analysis, but that the broad title provided for the category did not make this easy to discern. We have revised the titles for several of these categories to identify more clearly the eight categories: 1) In-water and coastal

construction (including development), 2) dredging (including disposal of dredged materials), 3) energy development (including renewable energy projects), 4) activities that generate water pollution, 5) aquaculture (including mariculture), 6) fisheries, 7) environmental response activities (including oil spills, spills of other substances, vessel groundings, and marine debris clean-up activities), and 8) military activities. All of the identified activities have the potential to affect one or more of the essential features by altering the quantity, quality or availability of the essential features for Hawaiian monk seals. The biological report (NMFS 2014a) and economic analysis report (Industrial Economics 2014) provide a more detailed description of the potential effects of each category of activities and threats on the essential features.

#### **Military Areas Ineligible for Designation (section 4(a)(3) Determinations)**

The ESA precludes the Secretary from designating military lands as critical habitat if those lands are subject to an INRMP under the Sikes Act Improvement Act of 1997 (Sikes Act; <http://www.gpo.gov/fdsys/pkg/USCODE-2013-title16/pdf/USCODE-2013-title16-chap5C-subchapI-sec670.pdf>) and the Secretary certifies in writing that the plan benefits the listed species (section 4(a)(3), Pub. L. 108-136).

Refining the essential features (described above), after considering public comment and available information, has reduced the size of the specific areas under consideration for critical habitat (i.e., those areas where the essential features exist). Consequently, the overlap between areas under consideration for critical habitat and areas managed under certain DOD INRMPs has changed since the 2011 proposed designation. Additionally, since 2011, several INRMPs have been revised to incorporate new management measures as well as newly managed areas; these changes, and our

determinations as to whether the INRMP provides a benefit to the species, are discussed below. Although the Army and the Air Force provided INRMPs for review, areas under consideration for Hawaiian monk seal critical habitat no longer overlap with Army or Air Force INRMP managed areas; therefore, these INRMPs require no review under section 4(a)(3)(B)(i).

The Marine Corps' MCBH, and the Navy's PMRF and the JBPHH INRMPs continue to overlap with areas under consideration for monk seal critical habitat, and these INRMPs were reviewed in accordance with section 4(a)(3)(B)(i) of the ESA. Areas subject to the MCBH INRMP that overlap with the areas under consideration for critical habitat include the 500-yard buffer zone in marine waters surrounding the MCBH-KB on the Mokapu Peninsula, Oahu; and Puuloa Training Facility, on the Ewa coastal plain, Oahu. Overlap areas for the PMRF INRMP include Kaula Island and coastal and marine areas out to 10 m in depth around the island of Niihau, which are leased for naval training activities and use. Overlap areas for the JBPHH INRMP include Nimitz Beach, White Plains Beach, the Naval Defensive Sea Area, the Barbers Point Underwater Range, and the Ewa Training Minefield, all on Oahu.

To determine whether a plan provides a benefit to the species, we evaluated each plan with regard to the potential conservation benefits to the species, the past known implementation of management efforts, and the management effectiveness of the plan. Plans determined to be a benefit to the species demonstrated strengths in all three areas of the review. While considering the third criterion, we determined that an effective management plan must have a structured process to gain information (through monitoring and reporting), a process for recognizing program deficiencies and successes (review),

and a procedure for addressing any deficiencies (allowing for adaption for conservation needs).

Although we previously determined that the 2006 MCBH INRMP provided a benefit to the Hawaiian monk seal (76 FR 32026; June 2, 2011), the 2012 MCBH INRMP was evaluated for this final rule to ensure that conservation measures implemented under the renewed INRMP continue to provide a benefit to the Hawaiian monk seal as well as the refined essential features. In review, the MCBH INRMP identifies multiple conservation measures that may confer benefits to the Hawaiian monk seal or its habitat, including debris removal, prohibitions against lay nets and gill nets in the 500-yard buffer zone, restrictions on fishing, enforcement of established rules by a Conservation Law Enforcement Officer, interagency cooperation for rehabilitation events, use of established procedures for seal haul-out and pupping events, educational outreach for protected species (including classroom briefs, webpage, news articles, brochures, service projects, and on-site signage and monitoring), protected species scouting surveys prior to training exercises along the beach; invasive species removal (e.g., removing invasive mangroves to support native species habitat), ecological assessments in marine resources surveys and inventories, and water quality projects (minimizing erosion and pollution). Additionally, management effectiveness and plan implementation are demonstrated in the plan's appendices, which outline the conservation measures goals and objectives, provide reports and monitoring efforts from past efforts, report on the plan's implementation, and describe the achievement of the goals and objectives. Meeting all three criteria for review, we have determined that the MCBH INRMP provides a benefit to the Hawaiian monk seal and its habitat.

In 2011, we found the Navy's two INRMPs did not meet the benefit criteria established for review and identified concerns with plan implementation and management effectiveness (76 FR 32026; June 2, 2011). Since 2011, the Navy has worked with us to recognize and revise plan deficiencies. Additionally, the Navy has enhanced the management efforts associated with Hawaiian monk seal conservation that are implemented under the JBPHH and PMRF INRMPs. Plan effectiveness has been addressed for both INRMPs by including a performance monitoring element to the INRMPs, which creates an annual review with State and Federal wildlife agencies. During review, management measures and outcomes are evaluated to ensure that plan deficiencies are identified and addressed. Additionally, the Navy has enhanced the management efforts associated with Hawaiian monk seal conservation that are implemented under these INRMPs as follows. In review, the JBPHH INRMP demonstrates conservation benefits for the species, including marine debris removal, monitoring, and prevention; pet restrictions; restriction of access; protocol to prevent disturbance during naval activities; staff and public education; training to prevent ship groundings; marine mammal stranding and response training and protocols; enforcement (through base police and the game warden); and compliance and restoration programs for contaminants. Based on these benefits provided for the Hawaiian monk seal, and in combination with the concerted effort made by the Navy to enhance the plan's implementation and management effectiveness, we determined that the JBPHH INRMP provides a benefit to the Hawaiian monk seal and its habitat.

Since 2011, the Navy has revised the PMRF INRMP's monitoring plan for Kaula Island to better reflect logistical constraints and accurately identify monitoring

capabilities for this area. Additionally, the Navy has coordinated with NMFS staff to improve the effectiveness of monitoring activities for the Island. In addition to these changes, the Navy has amended the PMRF INRMP to include coastal and marine areas out to 10 m in depth surrounding the Island of Niihau, which are leased for Navy training activities and use. Conservation measures on Niihau related to Hawaiian monk seals or their habitat include the following: a coastal monitoring program for Hawaiian monk seals and sea turtles, periodic removal of feral pigs, bans on ATVs (to preserve the sand dunes and coastal areas), bans on dogs (to prevent disturbance to native wildlife), and continued limited access for guests. In review, the PMRF INRMP demonstrates elements of a successful conservation program that will benefit the species, including marine debris removal, monitoring, and prevention; trapping of feral pigs, cats, and dogs; pet restrictions; restriction of public access in certain areas; protocols to prevent wildlife disturbance; public education; training to prevent ship groundings; monk seal monitoring and reporting; and compliance and restoration programs for contaminants. Based on these benefits provided for the Hawaiian monk seal, and in combination with the concerted effort made by the Navy to enhance the plan's implementation and management effectiveness, we determined that the PMRF INRMP provides a benefit to the Hawaiian monk seal and its habitat.

In conclusion, we have determined that the INRMPs for the MCBH, the PMRF, and the JBPHH each confer benefits to the Hawaiian monk seal and its habitat, and therefore the areas subject to these INRMPs are precluded from Hawaiian monk seal critical habitat.

#### **ESA Section 4(b)(2) Analysis**

Section 4(b)(2) of the ESA requires the Secretary to consider the economic, national security, and any other relevant impacts of designating any particular area as critical habitat. Any particular area may be excluded from critical habitat if the Secretary determines that the benefits of excluding the area outweigh the benefits of designating the area. The Secretary may not exclude a particular area from designation if exclusion will result in the extinction of the species. Because the authority to exclude is discretionary, exclusion is not required for any areas. In this final designation, the Secretary has applied statutory discretion as described below to exclude five occupied areas from critical habitat where the benefits of exclusion outweigh the benefits of designation.

The first step in conducting the ESA section 4(b)(2) analysis is to identify the “particular areas” to be analyzed. The “particular areas” considered for exclusion are defined based on the impacts identified. Where we considered economic impacts and weighed the economic benefits of exclusion against the conservation benefits of designation, we used the same biologically-based “specific areas” we had identified under section 3(5)(A) (e.g., Niihau, Kauai, Oahu, etc.) above. Delineating the “particular areas” as the same units as the “specific areas” allowed us to consider the conservation value of the designation most effectively. We also considered exclusions of smaller particular areas based on impacts on national security and other relevant impacts (i.e., for this designation, impacts on areas managed by USFWS in the NWHI). Delineating particular areas based on impacts to national security or other relevant impacts was based on land ownership or control (e.g., land controlled by the DOD within which national security impacts may exist or land owned or controlled by the USFWS). The next step in the ESA section 4(b)(2) analysis involves identification of the impacts of designation

(i.e., the benefits of designation and the benefits of exclusion). We then weigh the benefits of designation against the benefits of exclusion to identify areas where the benefits of exclusion outweigh the benefits of designation. These steps and the resulting list of areas excluded from designation are described in detail in the sections below.

### *Impacts of Designation*

The primary impact of a critical habitat designation stems from the requirement under section 7(a)(2) of the ESA that Federal agencies insure that their actions are not likely to result in the destruction or adverse modification of critical habitat. Determining this impact is complicated by the fact that section 7(a)(2) also contains the requirement that Federal agencies must also insure their actions are not likely to jeopardize the species' continued existence. Accordingly, the incremental impact of designation of critical habitat is the extent to which Federal agencies modify their actions to insure their actions are not likely to destroy or adversely modify the critical habitat of the species beyond any modifications they already would be required to make because of the species' listing and the requirement to avoid jeopardy. When a project modification would be required due to impacts to both the species and critical habitat, the impact of the designation is considered co-extensive with the impact of the ESA listing of the species. Additional impacts of designation include state and local protections that may be triggered as a result of the designation and the benefits from educating the public about the importance of each area for species conservation. Thus, the impacts of the designation include conservation impacts for Hawaiian monk seal and its habitat, economic impacts, impacts on national security, and other relevant impacts that may result from the designation and the application of ESA section 7(a)(2).

In determining the impacts of designation, we focused on the incremental change in Federal agency actions as a result of critical habitat designation and the adverse modification provision, beyond the changes expected to occur as a result of listing and the jeopardy provision. Following a line of recent court decisions, including: *Arizona Cattle Growers Association v. Salazar*, 606 F. 3d 1160 (9<sup>th</sup> Cir. 2010)) (*Arizona Cattle Growers*); and *Home Builders Association of Northern California et al. v. U.S. Fish and Wildlife Service*, 616 F.3d 983 (9<sup>th</sup> Cir. 2010) (*Home Builders*) economic impacts that occur regardless of the critical habitat designation are treated as part of the regulatory baseline and are not factored into the analysis of the effects of the critical habitat designation. In other words, consistent with the *Arizona Cattle Growers* and *Home Builders* decisions, we focus on the potential incremental impacts beyond the impacts that would result from the listing and jeopardy provision. In some instances, potential impacts from the designation could not be distinguished from protections that may already occur under the baseline (i.e., protections already afforded Hawaiian monk seals under its listing or under other Federal, state, and local regulations). For example, the project modifications to prevent the disturbance to an area of critical habitat may be similar to the project modifications necessary to prevent jeopardy to the species in an area. The extent to which these modifications differ may be project specific, and the incremental changes or impacts to the project may be difficult to tease apart without further project specificity. Thus, the analysis may include some impacts or project modifications that may have been required under the baseline regardless of the critical habitat rule.

Once we determined the impacts of the designation, we then determined the benefits of designation and the benefits of exclusion based on the impacts of the designation. The benefits of designation include the conservation benefits for Hawaiian monk seals and their habitat that result from the critical habitat designation and the application of ESA section 7(a)(2). The benefits of exclusion include the economic impacts, impacts on national security, and other relevant impacts (e.g., impacts on Native lands) of the designation that would be avoided if a particular area were excluded from the critical habitat designation. The following sections describe how we determined the benefits of designation and the benefits of exclusion and how those benefits were weighed as required under section 4(b)(2) of the ESA to identify particular areas that may be eligible for exclusion from the designation. We also summarize the results of this weighing process and determinations of the areas that are eligible for exclusion.

#### *Benefits of Designation*

The primary benefit of designation is the protection afforded under section 7 of the ESA via requiring all Federal agencies to insure their actions are not likely to destroy or adversely modify designated critical habitat. This is in addition to the requirement that all Federal agencies insure their actions are not likely to jeopardize the continued existence of the species. In addition to the protections described above, the designation may also result in other forms of benefits, such as educational awareness about monk seals and their habitat needs. The economic analysis report (Industrial Economics 2014) discusses additional benefits in detail, including use benefits (associated with wildlife-viewing), non-use benefits (associated with the value that people place on the species' existence), or ancillary ecosystem benefits. Such ancillary benefits may include preserved

water quality and enhanced or sustained marine habitat conditions supporting other marine and coastal species as well as other area uses (e.g., recreational use).

Most of these benefits are not directly comparable to the costs of designation for purposes of conducting the section 4(b)(2) analysis described below. Ideally, benefits and costs should be compared on equal terms; however, there is insufficient information regarding the extent of the benefits and the associated values to monetize all of these benefits. We have not identified any available data to monetize the benefits of designation (e.g., estimates of the monetary value of the essential features within areas designated as critical habitat, or of the monetary value associated with the designation supporting recovery). Further, section 4(b)(2) also requires that we consider and weigh impacts other than economic impacts that do not lend themselves to quantification in monetary terms, such as the benefits to national security of excluding areas from critical habitat. Given the lack of information that would allow us either to quantify or monetize the benefits of the designation for Hawaiian monk seals discussed above, we determined that conservation benefits should be considered from a qualitative standpoint.

In determining the benefits of designation, we considered a number of factors. We took into account the essential features present in the area, the habitat functions provided by each area, and the importance of protecting the habitat for the overall conservation of the species. In doing so, we acknowledged that, as pinnipeds, Hawaiian monk seals are uniquely adapted to a tropical system defined by low productivity and environmental variability, which is reflected in their foraging and reproductive patterns. Ecologically, monk seals find success in this environment by foraging independently on assorted bottom-associated prey species, at various depths, across a wide-range, and their lifestyle

reflects a solitary nature with no distinct breeding season. Therefore, habitat that supports this species' recovery must reflect and support these ecological requirements. We also acknowledged that variability associated with prey resources in this tropical environment means that the island/atoll habitats are likely to only support small resident numbers of these tropical seals (NMFS 2007). Thus, recovery for this species requires that multiple independent sub-populations are sufficiently populated across the Hawaiian Archipelago such that they may sustain "random decline", as outlined in the Recovery Plan for the Hawaiian Monk Seal (NMFS 2007).

The specific areas (i.e., areas 1-16) identified in this final rule are aimed at supporting the sub-populations located throughout the range. Given the significant roles that these areas play in supporting monk seal conservation, the CHRT did not distinguish relative value amongst the 16 specific areas. However, we have determined that specific areas which provide all three essential features provide a high conservation value to the species, because these areas provide habitat features necessary to support the multiple independent subpopulations identified in the recovery plan. In the NWHI, eight of the specific areas, Kure Atoll, Midway Islands, Pearl and Hermes Reef, Lisianski Island, Laysan Island, French Frigate Shoals, Necker Island, and Nihoa Island, support all three essential features (foraging, preferred pupping, and significant haul-out areas) for seals. In the MHI, five specific areas, Niihau, Kauai, Oahu, Maui Nui, and Hawaii, support all three essential features. Two of the areas in the NWHI, Maro Reef and Gardner Pinnacles provide important foraging areas that may be used by several subpopulations, in a portion of the range where food limitations are known to be a critical threat (Stewart *et al.* 2006; NMFS 2007). Marine areas around Kaula Island include marine foraging areas that may

support seals from the NWHI and the MHI, and the island (which is precluded from designation) supports significant haul out areas. Relative to specific areas that provide all three essential features, we find that Maro Reef, Gardner Pinnacles, and Kaula Island provide a medium conservation value for Hawaiian monk seals because these three areas provide marine foraging areas that support seals from several subpopulations. We recognize that the contribution to conservation value of smaller particular areas within these larger specific areas may vary widely based on the size of the particular area in question and the number and type of the essential features present within the particular area. Therefore, factors attributed to the benefits of the designation of areas were individually considered within each particular area during the exclusion discussions.

#### *Benefits of Exclusion Based on Economic Impacts*

The economic benefits of exclusion are the economic impacts (above those costs that result from the species' listing) that would be avoided by excluding particular areas from the designation. To determine these economic impacts, we identified activities within each specific area that may affect Hawaiian monk seal critical habitat. The draft biological report (NMFS 2014a) identified eight categories of activities: 1) in water and coastal construction (including development), 2) dredging (including disposal of dredged materials), 3) energy development (including renewable energy projects), 4) activities that generate water pollution, 5) aquaculture (including mariculture) 6) fisheries, 7) environmental response activities (including oil spills, spills of other substances, vessel groundings, and marine debris clean-up activities), and 8) military activities. We then considered the range of modifications that we might seek in these activities to avoid destroying or adversely modifying Hawaiian monk seal critical habitat. Where possible,

we focused on changes beyond those that may be required to avoid jeopardy to the continued existence of the species (i.e., protections in place resulting from listing the species). We relied on information from other ESA section 7 consultations and NMFS expertise to determine the types of activities and potential range of changes. In addition to the above information, we reviewed comments received on the 2011 proposed rule (76 FR 32026; June 2, 2011). The economic analysis (Industrial Economics 2014) was revised and updated to incorporate analysis appropriate to the revised delineation, information received in comments, as well as additional information solicited and/or received from Federal and State agencies. The final economic analysis (Industrial Economics Inc. 2014) discusses the 8 activities highlighted above and provides discussions regarding development activities (a subset of in-water and construction activities), and response to spills of other substances. Additionally, the report discusses impacts that were identified in public comments, including activities associated with the NWHI, beach recreation and tourism, scientific research, and Native Hawaiian activities.

The final economic analysis (Industrial Economics 2014) identifies the total estimated present value of the quantified impacts at \$2.04 million over the next 10 years; on an annualized basis, this is equivalent to impacts of \$290,000 per year. Impacts reflect additional administrative effort to consider critical habitat in section 7 consultation and are largely associated with the designation of areas in the MHI. Across the MHI, impacts are projected to be experienced strongest in the Maui Nui (40 percent of the quantified impacts) and Oahu (27 percent of the quantified impacts) specific areas, likely because of the larger economic activity in these areas and the larger size of the Maui Nui area. Looking at impacts across the activities, 81 percent of the quantified impacts (i.e., \$1.65

million) are associated with coastal construction and in-water construction activities (Industrial Economics 2014). Beyond the quantified impacts of the analysis, the report also emphasizes the potential for critical habitat to change the scope and scale of future projects or activities, which is difficult to quantify due to the uncertainty associated with the nature and scope of any future project modifications that will be necessary. This includes considerations associated with potential impacts to federally-managed fisheries under the Hawaii Fisheries Ecosystem Plan, coastal development projects requiring Federal or State permitting, and impacts associated with the military use of Niihau.

At this time, Federal fishery management modifications to avoid adverse modification are not expected, because these activities generally do not adversely modify foraging areas. This assessment is based on the fact that MHI seals do not appear to face food limitations in MHI foraging areas where fishery activities overlap with the designation. Additionally, the overlap between targeted species for these fisheries and monk seal diet is considered low, and may not extend beyond the family taxonomic level (Cahoon 2011; Sprague *et al.* 2013). However, future modifications were not ruled out, because future revised management measures could result as more information is gained about monk seal foraging ecology.

Impacts to development projects may not be fully realized for projects situated close to terrestrial critical habitat areas. This is in part because project-specific details are necessary to assess the true impact that development may have on the characteristics that support local preferred pupping and significant haul-out areas in order to distinguish how mitigation measures may differ from existing baseline protections. The final economic report (Industrial Economics 2014) identifies two areas on Kauai and one on Oahu where

development projects are scheduled to occur near areas proposed for critical habitat and where characteristics of the sites may be described as relatively remote. Generally, existing State coastline protections, including those associated with the Coastal Zone Management Act, limit development such that the large developments are not located close to shore, i.e., within areas proposed for Hawaiian monk seal critical habitat. However, recommendations could be made on projects, once project-specific details associated with community developments are available, if they have the potential to alter important characteristics at preferred pupping areas or significant haul-out sites. Additionally, Hawaii's DLNR has recognized the potential for the designation to result in increased management recommendations associated with State land permits or leases, as necessary, but provided no detail as to how recommendations may deviate from existing measures.

Military activities associated with the use of Niihau Island do not appear to affect the essential features of Hawaiian monk seal critical habitat and the designation is not expected to directly impact training or research activities surrounding Niihau. However, Niihau Ranch has expressed concerns that the designation of Niihau areas may result in diminished work with the DOD, because military officials may wish to avoid public scrutiny associated with military activities taking place in designated areas. Niihau Ranch indicates that 90 percent of the income on Island is derived from supporting DOD research and training (Industrial Economics 2014). Thus, losing this source of income could create an economic hardship for Niihau Ranch and the islands' residents.

In summary, economic impacts from the proposed designation are expected largely as a result of the additional administrative effort necessary to consider the impacts

that activities could have on Hawaiian monk seal essential features. Therefore, activities that are regularly occurring throughout these areas and already consulted on under section 7 in a jeopardy analysis of potential impacts to Hawaiian monk seals (such as in-water and coastal construction) reflect a majority of the burden of the designation. Similarly, those specific areas where economic activity is higher and/or where the specific area is larger also reflect the majority of the burden (e.g., Oahu and Maui Nui). The predicted impacts (or costs of designation) are expected to be spread across the specific area and no additional particular areas were identified within these units where the costs of the designation are expected to be disproportionately higher. Throughout the specific areas, we found that the activities of concern are already subject to multiple environmental laws, regulations, and permits that afford the proposed essential features a high level of baseline protection. For example, energy projects require extensive consideration of environmental impacts, and existing conservation recommendations that are outlined by the State and the Bureau of Ocean Energy Management (in a PEIS) to support Hawaii's energy development include measures that parallel NMFS' recommendations to avoid adverse modification to monk seal critical habitat. Thus, industry representatives agree that project modifications associated with this designation are not anticipated to result in increased burdens (Industrial Economics 2014). Despite these protections, uncertainty remains regarding the true extent of the impacts that some activities may have on the essential features, and economic impacts of the designation may not be fully realized. However, we considered the quantified impacts and found that the highest estimated annual economic cost associated with the designation of Hawaiian monk seal critical habitat is \$116,000 annually for a large unit in the MHI, estimated impacts of most other

units in the MHI are below or well below \$100,000, and in the NWHI portion of the chain impacts are expected to be less than \$1,100. Typically, to be considered “high,” an economic value would need to be above several million dollars (sometimes tens of millions), and “medium” may fall between several hundred thousand and millions of dollars. Accordingly, we consider the economic costs associated with this designation to be “low” economic impact for all particular areas.

#### *Exclusions of Particular Areas Based on Economic Impacts*

Because all particular areas identified for Hawaiian monk seal critical habitat have a high to medium conservation value and because the economic impacts associated with designation is expected to be low in all particular areas, we find that the benefits of designation outweigh the benefits of exclusion, and that no areas are appropriate for exclusion. This has not changed from the proposed rule. Because no areas are being excluded based on economic impacts, we did not need to further consider whether exclusions would result in extinction of the Hawaiian monk seal.

#### *Exclusions Based on Impacts to National Security*

The national security benefits of exclusion are the national security impacts that would be avoided by excluding particular areas from the designation. For the 2011 proposed rule, we evaluated 13 areas for exclusion based on national security impacts and proposed to exclude 5 areas in the MHI (76 FR 32026; June 2, 2011). We received comments on the June 2, 2011 proposed rule (76 FR 32026) from the U.S. Navy, the U.S. Army, and the U.S. Air Force, requesting that certain areas be re-evaluated and/or that additional areas be excluded due to national security impacts. The U.S. Navy, the USMC, and the U.S. Army identified areas where national security impacts may exist if critical

habitat were designated based on the boundaries of the 2011 proposed designation; however, after refining the essential features, not all of the areas requested for exclusion overlap with the areas that meet the definition of critical habitat. For this final rule we have considered the national security impacts for 10 sites that overlap with the areas meeting the definition of Hawaiian monk seal critical habitat. These 10 areas were considered for exclusion for the 2011 proposed rule; however, we have re-evaluated all of these requests for exclusion to consider information presented in public comments, as well as to evaluate differences in the proportion of habitat being requested for exclusion. To make our decision we weighed the benefits of exclusion (i.e., the impacts to national security that would be avoided) against the benefits of designation.

The primary benefit of exclusion is that potential costs associated with conservation measures for critical habitat would be avoided and the DOD would not be required to consult with NMFS under section 7 of the ESA regarding DOD actions that may affect critical habitat in those areas. To assess the benefits of exclusion, we evaluated the intensity of use of the particular area by the DOD, the likelihood that DOD actions in the particular area would affect critical habitat and trigger an ESA section 7 consultation, and the potential conservation measures that may be required and that may result in delays or costs that affect national security. We also considered the level of protection provided to critical habitat by existing DOD safeguards, such as regulations to control public access and use of the area and other means by which the DOD may influence other Federal actions in the particular area.

The primary benefit of designation is the protection afforded Hawaiian monk seals under the section 7 critical habitat provisions. To evaluate the benefit of designation

for each particular area, we considered what is known regarding Hawaiian monk seal use of the particular area, the size of the particular area when compared to the specific area and the total critical habitat area, and the likelihood that other Federal actions occur in the area that may affect critical habitat and trigger a consultation.

As discussed in “The Benefits of Designation” section, the benefits of designation may not be directly comparable to the benefits of exclusion for purposes of conducting the section 4(b)(2) analysis, because neither may be fully quantified or monetized. We identified that Hawaiian monk seal use of the area and conservation need for the habitat should be most heavily considered against the impacts (i.e., activity modification costs) that the designation, if finalized, may have on DOD activities; however, all factors discussed played a role in the decision. Table 2 outlines the determinations made for the 10 particular areas identified and the factors that weighed significantly in that process. Notably, in 2011 we proposed the PMRF Main Base at Barking Sands, Kauai for exclusion. However, this area does not support Hawaiian monk seal essential features as refined and does not overlap with the areas under consideration for Hawaiian monk seal critical habitat; therefore, consideration of exclusion is no longer necessary. Additionally, several areas previously considered for national security exclusions in 2011 are now ineligible for designation because they are managed under the JBPHH or the PMRF INRMPs. Therefore, these areas will not be considered for national security exclusion.

**TABLE 2 – SUMMARY OF THE ASSESSMENT OF PARTICULAR AREAS REQUESTED FOR EXCLUSION BY THE DOD BASED ON IMPACTS ON NATIONAL SECURITY.**

<b>DOD Site (size); Agency</b>	<b>Overlapping Particular Area (Size)</b>	<b>Exclusion Warranted?</b>	<b>Significant Weighing Factors</b>
(1) 3-mile danger zone in marine waters around Kaula Island (14 mi <sup>2</sup> , or 37 km <sup>2</sup> ) - Navy	Area 11 – Kaula (26 mi <sup>2</sup> , or 66 km <sup>2</sup> )	No	This area provides Hawaiian monk seal foraging habitat that may support seals from the NWHI and the MHI, and we have not been provided information identifying specific impacts to national security. The benefits of designation outweigh the benefits of exclusion.
(2) Marine waters from 10 m in depth to 12 nmi offshore of Niihau (115+ mi <sup>2</sup> , or 298+ km <sup>2</sup> ) - Navy	Area 12 – Niihau (115 mi <sup>2</sup> , or 298 km <sup>2</sup> )	No	The island of Niihau and the surrounding waters are of high value to Hawaiian monk seal conservation because it supports the highest number of seals in the MHI. The request for exclusion includes the entire marine area surrounding this important habitat but provides no specific justification for this larger marine area. The benefits of designation outweigh the benefits of exclusion.
(3) Kingfisher Underwater Training Area off of Niihau 2 mi <sup>2</sup> , or 4 km <sup>2</sup> ) - Navy	Area 12 – Niihau (115 mi <sup>2</sup> , or 298 km <sup>2</sup> )	Yes	The Island of Niihau supports the highest number of seals in the MHI; however, the particular area requested is relatively small in comparison to the overall area. Impacts to national security may result from section 7 consultations specific to the construction and maintenance of the training range. The benefits of exclusion outweigh the benefits of designation for this area.

(4) PMRF Offshore areas (including PMRF restricted area and the Shallow Water Training Range (SWTR)) (58 mi <sup>2</sup> , or 149 km <sup>2</sup> ) - Navy	Area 13 – Kauai (215 mi <sup>2</sup> , or 557 km <sup>2</sup> )	Yes	Impacts to national security may result from section 7 consultations specific to the installation of hydrophones on the range. Although the area is used by monk seals, current protocols in place provide protections for monk seals in this area. The benefits of exclusion outweigh the benefits of designation for this area.
(5) Puuloa Underwater Training Range (10 mi <sup>2</sup> , or 25 km <sup>2</sup> ) - Navy	Area 14 – Oahu (363 mi <sup>2</sup> , or 940 km <sup>2</sup> )	Yes	Impacts to national security may result from section 7 consultations specific to activities that occur within the range and this type of training area is only found in one other location nationwide. The marine foraging features located within this particular area are believed to be of lower value to Hawaiian monk seal conservation. The benefits of exclusion outweigh the benefits of designation.
(6) Commercial Anchorages B, C, D (1 mi <sup>2</sup> , or 2.6 km <sup>2</sup> ) - Navy	Area 14 – Oahu (363 mi <sup>2</sup> , or 940 km <sup>2</sup> )	No	It is unlikely that Navy activities will affect essential features at this site and the Navy has no control over other Federal activities occurring within this area. The benefits of designation outweigh the benefits of exclusion.
(7) Fleet Operational Readiness Accuracy Check Site (FORACS) (9 mi <sup>2</sup> , 22 km <sup>2</sup> ) - Navy	Area 14 – Oahu (363mi <sup>2</sup> , or 940 km <sup>2</sup> )	No	This area is believed to be of high conservation value to Hawaiian monk seals. It is unlikely that Navy activities will affect essential features at this site and other Federal activities occurring within this area may affect these features. The benefits of designation outweigh the benefits of exclusion.

(8) Marine Corps Training Area Bellows Offshore - Navy and USMC (size not estimated)	Area 14 – Oahu (363mi <sup>2</sup> , or 940 km <sup>2</sup> )	No	The boundaries of this area remain ill-defined and other Federal activities occurring within this area may affect essential features. The benefits of designation outweigh the benefits of exclusion.
(9) Shallow Water Minefield Sonar Training Range off Kahoolawe (4 mi <sup>2</sup> , or 11 km <sup>2</sup> ) - Navy	Area 15 – Maui Nui (1,445 mi <sup>2</sup> , or 3,742 km <sup>2</sup> )	Yes	The area requested is relatively small in comparison to the total area. Impacts to national security may result from section 7 consultations specific to the construction and maintenance of the training range. The benefits of exclusion outweigh the benefits of designation for this area.
(10) Kahoolawe Danger Zone (49 mi <sup>2</sup> , or 127 km <sup>2</sup> ) - Navy	Area 15 – Maui Nui (1,445 mi <sup>2</sup> , or 3,742 km <sup>2</sup> )	No	Area supports all three essential features and is considered of high conservation value for Hawaiian monk seals. Navy activities in this area are infrequent and other Federal activities may benefit from section 7 consultation requirements for this area. The benefits of designation outweigh the benefits of exclusion.

### *Exclusions Based on Other Relevant Impacts*

Section 4(b)(2) of the Act also allows for the consideration of other relevant impacts associated with the designation of critical habitat. Prior to the proposed rule we received comments from the USFWS requesting exclusion for Sand Island at Midway Islands due to economic and administrative burdens from the proposed designation. Similar to the National Security Analysis, we could not quantify the impacts on the USFWS in monetary terms or in terms of some other quantitative measure. To assess the benefits of excluding Sand Island, we evaluated the relative proportion of the area requested for exclusion, the intensity of use of the area, and the likelihood that actions on site will destroy or adversely modify habitat requiring additional section 7 delays, costs, or burdens. We also considered the likelihood of future section 7 consultations and the level of protection provided to critical habitat by existing USFWS safeguards. Sand Island at Midway Islands provides important habitat with the essential features of significant haul-out areas and preferred pupping areas in the northwest end of the NWHI chain. USFWS noted that their management plans provide protections for Hawaiian monk seals from disturbance and revealed no additional plans to encroach on haul-out areas. In considering the above-listed factors we were not able to identify any additional costs, i.e., activities that the USFWS wished to engage in at this site that would require additional management measures or modifications to protect Hawaiian monk seal essential features. Therefore, Sand Island at Midway Islands was not proposed for exclusion in the proposed rule (76 FR 32026; June 2, 2011) because we found that the benefit of designation outweighed the benefits of exclusion.

For the final designation, due to the refinements made to the designation and additional comments received from USFWS, we re-evaluated the benefit of excluding Sand Island. Because Sand Island provides Hawaiian monk seals with preferred pupping and significant haul-out areas and we have no new information regarding the extent to which consultations would produce an outcome that has economic or other impacts, we conclude that the benefits of designation outweigh the benefits of exclusion. Therefore, this area has not been excluded from designation.

### **Critical Habitat Designation**

Based on the information provided above, the public comments received and the further analysis that was done since the proposed rulemaking, we hereby designate as critical habitat for Hawaiian monk seals Specific Areas 1-16, of marine habitat in Hawaii, excluding the four military areas discussed under Exclusions Based on Impacts to National Security and in this section. The designated critical habitat areas include approximately 6,712 mi<sup>2</sup> (17,384 km<sup>2</sup>) and contain the physical or biological features essential to the conservation of the species that may require special management considerations or protection. This rule excludes from the designation the following areas based on national security impacts: Kingfisher Underwater Training area in marine areas off the northeast coast of Niihau; PMRF Offshore Areas in marine areas off the western coast of Kauai; the Puuloa Underwater Training Range in marine areas outside Pearl Harbor, Oahu; and the Shallow Water Minefield Sonar Training Range off the western coast of Kahoolawe in the Maui Nui area. Based on our best scientific knowledge and expertise, we conclude that the exclusion of these areas will not result in the extinction of the species, nor impede the conservation of the species. Additional areas are precluded

from designation under section 4(a)(3) of the ESA because the areas are subject to management under three different DOD INRMPs that we found to provide a benefit to Hawaiian monk seals. These areas include Kaula Island; coastal and marine areas out to 10 m in depth around the Island of Niihau; and, on Oahu, the 500-yard buffer zone in marine waters surrounding the Marine Corps Base Hawaii (on the Mokapu Peninsula) (MCBH-KB), Puuloa Training Facility on the Ewa coastal plain, Nimitz Beach, White Plains Beach, the Naval Defensive Sea Area, the Barbers Point Underwater Range, and the Ewa Training Minefield.

### **Effects of Critical Habitat Designation**

Section 7(a)(2) of the ESA requires Federal agencies, including NMFS, to insure that any action authorized, funded, or carried out by the agency (agency action) does not jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify designated critical habitat. When a species is listed or critical habitat is designated, Federal agencies must consult with us on any agency action to be conducted in an area where the species is present and that may affect the species or its critical habitat. During the consultation, we evaluate the agency action to determine whether the action may adversely affect listed species or adversely modify critical habitat and issue our finding in a biological opinion. If we conclude in the biological opinion that the agency action would likely result in the destruction or adverse modification of critical habitat, we would also recommend any reasonable and prudent alternatives to the action. Reasonable and prudent alternatives are defined in 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal

agency's legal authority and jurisdiction, that are economically and technologically feasible, and that would avoid the destruction or adverse modification of critical habitat.

Regulations at 50 CFR 402.16 require Federal agencies that have retained discretionary involvement or control over an action, or where such discretionary involvement or control is authorized by law, to reinitiate consultation on previously reviewed actions in instances in which 1) critical habitat is subsequently designated, or 2) new information or changes to the action may result in effects to critical habitat not previously considered in the biological opinion. Consequently, some Federal agencies may request re-initiation of consultation with us on actions for which formal consultation has been completed if those actions may affect designated critical habitat. Activities subject to the section 7 consultation process include activities on Federal lands, and activities on private or state lands requiring a permit from a Federal agency (e.g., a Clean Water Act section 404 dredge or fill permit from the U.S. Army Corps of Engineers) or some other Federal action, including funding (e.g., ESA section 6, Federal Highway Administration, or Federal Emergency Management Agency funding). Section 7 consultation would not be required for Federal actions that do not affect listed species or critical habitat, nor for actions on non-Federal and private lands that are not carried out, funded, or authorized by a Federal agency.

#### **Activities that May Be Affected**

ESA section 4(b)(8) requires, to the maximum extent practicable, that any regulation to designate or revise critical habitat include a brief description and evaluation of those activities (whether public or private) that may adversely modify such habitat or that may be affected by such designation. A wide variety of activities may affect

Hawaiian monk seal critical habitat and may be subject to the section 7 consultation processes when carried out, funded, or authorized by a Federal agency. The activities most likely to be affected by this critical habitat designation once finalized are 1) in water and coastal construction (including development), 2) dredging (including disposal of dredged materials), 3) energy development (including renewable energy projects), 4) activities that generate water pollution, 5) aquaculture (including mariculture), 6) fisheries, 7) environmental response activities (including oil spills, spills of other substances, vessel groundings, and marine debris clean-up activities), and 8) military activities. Private entities may also be affected by this critical habitat designation if a Federal permit is required, Federal funding is received, or the entity is involved in or receives benefits from a Federal project. These activities would need to be evaluated with respect to their potential to destroy or adversely modify critical habitat. Formal consultation under section 7(a)(2) of the ESA could result in changes to the activities to minimize adverse impacts to critical habitat or avoid destruction or adverse modification of designated critical habitat. We believe this final rule will provide Federal agencies, private entities, and the public with clear notification of critical habitat for the Hawaiian monk seal and the boundaries of such habitat. This designation will also allow Federal agencies and others to evaluate the potential effects of their activities on critical habitat to determine if section 7 consultation with NMFS is needed. Questions regarding whether specific activities would constitute destruction or adverse modification of critical habitat should be directed to NMFS (see **ADDRESSES** and **FOR FURTHER INFORMATION CONTACT**).

#### **Information Quality Act and Peer Review**

On December 16, 2004, the Office of Management and Budget (OMB) issued its Final Information Quality Bulletin for Peer Review (Bulletin). The Bulletin was published in the **Federal Register** on January 14, 2005 (70 FR 2664), and went into effect on June 16, 2005. The primary purpose of the Bulletin is to improve the quality and credibility of scientific information disseminated by the Federal government by requiring peer review of “influential scientific information” and “highly influential scientific information” prior to public dissemination. Influential scientific information is defined as “information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions.” The Bulletin provides agencies broad discretion in determining the appropriate process and level of peer review. Stricter standards were established for the peer review of “highly influential scientific assessments,” defined as information whose “dissemination could have a potential impact of more than \$500 million in any one year on either the public or private sector or that the dissemination is novel, controversial, or precedent-setting, or has significant interagency interest.” The draft biological report (NMFS, 2010a) and economic analysis (ECONorthwest, 2010) supporting this rule to designate critical habitat for the Hawaiian monk seal are considered influential scientific information and subject to peer review. These two reports were distributed to three independent reviewers for review before the publication date of the proposed rule. The peer reviewer comments are addressed above and were compiled into a peer review report and are available at [http://www.cio.noaa.gov/services\\_programs/prplans/PRsummaries.html](http://www.cio.noaa.gov/services_programs/prplans/PRsummaries.html).

### **Classification**

*Regulatory Planning and Review*

Under Executive Order 12866, the Office of Management and Budget determined this rule is not a significant regulatory action.

#### *Regulatory Flexibility Act*

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*, as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis describing the effects of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). We prepared a final regulatory flexibility analysis (FRFA) pursuant to section 603 of the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*; Industrial Economics 2014), which is included as Appendix C to the final economic analysis (Industrial Economics 2014). The FRFA incorporates information from the initial regulatory flexibility analysis (IRFA). This document is available upon request (see **ADDRESSES** section above) and can be found on the NMFS Pacific Island Region's website at [http://www.fpir.noaa.gov/PRD/prd\\_critical\\_habitat.html](http://www.fpir.noaa.gov/PRD/prd_critical_habitat.html). The results are summarized below.

A statement of the need for and objectives of this final rule is provided earlier in the preamble and is not repeated here. This final rule will not impose any recordkeeping or reporting requirements.

Three types of small entities identified in the analysis are 1) small business, 2) small governmental jurisdiction, and 3) small organization. The regulatory mechanism through which critical habitat protections are enforced is section 7 of the ESA, which directly regulates only those activities carried out, funded, or permitted by a Federal

agency. By definition, Federal agencies are not considered small entities, although the activities they may fund or permit may be proposed or carried out by small entities. This analysis considers the extent to which this designation could potentially affect small entities, regardless of whether these entities would be directly regulated by NMFS through the final rule or by a delegation of impact from the directly regulated entity.

The small entities that may bear the incremental impacts of this rulemaking are quantified in Chapters 3 through 12 of the final economic analysis (Industrial Economics 2014) based on seven categories of economic activity (in-water and coastal construction (including development); fisheries; energy projects; development; aquaculture; activities that generate water pollution; and research and other miscellaneous activities) potentially requiring modification to avoid destruction or adverse modification of Hawaiian monk seal critical habitat. Small entities also may participate in section 7 consultation as an applicant or may be affected by a consultation if they intend to undertake an activity that requires a permit, license, or funding from the Federal government. It is therefore possible that the small entities may spend additional time considering critical habitat during section 7 consultation for the Hawaiian monk seal. Potentially affected activities include in-water and coastal construction, fisheries, energy projects, development, aquaculture, activities that generate water pollution, and research and other miscellaneous activities. Of the activities identified in the Benefits of Exclusion Based on Economic Impacts and Proposed Exclusions section of this rule, consultations on dredging, environmental response activities, and military activities are not expected to affect third parties, and are therefore are not expected to affect small entities. Additionally, impacts are not quantified for development or for activities that generate water pollution and these

activities are described qualitatively in the FRFA to reflect on the potential magnitude of impacts. Exhibit C-1 in the final economic analysis summarizes estimated impacts to small entities by industry, and Exhibit C-3 describes potentially affected small businesses by NAICS code, highlighting the relevant small business thresholds. Although businesses affected indirectly are considered, this analysis considers only those entities for which impacts would not be measurably diluted, i.e., it focuses on those entities that may bear some additional costs associated with participation in section 7 consultation.

Based on the number of past consultations and information about potential future actions likely to take place within the critical habitat areas, the analysis forecasts the number of additional consultations that may take place as a result of critical habitat (see Chapters 3 through 12 of the economic analysis). Based on this forecast, incremental impacts associated with this rulemaking are expected to consist largely of administrative costs associated with section 7 consultations. In total, annualized incremental impacts are estimated at \$290,000, of which approximately \$121,000 may be borne by small entities. In addition to the quantified impacts, we also recognize that economic impacts that cannot be quantified are possible in the MHI related to fisheries, residential and commercial development, as well as military operations on Niihau. While most of these unquantified impacts would not be expected to change the relative rank of the affected units, unquantified impacts to Niihau could elevate that unit to be equal or greater in costs to the other MHIs.

Ideally this analysis would directly identify the number of small entities which may engage in activities that overlap with the proposed designation; however, while we track the Federal agencies involved in the consultation process, we do not track the

identity of past permit recipients or the particulars that would allow us to determine whether the recipients were small entities. Nor do we track how often Federal agencies have hired small entities to complete various actions associated with these consultations. In the absence of this information, the analysis utilizes Dun and Bradstreet databases, with supplemental data for fisheries participation, to determine the number of small businesses operating within the NAICS codes identified in Exhibit C-3 in each affected Hawaiian county.

The final rule does not directly mandate “reporting” or “record keeping” within the meaning of the Paperwork Reduction Act, and does not impose record keeping or reporting requirements on small entities. A critical habitat designation requires Federal agencies to initiate a section 7 consultation to insure their actions do not destroy or adversely modify critical habitat. During formal section 7 consultation under the ESA, NMFS, the action agency (Federal agency), and a third party participant applying for Federal funding or permitting may communicate in an effort to minimize potential adverse impacts to the habitat and/or the essential features. Communication may include written letters, phone calls, and/or meetings. Project variables such as the type of consultation, the location, affected essential features, and activity of concern, may in turn dictate the complexity of these interactions. Third party costs may include administrative work, such as cost of time and materials to prepare for letters, calls, or meetings. The cost of analyses related to the activity and associated reports may be included in these administrative costs. In addition, following the section 7 consultation process, entities may be required to monitor progress during the activity to ensure that impacts to the habitat and features have been minimized.

A FRFA must identify any duplicative, overlapping, and conflicting Federal rules. The protections afforded to threatened and endangered species and their habitat are described in sections 7, 9, and 10 of the ESA. A final determination to designate critical habitat requires Federal agencies to consult, pursuant to section 7 of the ESA, with NMFS on any activities that Federal agency funds, authorizes or carries out, including permitting, approving, or funding non-Federal activities (e.g., a Clean Water Act section 404 dredge or fill permit from the U.S. Army Corps of Engineers). The requirement to consult is to ensure that any Federal action authorized, funded, or carried out will not likely jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat. The incremental impacts forecast in the economic analysis and contemplated in the analysis are expected to result from the critical habitat designation and not the listing of the species or other Federal regulations.

In accordance with the requirements of the RFA (as amended by SBREFA 1996), this analysis considered various alternatives to the critical habitat designation for the Hawaiian monk seal. The alternative of not designating critical habitat for the Hawaiian monk seal (Alternative 1) was considered and rejected because such an approach does not meet the legal requirements of the ESA. We considered the alternative of designating all specific areas (i.e., no areas excluded) (Alternative 2); however, in some cases the benefits of excluding particular areas based on national security impacts outweighed the benefits of including them in the designation. Additionally, this alternative may increase the impacts that this rule may have on small businesses, to the extent that these businesses are involved in work associated with certain military activities. Thus, we also

considered the preferred alternative (Alternative 3) of designating all specific areas, but excluding particular areas based on the impacts to national security. As discussed early in Chapter 1 of the economic analysis, four areas were identified for the purposes of exclusion on the basis of national security under this alternative because the benefits of exclusion due to national security outweigh the benefits of designation. Although these areas are being excluded due to national security concerns, the exclusion of these areas from the designation may also in turn lessen the economic impacts on small businesses that may be contracted for work in these areas by the Department of Defense or on small businesses that plan on utilizing parts of these areas for other activities. The extent to which the economic impact to small entities would be reduced has not been determined based on the available information. Based on this analysis, impacts to small businesses resulting from the preferred alternative appear to be small, resulting in costs of 0.04 percent or less of small business revenue (see Exhibit C-1 in the economic analysis report). In conclusion, we were unable to determine significant economic impacts (Industrial Economics 2014) based on this designation; and, current information does not suggest that small businesses will be disproportionately affected by this designation.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act, we make the following findings: The designation of critical habitat does not impose an “enforceable duty” on state, local, tribal governments, or the private sector and therefore does not qualify as a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an “enforceable duty” upon non-Federal governments or

the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.”

Under the ESA, the only direct regulatory effect of this final rule is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities who receive Federal funding, assistance, permits, or otherwise require approval or authorization from a Federal agency for an action may be indirectly affected by the designation of critical habitat, the legally binding duty to avoid the destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly affected because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply.

We do not believe that this rule will significantly or uniquely affect small governments because it is not likely to produce a Federal mandate of \$100 million or greater in any year; that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. In addition, the designation of critical habitat imposes no obligations on local, state or tribal governments. Therefore, a Small Government Agency Plan is not required.

### *Takings*

Under Executive Order 12630, Federal agencies must consider the effects of their actions on constitutionally protected private property rights and avoid unnecessary takings of property. A taking of property includes actions that result in physical invasion or occupancy of private property, and regulations imposed on private property that substantially affect its value or use.

In accordance with Executive Order 12630, the critical habitat designation does not pose significant takings implications. A takings implication assessment is not required. This final designation affects only Federal agency actions (i.e. those actions authorized, funded, or carried out by Federal agencies). Therefore, the critical habitat designation does not affect landowner actions that do not require Federal funding or permits.

This critical habitat designation would not increase or decrease the current restrictions on private property concerning take of Hawaiian monk seals, nor do we expect the designation to impose substantial additional burdens on land use or substantially affect property values. Additionally, the final critical habitat designation does not preclude the development of Conservation Plans and issuance of incidental take permits for non-Federal actions. Owners of property included or used within the final critical habitat designation would continue to have the opportunity to use their property in ways consistent with the survival of listed Hawaiian monk seals.

#### *Federalism*

Pursuant to the Executive Order on Federalism, E.O. 13132, we determined that this rule does not have significant Federalism effects and that a Federalism assessment is not required. We requested information from and coordinated development of this final critical habitat designation with appropriate Hawaii State resources agencies. This designation may have some benefit to State and local resource agencies in that the areas essential to the conservation of the species are more clearly defined, and the essential features of the habitat necessary for the survival of Hawaiian monk seals are specifically

identified. While this designation would not alter where and what non-federally sponsored activities may occur, it may assist local governments in long-range planning.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests only on the Federal agency.

#### *Civil Justice Reform*

In accordance with E.O. 12988, the Department of Commerce has determined that this final rule does not unduly burden the judicial system and meets the requirements of section 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the ESA. This final rule uses standard property descriptions and identifies the essential features within the designated areas to assist the public in understanding the habitat needs of the Hawaiian monk seal.

#### *Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This final rule does not contain new or revised information collections that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. This final rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses or organizations.

#### *National Environmental Policy Act (NEPA)*

We have determined that an environmental analysis as provided for under the NEPA of 1969 for critical habitat designations made pursuant to the ESA is not required. *See Douglas County v. Babbitt*, 48 F.3d 1495 (9<sup>th</sup> Cir. 1995), *cert. denied*, 116 S. Ct. 698 (1996).

*Coastal Zone Management Act (CZMA)*

The CZMA emphasizes the primacy of state decision-making regarding the coastal zone. Section 307 of the CZMA (16 U.S.C. 1456), called the Federal consistency provision, is a major incentive for states to join the national coastal management program and is a powerful tool that states utilize to manage coastal uses and resources and to facilitate cooperation and coordination with Federal agencies.

Federal consistency is the CZMA requirement by which Federal agency activities that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone (also referred to as coastal uses or resources and coastal effects) must be consistent to the maximum extent practicable with the enforceable policies of a coastal state and federally approved coastal management program. We have determined that this final critical habitat designation is consistent to the maximum extent practicable with the enforceable policies of the approved Coastal Zone Management Program of Hawaii. This determination was submitted for review by the Hawaii Coastal Zone Management (CZM) Program. While the CZM program did generally express concerns about the expansiveness of the proposed designation and recommended only including areas that are vital for survival because monk seals are afforded protection outside of critical habitat areas under the ESA, the program concurred with our consistency determination in a

letter issued on August 18, 2011. The program's concerns are addressed under our responses to comments 14 and 35 above.

*Government to Government Relationship with Tribes*

The longstanding and distinctive relationship between the Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with, or are affected by, the Federal Government. This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States towards Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights.

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, outlines the responsibilities of the Federal Government in matters affecting tribal interests. If we issue a regulation with tribal implications (defined as having a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes), we must consult with those governments or the Federal Government must provide funds necessary to pay direct compliance costs incurred by tribal governments.

Federally recognized tribe means an Indian or Alaska Native tribe or community that is acknowledged as an Indian tribe under the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a. In the list published annually by the Secretary, there are no federally recognized tribes in the State of Hawaii (74 FR 40218; August 11, 2009). As identified in the proposed rule, Native Hawaiian lands are not tribal lands for purposes of

the requirements of the President’s Memorandum or the Department Manual. In the proposed rule, we noted that Native Hawaiian organizations have the potential to be affected by Federal regulations and, as such, that consideration of these impacts may be evaluated as other relevant impacts from the designation. We solicited comments regarding areas of overlap with the designation that may warrant exclusion from critical habitat for the Hawaiian monk seal due to such impacts, and/or information from affected Native Hawaiian organizations concerning other Native Hawaiian activities that may be affected in areas other than those specifically owned by the organization. We responded to comments received regarding these concerns in Summary of Comments and Responses section above and in final economic analysis (Industrial Economics 2014).

In conclusion we find that this critical habitat designation does not have tribal implications, because the final critical habitat designation does not include any tribal lands and does not affect tribal trust resources or the exercise of tribal rights.

#### *Energy Effects*

Executive Order 13211 requires agencies to prepare a Statement of Energy Effects when undertaking a “significant energy action.” According to Executive Order 13211 “significant energy action” means any action by an agency that is expected to lead to the promulgation of a final rule or regulation that is a significant regulatory action under Executive Order 12866 and is likely to have a significant adverse effect on the supply, distribution, or use of energy. We have considered the potential impacts of this action on the supply, distribution, or use of energy (see final economic analysis; Industrial Economics 2014). Energy projects may affect the essential features of critical habitat for the Hawaiian monk seal. Due to the extensive requirements of renewable

energy projects to consider environmental impacts, including impacts on marine life, even absent critical habitat designation for the Hawaiian monk seal, we anticipate it is unlikely that critical habitat designation will change conservation efforts recommended during section 7 consultation for these projects. Consequently, it is unlikely the identified activities and projects will be affected by the designation beyond the quantified administrative impacts. Therefore, the designation is not expected to affect the level of energy production. It is unlikely that any impacts to the industry that remain unquantified will result in a change in production above the one billion kilowatt-hour threshold identified in the Executive Order. Therefore, it is unlikely that the energy industry will experience “a significant adverse effect” as a result of the critical habitat designation for the Hawaiian monk seal.

### **References Cited**

A complete list of all references cited in this rule making may be found on our Web site at [http://www.fpir.noaa.gov/PRD/prd\\_critical\\_habitat.html](http://www.fpir.noaa.gov/PRD/prd_critical_habitat.html), and is available upon request from the NMFS (see **ADDRESSES**).

### **List of Subjects in 50 CFR Part 226**

Endangered and threatened species.

Dated: August 14, 2015.

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Eileen Sobeck,

Assistant Administrator for Fisheries,

National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 226 is amended as follows:

**PART 226-DESIGNATED CRITICAL HABITAT**

1. The authority citation for part 226 continues to read as follows:

**Authority:** 16 U.S.C. 1533.

2. Section 226.201 is revised to read as follows:

**§ 226.201 Critical habitat for the Hawaiian monk seal (*Neomonachus schauinslandi*).**

Critical habitat is designated for Hawaiian monk seals as described in this section.

The textual descriptions of critical habitat in this section are the definitive source for determining the critical habitat boundaries.

(a) *Critical habitat boundaries.* Critical habitat is designated to include all areas in paragraphs (a)(1) and (2) of this section and as described in paragraphs (b)(1) and (2) of this section:

(1) Northwestern Hawaiian Islands: Hawaiian monk seal critical habitat areas include all beach areas, sand spits and islets, including all beach crest vegetation to its deepest extent inland, lagoon waters, inner reef waters, and including marine habitat through the water's edge, including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, out to the 200-m depth contour line (relative to mean lower low water) around the following 10 areas:

- (i) Kure Atoll,
- (ii) Midway Islands,
- (iii) Pearl and Hermes Reef,
- (iv) Lisianski Island,
- (v) Laysan Island,

- (vi) Maro Reef,
- (vii) Gardner Pinnacles,
- (viii) French Frigate Shoals,
- (ix) Necker Island, and
- (x) Nihoa Island.

(2) Main Hawaiian Islands: Hawaiian monk seal critical habitat areas

surrounding the following islands listed below are defined in the marine environment by a seaward boundary that extends from the 200-m depth contour line (relative to mean lower low water), including the seafloor and all subsurface waters and marine habitat within 10 m of the seafloor, through the water's edge into the terrestrial environment where the inland boundary extends 5 m (in length) from the shoreline between identified boundary points listed in the table below around the areas listed in paragraphs (a)(2)(i)-(vi) of this section. The shoreline is described by the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth or the upper limit of debris (except those areas identified in paragraph (c) of this section). In areas where critical habitat does not extend inland, the designation has a seaward boundary of a line that marks mean lower low water.

<i>Area</i>	<i>Island</i>	<i>Textual Description of Segment</i>	<i>Boundary Points</i>	<i>Latitude</i>	<i>Longitude</i>
13	Kauai	Southeast coast of Kauai (Nomilu Fishpond area through Mahaulepu)	KA 11	21°53'08"N	159°31'48"W
			KA 12	21°53'34"N	159°24'25"W
13	Kauai	Kawelikoa Point to Molehu	KA21	21°54'26"N	159°23'26"W
			KA22	21°54'48"N	159°23'08"W
13	Kauai	Lydgate Park through Wailua canal	KA 31	22°02'11"N	159°20'08"W
			KA 32	22°02'41"N	159°20'11"W
13	Kauai	Wailua canal through Waikaea canal	KA 41	22°02'45"N	159°20'10"W
			KA 42	22°04'14"N	159°18'60"W
13	Kauai	Waikaea canal through Kealia	KA 51	22°04'15"N	159°19'01"W
			KA 52	22°05'59"N	159°18'08"W
13	Kauai	Anahola and Aliomanu areas	KA 61	22°07'46"N	159°17'35"W
			KA 62	22°09'28"N	159°18'18"W
13	Kauai	Moloaa Bay through Kepuhi Point	KA 71	22°11'38"N	159°19'46"W
			KA 72	22°12'52"N	159°21'14"W
13	Kauai	Southeast of Kilauea	KA 81	22°13'48"N	159°23'52"W
			KA 82	22°13'55"N	159°24'06"W
13	Kauai	Wainiha Beach Park through Kee Beach Park	KA 91	22°12'60"N	159°32'30"W
			KA 92	22°13'13"N	159°35'01"W
13	Kauai	Milolii State Park Beach Area	KA101	22°09'13"N	159°42'52"W
			KA102	22°08'59"N	159°43'21"W
14	Oahu	Keana Point Area	OA 11	21°34'43"N	158°15'37"W
			OA 12	21°32'45"N	158°14'25"W
14	Oahu	Maili Beach through Kalaeloa Barbers Point Harbor	OA 21	21°25'43"N	158°10'48"W
			OA 22	21°19'24"N	158°07'20"W
14	Oahu	Kalaeloa Barbers Point Harbor through Iroquois Point	OA 31	21°19'18"N	158°07'17"W
			OA 32	21°19'20"N	157°58'17"W
14	Oahu	Diamond Head area	OA 41	21°15'27"N	157°49'05"W
			OA 42	21°15'24"N	157°47'45"W
14	Oahu	Hanauma Bay through Sandy Beach	OA 51	21°16'05"N	157°41'50"W
			OA 52	21°17'45"N	157°39'27"W
14	Oahu	Makapuu Beach Area	OA 61	21°18'36"N	157°39'31"W
			OA 62	21°18'58"N	157°39'55"W
14	Oahu	Lori Point through Waimea Bay	OA 71	21°40'26"N	157°56'00"W
			OA 72	21°38'18"N	158°03'56"W
14	Oahu	Kapapa Island (Kaneohe Bay)	OAi1	21°28'36"N	157°47'55"W
14	Oahu	Mokulua - Moku Nui	OAi2	21°23'30"N	157°41'56"W
14	Oahu	Mokulua - Moku Iki	OAi3	21°23'16"N	157°41'52"W
14	Oahu	Manana (Rabbit Island)	OAi4	21°19'44"N	157°39'24"W
15	Molokai	Laaupoint Area	MO 11	21°07'49"N	157°17'47"W

			MO 12	21°05'21"N	157°15'50"W
15	Molokai	Kalaupapa Area	MO 21	21°12'33"N	156°58'52"W
15	Molokai	Moku Hooniki	MO 22	21°11'28"N	156°59'06"W
15	Lanai	Shipwreck Beach Area	MOi1	21°07'59"N	156°42'10"W
			LA 11	20°54'45"N	156°53'45"W
15	Lanai	Northwest Lanai (Including Polihua Beach)	LA 12	20°55'20"N	156°56'45"W
15	Lanai	North of Kamalapau Harbor	LA 21	20°55'42"N	156°59'47"W
			LA 22	20°52'02"N	157°02'33"W
15	Lanai	Kamalapau Harbor through Kaholo Pali	LA 31	20°48'38"N	156°59'15"W
			LA 32	20°47'17"N	156°59'24"W
15	Lanai	Kaholo Pali through Manele Harbor	LA 41	20°47'13"N	156°59'27"W
			LA 42	20°46'59"N	156°59'31"W
15	Lanai	Manele Harbor through Nakalahale Cliff	LA 51	20°44'13"N	156°58'01"W
			LA 52	20°44'29"N	156°53'15"W
15	Lanai	Nakalahale Cliff through Lopa Beach	LA 61	20°44'35"N	156°53'14"W
			LA 62	20°44'49"N	156°52'16"W
15	Lanai	Puupehe*	LA 71	20°45'07"N	156°51'50"W
			LA 72	20°48'21"N	156°48'24"W
15	Lanai	Mid-North coast (including Kaukamoku and Ahupuiki)	LAi1	20°44'04"N	156°53'25"W
			KH 11	20°34'36"N	156°37'36"W
15	Kahoolawe	Eastern coast of Kahoolawe (Honokoia through Sailer's Hat)	KH 12	20°34'10"N	156°38'15"W
			KH 21	20°33'08"N	156°40'35"W
15	Kahoolawe	Kuloa Point through Hana Wharf and Ramp	KH 22	20°30'04"N	156°40'23"W
			MA 11	20°40'02"N	156°02'27"W
15	Maui	Hana Wharf and Ramp through Kainalimu Bay	MA 12	20°45'21"N	155°58'54"W
			MA 21	20°45'20"N	155°58'56"W
15	Maui	Keanae Peninsula to Nauailua Bay	MA 22	20°46'08"N	155°59'04"W
			MA 31	20°51'56"N	156°08'46"W
15	Maui	Maliko Bay through Papaula Point	MA 32	20°51'41"N	156°08'55"W
			MA 41	20°56'11"N	156°21'11"W
15	Maui	Kahului Harbor West through Waihee Beach Park	MA 42	20°54'30"N	156°25'06"W
			MA 51	20°53'53"N	156°28'47"W
15	Maui	Punalau Beach through to Mala Wharf	MA 52	20°56'04"N	156°30'15"W
			MA 61	21°01'20"N	156°37'28"W
15	Maui	Southeast of Mala Wharf through to Lahaina Harbor	MA 62	20°53'09"N	156°41'10"W
			MA 71	20°53'04"N	156°41'12"W
15	Maui	Southeast of Lahaina Harbor through to Papalaua	MA 72	20°52'26"N	156°40'43"W
			MA 81	20°52'12"N	156°40'39"W
15	Maui		MA 82	20°47'34"N	156°34'00"W

15	Maui	East of Maalaea Harbor through to Kihei boat ramp	MA 91	20°47'32"N	156°30'34"W
			MA 92	20°42'29"N	156°26'46"W
15	Maui	South of Kihei Boat Ramp through Ahihi Bay	MA 101	20°42'27"N	156°26'47"W
			MA 102	20°37'39"N	156°26'40"W
15	Maui	La Perouse Bay from Kalaeloa Point through Pohakueaea Point	MA 111	20°35'43"N	156°25'33"W
			MA 112	20°34'45"N	156°23'29"W
15	Maui	Molokini Crater	MAi1	20°37'51"N	156°29'43"W
16	Hawaii	Waimanu through Laupahoehoenuei	HA 11	20°08'35"N	155°37'59"W
			HA 12	20°09'54"N	155°39'18"W
16	Hawaii	Keokea Bay through Kauhola Point	HA 21	20°13'39"N	155°44'49"W
			HA 22	20°14'44"N	155°46'18"W
16	Hawaii	Kapaa Beach County Park to Mahukona Harbor	HA 31	20°12'16"N	155°54'06"W
			HA 32	20°11'04"N	155°54'05"W
16	Hawaii	South of Mahukona Harbor	HA 41	20°10'60"N	155°54'03"W
			HA 42	20°10'51"N	155°54'07"W
16	Hawaii	Pauoa Bay to Makaiwa Bay area	HA 51	19°57'03"N	155°51'49"W
			HA 52	19°56'38"N	155°52'10"W
16	Hawaii	Anaehoomalu Bay area through Keawaiki Bay area	HA 61	19°54'42"N	155°53'26"W
			HA 62	19°53'09"N	155°54'34"W
16	Hawaii	Puu Alii Bay Area through Mahaiula Bay	HA 71	19°47'37"N	156°01'33"W
			HA 72	19°46'53"N	156°02'18"W
16	Hawaii	Keahole Point through Kaloko-Honokohau National Historic Park	HA 81	19°43'54"N	156°03'26"W
			HA 82	19°40'28"N	156°01'34"W
16	Hawaii	South of Oneo Bay area through to Holualoa Bay area	HA 91	19°38'10"N	155°59'29"W
			HA 92	19°36'31"N	155°58'41"W
16	Hawaii	Kahaluu Bay Area through Keauhou Bay Area	HA 101	19°34'49"N	155°57'59"W
			HA 102	19°33'43"N	155°57'43"W
16	Hawaii	Kealakekua Bay Area	HA 111	19°28'38"N	155°55'13"W
			HA 112	19°28'25"N	155°55'10"W
16	Hawaii	Honaunau Bay Area	HA 121	19°25'35"N	155°55'02"W
			HA 122	19°25'01"N	155°54'42"W
16	Hawaii	Milolii Bay Area through Honomalino Bay Area	HA 131	19°11'07"N	155°54'29"W
			HA 132	19°10'04"N	155°54'35"W
16	Hawaii	Ka Lae National Historic Landmark District through Mahana Bay	HA 141	18°54'54"N	155°40'59"W
			HA 142	18°55'00"N	155°40'09"W

16	Hawaii	Papakolea Green Sand Beach Area	HA 151	18°56'10"N	155°38'47"W
			HA 152	18°56'11"N	155°38'45"W
16	Hawaii	Kaalualu Bay Area	HA 161	18°58'14"N	155°37'01"W
			HA 162	18°58'18"N	155°36'49"W
16	Hawaii	Whittington Beach Area through Punaluu Beach Area	HA 171	19°05'04"N	155°33'03"W
			HA 172	19°08'06"N	155°30'09"W
16	Hawaii	Halape Area through Keauhou Point Area	HA 181	19°16'14"N	155°15'20"W
			HA 182	19°15'45"N	155°13'59"W
16	Hawaii	Kapoho Bay Area	HA 191	19°29'38"N	154°49'01"W
			HA 192	19°30'10"N	154°48'46"W
16	Hawaii	Lehia Beach Park through to Hilo Harbor	HA 201	19°44'07"N	155°00'38"W
			HA 202	19°43'56"N	155°03'02"W
16	Hawaii	Papaikou Area	HA 211	19°46'39"N	155°05'18"W
			HA 212	19°46'43"N	155°05'18"W
16	Hawaii	Onomea Bay Area	HA 221	19°48'33"N	155°05'34"W
			HA 222	19°48'37"N	155°05'22"W
16	Hawaii	Hakalau Area	HA 231	19°54'02"N	155°07'32"W
			HA 232	19°54'05"N	155°07'43"W

- (i) Kaula Island,
- (ii) Niihau,
- (iii) Kauai,
- (iv) Oahu,
- (v) Maui Nui (including Kahoolawe, Lanai, Maui, and Molokai), and
- (vi) Hawaii.

(b) *Essential features.* The essential features for the conservation of the Hawaiian monk seal are the following:

(1) *Terrestrial areas and adjacent shallow, sheltered aquatic areas with characteristics preferred by monk seals for pupping and nursing.* Preferred areas that serve an essential service or function for Hawaiian monk seal conservation are defined as those areas where two or more females have given birth or where a single female chooses to return to the same site more than one year. Preferred pupping areas generally include sandy, protected beaches located adjacent to shallow sheltered aquatic areas, where the mother and pup may nurse, rest, swim, thermoregulate, and shelter from extreme weather. Additionally, this habitat area provides relatively protected space for the newly weaned pup to acclimate to life on its own. The newly weaned pup uses these areas for swimming, exploring, socializing, thermoregulatory cooling and the first attempts at foraging. Characteristics of terrestrial pupping habitat may include various substrates such as sand, shallow tide pools, coral rubble, or rocky substrates, as long as these substrates provide accessibility to seals for hauling out. Some preferred sites may also incorporate areas with low lying vegetation used by the pair for shade or cover, or relatively low levels of anthropogenic disturbance. Characteristics of the adjoined

sheltered aquatic sites may include reefs, tide pools, gently sloping beaches, and shelves or coves that provide refuge from storm surges and predators.

(2) *Marine areas from 0 to 200 m in depth that support adequate prey quality and quantity for juvenile and adult monk seal foraging.* Inshore, benthic and offshore teleosts, cephalopods, and crustaceans are commonly described as monk seal prey items. Habitat types that are regularly used for foraging include the sand terraces, talus slopes, submerged reefs and banks, nearby seamounts, barrier reefs, and slopes of reefs and islands. Monk seals focus foraging in bottom habitats on bottom-associated prey species, with most foraging occurring in waters between 0 to 200 m in depth. Habitat conditions, such as water quality, substrate composition and available habitat, should support growth and recruitment of bottom-associated prey species to the extent that monk seal populations are able to successfully forage.

(3) *Significant areas used by monk seals for hauling out, resting or molting.*

Significant haul-out areas are defined by the frequency with which local populations of seals use a stretch of coastline or particular beach. Significant haul-out areas are defined as natural coastlines that are accessible to Hawaiian monk seals and are frequented by Hawaiian monk seals at least 10 percent as often as the highest used haul out site(s) on individual islands, or islets. Significant haul-out areas are essential to Hawaiian monk seal conservation because these areas provide space that supports natural behaviors important to health and development, such as resting, molting, and social interactions. Hawaiian monk seals use terrestrial habitat to haul out for resting, and molting. Certain areas of coastline are more often favored by Hawaiian monk seals for hauling out. These favored areas may be located near preferred foraging areas, allow for relatively

undisturbed periods of rest, or allow small numbers of Hawaiian monk seals to socially interact as young seals and reproductive adults. These haul-out sites are generally characterized by sandy beaches, sand spits, or low shelving reef rocks accessible to seals.

(c) *Areas not included in critical habitat.* Critical habitat does not include the following particular areas where they overlap with the areas described in paragraph (a) of this section:

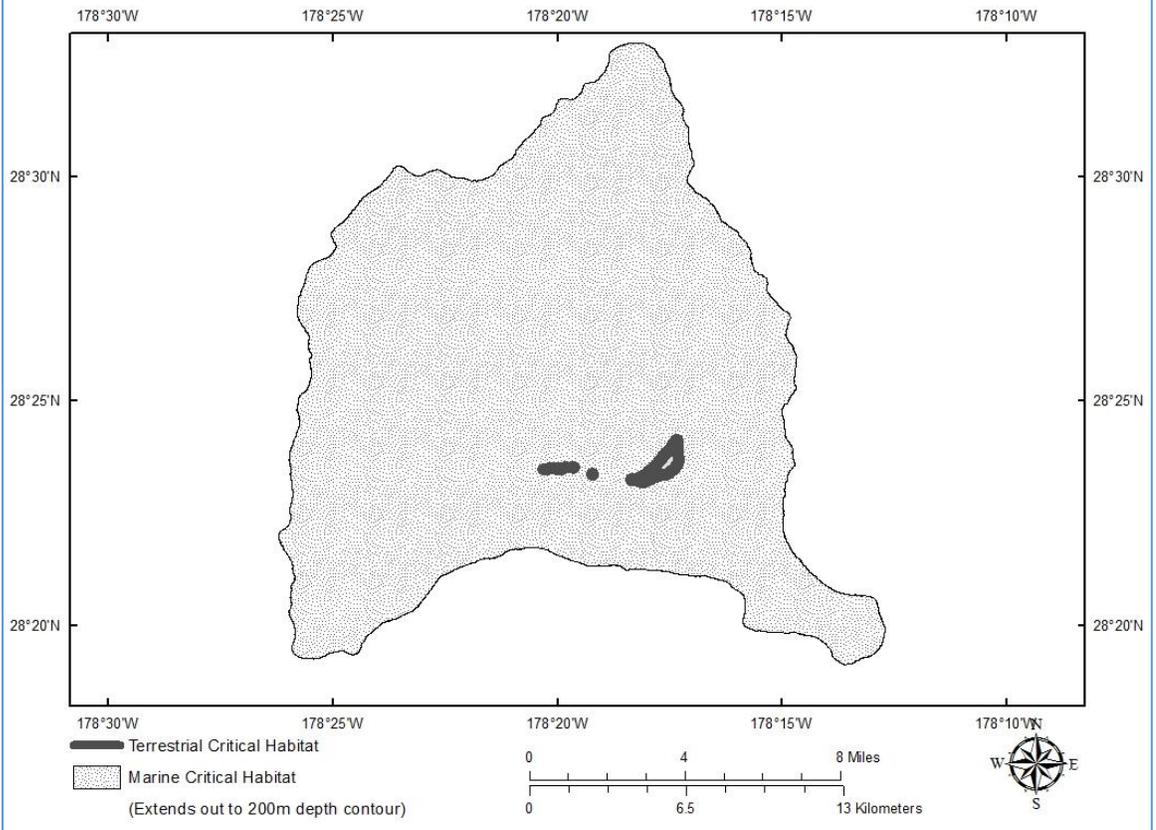
(1) Pursuant to ESA section 3(5)(A)(i), all cliffs and manmade structures, such as docks, seawalls, piers, fishponds, roads, pipelines, boat ramps, platforms, buildings, ramparts and pilings existing within the legal boundaries on [*INSERT DATE 30 DAYS AFTER PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER*].

(2) Pursuant to ESA section 4(a)(3)(B) all areas subject to the Marine Corps Base Hawaii, the Joint Base Pearl Harbor-Hickam, and the Pacific Missile Range Facility Integrated Natural Resource Management Plans.

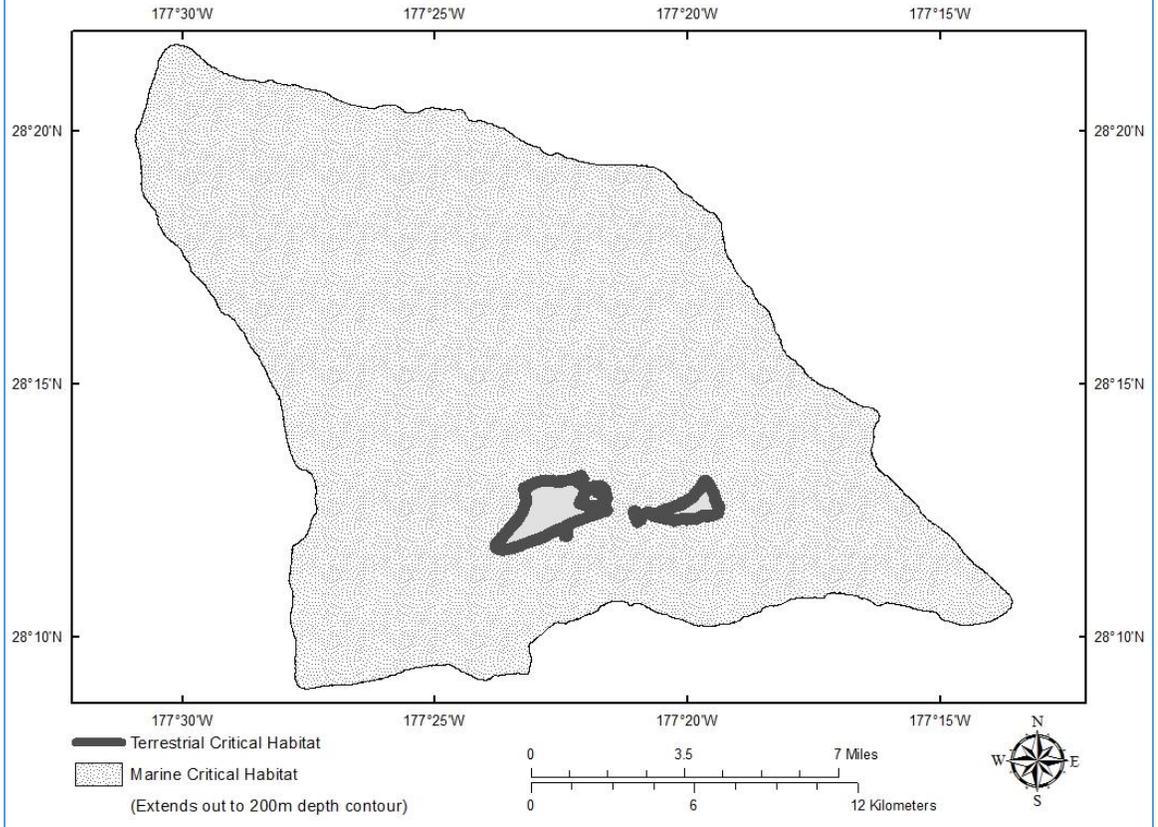
(3) Pursuant to ESA section 4(b)(2) the following areas have been excluded from the designation: the Kingfisher Underwater Training area in marine areas off the northeast coast of Niihau; the Pacific Missile Range Facility Offshore Areas in marine areas off the western coast of Kauai; the Puuloa Underwater Training Range in marine areas outside Pearl Harbor, Oahu; and the Shallow Water Minefield Sonar Training Range off the western coast of Kahoolawe in the Maui Nui area.

(d) *Maps of Hawaiian monk seal critical habitat.* The following are the overview maps of Hawaiian monk seal critical habitat:

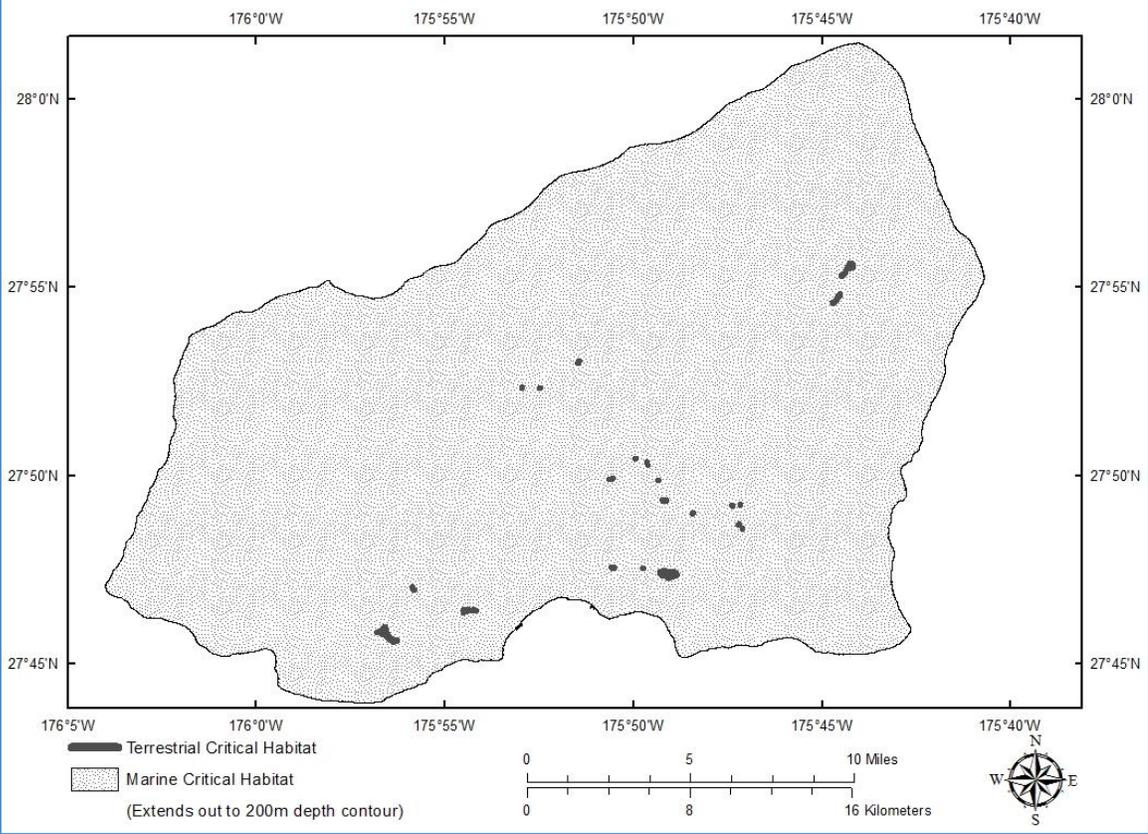
# Hawaiian Monk Seal Critical Habitat: Area 1. Kure Atoll



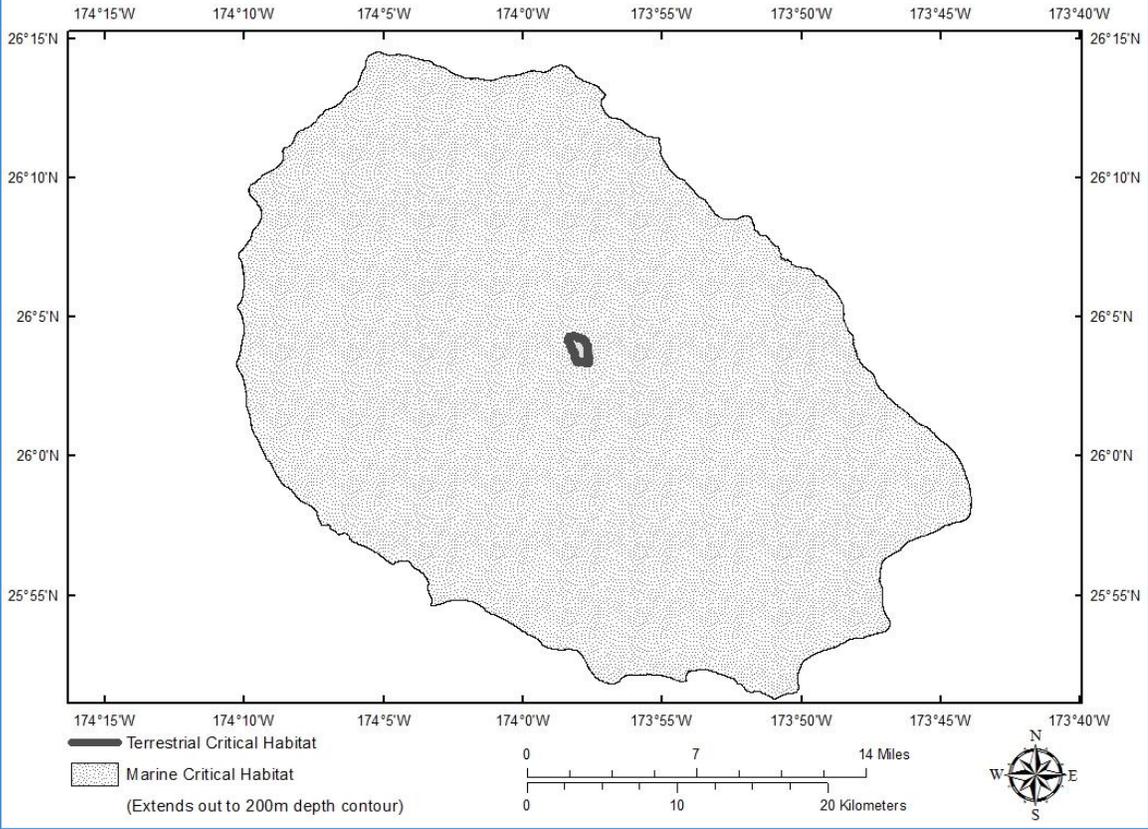
### Hawaiian Monk Seal Critical Habitat: Area 2. Midway Islands



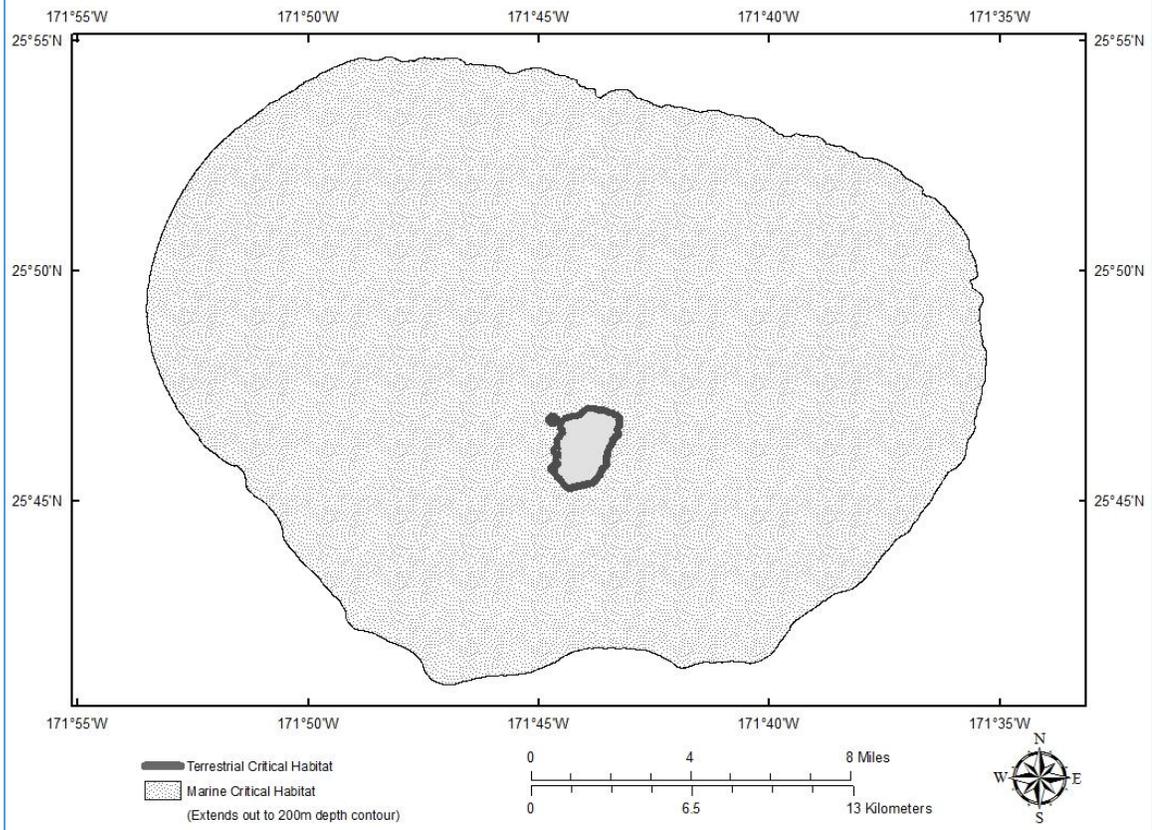
### Hawaiian Monk Seal Critical Habitat: Area 3. Pearl and Hermes Reef



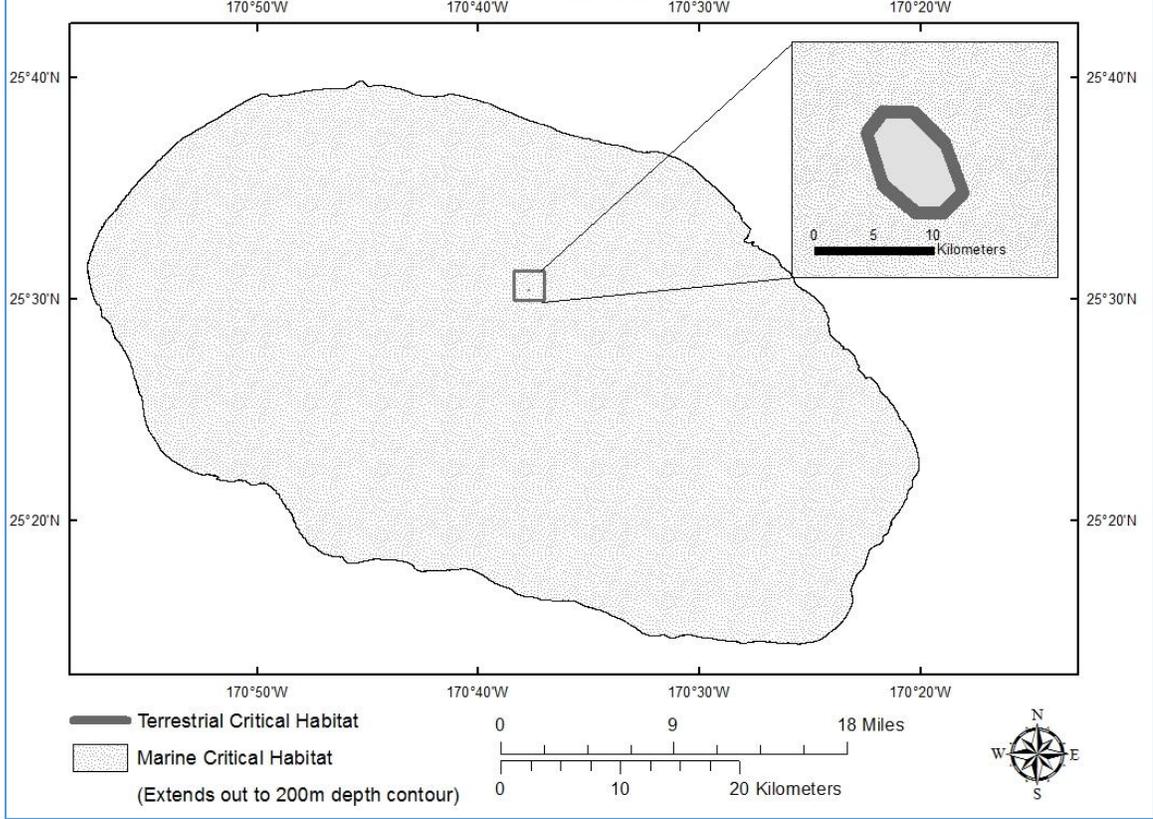
# Hawaiian Monk Seal Critical Habitat: Area 4. Lisianski Island



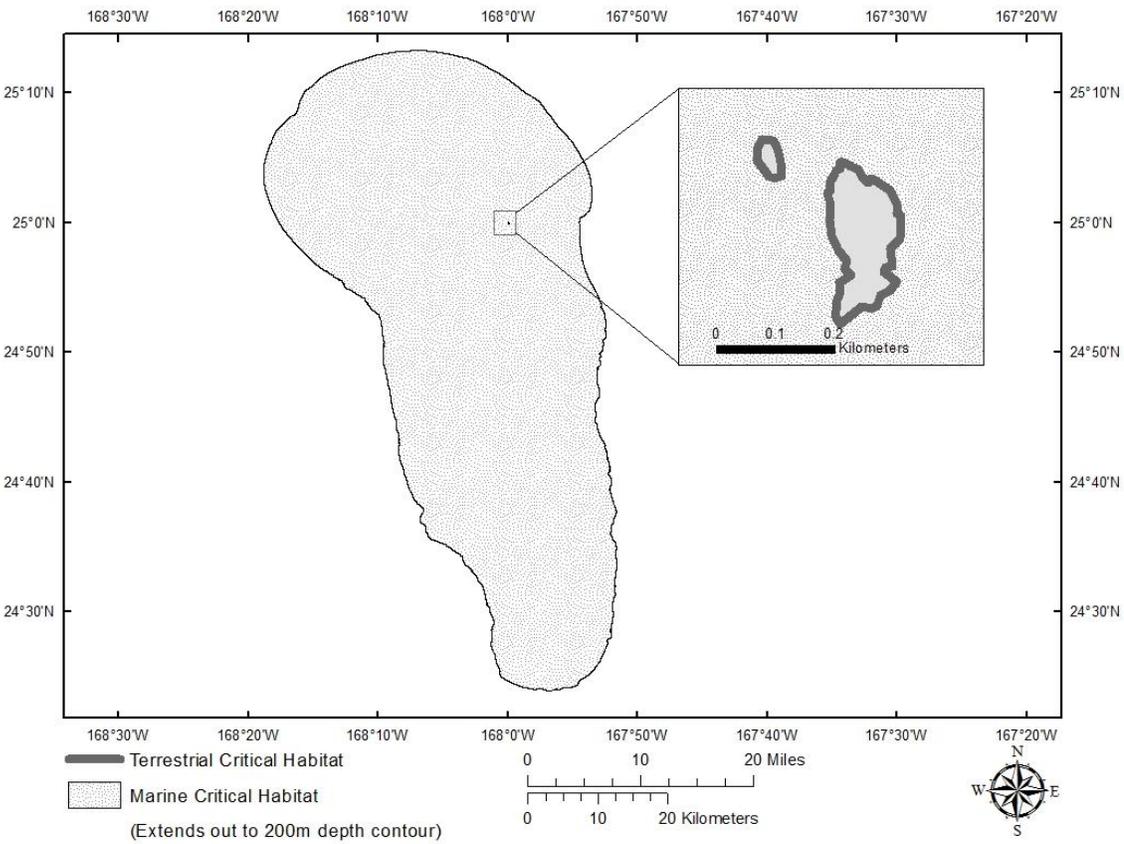
# Hawaiian Monk Seal Critical Habitat: Area 5. Laysan Island



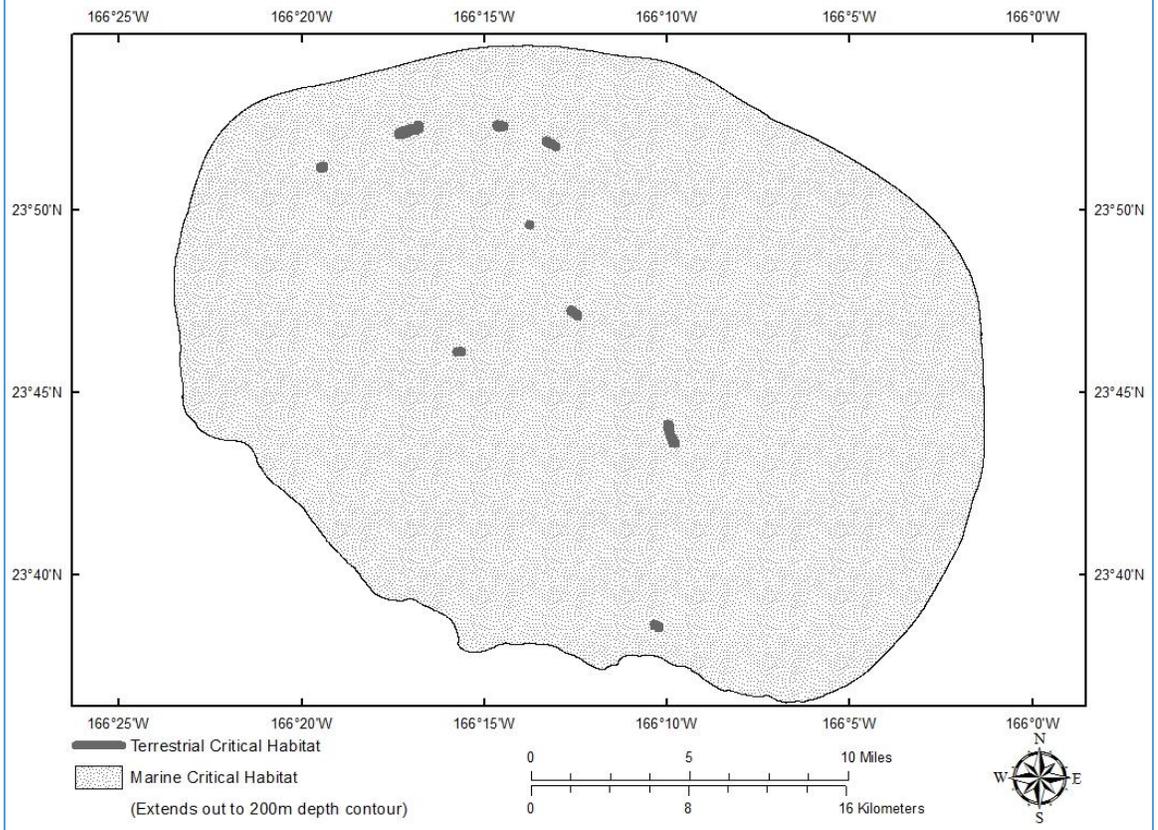
# Hawaiian Monk Seal Critical Habitat: Area 6. Maro Reef



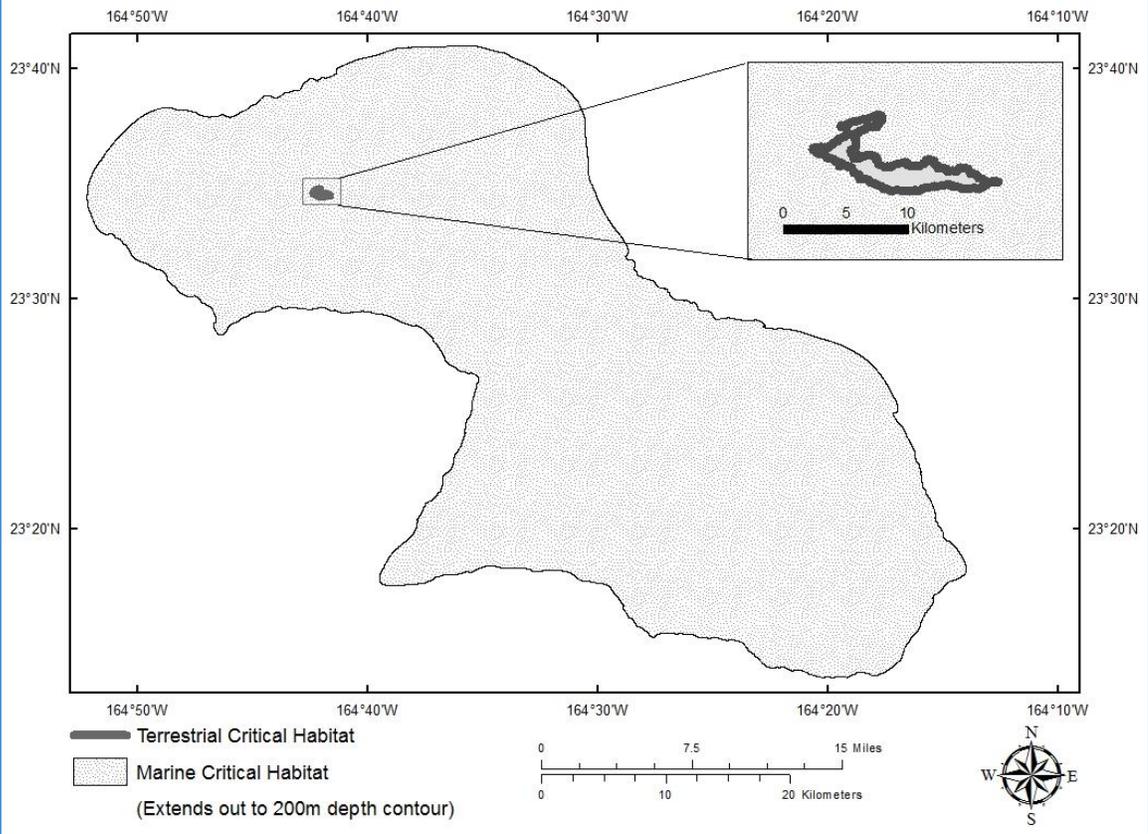
### Hawaiian Monk Seal Critical Habitat: Area 7. Gardner Pinnacles



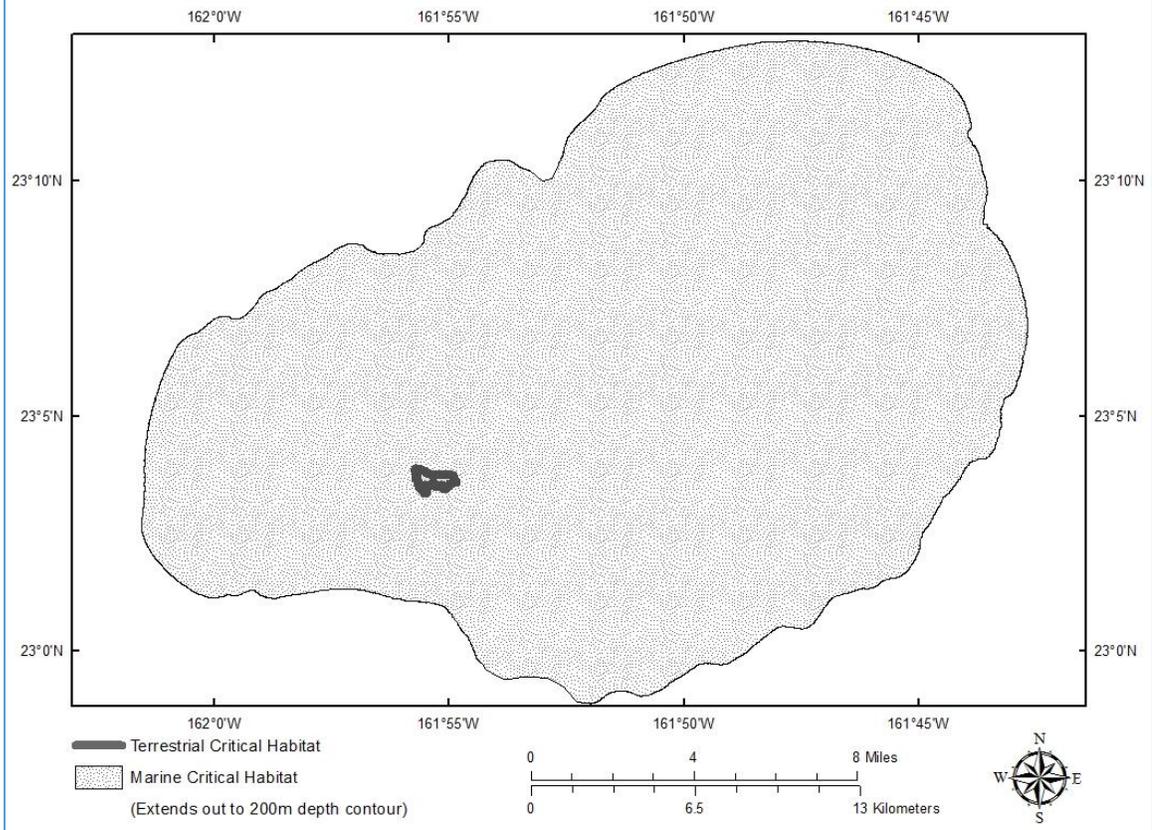
# Hawaiian Monk Seal Critical Habitat: Area 8. French Frigate Shoals



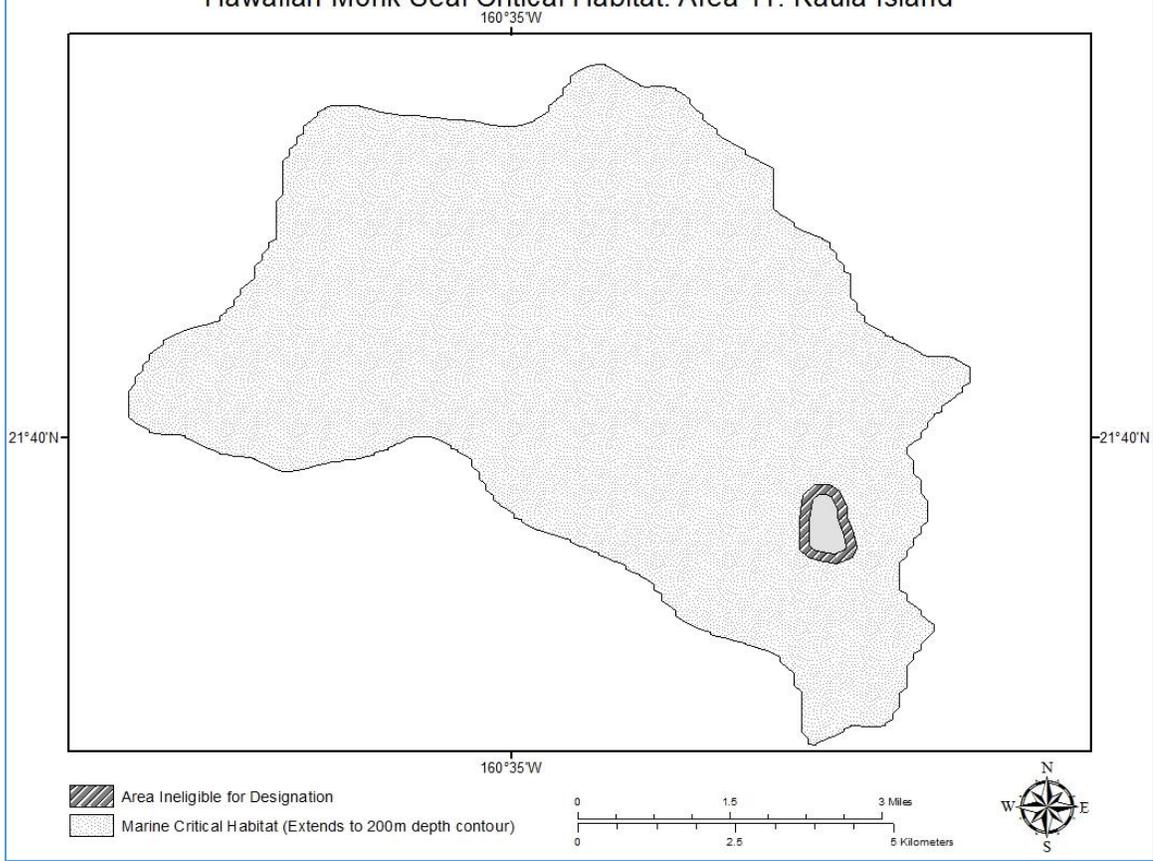
# Hawaiian Monk Seal Critical Habitat: Area 9. Necker Island



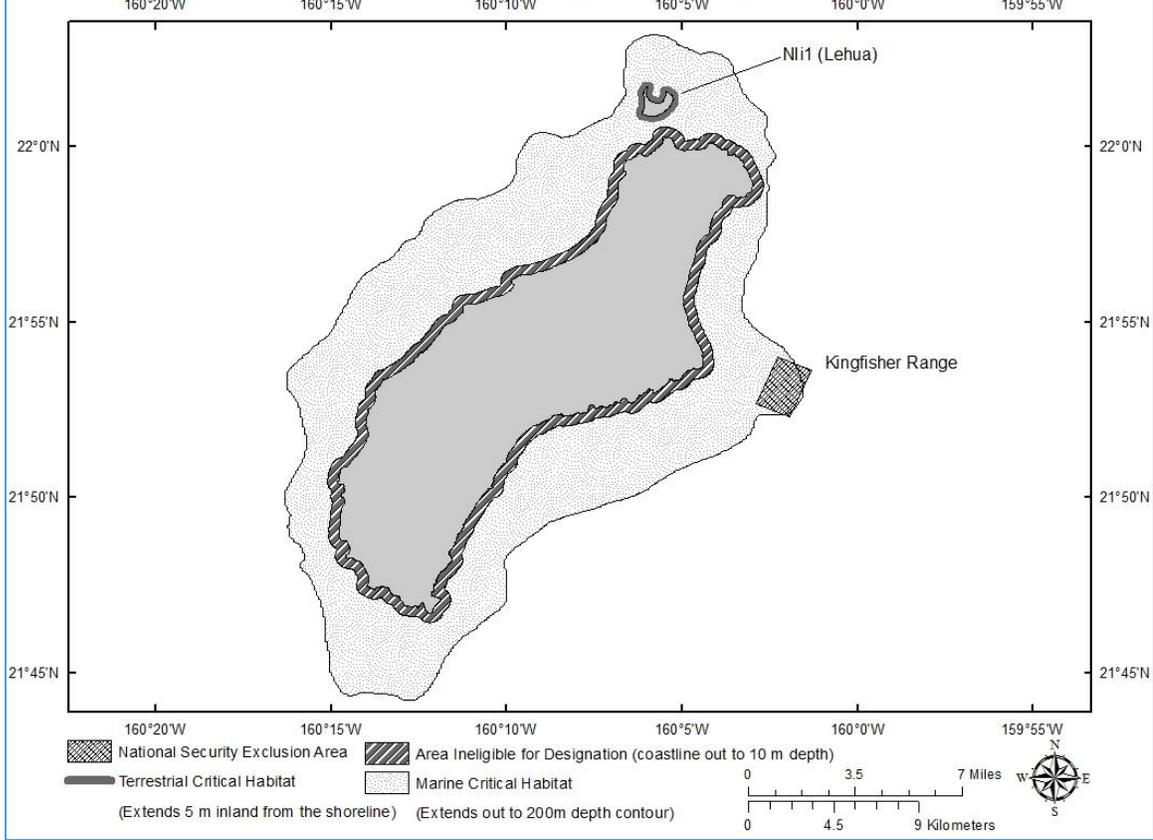
# Hawaiian Monk Seal Critical Habitat: Area 10. Nihoa



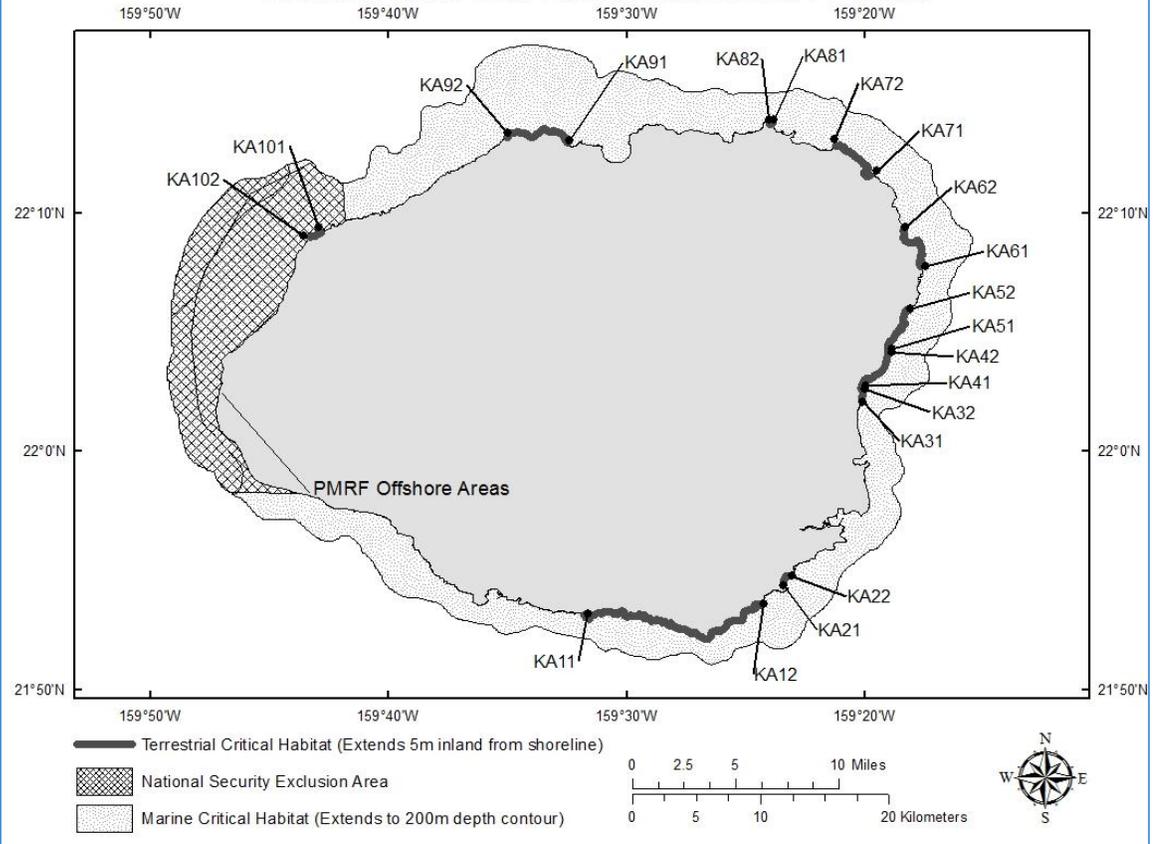
# Hawaiian Monk Seal Critical Habitat: Area 11. Kaula Island



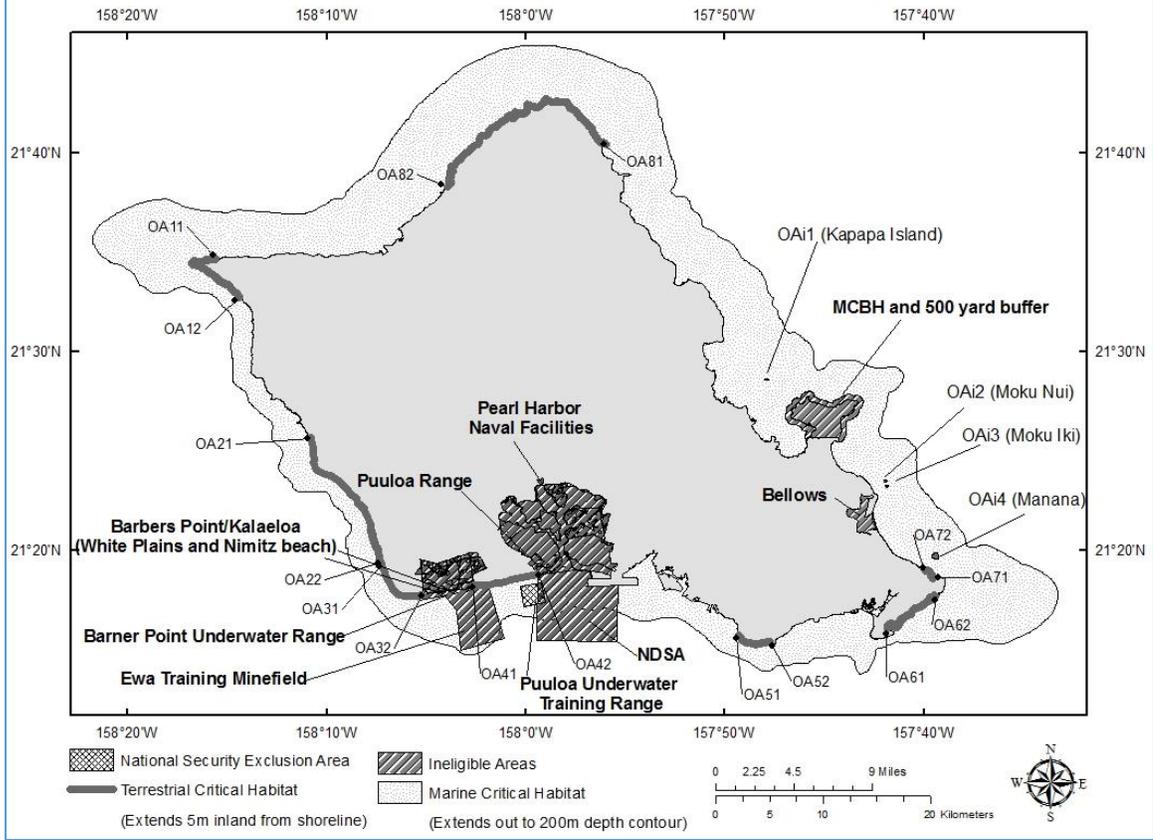
# Hawaiian Monk Seal Critical Habitat: Area 12. Niihau



### Hawaiian Monk Seal Critical Habitat: Area 13. Kauai

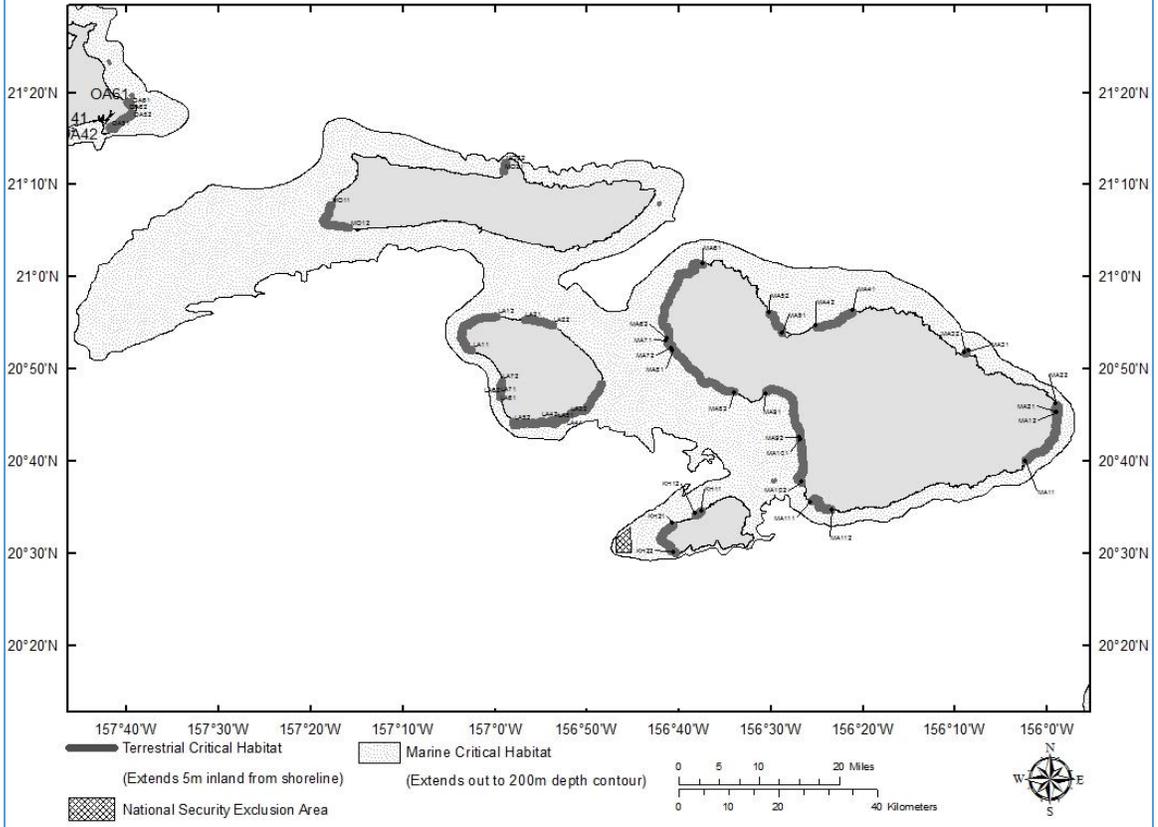


# Hawaiian Monk Seal Critical Habitat: Area 14. Oahu

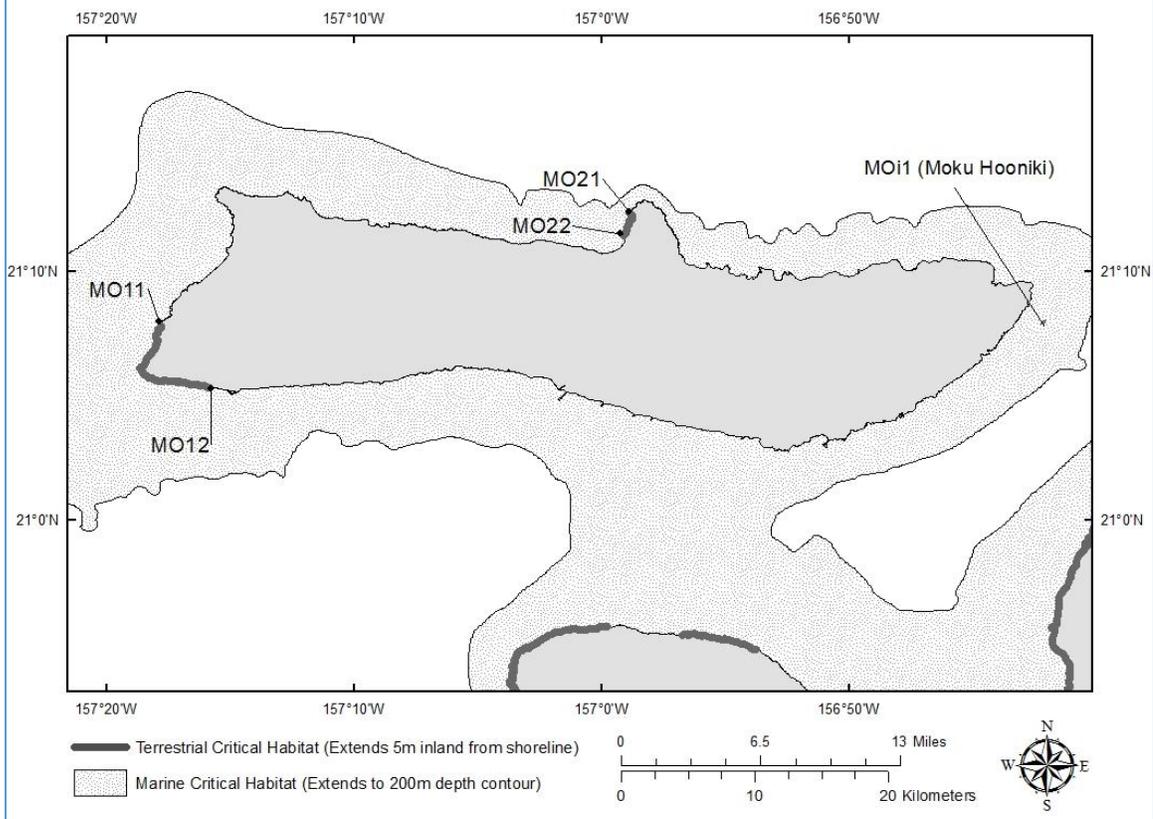


# Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Maui and Kahoolawe

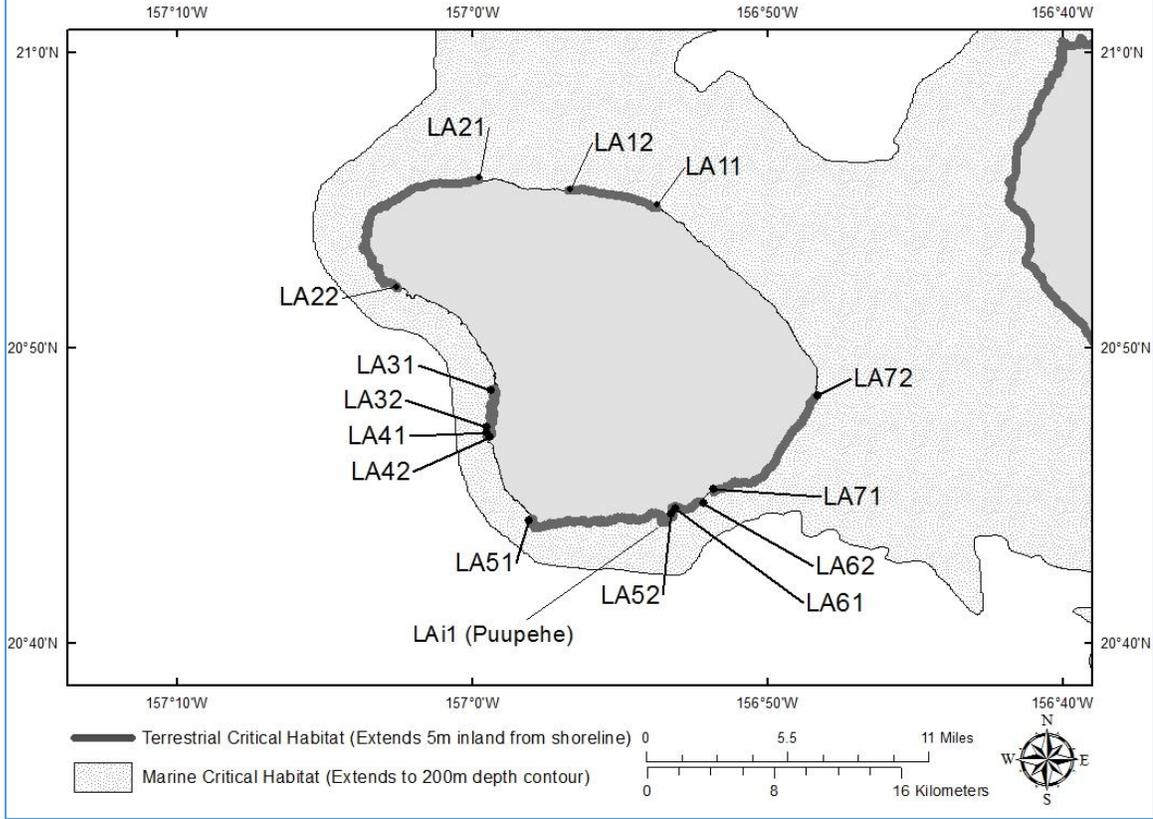
157°40'W 157°30'W 157°20'W 157°10'W 157°0'W 156°50'W 156°40'W 156°30'W 156°20'W 156°10'W 156°0'W



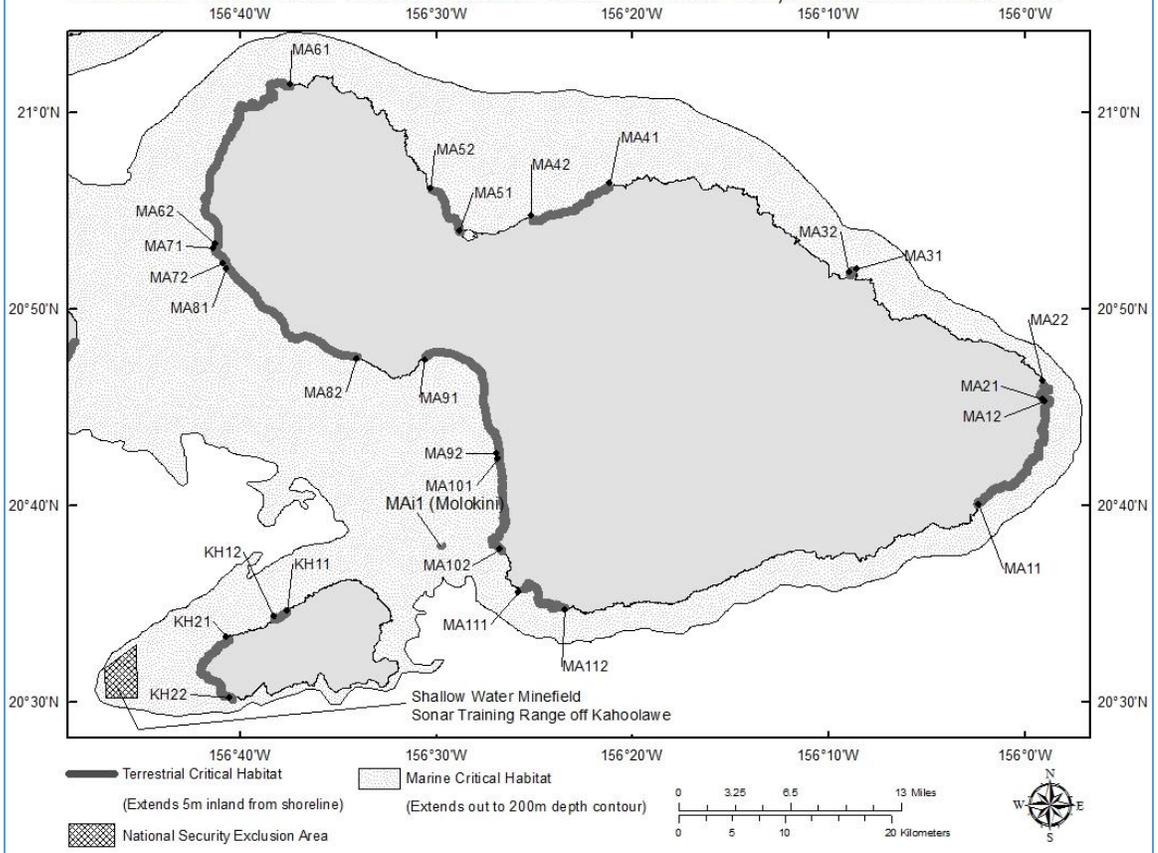
### Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Molokai



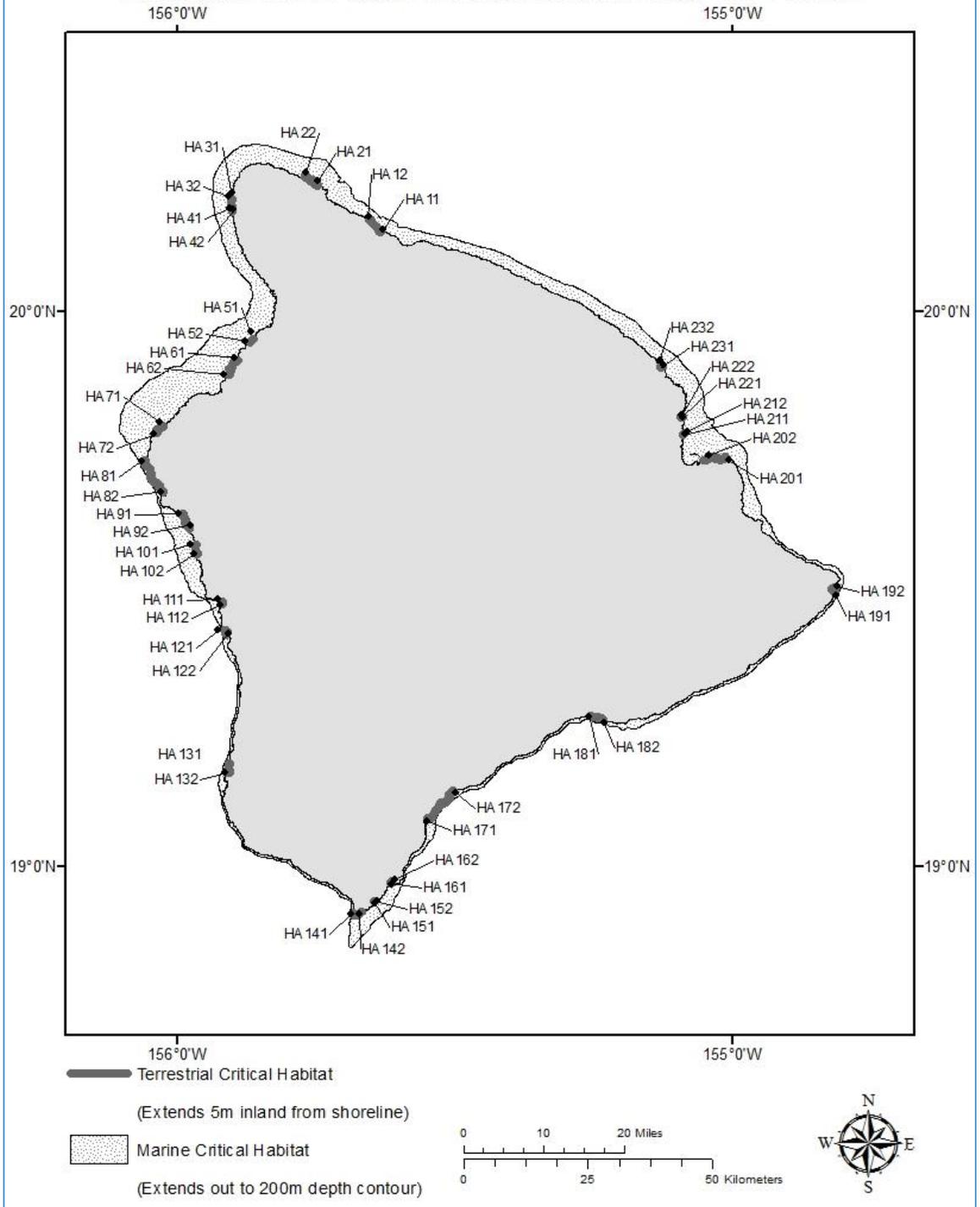
### Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Lanai



# Hawaiian Monk Seal Critical Habitat: Area 15. Maui Nui, Maui and Kahoolawe



# Hawaiian Monk Seal Critical Habitat: Area 16. Hawaii



# Hawaiian Monk Seal Critical Habitat: Area 16. Hawaii, West Hawaii

