Western
Pacific
Regional
Fishery
Management
Council

August 30, 2011

VIA ELECTRONIC FILING AND POSTAL MAIL
Lance Smith
Regulatory Branch Chief
Attn: Hawaiian Monk Seal Proposed Critical Habitat
Protected Resources Division
National Marine Fisheries Service
Pacific Islands Regional Office
1601 Kapiolani Blvd., Suite 1110
Honolulu, Hawaii 96814

Re: Proposed Rulemaking to Revise Critical Habitat for Hawaiian Monk Seals (RIN 0648-BA81)

Dear Lance:

The Western Pacific Regional Fishery Management Council (the Council) appreciates this opportunity to provide comments to the National Marine Fisheries Service (NMFS) on the proposed revision of the Hawaiian monk seal critical habitat[1]. The proposed critical habitat revision includes terrestrial and marine habitat from 5 m inland from the shoreline extending seaward to the 500 m depth contour around the Main Hawaiian Islands (MHI), excluding areas for which national security benefits of exclusion outweighs the benefits of inclusion, and exclusion will not result in extinction of the species.

The Council argues that the designation of marine habitat to depths of 500 m is excessive and does not reflect the best available science. Further, the Council finds the Economic Analysis Report to be insufficient, and impacts to fisheries and other activities are underestimated. Finally, critical habitat designation in MHI will not mitigate the true factors leading to the demise of the species, and the Council therefore argues that NMFS should focus its efforts on the recovery of the Hawaiian monk seal population in the NWHI.

Proposed critical habitat designation to include marine habitat in the MHI from shoreline to 500 m depth is not based on the best available science

The proposal to designate marine habitat from shoreline to 500 m depth in the MHI is not based on the best available scientific information because the supporting information provided by NMFS does not demonstrate that all marine habitat up to 500 m in the MHI are "preferred by juvenile and adult monk seals for foraging." NMFS bases this proposal on recent unpublished

[1] *See* 76 Fed. Reg. 32026 (June 2, 2011).

data[2] of monk seals with cell phone tags in the MHI demonstrating *some* diving depths up to 489 m, and on the supposition that monk seals, which currently are known to forage within 200 m in the MHI, will someday be forced to forage to depths to 500 m in the future. This rationale is inconsistent with Section 4(b)(2) of the ESA which requires critical habitat to be based on the best available scientific information at the time of designation, not on assertion, supposition, or conjecture.

Neither the proposed rule nor the draft Biological Report provide details of the recent cell phone tag records or any information on the methods of this study or its findings. The only citation provided for these supposed dive records is a memo from Jean Higgins, Pacific Islands Regional Office, to the HMS Critical Habitat Proposed Rule File. While the memo may indicate the diving capabilities of an individual seal in the MHI, it does not demonstrate a forage event, does not demonstrate that depths down to 500 m are *preferred* by MHI juvenile and adult monk seal population for foraging, nor does it explain what physical or biological features occur at depths up to 500 m in the MHI that are primary constituent elements necessary for population recovery. The use of this limited dive information to infer preferred foraging habitat for monk seals would be similar to assessing typical human mobility based on extremes such as athletic performance. The current best available scientific information therefore suggest that 489 m is merely the known dive limit of monk seals in the MHI, and the primary foraging habitat utilized by adult and juvenile monk seals in the MHI is near shore waters within the 200 m isobath[3].

Additionally, NMFS asserts that both population increase and intra-specific competition in the MHI is assured to occur and this appears to be part of the rationale given for expanding critical habitat in the MHI beyond the depth range supported by current foraging information to be *preferred* habitat. However, there is no supporting literature that indicates intra-specific competition plays a role in food limitation in the NWHI, therefore there is no basis for applying this assertion to the MHI. Moreover, NMFS notes in the proposed rule that differences between monk seal population status, habitat, research efforts, and threats to the seals utilizing MHI and NWHI support a separate approach to management and conservation efforts, thus justifying the designation of different depths of critical habitat between MHI and NWHI.

Further, NMFS acknowledges in the proposed rule and other sources[4] that the low survival rate of pups and juvenile monk seals up to 3 years of age is the primary factor that is contributing to the continued decline of the population in the NWHI. The essential features to determine critical habitat should then focus on the habitat requirements of pups and juveniles, and not adults. The proposed rule clearly states that foraging studies with juvenile monk seals in the NWHI shows feeding occurring within shallow atoll lagoons at 10-30 m and on deep reef slopes at 50-100 m. Taken together, these information suggest that the most critical foraging habitat for Hawaiian monk seals are 10-100 m depth utilized by juveniles up to 3 years of age.

For these reasons, the proposed designation should be revised to limit marine areas of critical habitat in the MHI to depths between 0-100 m. However, should NMFS maintain that all marine habitat up to 500 m depth in the MHI is "essential" on the basis of a few dive records,

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[2] NMFS (2010) Memo from Jean Higgins, Pacific Islands Regional Office, to the HMS Critical Habitat Proposed Rule File re: New dive depths recorded for Hawaiian monk seals in the MHI.

[3] Littnan, C.L., Stewart, B.S., Yochem, P.K. & Braun, R. (2006). Survey for selected pathogens and evaluation of disease risk factors for endangered Hawaiian monk seals in the main Hawaiian Islands. EcoHealth 3:232-244.

[4] For example, two recent documents prepared by NMFS acknowledge this:
NMFS (2007). Recovery Plan for the Hawaiian Monk Seal (Monachus schauinslandi). Second Revision. National Marine Fisheries Service, Silver Spring, MD. 165 pp.
NMFS. (2011). Hawaiian Monk Seal Recovery Actions Draft Programmatic Environmental Impact Statement.

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. Areas not included in the proposed critical habitat designation due to the lack of essential features but are known monk seal haul out areas include Waikiki Beach[5], Kaneohe Bay, and Hanalei Bay.

Economic analysis is insufficient and fails to fully assess potential impacts from the proposed designation

The Council finds that the draft Economic Analysis report is insufficient and fails to fully assess potential impacts as a result of the proposed critical habitat revision to include marine habitat up to 500 m depth in the MHI. The draft Economic Analysis concludes that impacts of the proposed critical habitat designation may be felt most by federal agencies and others involved with in-water and coastal construction activities and the disposal of dredge materials in the form of administrative costs associated with consultations. The report also acknowledges a potential for larger impacts "if future research or information should establish a connection between point-source water pollution or commercial fisheries, and the essential features of the HMS critical habitat." However, the report fails to determine the extent to which these impacts may occur, and as a result vastly underestimates the potential economic impact from the designation.

Several factors have led to NMFS' underestimation of impacts resulting from the proposed critical habitat designation:

a) The draft Economic Analysis report is incomplete
b) Quality of the draft Economic Analysis report is not comparable to recent similar analyses conducted for other critical habitat designations
c) The draft Economic Analysis report underestimates the impacts to fishing and aquaculture activities
d) A rigorous and systematic approach is lacking in the analysis of exclusions based on economic impacts

These factors are explained in detail in the following sections.

a) The draft Economic Analysis report is incomplete

The draft Economic Analysis does not complete all of the steps outlined in the analysis approach. According to the executive summary of the draft Economic Analysis report, the final step in the analysis entails the following (emphasis added):

- Estimate the potential economic impacts of Hawaiian monk seal conservation efforts by economic activity type and <u>sum these impacts by area</u>.

The report, however, ends after the previous step of identifying the potential economic impacts on each individual activity type, and does not complete the last step of summing these impacts by the 16 specific areas proposed for designation[6], as listed in Table 2 of the document. The

[5] A quick internet search of monk seal haul outs in Waikiki resulted in at least a dozen hits in the past five years. For example, Kermit was observed at Queens Beach Waikiki, May 2009; Seal H-59 at Kaimana Beach Waikiki in February 2007. Other events and pictures revealed seal haul outs in Waikiki in April 2008, June 2008, and at San Souchi Waikiki on August 2010.

[6] These 16 areas are: Kure Atoll, Midway Islands, Pearl & Hermes Reef, Lisianski Island, Laysan Island, Maro Reef, Gardner Pinnacoles, French Frigate Shoals, Necker Island, Nihoa Island, Kalua Island, Niihau Island, Kauai Island, Oahu Island, Maui County, and Hawaii Island.

report should have included a section in which a synthesis of impacts to all activities would be analyzed for each of the areas. The analysis of potential economic impacts is therefore incomplete, and the Council thus requests that NMFS conduct a reanalysis and reflect the results in the draft ESA Section 4(b)(2) report prior to the publication of a final rule.

b) Quality of the draft Economic Analysis report is not comparable to recent similar analyses conducted for other critical habitat designations

The quality of the draft Economic Analysis report for the proposed Hawaiian monk seal critical habitat revision does not meet the same standards achieved by other recent critical habitat economic analyses conducted by NMFS, nor the regulatory analysis guidelines set forth by the Office of Management and Budget (OMB). For example, the Economic Analysis report prepared for the critical habitat designation of leatherback sea turtles[7] entailed the application of a cost-effectiveness framework that supports the Section 4(b)(2) decision-making process. The framework allows the comparison of estimated "benefits of exclusion" against an indicator of the biological "benefits of designation" for each proposed area, and the leatherback Economic Analysis report was prepared in a manner that provides systematic results contributing to the 'benefits of exclusion" portion of the weighing process. According to the report, the cost-effectiveness analysis (CEA) is one of two possible scientific approaches that are supported by the Office of Management and Budget (OMB) through its guidelines on regulatory analysis[8]. The OMB guidelines specifically note that a CEA should be conducted when primary benefits cannot be expressed in monetary units, as the approach offers a rigorous way to analyze options without requiring monetization of all relevant benefits or costs.

Moreover, the leatherback Economic Analysis report identifies a range of potential project modifications and quantifies the potential resulting economic impacts in dollar values wherever cost information is available. Activities for which uncertainty exist for the extent of project modifications or cost data are lacking, impacts are qualitatively assessed (e.g., "low impacts with medium cost"). All of these economic activities are first assessed individually by area, and the impacts and costs are later summarized for all activities by area. In contrast, the draft Economic Analysis for the monk seal critical habitat designation fails to assess the potential economic impacts resulting from project modifications on the basis that uncertainty exists with extent to which re-initiation or new consultations would result in modifications, and that current information is insufficient to determine the extent of these costs, should they materialize. Further, as identified in the previous section, the draft Economic Analysis for the monk seal action does not involve any synthesis of impacts to all activities by area.

These examples illustrate the inconsistency in the quality of the economic analysis conducted for two recent critical habitat designation proposals. NMFS should be held to consistent analysis standards to ensure fairness across regions in comparable decision-making processes. When conducting the reanalysis of economic impacts, NMFS should review the analysis prepared for the leatherback sea turtle critical habitat designation and apply the methods used in determining economic impacts of the designation. In particular, NMFS should identify

[7] NOAA Fisheries. 2009. Economic impacts associated with potential critical habitat designation for the leatherback sea turtle. Available for download at: http://www.nmfs.noaa.gov/pr/pdfs/species/leatherback_economics.pdf
[8] U.S. Office of Management and Budget. "Circular A-4," September 17, 2003, available at http://www.whitehouse.gov/omb/circulars_a004_a-4/

the range of potential project modifications and quantify resulting economic impacts and address uncertainties in qualitative values using methods applied in the leatherback Economic Analysis.

c) The draft Economic Analysis report underestimates the impacts to fishing and aquaculture activities

The draft Economic Analysis report lacks some important information regarding fishing and aquaculture activities that resulted in the underestimation of economic impacts to these activities from the proposed critical habitat designation. The proposed rule clearly lists restrictions on the spatial or temporal extent of fishing areas or aquaculture projects as possible modifications resulting from the critical habitat revision. However, the potential economic impacts were not quantified on the basis that uncertainty exists with extent to which re-initiation or new consultations would result in modifications, and that current information is insufficient to determine the extent of these costs, should they materialize.

NMFS contacted the Council when the economic analysis was being conducted, and Council staff subsequently met with the consultant conducting the economic analysis and provided materials on the economic values of fishing activities that may be affected by the designation. However, in reviewing the draft Economic Analysis report, it does not appear that all information provided by the Council were considered. We therefore provide some of that same information below as well as new information that has become available since.

The description of fisheries included in the draft Economic Analysis report is void of any dollar amount to quantify the value of the activity. One of the documents that the Council provided to the consultant was the Council's Fishery Ecosystem Plan (FEP) for the Hawaii Archipelago[9] with specific reference to the socioeconomic environment and fisheries description sections. Economic information provided in these sections includes the following:

- The most recent estimate of ex-vessel value of fish sold by fisheries regulated under the Hawaii FEP at $4.2 million[10];
- Estimated total fishing expenditures at $125 million;
- Estimated 109,000 participants, or 8.6% of Hawaii's population represented, in recreational and subsistence fishing; and
- Ex-vessel price per pound (e.g., $5.89 and $5.01 for onaga and opakapaka in 2003)

Additionally, new information on the MHI bottomfish fishery is now available. For example, the fishery generated $1.7 million in revenue in 2010[11] under the 2010-2011 total allowable catch (TAC) of 254,050 lbs. The TAC for the fishery has been revised to 325,000 lbs for the upcoming 2011-2012 season starting on September 1, 2011, and an increase in revenue can be expected. A recent survey of the Hawaii bottomfish fishery estimated the fishery's contribution to the economy through the purchase of electronics, gear, and vessels, as well as through goods and services such as repairs and maintenance. According to the preliminary results, commercially-licensed fishermen have, on average, invested approximately $8,354 in

[9] http://wpcouncil.org/fep/WPRFMC%20Hawaii%20FEP%20(2009-09-21).pdf

[10] The ex-vessel value includes revenues from the following fisheries regulated under the Hawaii FEP: Coral reef species; MHI bottomfish; NWHI bottomfish; MHI crustaceans; and precious corals.

[11] Preliminary data as of April 11, 2011, presented at the Western Pacific Regional Fishery Management Council's Hawaii Archipelago Ecosystem Plan Team Meeting in Honolulu on April 12, 2011.

electronics, $5,759 in gear, and $40,465 in their vessels[12]. A simple extrapolation of these investments to the 519 bottomfish fishermen who responded to the survey reveals an overall economic contribution of more than $28 million over the years. These direct and indirect economic contributions from the bottomfish fishery suggest that even a small modification in the project area would produce economic impacts. For example, a spatial or temporal restriction in the fishery that would result in a 5% reduction in catch would translate to $85,000 of lost revenue based on a simple extrapolation from the fishery's value in 2010[13].

The draft Economic Analysis report also fails to consider the economic value of recreational and subsistence fisheries, components of which now have a clear federal nexus in the form of the new National Saltwater Angler Registry. While the registry is currently only required for those fishing outside of 3 miles, inclusion of saltwater fishing activities within 3 miles and from shoreline may be possible in the future. The draft Economic Analysis report notes that "NMFS does not intend to use the registry to regulate the activities of individual anglers". However, existence of the federal nexus alone provides the potential for ESA Section 7 consultation to be required in the future. This is particularly concerning in light of a recent Section 7 consultation with the US Fish and Wildlife Service for the federally-funded Hawaii Ulua Tagging Project that nearly stopped all tagging activities until the consultation was completed. Moreover, the new federal nexus for recreational and subsistence fisheries through the National Saltwater Angler Registry as well as the existing federal MHI non-commercial bottomfish permit create concerns for the fishing community as it leaves NMFS vulnerable to litigation by any person or organization that may suspect that recreational, non-commercial and subsistence fishing could be impacting monk seal habitat.

Potential economic impacts to aquaculture activities are also underestimated. In recent years, the National Oceanic and Atmospheric Administration (NOAA) has been promoting safe and sustainable offshore aquaculture operations in U.S. federal waters through the introduction of the National Offshore Aquaculture Act of 2007. Offshore aquaculture operations are multi-million dollar activities that require investor confidence. Critical habitat designation would add the requirement for additional consultation that may result in modification of activities before such operations could be permitted. As a result, the potential exist that the critical habitat designation would derail some interest in starting up offshore aquaculture operations in Hawaii.

The above information represents only some of the economic information missing from the draft analysis report. It is likely that economic information for other activities were also missing from the analysis, and we suspect that overall economic impacts that could result from the critical habitat designation was vastly underestimated.

d) A rigorous and systematic approach is lacking in the analysis of exclusions based on economic impacts

In addition to the deficiencies in the draft Economic Analysis report identified above, the draft ESA Section 4(b)(2) report also lacks a rigorous and systematic approach in weighing the

[12] Hospital, J. and C. Beavers. 2010. Fishermen identify levels of investment and annual fishing expenditures. *Bottomfish News, vol.9,* p.2-3.

[13] This value does not include any indirect impacts such as costs associated with changes in gear investments and fuel requirements. This also does not take into account the potential indirect impacts to restaurant and tourism industries. Bottomfish fishery provides a unique local product that is marketed to tourists as a 'visitor's attraction', particularly on Maui where tourism is dominated by visitors from mainland U.S. and Canada.

benefits of designation against the benefits of exclusion to determine if any area should be excluded from designation based on economic impacts. It appears from the Section 4(b)(2) report that determination of exclusion due to economic impacts was done through 'deliberations' and 'discussions' that are not well documented. NMFS notes in the discussion on the benefits of designation[14] that conservation benefits were "considered from a qualitative stand point" and that "factors attributed to the benefits of the designation of areas were individually considered within each particular area during the exclusion discussions and are described in detail as exclusion considerations were raised." However, in the subsequent discussion of the benefits of exclusions based on economic impacts, no systematic analysis is conducted to weigh the benefits of designation against economic impacts in each of the 16 specific areas, and the discussion is summarized as follows:

> The Economic Analysis presented indicates that impacts may be felt most strongly by in-water and coastal construction activities and the disposal of dredge materials. Beyond these impacts, the potential exists for greater economic impacts to activities associated with water quality control and fishing activities as we better understand the impacts that these activities have on the essential features of Hawaiian monk seal critical habitat. In considering these factors, we also deliberated over the benefits of designating critical habitat for the Hawaiian monk seal in these areas. The Economic Analysis demonstrates the potential for benefits in the tourism industry, and benefits that people derive from value placed on Hawaiian monk seals and the environment in Hawaii, but we focused on what this designation means for the Hawaiian monk seal. In doing so, we acknowledged first that the Hawaiian monk seal population is on the decline ((NMFS) 2009). Secondly, we acknowledged that rises in sea level continue to present a threat to the species, especially in the habitat previously designated in the NWHI, and we recognized that the growing population in the MHI represents the best hope for conserving the population. As discussed earlier, the benefits associated with the designation of critical habitat stem from our ability to identify the features that are essential not only for the conservation of the species but also for its recovery. The proposed rule, if finalized as proposed, will in turn provide protections for those essential features through ESA section 7(a)(2) consultations. Designating critical habitat within the MHI provides a means to protect those essential features in an area where the features are most threatened by expansion and development; this will be especially important as the population of seals increases in the MHI. In Summary, at this time, we have not identified a particular area where the benefits of exclusion from the designation, due to economic impacts, outweigh the benefits of designation.[15]

The level of analysis conducted by the monk seal critical habitat review team to determine exclusions based on economic impacts is not systematic and insufficient in weighing the costs and benefits. In contrast, the Section 4(b)(2) analysis conducted for the designation of leatherback sea turtle critical habitat[16] takes a systematic approach in which overall conservation value ratings were calculated for each specific area[17] by the critical habitat review team. The

[14] *See* pp.18-20 of the draft ESA Section 4(b)(2) Report

[15] Pp.22-23, Revision of Critical Habitat for Hawaiian Monk Seals: Draft ESA Section 4(b)(2) Report

[16] National Marine Fisheries Service, Critical Habitat Review Team. 2009. Designation of Critical Habitat for the Leatherback Sea Turtle: Endangered Species Act Section 4(b)(2) Report. Available for download at: http://www.nmfs.noaa.gov/pr/pdfs/species/leatherback_esa4b2.pdf

[17] The methods used to calculate the ratings are as follows (p.16 of the leatherback ESA Section 4(b)(2) Report):

resulting ratings were then weighed against the estimated costs and impact rating determined in the draft leatherback Economic Analysis report to determine specific areas that would qualify for exclusion based on economic impacts. This method allows a much more rigorous approach in weighing the costs and benefits to a critical habitat designation. The Council therefore request that NMFS reconsider the analysis used in the draft monk seal ESA Section 4(b)(2) report so that determination of exclusion due to economic impacts is conducted in a thorough manner that is consistent with other recent critical habitat designations.

Primary threats to the species, such as low pup survivability in NWHI, inter-specific competition and attacks by sharks cannot be addressed through critical habitat designation

As acknowledged by NMFS in the proposed rule and the Recovery Plan for the Hawaiian Monk Seal, the primary factor contributing to the continued decline of the population in the NWHI is the low survival rate of pups and juvenile monk seals up to 3 years of age. Additional threats to monk seals particularly in the NWHI include inter-specific competition and attacks by sharks. In the MHI, NMFS has identified the primary threat as human interactions, including mother-pup disturbance on popular beaches, recreational fishery interactions, and exposure to diseases. These threats that are most detrimental to the monk seal populations in NWHI and MHI cannot be addressed through the designation of critical habitat given that they are not caused by activities that are federally funded, authorized, or permitted, or because they are not issues of habitat. NMFS has been addressing these threats through existing Section 7 consultations as well as recovery and management activities, and is currently proposing additional activities in hopes of curtailing the continued population decline in the NWHI. Moreover, NMFS has not adequately demonstrated that the existing critical habitat in the NWHI extending out to the 20 fathom isobath has contributed to the conservation and recovery of monk seals, nor have they adequately demonstrated that the proposed designation to include marine habitat out to the 500 m depth contour would contribute to the recovery goal of the species.

Negative attitudes toward monk seals from fishermen and other ocean users in the MHI are mounting due to increasing incidents of interactions with monk seals that pose a threat to human safety, as well as interactions resulting in monk seals stealing fishermen's catch or destroying gear. The perceived protection of monk seals over humans through the proposed critical habitat revision as well as the proposed temporary translocation of monk seal pups from NWHI to MHI may, cumulatively, result in more negative impacts to monk seals than the benefits provided by the critical habitat designation.

The Council therefore requests that NMFS continue to focus on addressing the decline of the NWHI population through recovery and management efforts, and minimize the areas that will be designated as critical habitat, especially in the MHI.

"In evaluating the conservation value rating of each specific area, we assessed how leatherbacks use each area, the frequency and duration of that use, and the quality and quantity of prey species within each area. After reviewing the best available information, we determined that the eight specific areas varied in terms of potential conservation value for leatherback turtles. As a team, we used professional judgment to assign a relative importance score of 1, 2, or 3 (3 representing the highest importance) to each area for each of our two identified PCEs[17]. Scores were then summed and used to assign an overall conservation rating of "Very Low", "Low", "Medium" or "High" for each specific area. Summed numeric equivalents for each conservation rating were: Very Low = 3 or less; Low = 4; Medium = 5; High = 6 (see biological report for more details)."

Conclusions

The Council recognizes the challenge faced by the monk seal population in Hawaii, with a declining population in the protected NWHI and a growing population in the developed MHI. We understand that the low survival rate of pups and juveniles in the NWHI is a critical factor in the decline of the overall population. We therefore urge NMFS to focus their efforts in addressing the issue of low survival rates in the NWHI, and minimize the marine habitat areas that would be designated as critical habitat. Specifically, the Council requests NMFS to consider revising the proposed critical habitat designation to only include marine areas of 0-100 m depth in the MHI, based on the best available scientific information suggesting that the depth represents *preferred* foraging habitat for juvenile monk seals.

In addition, we argue that NMFS should be held to consistent analysis standards to ensure fairness across regions in comparable decision-making processes. We therefore request NMFS to revisit the draft Economic Analysis report and the ESA Section 4(b)(2) report to conduct a reanalysis utilizing methods and approaches used in the analysis for the leatherback sea turtle critical habitat designation.

Sincerely,

Kitty M. Simonds

Kitty M. Simonds
Executive Director

Cc: Michael Tosatto, Regional Administrator, NMFS Pacific Islands Regional Office