



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

**FINDING OF NO SIGNIFICANT IMPACT
FOR THE ISSUANCE OF REGULATIONS AND A LETTER OF AUTHORIZATION
TO THE U.S. MARINE CORPS TO TAKE MARINE MAMMALS BY HARASSMENT,
INCIDENTAL TO TRAINING ACTIVITIES IN PAMLICO SOUND, NORTH CAROLINA**

NATIONAL MARINE FISHERIES SERVICE

National Oceanic and Atmospheric Administration Administrative Order (NAO) 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality's (CEQ) regulations at 40 CFR 1508.27 state that agencies should analyze the significance of an action both in terms of 'context' and 'intensity'. Each criterion listed below is relevant to making a finding of no significant impact and NMFS has considered them individually, as well as in combination with the others.

BACKGROUND

The National Marine Fisheries Service (NMFS) received an application from the U.S. Marine Corps (Marine Corps) requesting regulations and an associated Letter of Authorization (LOA) under the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1631 *et seq.*) for the incidental taking of marine mammals incidental to the conduct of training operations within two bombing targets (Brant Island Bombing Target (BT-9) and Piney Island Bombing Target (BT-11)) in Pamlico Sound, North Carolina for five years. These training operations qualify as military readiness activities.

Under the MMPA, NMFS shall grant authorization for the incidental taking of marine mammals if we find that the taking will have a negligible impact on the species or stock(s), and will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant). The Authorization must prescribe, where applicable, the permissible methods of taking; other means of effecting the least practicable adverse impact on the species or stock and its habitat; and requirements pertaining to the mitigation, monitoring and reporting of such taking.

The proposed action is a direct outcome of the Marine Corps requesting an Authorization to take marine mammals incidental to the conduct of training operations within BT-9 and BT-11 Pamlico Sound, North Carolina. The Marine Corp's activities, which have the potential to cause Level A or Level B harassment of marine mammals, warrant an incidental take authorization from us under section 101(a)(5)(A) of the MMPA.

In accordance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality (CEQ) regulations in 40 CFR §§ 1500-1508, and National Oceanographic and Atmospheric Administration (NOAA) Administrative Order (NAO) 216-6, we completed an Environmental Assessment (EA) titled, *Issuance of Regulations and a Letter of Authorization to the U.S. Marine Corps to Take Marine Mammals by Harassment, Incidental to Training Activities in Pamlico Sound, North Carolina*. NMFS incorporates this EA in its entirety by reference. NMFS also incorporates the Marine Corps' 2009 EA titled, *Marine Air Corps Station (MCAS) Cherry Point Range Operations*.



NMFS has prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts of the selected alternative—Alternative 1 (Preferred Alternative) titled, *Issuance of an Authorization with Mitigation Measures*. Under this Alternative, NMFS would issue regulations and an associated LOA (valid for five years) under the MMPA with required mitigation, monitoring, and reporting measures. Based on a review of the Marine Corp’s proposed activities and the measures contained within Alternative 1, NMFS has determined that no direct, indirect, or cumulatively significant impacts to the human environment would occur from implementing the Preferred Alternative.

ANALYSIS

NAO 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the CEQ regulations at 40 CFR §1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below this section is relevant to making a finding of no significant impact. NMFS has considered each criterion individually, as well as in combination with the others. NMFS analyzed the significance of this action based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMP)?

Response: No. NMFS does not expect that the Service’s limited action of issuing regulations and an LOA to the Marine Corps would cause substantial damage to the ocean and coastal habitats and/or essential fish habitat. The Marine Corps’ activities would not affect physical habitat features, such as substrates and water quality. The mitigation and monitoring measures required by the regulations and LOA would not affect habitat or essential fish habitat. Therefore, NMFS, Office of Protected Resources, Permits and Conservation Division has determined that the issuance of an Authorization for the taking of marine mammals incidental to the project would not have an adverse impact on EFH, and an EFH consultation is not required.

Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern for a number of invertebrate and fish species managed under Fishery Management Plans occur within the project area. The Marine Corps determined in its 2009 EA that their activities would not reduce EFH quality and/or quantity. Explosions would not occur on the seafloor and, therefore, ordnance expenditures would not result in impacts to the substrate. Underwater detonations would not result in substantial sediment displacement to the seafloor. If minor displacement occurs, water currents would redistribute sediments so that habitat alteration would be short term. Items and materials expended into the waters in BT-9 and BT-11 would not result in any adverse impacts to the chemical or biological environments that would reduce the quality and/or quantity of EFH. The proposed activities would occasionally introduce small quantities of chemical compounds into the waters around BT-9 and BT-11, which would rapidly disperse. These additions would be too small to adversely impact any of the EFH within Pamlico Sound. The main effect of the Marine Corp’s activities would be short-term disturbance that might lead to temporary and localized relocation of the EFH species or their food. Thus, no substantial or adverse impacts to EFH are anticipated as a result of implementing the proposed action.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: No. NMFS does not expect that the limited action of issuing regulations and LOA to the Marine Corps would have a substantial impact on marine life biodiversity or on the normal functioning of the nearshore ecosystems in Pamlico Sound, NC. The mitigation and monitoring measures required by the regulations and LOA would not affect benthic productivity or predator-prey relationships.

Because of the small zones of impact and the short duration of the Marine Corps operations, NMFS believes that there would not be a substantial impact on marine life biodiversity or on the normal functioning of the nearshore ecosystems in Pamlico Sound, NC. The Marine Corps' proposed activities may temporarily disturb bottlenose dolphins in the proposed training activity areas, but the effects would be short-term and localized.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: No, NMFS does not expect this action to have a substantial impact on public health or safety. Mitigation measures incorporated by the Marine Corps would ensure that no recreational boaters or commercial shippers are within the perimeter of the detonation sites. The extensive monitoring that is required for detecting the presence of marine mammals in the proposed training activity area would alert Marine Corps personnel to the presence of humans in the training activity area as well.

Due to safety concerns, other activities conducted by the public (e.g., commercial shipping) would not and do not occur within BT-9 or BT11. The Marine Corps restricts access within BT-9 and BT-11 for the hours immediately preceding, during, and just after training activities according to Marine Corps policies. Marine Corps personnel would take the necessary precautions to ensure their safety during all proposed activities.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: This action may adversely affect endangered or threatened species, marine mammals, and other non-target species, but NMFS expects that such effects would not be significant.

No critical habitat is present within the action area, so none would be affected. The proposed action would not jeopardize the continued existence of any species listed under the Endangered Species Act (ESA). Listed species that might be affected include the loggerhead, green, hawksbill, Kemp's ridley, and leatherback sea turtles. Adverse effects would be limited to short-term behavioral disturbances that may constitute harassment. NMFS' Biological Opinion (issued in 2012 per the ESA) for this action supports this determination.

The ESA-listed West Indian manatee is under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS). However, the USFWS did not issue a Biological Opinion, as the West Indian manatee is not expected to be present in the waters of Pamlico Sound. Therefore, the species would not be affected by the Marine Corps' operations or by the issuance of regulations and an LOA to conduct such activities.

We have determined that the proposed activities may result in some Level A and Level B harassment of bottlenose dolphins—none of which are listed as threatened or endangered under the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*).

Bottlenose dolphins may be present in the action area; however, with strict mitigation and monitoring measures implemented for the Marine Corps' proposed activities, NMFS has determined that the Marine Corps' proposed activities are unlikely to result in the mortality or serious injury of marine mammals and, would result in, either a low likelihood of hearing injury, or, more likely, a temporary modification in behavior by marine mammals.

Some non-target fish and invertebrate species may be killed or injured by the Marine Corps' operations; however, since the proposed impact area is small, NMFS has determined the adverse effects to fish and invertebrate species would be insignificant.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No. NMFS expect that no significant social or economic effects would result from our issuance of regulations or an LOA to the Marine Corps. The primary impacts to the natural and physical environment are expected to be acoustic and temporary in nature (and not significant), and not interrelated with significant social or economic impacts. Additionally, this action would not have a significant social or economic impact as the proposed training activities are confined to military personnel and would be conducted in a limited geographic area. Further, there would be no impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses, as there are no such uses of marine mammals in the proposed training activity area. Therefore the Marine Corps' activities would not significantly displace other resource users.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No, the effects of our proposed issuance regulations and an LOA for the take of marine mammals incidental to the proposed activities are not highly controversial. Specifically, there is not a substantial dispute about the size, nature, or effect of potential impacts from NMFS's proposed action or the Marine Corps' proposed activities.

The effects of the Marine Corp's proposed activities are primarily related to the input of sound, resulting from military readiness activities, into the environment. The implementation of mitigation and monitoring measures included in the proposed regulations and LOA would ensure that no marine mammals are injured or killed, and that impacts to marine mammals are limited to, at most, harassment. While NMFS' judgments on impact thresholds are based on somewhat limited data, enough is known for NMFS and the regulated entity (here the Marine Corps) to develop precautionary monitoring and mitigation measures to minimize the potential for significant impacts on biological resources. The Marine Corps has conducted these activities for decades, and NMFS is unaware of any substantial dispute over the effects of these activities on marine mammals.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: No, this action would not affect terrestrial ecosystems or nearshore and estuarine habitats, as these areas do not exist within BT-9 or BT-11. The locations of the testing and training areas are two bombing targets within Pamlico Sound, NC. Although EFH occurs within the project area, no substantial or adverse impacts to EFH are anticipated as a result of implementing the proposed activities or any of the alternatives. Items and materials expended into the waters in BT-9 and BT-11 would not result in any adverse impacts to the chemical or biological environments that would reduce the quality and/or quantity of EFH. The proposed activities would occasionally introduce small quantities of chemical compounds into the waters around BT-9 and BT-11, which would rapidly disperse. These additions would be too small to adversely impact any of the EFH within Pamlico Sound.

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No. As indicated in a previous response, the effects of underwater explosions and resultant sounds on marine mammals and other species are not fully known, and NMFS' judgments on impact thresholds are based on limited data. However, enough is known for NMFS and the Marine Corps to develop precautionary measures to minimize the potential for significant impacts on biological resources. The multiple mitigation and monitoring requirements required of the Marine Corps are designed to ensure the least practicable impact on the affected species or stocks of marine mammals and also to gather additional data. These measures are not likely to result in increased risk to affected marine mammal stocks.

NMFS has issued numerous Authorizations to the Marine Corps and other military agencies for the same activities for decades and has conducted previous NEPA analyses on those actions. Each Authorization required marine mammal monitoring and monitoring reports, which NMFS has reviewed to ensure that activities have a negligible impact on marine mammals. In no case have impacts to marine mammals, as determined from monitoring reports, exceeded our previous determinations under the MMPA and our analyses under the NEPA. Therefore, the potential risks of training activities resulting in elevated sound levels are not unique or unknown, nor does NMFS expect there to be significant uncertainty about impacts.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: No, NMFS believes that the proposed action and the Marine Corps' proposed activities are not related to other actions with individually insignificant, but cumulatively significant impacts. There are other military activities in the Atlantic Ocean that result in detonations that may result in the harassment, injury, or mortality of marine mammals. However, these activities, which are described in the EA and the documents it incorporates by reference, are separated both geographically and temporally; all are infrequent in occurrence and short-term in nature. In addition, all currently use mitigation and monitoring procedures to ensure that no marine mammals or ESA-listed species are killed or seriously injured, and measures are taken to minimize impacts to the lowest level practicable. The Cumulative Effects section of the EA and the material incorporated by

reference go into more detail regarding other past, present, and reasonably foreseeable future actions, but concludes that the impacts of the proposed action are expected to be no more than minor and short-term with no potential to contribute to cumulatively significant impacts.

10) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: No, the proposed action and the proposed training activities would not take place in any areas listed or eligible for listing in the National Register of Historic Places and would not cause loss or destruction of any significant cultural or historic resources.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: No, the proposed action and the proposed training activities would not remove or introduce any species out of or into the environment. Therefore, it would not result in the introduction or spread of non-indigenous species.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or does it represent a decision in principle about a future consideration?

Response: No, this action would not set a precedent for future actions with significant effects or represent a decision in principle about a future consideration. To ensure compliance with statutory and regulatory standards, NMFS' actions under section 101(a)(5)(A) of the MMPA must be considered individually and be based on the best available science, which is continuously evolving. Moreover, each action for which an incidental take authorization is sought must be considered in light of the specific circumstances surrounding the action, and mitigation and monitoring may vary depending on those circumstances. For these reasons, NMFS does not believe that the proposed issuance of regulations and an LOA to the Marine Corps to conduct training activities within BT-9 and BT-11 is likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration.

13) Can the proposed action reasonably be expected to violate any Federal, State, or local law or requirements imposed for the protection of the environment?

Response: No, the proposed issuance of regulations and an LOA would not result in any violation of federal, state, or local laws for environmental protection. No ESA-listed marine mammals under NMFS jurisdiction are known to occur within the action area; therefore, there is no requirement for NMFS to consult under Section 7 of the ESA on the proposed action under section 101(a)(5)(A) of the MMPA. NMFS' proposed issuance of regulations and an LOA is conducted in conformance with the MMPA. NMFS has made all appropriate determinations under other applicable statutes, and NMFS' action would not violate any laws or requirements.

Finally, the Marine Corps are required to obtain any additional federal, state and local permits necessary to carry out the proposed activities. The Marine Corps' military readiness activities require issuance of multiple permits. Each agency would review the Marine Corps' action as appropriate to ensure compliance with applicable federal, state, or local laws and requirements.

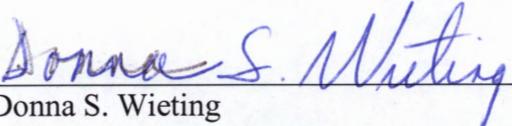
14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No, the proposed action is not reasonably expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. NMFS' proposed issuance of regulations and an LOA is specifically designed to reduce the effects of the Marine Corps' activities to the least practicable impact to marine mammals, through the inclusion of appropriate mitigation and monitoring measures. NMFS has no other proposed or current actions in the project area, and the issuance of regulations and an LOA does not result in significant cumulative impacts when considered with all other past, present, and reasonably foreseeable projects.

Similarly, despite temporal overlap and the potential for limited spatial overlap, the cumulative effects of the Marine Corps' proposed activities with other past, present, and reasonably foreseeable projects are not considered cumulatively significant. The Cumulative Impacts section of NMFS' 2015 EA and the Marine Corps' 2009 EA addresses this topic in greater detail. Implementation of the proposed action, in conjunction with other past, present, and reasonably foreseeable future actions, would not be expected to result in significant cumulative impacts to the environment. As such, the proposed action would not result in cumulative adverse effects that could have a substantial effect on species in the action area.

DETERMINATION

In view of the information presented in this document and the analysis contained in NMFS' 2015 EA titled *Issuance of Regulations and a Letter of Authorization to the U.S. Marine Corps to Take Marine Mammals by Harassment, Incidental to Training Activities in Pamlico Sound, North Carolina*; the Marine Corps' 2009 EA titled, *Marine Air Corps Station (MCAS) Cherry Point Range Operations*, incorporated by reference; and the Marine Corps' application for an Incidental Harassment Authorization, NMFS has determined that issuance of an Authorization to the Marine Corps would not significantly impact the quality of the human environment, as described in this FONSI and in the supporting documents. Accordingly, the preparation of an Environmental Impact Statement for this action is not necessary.



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2/19/15
Date