

NATIONAL MARINE FISHERIES SERVICE PROCEDURAL INSTRUCTION 02-110-19

December 21, 2016

Protected Resources Management
Conservation of Threatened and Endangered Species 02-110

Interim Guidance on the Endangered Species Act Term "Harass"

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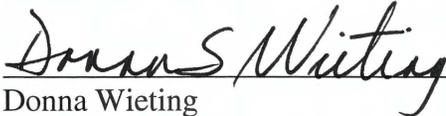
Author name: Cathy Tortorici
Office: Protected Resources

Certified by: Donna Wieting
Office: Protected Resources

Type of Issuance: Initial

SUMMARY OF REVISIONS:

This procedural instruction was adapted from the October 21, 2016 Memorandum for Regional Administrators "Interim Guidance on the Endangered Species Act Term 'Harass'", signed by Donna Wieting.

Signed  12/21/16
Donna Wieting Date
Director, Office of Protected Resources

Purpose

Recent experience implementing the Endangered Species Act (ESA) in the context of section 7 led the National Marine Fisheries Service (NMFS) to conclude that it is necessary to provide an interpretation of the term "harass" to ensure consistent decision-making. This procedure seeks to improve consistency in the interpretation and application of the term harass, particularly for the ESA as it applies to section 7 and section 10 analyses for non-captive wildlife, pending consideration of rulemaking.¹

Background and Current Regulatory Definitions

The ESA prohibits the take of species listed as endangered by the U.S. Fish and Wildlife Service (USFWS) or NMFS. Species listed as threatened may have the take prohibition applied to them by further regulation pursuant to section 4 of the ESA. Under the ESA, "take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" with respect to an ESA-listed species. Under the ESA and its implementing regulations, NMFS evaluates and makes informed decisions about the effects of anthropogenic activities on ESA-listed species and determines when any anticipated take (incidental or directed) may be exempted or authorized.

¹ This memorandum does not address situations involving captive wildlife, which involve different considerations.

Both the USFWS² and NMFS³ have regulatory definitions of "harm." The USFWS also has a regulatory definition of harass.⁴ NMFS has not yet defined harass under the ESA in regulation or provided written guidance on the application and interpretation of the term for use in its implementation of the ESA.

NMFS recognizes the benefit of providing guidance on the interpretation of the term "harass" to ensure nationwide consistency. As a first step, for use on an interim basis, NMFS will interpret harass in a manner similar to the USFWS regulatory definition for non-captive wildlife:

"Create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. "

Interpretation and Application of the NMFS Interim ESA Harass Definition

Likelihood of injury: Based on the language and structure of the USFWS definition of harassment, as modified for our purposes, we interpret the concept of likelihood of injury as embedded in the assessment of the behavioral response that results from an annoyance. The USFWS definition refers to a "likelihood of injury" due to an annoyance that is of "such extent as to significantly disrupt normal behavioral patterns." Thus, an analysis that indicates a likelihood of a significant disruption in behavior patterns establishes the "likelihood of injury." A separate analysis of "likelihood of injury" is not needed, as set forth in the steps below. The effects analysis must indicate that there is a reasonable connection between the "annoyance" (taking into account its magnitude, duration, frequency, and scope) and the behavioral response on the part of the animal(s) exposed to the disturbance that would be expected to result in the creation or increased risk of injury to that animal. The term annoyance is used interchangeably with disturbance or other similar terms to refer to any act that disturbs an individual animal.

Significant disruption of normal behavioral patterns: NMFS interprets the phrase "significantly disrupt normal behavioral patterns" to mean a change in the animal's behavior (breeding, feeding, sheltering, resting, migrating, etc.) that could reasonably be expected, alone or in concert with other factors, to create or increase the risk of injury to an BSA-listed animal when added to the condition of the exposed animal before the disruption occurred. An injury in the context of analyzing behavioral responses could be a physical injury or a physiological or other impact that would reasonably be expected to negatively affect the animal's growth, health, reproductive success, and/or ability to survive (i.e., an effect that results from a more than inconsequential behavioral response). Harassment does not require that an injury actually result or is proven; only that the behavioral response creates or increases the likelihood of injury.

² USFWS defines harm as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering." (SO CFR 17.3)

³ NMFS defines harm as "an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering." (SO CFR 222.102)

⁴ USFWS defines harass as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to breeding, feeding or sheltering. This definition, when applied to captive wildlife, does not include generally accepted: (1) animal husbandry practices that meet or exceed the minimum standards for facilities and care under the Animal Welfare Act; (2) breeding procedures; or (3) provisions of veterinary care for confining, tranquilizing, or anesthetizing, when such practices, procedures, or provisions are not likely to result in injury to the wildlife. (SO CFR 17.3)

Thus, NMFS will consider the following steps in an assessment of whether proposed activities are likely to harass. For instances where the assessment pertains to whether a take has already occurred or is ongoing the focus is on the last consideration based on the available information about how an animal or animals responded to an "annoyance" and not on an assessment of future exposures. The four steps for an assessment of "harass" are:

- 1) Whether an animal is likely to be exposed to a stressor or disturbance (i.e., an annoyance);
- 2) The nature of that exposure in terms of magnitude, frequency, duration, etc. Included in this may be type and scale as well as considerations of the geographic area of exposure (e.g., is the annoyance within a biologically important location for the species, such as a foraging area, spawning/breeding area, or nursery area?);
- 3) The expected response of the exposed animal to a stressor or disturbance (e.g., startle, flight, alteration [including abandonment] of important behaviors); and;
- 4) Whether the nature and duration or intensity of that response is a significant disruption of those behavior patterns which include, but are not limited to, breeding, feeding, or sheltering, resting or migrating, as described above in this memorandum).

In order to illustrate how to apply the above steps, Appendix A includes two examples of cases where NMFS determined whether animals would be harassed based on an application of this interim guidance. Actual harassment determinations must be made on a case-by-case basis for each project analyzed. Also note that steps 1-3 are similar for any section 7 assessment concerning whether incidental take is reasonably certain to occur (see 80 Federal Register 26832, 26837 [May 11, 2015]).

Understanding the NMFS Interim ESA Harass Definition in Relationship to the Marine Mammal Protection Act

Under the Marine Mammal Protection Act (MMPA), there is a general moratorium on the taking of marine mammals, including take by harassment, with some exemptions and exceptions. "Harassment" is defined in the MMPA and within NMFS' MMPA regulations (50 CFR 216.3).

The MMPA defines two levels of harassment - An act of pursuit, torment, or annoyance that:

- a. Has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; and
- b. Has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment.]

Under NMFS regulation, Level B harassment does not include an act that has the potential to injure a marine mammal or marine mammal stock in the wild.

In addition to this standard definition of harassment, amendments to the MMPA provided definitions of Level A and Level B harassment specific to military readiness activities or federal scientific research activities directed on marine mammals:

- a. Any act that injures or has the significant potential to injure a marine mammal or marine mammal stock in the wild; or
- b. Any act that disturbs or is likely to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns, including, but not limited to, migration, surfacing, nursing, breeding, feeding, or sheltering, to a point where such behavioral patterns are abandoned or significantly altered.

The interim ESA harass interpretation does not specifically equate to MMPA Level A or Level B harassment, but shares some similarities with both levels in the use of the terms "injury/injure" and a focus on a disruption of behavior patterns. NMFS has not defined "injure" for purposes of interpreting Level A and Level B harassment but in practice has applied a physical test for Level A harassment.

NMFS intends to further explore the similarities and differences between harassment under the MMPA and ESA to determine whether additional steps should be taken relative to the interpretation of the two statutes when taking actions regarding ESA-listed marine mammals. In the interim, when assessing actions under the ESA, NMFS will apply the interim ESA harass interpretation. Correspondingly, for an MMPA assessment of an action, NMFS will continue to apply the MMPA definition of harassment. In practice, this may result in different outcomes under the MMPA and ESA analyses of an action, depending on the record in the particular matter.

NOTE - This memorandum does not result in environmental impacts because it serves to clarify existing regulatory language that NMFS has been using in a number of contexts. Nothing in this memorandum is intended to require reevaluation of any previously completed ESA actions. This guidance does not create or confer any rights for or on any person or operate to bind the public. Finally, this memorandum does not change the substantive protections afforded to ESA-listed species and therefore does not change the on-the-ground effects of biological opinions and incidental take statements.

Appendix A – Examples

The following two cases demonstrate how similar activities can result in different conclusions of whether an action is likely to harass individuals of an ESA-listed species. These examples apply to an assessment of the predicted or anticipated consequences of the action and follow the four steps (a. through d.) described in the interim ESA harass guidance. For ease of presentation, factors a. and b. have been collapsed into the first portion of the presentation of each example.

Non-Harassment Example

1, 2) Whether an animal is likely to be exposed to an "annoyance" and the nature of that exposure in terms of magnitude, frequency, duration, etc. Included in this may be type and scale as well as considerations of the geographic area of exposure (e.g., is the annoyance within a biologically important location for the species, such as a foraging area, spawning/breeding area, or nursery area?):

In this example, the action consists of in-water and overwater construction activities, including clamshell dredging to remove accumulated sediments. The action will occur in a bay known to provide habitat for ESA-listed marine species. The action will last about 6 months. The project area lies along the eastern shore of the central portion of the bay along a heavily industrialized section of the bay. Available data indicate that this area is not frequently visited by foraging or migrating individuals of this species, unlike other areas of the bay where we expect regular occurrence and sustained presence of the species. Therefore, species interactions with construction equipment or vessels in or around project activities, while unlikely, are not discountable and therefore we further assess whether the effects of interactions are likely to be significant to those individuals.

3) The expected behavioral response of the exposed animal:

Given the chance that individual animals could be found in the proposed project area, we expect that any individuals in the immediate project area would detect the general presence and noise associated with proposed project activities. If individuals are in the construction site area but avoid visual detection, we expect they will detect the commencement of project activities and will have an opportunity to move away, especially during the initial stages of mobilizing equipment and vessels for work. This expectation is supported by project monitoring field observations of the species. In general, all in-water construction projects present some risk of disturbance to any of the ESA-listed species that may be present in the project area. We expect that the individual animals will react to the disturbance by avoiding those project areas.

4) Whether it is reasonable to expect that the nature and duration or intensity of that response is a significant disruption of those behavior patterns which include, but are not limited to, breeding, feeding, or sheltering:

Given that the species is not known to spend significant periods of time outside certain portions of the bay to begin with, avoidance of the project area for any period of time is not likely to significantly impact or disrupt their regular foraging movement and migration behavior patterns in the bay. Avoidance of this area for any period of time is not expected to limit their ability to forage or have any detectable effect on their health, as preferred foraging habitat exists beyond the project site. As a result, we conclude that the impacts of disturbance are expected to be insignificant given the low probability that the species will be in project areas and because the minimal disruption of normal

behavior patterns anticipated is not expected to create the likelihood of injury to the exposed individuals.

Harassment Example

1, 2) Whether an animal is likely to be exposed to an "annoyance" and the nature of that exposure in terms of magnitude, frequency, duration, etc. Included in this may be type and scale as well as considerations of the geographic area of exposure (e.g., Is the annoyance within a biologically important location for the species, such as a foraging area, spawning/breeding area, or nursery area?):

In this example, another portion of the project described above includes an eelgrass mitigation project to compensate for impacts to habitat as a result of the proposed project, as well outstanding mitigation requirements owed from other completed projects. Over the course of 6 weeks, dredge material will be pumped into the disposal area, while implementing monitoring and avoidance measures to avoid direct interactions with the ESA-listed species during placement. After 12 weeks of sediment settlement time, divers will then conduct eelgrass harvesting/planting during a second 6-week period.

The proposed location of eelgrass mitigation activities is within the preferred habitat for ESA-listed species in the bay, where individual animals can be found residing, foraging, resting, and migrating at any time year-round. As a result, there is a high likelihood of their exposure to the proposed project during sustained periods of time where vessels, equipment, and project activity will be occurring on a regular basis. As stated above, given that all this activity will occur within an area known to be frequently used by individual animals, there is a high likelihood that those individual animals will be consistently exposed to the presence of all activities and equipment associated with the proposed eelgrass mitigation project.

3) The expected behavioral response of the exposed animal:

Although none of the activities associated with the eelgrass mitigation project produce particularly loud sounds, we expect that individual animals in the immediate project area would detect the general presence, noise, and activity associated with all stages of the eelgrass mitigation project. As indicated for the construction and dredging portion of the action, we expect that the individual animals will generally attempt to avoid the immediate area where increased in-water activity is occurring.

4) Whether it is reasonable to expect that the nature and duration or intensity of that response is a significant disruption of those behavior patterns which include, but are not limited to, breeding, feeding, or sheltering:

We recognize that the scale of possible impacts on the health or fitness of an individual animal is expected to be highly variable and unique to each animal, given sustained disruptions of normal behavior and life functions for up to 6 weeks, or multiple periods of disruption. However, because this proposed project occurs in an area where many individuals of the species are expected to spend significant periods of time foraging, resting, and migrating-and we expect sustained disturbance throughout the duration of the project is likely to lead to avoidance and alteration of those important normal behavioral patterns-we expect the disturbance resulting from the eelgrass mitigation project is likely to result in adverse effects through a significant disruption of normal behavior patterns that creates the likelihood of injury to the exposed individuals.