252.245–7002 Reporting Loss of Government Property.

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(b) * * *

(1) The Contractor shall use the property loss function in the Government-Furnished Property (GFP) module of the Procurement Integrated Enterprise Environment (PIEE) for reporting loss of Government property. Reporting value shall be at unit acquisition cost. Current PIEE users can access the GFP module by logging into their account. New users may register for access and obtain training on the PIEE home page at *https://wawf.eb.mil/piee-landing.*

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[FR Doc. 2020–18639 Filed 8–28–20; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 216 and 229

[Docket No. 200819–0222]

RIN 0648–BG55

Guidelines for Safely Deterring Marine Mammals

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

ACTION: Proposed rule.

SUMMARY: The Marine Mammal Protection Act (MMPA) allows for specified persons to employ measures to deter marine mammals from damaging fishing gear and catch, damaging personal or public property, or endangering personal safety, as long as these measures do not result in death or serious injury of marine mammals. The MMPA directs the Secretary of Commerce, through NOAA's NMFS, to publish a list of ''guidelines'' for use in safely deterring marine mammals under NMFS' jurisdiction and to recommend ''specific measures,'' which may be used to nonlethally deter marine mammals listed under the Endangered Species Act (ESA). While the guidelines and specific measures are not mandatory, the MMPA provides protection from liability under the MMPA for take resulting from such deterrence measures by specifying that any actions taken to deter marine mammals that are consistent with the guidelines or specific measures are not a violation of the act. NMFS has not evaluated these deterrents for effectiveness. This rulemaking also includes prohibitions on certain deterrent methods that NMFS has determined, using the best available scientific information, would have a significant adverse effect on marine mammals.

DATES: Comments must be received by October 30, 2020.

ADDRESSES: You may submit comments on this document, identified by NOAA–NMFS–2020–0109, by either of the following methods:

Electronic Submission: Submit all electronic public comments via the Federal e-Rulemaking Portal:

1. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2020-0109;*

2. Click the ''Comment Now!'' icon, complete the required fields;

3. Enter or attach your comments.

Mail: Submit written comments to Chief, Marine Mammal and Sea Turtle Conservation Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.,* name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter N/A in the required fields if you wish to remain anonymous).

The NMFS Acoustic Deterrents Web Tool is available and accessible via the internet at: *https://jmlondon.shinyapps.io/NMFSAcousticDeterrentWebTool/.*

Copies of the draft Environmental Assessment (EA) prepared in support of this action are available and accessible via the internet at: *https://www.regulations.gov/.*

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to NMFS Office of Protected Resources and by email to *OIRA_Submission@omb.eop.gov* or fax to (202) 395–7285.

FOR FURTHER INFORMATION CONTACT: Kristy Long, Office of Protected Resources, 301–427–8402; Amy Scholik-Schlomer, Office of Protected Resources, 301–427–8402. Individuals who use a telecommunications device for the hearing impaired may call the Federal Information Relay Service at 1–800–877–8339 between 8 a.m. and 4 p.m. Eastern time, Monday through Friday, excluding Federal holidays.

SUPPLEMENTARY INFORMATION:

Background

The deterrence provisions of the MMPA (16 U.S.C. 1361 *et seq.*) provide an exception to otherwise prohibited acts, allowing specified persons to deter a marine mammal from damaging fishing gear and catch, damaging personal or public property, or endangering personal safety, so long as those deterrents do not result in the death or serious injury of a marine mammal. NMFS has defined ''serious injury'' as any injury that will likely result in death (50 CFR 229.2) and has developed a process and policy to distinguish serious from non-serious injuries (*https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-policies-guidance-and-regulations#distinguishing-serious-from-non-serious-injury-of-marine-mammals*).

Specifically, MMPA section 101(a)(4)(A) allows the owner of fishing gear or catch, the owner of private property, or an employee or agent of such owner (''specified persons''), to deter marine mammals from damaging fishing gear or catch or private property, respectively. Additionally, it allows any person to deter a marine mammal from endangering personal safety and any government employee to deter a marine mammal from damaging public property. The appropriate use of deterrents is allowed under these circumstances so long as any such use does not result in mortality or serious injury of a marine mammal. Section 101(a)(4)(A) does not allow the use of deterrents by any other person or entity or for any other purpose than those expressly enumerated.

MMPA section 101(a)(4)(B) directs the Secretary of Commerce, through NMFS, to publish a list of guidelines for use in safely deterring marine mammals and to recommend specific measures which may be used to non-lethally deter marine mammals listed as endangered or threatened under the ESA. Section 101(a)(4)(B) provides protection from liability from take, including mortality and serious injury, resulting from actions to deter marine mammals that are consistent with such guidelines and specific measures by specifying that such actions are not a violation of the MMPA. Compliance with the recommended specific measures would not necessarily provide protection from

liability under the ESA for the taking of ESA-listed marine mammals (see Classification section). The statute uses the terms ''guidelines'' and recommended ''specific measures,'' which indicates that these measures are not mandatory and only need to be complied with if an individual or entity wanted protection from liability under section 101(a)(4)(B) in the event of a marine mammal serious injury or mortality. Although they are guidelines and recommended specific measures, the statute nevertheless requires that the guidelines be published in the **Federal Register** and developed after notice and an opportunity for public comment.

Although the guidelines and recommended specific measures are not mandatory, as described above, MMPA section 101(a)(4)(C) allows that NMFS may prohibit certain deterrence methods if NMFS determines, using the best scientific information available, and subsequent to public comment, that the deterrence measure has a significant adverse effect on marine mammals.

Specified persons may choose to deter marine mammals using deterrents that are not included in the guidelines, recommended specific measures, or prohibitions. However, if a marine mammal is killed or seriously injured as a result of deterrence actions outside those specified in the guidelines or specific measures, the protection from liability provided in section 101(a)(4)(B) would not apply.

To implement the statutory provisions and inform development of these guidelines, NMFS initially solicited public input on which deterrents to evaluate and consider for approval (79 FR 74710, December 16, 2014). NMFS requested information on: The specifications (*e.g.,* source and frequency levels, pulse rate, type of fencing, size of flags, etc.) for each deterrent or technique, which marine mammal species or species group (large cetaceans, small cetaceans, pinnipeds) would be deterred, how a deterrent would be employed (*e.g.,* attached to fishing gear, launched some distance from a marine mammal), any evidence that the deterrent would not result in mortality or serious injury, and any other implementation considerations. We received a range of comments and requests from non-governmental organizations, private sector companies and product developers, fishery management councils, commercial and recreational fishermen, and representatives of the merchant shipping and maritime trade industry. For example, multiple respondents urged NMFS to ensure any prohibitions and guidelines were not too specific as to limit the ability to develop new technologies or products and to consider geographical and species variation inherent in the deterrent process. There were also general requests for NMFS to consider including acoustic devices along with the range of deterrents currently in use so commercial and recreational fishermen would have advice on and multiple options to deter different species under a variety of conditions, and potential protection from liability for take resulting from their use. NMFS considered information from this public comment period to assist with determining which methods and technologies are appropriate for these guidelines.

Separate from the provisions provided in the MMPA section 101(a)(4) for non-lethally deterring marine mammals, section 109(h) allows designated Federal, state, and local government officials or employees to take marine mammals in the course of their duties. Specifically, section 109(h) states that nothing in MMPA Title I or Title IV prevents a Federal, state, or local government official or employee, or person designated under section 112(c) from taking, in the course of their duties, a marine mammal in a humane manner (including euthanasia) if such taking is for the: (1) Protection or welfare of the mammal, (2) protection of the public health and welfare, or (3) nonlethal removal of nuisance animals. Any takes occurring under the authority of section 109(h) must be reported to the NMFS within 60 days pursuant to 50 CFR 216.22(b). These proposed guidelines and recommended specific measures pertain to members of the public deterring marine mammals for reasons outlined in MMPA section 101(a)(4) and do not apply to situations covered under section 109(h), such as deterring marine mammals from a hazardous area (*e.g.,* an oil spill).

As a result of the protections afforded by the MMPA since 1972, many species of marine mammals, certain stocks of pinnipeds (seals and sea lions) in particular, are increasing in abundance in the United States. Many marine mammals feed mostly on fish. In recent years, frustration by fishermen and property owners stemming from conflicts with marine mammals has increased, particularly as some populations of marine mammals have increased in certain areas. In many areas, harbor seals and gray seals haul out on beaches commonly used by humans, increasing the chances of negative interactions between marine mammals and humans. Additionally, pinnipeds (*e.g.,* California sea lions, Steller sea lions) regularly haul out on docks, sometimes damaging the docks and posing a threat to humans trying to access their property.

In some fisheries, marine mammals regularly remove catch or bait (depredation) from fishing gear, and some species (primarily pinnipeds) take fish from aquaculture pens. Over 30 species of odontocetes (toothed whales, dolphins, porpoises) are known to engage in depredation. For example, some individuals in populations of sperm, killer, false killer, and pilot whales around the world have become adept at removing a variety of fish species from longline hooks, a behavior also exhibited by other toothed whales and dolphins in a wide range of fisheries. Other species take catch from trawl or gill nets. Regardless of gear type, depredation can lead to marine mammal bycatch, with some marine mammals dying or becoming seriously injured. Depredation can significantly affect the volume and quality of commercial and recreational catch and may contribute to fishermen taking retaliatory actions, such as intentionally shooting and killing marine mammals. NMFS has numerous stranding records documenting animals killed or injured by lethal take from gunshots, particularly of bottlenose dolphins in the NMFS Southeast Region and California sea lions in the NMFS West Coast Region. These proposed guidelines and recommended specific measures are intended to provide tools for fishermen and property owners to protect fishing gear, catch, and property, while also reducing intentional lethal takes and serious injuries of marine mammals. Further, this action would reduce unlawful take by prohibiting the use of those deterrent methods that we have determined will result in significant adverse effects to marine mammals.

Tribal Treaty Fishing

Several Indian tribes located in the Pacific Northwest have entered into treaties with the United States that expressly reserve the right to fish at their usual and accustomed grounds and stations. As explained in prior notices, these tribal treaty fisheries are conducted under the authority of the treaties and managed by the relevant tribe. See, *e.g.,* 2010 NMFS List of Fisheries (74 FR 58859, November 16, 2009). In recognition of the sovereign authority of treaty fishing tribes over the conduct of their fisheries, NMFS proposes that the specific prohibitions in these regulations not apply to tribal fishermen participating in a treaty fishery. The guidelines may

nevertheless serve as a resource for treaty tribes and tribal fishermen to inform methods for safely deterring marine mammals in the conduct of treaty fisheries and would still provide protection from liability for take resulting from deterrence actions taken consistent with these guidelines and recommended specific measures.

Alaska Natives

NMFS intends that this proposed rule will have no impact or effect on Alaska Native take of marine mammals for subsistence purposes or the creating and selling of authentic Alaska Native articles of handicrafts and clothing, as provided under MMPA section 101(b).

Practice Avoidance Before Deterrence

NMFS strongly encourages fishermen, private property owners, and government officials to practice avoidance techniques prior to attempting to deter any marine mammal. Avoiding interactions is the safest method for preventing death or serious injury to marine mammals and the most definitive way to minimize risk to human safety. Fishermen can modify fishing operations to avoid or minimize interactions with marine mammals by adjusting tow and haul times or duration of sets. Specific areas known or thought to be occupied by marine mammals should be avoided and all effort should be made to avoid setting or placing fishing gear and catch in areas where marine mammals are sighted. Trawling, trolling, or hauling gear in the vicinity of marine mammals should also be avoided and must cease when transiting through a group of marine mammals to avoid unlawful take. NMFS strongly encourages fishermen to avoid discarding fish in the vicinity of marine mammals or known haulout locations, particularly given the prohibition on feeding marine mammals found at 50 CFR 216.3. Finally, while observing marine mammals, NMFS strongly encourages compliance with all regional viewing guidelines to further reduce impacts to marine mammals.

Gear Modifications To Deter Marine Mammals

Gear modifications are any alterations to existing fishing gear intended to reduce bycatch and/or depredation. Simple gear modifications include changing the material or the characteristics of gear used (*e.g.,* weak circle hooks), changing the color of the gear, reducing line length or strength, and adding materials to gear. Pursuant to MMPA section 101(a)(4), fishermen do not need authorization to modify gear and/or fishing practices to protect fishing gear, catch, or bait from marine mammals, so long as any such modified gear and/or fishing practices do not result in the death or serious injury of a marine mammal and are consistent with the prohibitions included in this rulemaking; therefore, NMFS did not consider modifications to fishing gear as a deterrent.

Types of Deterrents

In general, deterrents fall into two categories, ''non-acoustic'' or ''acoustic.'' Non-acoustic deterrents target senses other than hearing to deter a marine mammal. Non-acoustic deterrents could be visual, physical barriers, electrical, chemosensory, or tactile. Visual deterrent methods rely on a marine mammal's visual acuity and perception of a change in their immediate environment to elicit a flight or avoidance behavior. Physical barriers prevent an animal from gaining access to an area. Chemosensory deterrents used on marine mammals often focus on taste to induce an aversion response. In addition to chemical repellents applied through consumption mechanisms, chemicals used for predator control can also be aerosolized or applied through an inhalation route of entry. Tactile deterrent methods typically involve physically creating pain or discomfort to induce aversion with the goal of eliciting flight behaviors (Scordino 2010). Tactile deterrents can be propelled through the use of a multitude of devices to extend the deterrent potential beyond what would be possible with manual use (*e.g.,* throwing or striking by hand).

Acoustic deterrents, which can produce sound underwater or in air, fall into two main categories, impulsive and non-impulsive, based on their potential to affect marine mammal hearing sensitivity (*i.e.,* cause a permanent threshold shift, (PTS)). Impulsive acoustic deterrents (*e.g.,* seal bombs, firecrackers, banging pipes, bird bangers) produce sounds that are typically transient, brief (less than 1 second), broadband (produce sound over a wide frequency range), and consist of high peak sound pressure with rapid rise time and rapid decay (peak sound increases and dissipates quickly) and generally have an increased capacity to affect marine mammal hearing sensitivity. Some impulsive deterrents contain explosives (*e.g.,* underwater firecrackers) while others do not (*e.g.,* banging pipes). Non-impulsive acoustic deterrents (*e.g.,* pingers, predator sounds, air horns) typically only have small fluctuations in decibel (dB) level, making them less likely to affect hearing sensitivity compared to impulsive sources (Southall *et al.* 2007; NMFS 2018; Southall *et al.* 2019).

For a description of each deterrent evaluated and how it is used, please see the draft EA prepared under the National Environmental Policy Act (NEPA) for this action (see **ADDRESSES**).

TABLE 1—TYPES OF NON-ACOUSTIC AND ACOUSTIC DETERRENTS EVALUATED

Non-Acoustic Deterrents	
Visual	Air dancers, flags, pinwheels, streamers.
	Bubble curtains.
	Flashing or strobe lights.
	Human attendants.
	Lasers.
	Patrol animals.
	Predator shapes.
	Vessel chasing.
	Vessel patrolling.
	Unmanned aircraft systems.
Physical barriers	Anti-predator netting.
	Containment booms/waterway barriers.
	Gates/closely spaced bars.
	Horizontal bars.
	Rigid fencing in air.
	Swim step protectors.
Chemo-sensory	Chemical irritants.
	Corrosive chemicals.
	Taste deterrents.
Tactile:	
Electrical	Cattle prods.
	Electric fencing in air.
	Electric fencing in water.
	Electrical mats.
	Electrical nets.
	Electroshock weapon technology.
	Underwater electric barriers.
Projectiles used with firearms.	Bullets, plastic bullets, rubber bullets, shotgun shells with rubber shot or balls, BBs, shot pellets, beanbag rounds, sponge grenades.
Projectiles used with compressed air/gas.	BBs, shot pellets, paintballs, sponge grenades, nails, spears.
Other projectiles.	Arrows, darts, spears, foam missiles/rounds, spears, rocks.
Fixed sharp objects.	Nails, barbed wire.
Manual—sharp	Gaffs, hooks, sharp-ended poles, etc.
Manual—blunt	Crowder boards, blunt-tipped poles, brooms, mop handles, butt of a spear gun, etc.
Water	Hose, sprinkler, water gun.
Acoustic Deterrents	
Impulsive:	

TABLE 1—TYPES OF NON-ACOUSTIC AND ACOUSTIC DETERRENTS EVALUATED—Continued

Explosive	Fireworks; bird bangers; bird whistler/screamers; pencil launchers/bear bangers; propane cannons; explosive pest control devices (*i.e.,* seal bombs, cracker shells, bird bombs, underwater firecrackers).
Non-Explosive	Banging objects/passive acoustic in-air deterrents; low-frequency, broadband devices; pulsed power devices.
Non-impulsive	Acoustic alarms (*i.e.,* pingers, transducers); in-air noisemakers; predator sounds/alarm vocalizations using underwater speakers.

Evaluation Criteria and Considerations

Acoustic Deterrents

In analyzing acoustic deterrents, we considered each deterrent's potential to cause acoustic injury (*i.e.,* PTS) as well as direct physical, non-acoustic injury to the lungs and gastrointestinal (GI) tract associated with underwater explosives. The potential for acoustic deterrents to cause acoustic injury was evaluated based upon marine mammal hearing groups using the PTS onset thresholds in NMFS' Technical Guidance (NMFS 2018); see the EA for a list of species included in each of the five hearing groups. We developed an evaluation criterion to compare to these thresholds.

Our evaluation criterion considered whether a deterrent had the potential to result in PTS at distances >100 meters (m) from the source after an hour of exposure. We chose a 100-m distance (*i.e.,* isopleth or a line drawn through all points having equal sound pressure or exposure levels) for two reasons. First, 100 m is a minimum displacement distance for various devices and is a typical distance within which some of these devices are deployed from one another (reviewed in McGarry *et al.* 2020, see Tables 2 and 3). Second, it represents a reasonable distance at which one can sight the most susceptible and difficult to sight marine mammal hearing group (High Frequency (HF) cetaceans; Dall's porpoise, harbor porpoise, dwarf sperm whales, and pygmy sperm whales) with high probability using unaided vision. Based on Roberts *et al.* (2016), the probability of sighting harbor porpoises with unaided vision is high (*i.e.,* detection probability ~ 1) out to around 100 m, after which sighting probability begins to steeply decline. Given this, we conservatively chose to use a 100-m isopleth as it provides reasonable assurance that an acoustic deterrent user would be able to sight the most susceptible and difficult to sight marine mammal species and, as such, all other less susceptible more easily sighted marine mammal species. This is consistent with a recent review of acoustic deterrents by McGarry *et al.* (2020), who determined a 100-m criterion was appropriate to evaluate deterrents for the likelihood of exposure resulting in PTS onset.

The 1-h exposure duration represents a reasonable maximum exposure duration expected for marine mammals from a deterrent device within a 24-hour (h) period (*e.g.,* exposure can be continuous or consist of multiple shorter exposures throughout the day). Our analysis used twice the duration used by the McGarry *et al.* 2020 evaluation (*i.e.,* 30-minutes) to account for the potential for multiple exposures to occur within a day. The PTS onset distances associated with the 1-h exposure duration represents the distance from the deterrent a marine mammal would have to remain for an hour to potentially experience PTS. If an animal occurs farther from the deterrent, PTS is unlikely to occur. If an animal is closer than 100 m, the likelihood of PTS would depend both on how close the animal gets to the deterrent and how long the animal remains within this isopleth.

To account for incidental exposure of non-targeted marine mammal species, we analyzed all acoustic deterrents for potential acoustic injury impacts to every marine mammal hearing group, regardless of whether the hearing group included targeted or non-targeted marine mammals. Thus, we evaluated specifications in consideration of the most susceptible hearing group.

Acoustic devices were evaluated based on their specific acoustic characteristics, such as source level (underwater: dB re: 1 micropascal (µPa) at 1 m and airborne: dB re: 20 µPa at 1 m), frequency range (*i.e.,* kilohertz (kHz)), signal duration, and silent intervals between signals (inter-pulse interval or minimum silent interval between signals). To determine isopleths, practical geometric spreading (15 log R) was used to model transmission loss through the environment for all underwater sources. The only exceptions were seal bombs and airborne devices, where it was considered more appropriate to rely upon spherical spreading (20 log R) (Attenborough 2014; Wiggins *et al.* 2019). Sound typically propagates through airborne environments via spherical spreading (Attenborough 2014), and recent field measurements of seal bomb detonations underwater support using spherical spreading to describe transmission loss (Wiggins *et al.* 2019).

NMFS evaluated source levels for various deterrents to determine the maximum source level that would not exceed our 100-m, 1-h criterion. All underwater devices with source levels up to 170 dB, and a maximum 54 percent duty cycle (*i.e.,* producing sound for less than 32 minutes within an hour), met the evaluation criterion.

For acoustic deterrents that involve the use of underwater explosives, NMFS also evaluated the potential for severe lung injury, slight lung injury, and gastrointestinal tract injury (DoN 2017). Quantitative mortality criteria (severe lung injury) resulting from exposure to sound are only available for underwater explosives. Lung injury thresholds are dependent on animal mass (*i.e.,* smaller mass individuals are more susceptible than those with higher mass). Therefore, we evaluated underwater impulsive explosive acoustic deterrents based on conservative assumptions: (1) That the animal was at the surface, and (2) the smallest mass representative calf or pup in each hearing group was exposed (DoN 2017). Thus, when evaluating explosive deterrents, we considered the criteria (lung, GI tract, or PTS) resulting in the largest isopleth.

Some acoustic deterrents have specifications that can be manipulated or adjusted by the user. For example, a user can control the distance a deterrent is deployed from a marine mammal and/or the time (*i.e.,* silent interval) between deployments. Additionally, deterrents may have multiple or programmable settings (*e.g.,* duty cycle, silent interval between signals, and sound type/variety). For manually-deployed deterrents (*e.g.,* hand held devices where the silent interval between signals can be controlled), we determined the minimum silent interval needed to meet the evaluation criterion (*i.e.,* onset of PTS >100-m, 1-h), for a single deterrent device, for all marine mammal hearing groups. For programmable devices capable of producing output with a range of characteristics (*e.g.,* adjustable source level or produced a broad range of frequencies), we evaluated the device by using the maximum potential value for each characteristic, recognizing that many combinations of specifications are possible, and determined the minimum silent interval, for a given device, needed to meet the evaluation criterion

for all marine mammal hearing groups. This allowed us to evaluate the maximum potential impact of a given deterrent as well as how any deterrents capable of exceeding our criterion may be deployed in ways that are safe and within our criterion.

In addition to acoustic injury, NMFS also considered secondary impacts (*e.g.,* chronic stress, displacement from important habitat, decreased fitness).

Non-Acoustic Deterrents

We evaluated non-acoustic deterrents for the likelihood they would impact marine mammals and the potential severity of those impacts. Severity was assessed as lethal (mortality or serious injury) or sub-lethal including whether the impact was primary (*e.g.,* physical trauma, trauma, toxicity) or secondary (*e.g.,* infection, chronic stress, displacement from important habitat, decreased fitness). We evaluated whether a potential injury would be serious according to the NMFS Policy for Distinguishing Serious from Non-Serious Injury of Marine Mammals (77 FR 3233; January 23, 2012). Deterrents not likely to result in mortality or serious injury were included in the guidelines or recommended specific measures.

Other Considerations

To evaluate some categories of deterrents mentioned below, NMFS relied on information on effects on humans and other animals (*e.g.,* cows) when that information was not available for marine mammals. For visual strobe or flashing lights, NMFS proposes to include lights that are used for humans because pinnipeds and likely cetaceans have similar visual acuity to humans (Scholtyssek *et al.* 2007, Levenson and Schusterman 1999). For electric fencing in air, NMFS proposes to include a maximum of 3,000 volts (V), consistent with industry standards for deterring livestock with skin 1 millimeter (mm) thick, as pinnipeds generally have thicker skin and underlying blubber when compared to livestock (*e.g.,* Steller sea lion skin has been measured as 5 mm (Jonker 1996)). For electric mats, NMFS proposes to include low voltage 24V direct current as that is safe for humans. For using paintballs and sponge grenades to deter pinnipeds, NMFS considered typical deployment practices for humans (not shooting another person with paintballs within 3 m and sponge grenades within 10 m) as well as the acoustic impacts (*e.g.,* minimum of 14 m for paintballs and sponge grenades meets our evaluation criterion for phocids (earless seals) related to PTS for air rifles). In general, there are two types of paintballs; those considered ''low impact'' (*i.e.,* 0.50 caliber) and those considered standard (*i.e.,* 0.68 caliber). The recommended minimum age for playing paintball varies (sometimes as young as 6 years old) and low impact paintballs are often recommended for children younger than 10–12 years old; therefore, the expected impacts to pinnipeds would be less than those experienced by human children because pinnipeds are much larger. Sponge grenades can be deployed using low velocity hand held launchers or high velocity automatic, mounted launchers. NMFS is proposing to include low velocity sponge grenades (40 x 46 mm) deployed using hand held launchers.

All airborne acoustic deterrents evaluated had source levels <142 dB for impulsive deterrents and <158 dB for non-impulsive deterrents, all of which meet the acoustic evaluation criterion. As noted above, NMFS proposes to include underwater acoustic deterrents with minimum distances and silent intervals to ensure that the acoustic evaluation criterion are met.

Proposed Guidelines for Deterring Marine Mammals

NMFS proposes the following guidelines (Tables 2 and 3) to deter marine mammals that are not listed under the ESA; these guidelines include deterrents for marine mammals not listed as threatened or endangered. For using deterrents to target each of the three taxa, mysticetes (baleen whales), odontocetes (toothed whales, dolphins, porpoises), and pinnipeds (seals and sea lions), the proposed guidelines include types of deterrents within a particular category of deterrents. Additionally, we include associated implementation provisions that must be followed to allow the individual to take advantage of the protection from liability provided in section 101(a)(4)(B); this is particularly noteworthy for acoustic deterrents where minimum distances and/or a minimum silent intervals are specified. For acoustic deterrents, the minimum distances and silent intervals vary according to each marine mammal hearing group: High-frequency cetaceans (HF), mid-frequency (MF) cetaceans, low-frequency (LF) cetaceans, phocid pinnipeds (earless seals), and otariid pinnipeds (eared seals and sea lions).

General Guidelines

Anyone attempting to deter a marine mammal should consider their own personal safety, that of others in the vicinity, and the safety of the marine mammal. When operating a vessel, captains should use extreme caution when maneuvering around marine mammals, as they may surface in unexpected places. If a marine mammal approaches a vessel, the captain should put the engine in neutral to avoid striking the animal. Deterrent users must cease using a deterrent if an animal demonstrates any sign of aggression (*e.g.,* charging, lunging), as this could compromise human safety as well as marine mammal safety. If deterrent attempts are unsuccessful, NMFS strongly encourages users to temporarily suspend the activity (*e.g.,* fishing), giving the animal a chance to leave the area before resuming that activity.

NMFS has not evaluated these deterrents for effectiveness. NMFS recommends that users start with less impactful techniques first (*e.g.,* visual, physical barriers, in-air noisemakers, water deterrents), before using more impactful deterrents (*e.g.,* tactile—projectiles, explosives). Additionally, animal size should be taken into consideration. More impactful deterrents should be limited to adult animals (*e.g.,* adult male Steller sea lion on a dock that is endangering personal safety). Users should take into consideration the size of the animal with respect to human safety, particularly when using certain deterrents in close proximity to animals (*e.g.,* crowder boards).

Summary of Guidelines

TABLE 2—LIST OF NON-ACOUSTIC DETERRENTS FOR NON-ESA MARINE MAMMALS INCLUDED IN THE GUIDELINES

	Mysticetes	Odontocetes	Pinnipeds
Visual	Bubble curtains	Bubble curtains	Bubble curtains.
	Flashing or strobe lights	Flashing or strobe lights	Air dancers, flags, pinwheels, and streamers.
	Predator shapes	Predator shapes	Flashing or strobe lights.
	Vessel patrolling	Vessel patrolling	Human attendants.
	Unmanned Aircraft Systems	Unmanned Aircraft Systems	Predator shapes.

TABLE 2—LIST OF NON-ACOUSTIC DETERRENTS FOR NON-ESA MARINE MAMMALS INCLUDED IN THE GUIDELINES—Continued

	Mysticetes	Odontocetes	Pinnipeds
Physical barriers.	Containment booms, waterway barriers, and log booms.	Containment booms, waterway barriers, and log booms.	Vessel patrolling. Unmanned Aircraft Systems. Containment booms, waterway barriers, and log booms. Gates or closely spaced poles. Horizontal bars/bull rails. Rigid fencing in air. Swim step protectors.
Tactile—Electrical.	None	None	Electric fencing (in air). Low voltage electric mats.
Tactile—Projectile.	Foam projectiles with toy guns	Foam projectiles with toy guns	Foam projectiles with toy guns. Paintballs with paintball guns. Sponge grenades with hand held launcher. Blunt objects with slingshot.
Tactile—Manual.	Blunt objects—blunt tip poles, brooms, mop handles, etc.	Blunt objects—blunt tip poles, brooms, mop handles, etc.	Blunt objects—blunt tip poles, brooms, mop handles, etc.
Tactile—Water.	Water hoses, sprinklers, water guns	Water hoses, sprinklers, water guns	Water hoses, sprinklers, water guns.

TABLE 3—LIST OF ACOUSTIC DETERRENTS FOR NON-ESA MARINE MAMMALS INCLUDED IN THE GUIDELINES

	Mysticetes	Odontocetes	Pinnipeds
Impulsive—Explosives.	None	None	Aerial pyrotechnics/fireworks. Bird bangers, bird whistlers/screamers, bear bangers using pencil launcher, propane cannons. Cracker shells, bird bombs, seal bombs, underwater firecrackers.
Impulsive—Non-Explosives.	Banging objects (*e.g.,* Oikomi pipes) underwater.	Banging objects (*e.g.,* Oikomi pipes) underwater.	Banging objects (*e.g.,* Oikomi pipes)/in-air passive acoustic devices (*e.g.,* hanging chains, cans). Low frequency, broadband devices. Pulsed power devices.
Non-Impulsive (<170 dB RMS).	Acoustic alarm (*i.e.,* pingers/transducers). Predator sounds/alarm vocalizations using underwater speakers.	Acoustic alarms (*i.e.,* pingers/transducers). Predator sounds/alarm vocalizations using underwater speakers.	Acoustic alarms (*i.e.,* pingers/transducers). Air horns, in-air noisemakers, sirens, whistles. Predator sounds/alarm vocalizations using underwater speakers.

Deterrents used in air (air dancers, gates, bull rails, aerial pyrotechnics, bird bombs, etc.) are included in the guidelines for pinnipeds only because seals and sea lions routinely spend time out of the water. With respect to cetaceans, underwater cracker shells, seal bombs, pulsed power devices, and low frequency, broadband deterrents could result in onset of PTS at distances close to 100 m, which is our evaluation criterion; therefore, in order to take advantage of the protection from liability provided in section 101(a)(4)(B), anyone using these devices to target pinnipeds, must first conduct a thorough scan for cetaceans in all directions as noted below and maintain the specified minimum silent interval.

Programmable Devices and the NMFS Acoustic Deterrent Web Tool

Many devices allow the user to manipulate various settings or characteristics of the device. In order to take advantage of the protection from liability provided in section 101(a)(4)(B), any underwater non-impulsive devices capable of producing sound ≥ 170 dB root mean square (RMS) must be evaluated and approved via the Acoustic Deterrent Web Tool before attempting to use the deterrent. Users seeking protection from liability under section 101(a)(4)(B) must visit NMFS' online Acoustic Deterrent Web Tool and enter the settings they intend to use for a particular device. If the settings meet the evaluation criterion (onset of PTS >100 m, 1-h), the Web Tool will produce a certificate indicating that its use in the specified manner is consistent with these guidelines such that any resultant mortality or serious injury of a marine mammal is not a violation of the MMPA. If the specifications do not meet NMFS' criteria for approval, the user would not obtain a certificate and any resultant mortality or serious injury of a marine mammal could be a violation of the MMPA. The proposed Web Tool is available on the internet at *https://jmlondon.shinyapps.io/NMFSAcousticDeterrentWebTool/.*

Additional Specifications

For many deterrents included in the guidelines, we include additional specifications to further minimize the

risk of injury to marine mammals as a condition of effectuating the protection from liability under section 101(a)(4)(B). For acoustic deterrents, to reduce potentially harmful impacts to the target marine mammals and other sensitive marine mammals in the vicinity, minimum deployment distances as well as silent intervals are required (Tables 4–7). When deploying acoustic deterrents, users in close proximity to each other and/or on the same vessel must coordinate deploying any acoustic deterrents that have a minimum silent interval to ensure compliance with the requirements. For acoustic deterrents targeting pinnipeds, there are separate distances required for each group of pinnipeds. Phocids (earless seals) have lower PTS thresholds than otariids (eared seals and sea lions); thus, if both taxa are present, the user is required to comply with the minimum distance for phocids. Additionally, for several types of deterrents (*e.g.,* explosives), there are additional municipal, state, and/or Federal requirements for using and possessing such deterrents. These guidelines and recommended specific measures do not exempt users from any such requirements. For example, in the Southeastern United States, possessing and using explosives for fishing in various contexts is prohibited by state regulations in all states from North Carolina through Texas, as well as by Federal regulations under the Magnuson-Stevens Fishery Conservation and Management Act. In other words, compliance with this regulation and section 101(a)(4)(A) does not obviate the user's obligation to comply with all other applicable local, state, and Federal requirements related to the use of deterrents. The additional implementation measures that are included in this rule in order to effectuate the protection from liability provided in section 101(a)(4)(B) are summarized below.

Visual Deterrents

Flashing lights or strobe lights. Flashing or strobe lights used to deter marine mammals must conform to any standards established by Federal law.

Flags, pinwheels, and streamers. Flags, pinwheels, and streamers used to deter pinnipeds must ensure, to the best ability of the user, that the materials will stay intact and securely fastened; all such products must be installed and maintained in such a manner as to reduce the risk of entanglement or ingestion.

Vessel patrolling. When patrolling fishing gear or property with a vessel, the user must maintain a consistent and ''safe speed'' (as the term is defined in 33 CFR.83.06 and the International Regulations for Preventing Collisions at Sea 1972 (*see* 33 U.S.C. 1602)), compliance with any and all applicable speed limitations, and a fixed direction to avoid coming into contact with a marine mammal.

UAS (Unmanned aircraft system). Only vertical takeoff and landing aircraft are allowed for deterring marine mammals. Devices must be in good working order and operated consistent with the manufacturer's specifications. Users shall fly UASs no closer than 5 m from an animal. UAS altitude adjustments shall be made away from animals or conducted slowly when above animals. A UAS shall hover over a target marine mammal only long enough to deter the animal and should not come into direct contact with the animal. Users shall abide by applicable approach regulations for threatened and endangered marine mammals in 50 CFR 223.214 and 224.103, and any other applicable approach regulations for marine mammals such as those at 50 CFR 216.19 and 15 CFR 922.184.

Physical Barrier Deterrents

Containment booms, waterway barriers, and log booms. Any containment booms, waterway barriers, and log booms used to deter marine mammals must be constructed, installed, secured and maintained to reduce the risk of entanglement or entrapment. In-water lines should be kept stiff, taut, and non-looping. Booms/barriers should not block major egress and ingress points for marine mammals in channels, rivers, passes, and bays.

Rigid fencing in air, horizontal bars/bull rails, and gates or closely spaced poles. Any fencing, rails, gates, and poles used to deter pinnipeds must be constructed, installed, and maintained in such a manner as to ensure spacing, height, and/or width would not result in entrapment or entanglement.

Tactical—Electrical Deterrents

Electric fencing (in air). Electric fencing used to deter pinnipeds on land shall be no more than 3,000 V and properly maintained to ensure required voltage and reduce the risk of entanglement or entrapment.

Electric mats. Electric mats used to deter pinnipeds shall not exceed 24 V nominal.

Tactile—Projectile Deterrents

Foam projectiles with toy guns. When using foam projectiles with toy guns to deter marine mammals, the deterrent must strike the posterior end of an animal's body, taking care to avoid the animal's head and/or blowhole.

Paintballs with paintball guns. When using paintballs to deter pinnipeds, only non-toxic and water-soluble paintballs may be deployed using paintball guns at a minimum of 14 m from a phocid and 3 m from an otariid, and the paintball must strike the posterior end of an animal's body, taking care to avoid the animal's head.

Sponge grenades using handheld launcher. Sponge grenades used to deter pinnipeds must be deployed at a minimum distance of 14 m from a phocid and 10 m from an otariid and the sponge grenade must strike the posterior end of an animal's body, taking care to avoid the animal's head.

Blunt objects with slingshot. When using blunt objects with a sling shot to deter pinnipeds, users must strike an area near an animal first before striking the posterior end of an animal's body, taking care to avoid the animal's head. Blunt objects deployed via sling shot must not be sharp or metallic.

Tactile—Manual Deterrents

Blunt objects. Blunt objects (*e.g.,* poles, broom, and mop handles) used to deter marine mammals must be deployed using a prodding motion. Such deterrents are only appropriate in situations where an animal is directly pursuing a person, dock, vessel, or fishing gear, or attempting to haul out on a dock or vessel. Users must impact the posterior end of an animal's body (or the chest of a pinniped), taking care to avoid the animal's head and/or blowhole.

Tactile—Water Deterrents

Water deterrents. When using water deterrents, users must first strike an area near the animal before striking the animal; then the user must strike the posterior end of an animal's body, taking care to avoid the animal's head and/or blowhole.

Acoustic Impulsive Explosive Deterrents

Impulsive explosives. For the protection from liability provided in section 101(a)(4)(A) to apply, impulsive explosives are allowed only for deterring pinnipeds and only under certain conditions. When deploying approved impulsive explosives, users must abide by minimum distance and silent intervals as well as several other requirements included below. For all explosives, users must:

- Obtain all necessary permits or authorizations from local, state, and/or Federal authorities and make them available for inspection upon request by any authorized officer; and
- Deploy approved explosives behind a pinniped by the appropriate minimum

distance, taking care to avoid deploying an explosive in front of the animal, in the direction the animal is traveling, or in the middle of a group of animals.

For seal bombs, users must abide by the following:

1. Conduct a visual scan in all directions for cetaceans within 100 m; if the user cannot see 100 m due to darkness or weather conditions, then seal bombs are prohibited;

2. If cetaceans (whales, dolphins, porpoises) are sighted within 100 m of the user, then seal bombs are prohibited;

3. The visual scan must be repeated in all directions before each subsequent deployment; and

4. If both pinniped taxa are present, the minimum distance for phocids shall apply.

For cracker shells deployed underwater, the requirements are the same as those for deploying seal bombs, except the required visual scans are for determining whether HF cetacean species (*i.e.,* Dall's porpoise, harbor porpoise, pygmy sperm whales, and dwarf sperm whales), as opposed to all cetaceans for seal bombs, are within a 100-m of the user.

TABLE 4—MINIMUM SILENT INTERVALS AND DISTANCES WHEN DEPLOYING UNDERWATER ACOUSTIC IMPULSIVE EXPLOSIVES FOR DETERRING PINNIPEDS

Deterrent	Minimum silent interval between deployments	Minimum distance from phocids (m)	Minimum distance * from otariids (m)
Cracker shell	6 minutes	3	** 2
Seal bomb	180 seconds	20	2
Underwater firecracker	1 second	** 2	** 2

* If both phocid and otariid pinnipeds are observed in the area, then the minimum distance for phocids is required.
** Distance is based on physical proximity instead of acoustic effects.

Because Steller sea lions from both the endangered western distinct population segment (DPS) as well as the eastern DPS, which is not ESA-listed, occur east of 144° W longitude and north of latitude 55°49′22.00″ N (the area north of the southern tip of Coronation Island) and cannot be visually distinguished, impulsive explosives deployed underwater (*e.g.,* seal bombs, cracker shells, underwater firecrackers) are not included in the guidelines for deterring any Steller sea lions in all areas west of 144° W longitude and north of latitude 55°49′22.00″ N east of 144° W longitude.

For airborne explosives such as bird bombs and cracker shells, users must aim in the air above the animal and abide by the required minimum distances in Table 5.

TABLE 5—MINIMUM DISTANCES WHEN DEPLOYING AIRBORNE ACOUSTIC IMPULSIVE EXPLOSIVES FOR DETERRING PINNIPEDS

Deterrent	Phocid Pinniped Minimum Distance (m)	Otariid Pinniped Minimum Distance * (m)
Aerial pyrotechnics/fireworks	23	2
Bear bangers using pencil launcher	2	** 2
Bird banger	23	2
Bird bomb	8	** 2
Bird whistler/screamer	5	** 2
Cracker shells	24	2
Propane cannon	2	** 2

* If both phocid and otariid pinnipeds are observed in the area, then the minimum distance for phocids is required.
** Distance is based on physical proximity instead of acoustic effects.

Acoustic Impulsive Non-Explosive Deterrents

For *impulsive non-explosives,* NMFS is not proposing additional specifications for banging objects in air beyond the minimum distances and silent intervals described in Table 6. For banging objects underwater, pulsed power devices, and low frequency broadband devices, users are required to conduct a visual scan in all directions for either all cetaceans when using low frequency, broadband devices or HF cetaceans (*i.e.,* Dall's porpoise, harbor porpoise, pygmy sperm whales, and dwarf sperm whales) for pulsed power devices or banging objects underwater as described above for impulsive explosives.

TABLE 6—MINIMUM DISTANCES AND SILENT INTERVALS WHEN DEPLOYING ACOUSTIC IMPULSIVE NON-EXPLOSIVES FOR DETERRING EACH HEARING GROUP

Deterrent	Source level (RMS SPL)	Minimum silent interval between signals	LF cetacean minimum distance (m)	MF cetacean minimum distance (m)	HF cetacean minimum distance (m)	Phocid pinniped minimum distance (m)	Otariid pinniped minimum distance (m)
Pulsed Power Device	220 dB	1200 seconds (20 minutes).				1	1
Low frequency, broadband device	219 dB	300 seconds				5	1
Low frequency, broadband device	215 dB	120 seconds				5	1
Low frequency, broadband device	208 dB	30 seconds				4	1
Banging objects underwater	n/a	18 seconds	11	3		8	2
Banging objects in air	n/a	n/a	n/a	n/a	n/a	24	2

Note: A blank cell indicates that particular deterrent is not included in the guidelines or specific measures for that taxon.

Acoustic Non-Impulsive Deterrents

For airborne non-impulsive deterrents, Table 7 denotes minimum distances for phocids based on hearing sensitivity and minimum distances for otariids based on physical proximity to ensure people keep a safe distance from the animal.

TABLE 7—MINIMUM DISTANCES WHEN DEPLOYING AIRBORNE NON-IMPULSIVE ACOUSTIC DETERRENTS FOR PINNIPEDS

Deterrent	Phocid pinniped minimum distance (m)	Otariid pinniped minimum distance * (m)
Air horn	4	** 2
In-air noise maker (*e.g.,* vuvuzela)	5	** 2
Sirens	2	** 2
Whistles	3	** 2

* If both phocid and otariid pinnipeds are observed in the area, then the minimum distance for phocids is required.
** Distance is based on physical proximity instead of acoustic effects.

Proposed Recommended Specific Measures for Deterring ESA-Listed Marine Mammals

A summary of the recommended specific measures proposed for ESA-listed marine mammals is in Table 8. NMFS proposes to include all of the above guidelines as recommended specific measures for deterring ESA-listed mysticetes (baleen whales). Persons deterring marine mammals are still required to abide by existing approach regulations for humpback whales in Alaska, North Atlantic right whales, western Steller sea lions, and killer whales in Washington pursuant to 50 CFR 223.214 and 224.103, and any other applicable approach regulations for marine mammals such as those at 50 CFR 216.19 and 15 CFR 922.184. For ESA-listed odontocetes, NMFS proposes recommended specific measures for the Cook Inlet DPS of beluga whales, the Main Hawaiian Islands Insular DPS of false killer whales, the Southern Resident DPS of killer whales, and sperm whales. For ESA-listed pinnipeds, NMFS proposes recommended specific measures for the western DPS of Steller sea lions and the Hawaiian monk seal; for all other species of ESA-listed pinnipeds, NMFS proposes to include all of the above guidelines as recommended specific measures. The western DPS of Steller sea lions is defined as Steller sea lions born west of 144° W longitude. In recent years, western DPS Steller sea lions have also been documented east of 144° W longitude. Western DPS Steller sea lions east of 144° W longitude commonly occur from Cape Suckling through Yakutat and northern southeast Alaska to 55°49′22.00″ N latitude, but are rarely found south of 55°49′22.00″ N latitude (north of the southern tip of Coronation Island) (Jemison *et al.* 2018, Hastings *et al.* 2020). Therefore, NMFS proposes recommended specific measures for all areas occupied by western DPS animals, both east and west of 144° W, except for airborne acoustic impulsive explosives, which are proposed only for deterring Steller sea lions east of 144° W longitude and north of 55°49′22.00″ N latitude.

TABLE 8—RECOMMENDED SPECIFIC MEASURES FOR DETERRING ESA-LISTED MARINE MAMMALS

	ESA-listed mysticetes	ESA-listed odontocetes				ESA-listed pinnipeds		
		CI Beluga	Insular FKW	SRKW	Sperm whales	HMS	WSSL	All others
Non-Acoustic Deterrents								
Visual:								
Air dancers, flags, pinwheels, streamers						✓	✓	✓
Bubble curtains	✓	✓	✓	✓	✓	✓	✓	✓
Flashing or strobe lights	✓	✓	✓	✓	✓	✓	✓	✓
Human attendants								
Predator shapes	✓	✓	✓	✓	✓	✓	✓	✓
Vessel patrolling	✓	✓	✓	✓	✓	✓	✓	✓
Unmanned aircraft systems	✓	✓	✓	✓	✓	✓	✓	✓

TABLE 8—RECOMMENDED SPECIFIC MEASURES FOR DETERRING ESA-LISTED MARINE MAMMALS—Continued

	ESA-listed mysticetes	ESA-listed odontocetes				ESA-listed pinnipeds		
		CI Beluga	Insular FKW	SRKW	Sperm whales	HMS	WSSL	All others
Physical barriers:								
Rigid fencing in air						✓	✓	✓
Horizontal bars/bull rails						✓	✓	✓
Gates/closely spaced bars						✓	✓	✓
Containment booms/waterway barriers	✓			✓	✓	✓	✓	✓
Swim step protectors						✓	✓	✓
Tactile:								
Projectiles:								
Paintballs and sponge grenades used with air rifle or airsoft gun						✓	✓	✓
Foam missiles/rounds with toy guns	✓			✓	✓	✓	✓	✓
Blunt objects with slingshot							✓	✓
Manual:								
Crowder boards, blunt-tipped poles, brooms, mop handles, etc.	✓		✓		✓	✓	✓	✓
Electrical:								
Electric fencing in air						✓	✓	✓
Electrical mats						✓	✓	✓
Water:								
Hose, sprinkler, water gun	✓	✓	✓	✓	✓	✓	✓	✓
Acoustic Deterrents								
Impulsive:								
Explosive:								
Aerial pyrotechnics/fireworks; bird bangers; bird whistler/screamers; bear bangers used with pencil launchers							✓	✓
Propane cannons							✓	✓
Explosive pest control devices (*i.e.,* seal bombs, cracker shells, bird bombs, underwater firecrackers)								✓
Non-Explosive:								
Low-frequency, broadband devices						✓	✓	✓
Pulsed power devices						✓	✓	✓
Banging objects underwater	✓			✓	✓	✓	✓	✓
Banging objects in-air/passive acoustic deterrents						✓	✓	✓
Non-impulsive:								
Underwater devices <170dB including acoustic alarms (*i.e.,* pingers, transducers)	✓			✓	✓	✓	✓	✓
Air horns, in-air noisemakers, sirens, whistles						✓	✓	✓
Predator sounds/alarm vocalizations using underwater speakers	✓			✓	✓	✓	✓	✓

Note: Cells with check marks indicate the specific measure is approved for that taxa or species; blank cells indicate those deterrents are not included as specific measures.

List of Abbreviations in Table 8: CI—Cook Inlet; FKW—false killer whale; HMS—Hawaiian monk seal; SRKW—Southern Resident killer whale; WSSL—western Steller sea lion.

Reporting Requirement

NMFS is proposing a reporting requirement for any marine mammals that are observed to have been injured or killed in the course of deterrence under the guidelines and recommended specific measures. This requirement to submit a form either online or via postage-paid mailing is similar to the requirement for commercial fishermen to report marine mammals incidentally killed or injured during commercial fishing operations. This will provide information to evaluate whether the guidelines and recommended specific measures are working as intended for safely deterring marine mammals.

If a marine mammal is observed injured or killed during or as a result of using a deterrent included in the guidelines or recommended specific measures, that injury or death must be reported to NMFS within 48 hours in order for the protection from liability in section 101(a)(4)(B) to apply. If finalized, NMFS intends that, for commercial fishing vessel owners and operators, reporting requirements for deterrent-related mortality and injury of marine mammals will be integrated with existing reporting requirements under MMPA section 118(e). Specifically, NMFS would seek to revise the existing form (Office of Management and Budget (OMB) number 0648–0292) to request additional information regarding deterrent use during the next update per the collection of information requirements of the Paperwork Reduction Act (PRA). Reporting requirements are applicable to all vessel owners and operators regardless of commercial fishery category on the MMPA List of Fisheries (*i.e.,* Category I, Category II, or Category III).

For anyone other than a commercial fisherman engaging in deterrence, when reporting a mortality or injury under this provision the following information would be required:

1. The name and address of the person deterring the marine mammal(s);

2. The vessel name, and Federal, state, or tribal registration numbers of the registered vessel and/or the saltwater angler registration number if deterrence occurred during fishing;

3. A description of the fishery, including gear type and target, or of the property where the deterrence occurred;

4. A description of the deterrent including number of attempts/deployments, specifications of devices, and any other relevant characteristics;

5. The species and number of each marine mammal incidentally killed or injured or a description (and/or photograph or video if available) of the animal(s) killed or injured if the species is unknown;

6. The disposition of the animal (*e.g.,* injured or dead, type of wounds);

7. The date, time, and approximate geographic location where the mortality or injury occurred; and

8. Other relevant information such as the behavior of the animal in response to the deterrent, other protected species in the vicinity, etc.

Prohibitions

NMFS has determined that a number of deterrents and associated deterrence activities would result in significant adverse effects to marine mammals (Table 9). Specifically, NMFS finds that the deterrents listed in Table 9 are likely to result in mortality, serious injury, and/or permanent hearing loss. Additionally, several prohibitions are included to cross-reference with other pre-existing prohibitions concerning the particular species or other parts of the regulations relevant to marine mammals. Information on these prohibitions are detailed in Chapter 4 of the draft EA.

TABLE 9—PROHIBITIONS ON DETERRING MARINE MAMMALS

General Prohibitions		
Target a deterrent action at a marine mammal calf or pup. Striking a marine mammal's head or blowhole when attempting to deter a marine mammal. Deploying or attempting to deploy a deterrent into the middle of a group of marine mammals. Feeding or attempting to feed a marine mammal in a manner prohibited by 50 CFR 226.3 even for the purposes of deterrence. Deterring or attempting to deter any marine mammal demonstrating signs of aggression, including charging or lunging, except when necessary to deter a marine mammal from endangering personal safety. Approaching certain ESA-listed marine mammals, including humpback whales in Alaska, North Atlantic right whales, western Steller sea lions, and killer whales in Washington, pursuant to 50 CFR 223.214 and 224.103.		
Mysticetes	Odontocetes	Pinnipeds
Non-Acoustic Deterrents		
Vessel chasing. Using any chemical irritants, corrosive chemicals, and other taste deterrents to deter marine mammals. Sharp objects. Using a firearm, bow, or spear gun for deterring mysticetes.	Vessel chasing. Using any chemical irritants, corrosive chemicals, and other taste deterrents to deter marine mammals. Sharp objects. Using a firearm, bow, or spear gun for deterring odontocetes.	Patrol animals. Vessel chasing. Using any chemical irritants, corrosive chemicals, and other taste deterrents to deter marine mammals. Sharp objects. Using a firearm, except for bird bombs and cracker shells. Discharging a firearm at or within 100 yards (91.4 m) of a Steller sea lion west of 144° W longitude.
Acoustic Deterrents		
Any impulsive explosives.	Any impulsive explosives.	Any impulsive explosives not included in the guidelines or specific measures. Seal bombs, underwater cracker shells, banging objects underwater, pulsed power devices, or low frequency broadband devices when visibility is <100m (*e.g.,* at night, fog).
Any non-impulsive device with an underwater source level ≥170 dB RMS, unless that device has been evaluated and approved by NMFS or via the NMFS Acoustic Deterrent Web Tool	Any non-impulsive device with an underwater source level. ≥170 dB RMS, unless that device has been evaluated and approved by NMFS or via the NMFS Acoustic Deterrent Web Tool.	Any non-impulsive device with an underwater source level ≥170 dB RMS, unless that device has been evaluated and approved by NMFS or via the NMFS Acoustic Deterrent Web Tool.

Revising MMPA Provisions at §§ 229.4 and 229.5

NMFS proposes to revise 50 CFR 229.4 and 229.5 to ensure consistency between these guidelines and recommended specific measures and the existing regulations for commercial fisheries under the MMPA. NMFS proposes to clarify that persons engaged in Category I, II, and III fisheries must comply with all deterrence prohibitions and are encouraged to follow the guidelines and recommended specific measures in 50 CFR part 216 to safely deter marine mammals from damaging fishing gear, catch, or other private property or from endangering personal safety.

Request for Public Comment

NMFS requests public comment on these proposed guidelines, recommended specific measures, and prohibitions and the topics noted below.

- Any deterrents not included in the proposed guidelines, recommended specific measures, or prohibitions that should be considered.
- Specifications and typical deployment practices for all acoustic devices, but particularly the acoustic specifications for paintball guns and airsoft guns.
- The design and usability of the NMFS Acoustic Deterrents Web Tool.
- Underwater source level associated with cracker shells.
- Signal duration associated with propane cannons, air rifles, low frequency broadband devices, and cowbells or other passive acoustic deterrents.
- Silent intervals and/or signal durations associated with numerous underwater acoustic alarms (see Appendix B in EA for more detail).
- Whether NMFS should consider only allowing ''low impact'' (*i.e.,* 0.50 caliber) paintballs or allow both low and higher impact (*i.e.,* 0.68 caliber) paintballs for pinnipeds.
- Whether paint balls and sponge grenades should be allowed for endangered Hawaiian monk seals.

- Whether the proposed specific measures for endangered Hawaiian monk seals are appropriate in the Hawaiian cultural context.
- The impacts this rulemaking may have on tribal and Alaska Native communities.

References Cited

A complete list of all references cited in this proposed rule can be found on the Federal e-Rulemaking Portal at *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2020-0109,* and is available upon request from the NMFS Office of Protected Resources (see **ADDRESSES**).

Classification

The Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration (SBA) that this proposed rule would not have a significant economic impact on a substantial number of small entities. Any entity with combined annual fishery landing receipts less than $11 million is considered a small entity for purposes of the Regulatory Flexibility Act (50 CFR 200.2). Under this $11 million standard, all entities subject to this action are considered small entities.

This action proposes guidelines for safely deterring marine mammals under NOAA's jurisdiction (*e.g.,* whales, dolphins, seals, and sea lions) and recommends specific measures for safely deterring marine mammals listed under the ESA. It also proposes prohibitions on deterrent methods that would have a significant adverse effect on marine mammals. The proposed rule does not require that property owners, commercial fishermen, or recreational fishermen deter marine mammals; if members of the public choose to deter marine mammals from endangering personal safety, damaging private or public property, or damaging fishing gear or catch consistent with the guidelines and recommended specific measures, those persons would be protected from liability under section 101(a)(4)(B) if a marine mammal is killed or seriously injured as a result of such deterrence. Therefore, the proposed rule would not have a significant economic impact on a substantial number of small entities. Because this proposed rule would not have a significant economic impact on a substantial number of small entities, an initial regulatory flexibility analysis is not required and was not prepared.

Paperwork Reduction Act

This proposed rule contains a collection-of-information requirement subject to review and approval by OMB under the PRA. This requirement has been submitted to OMB for approval. Public reporting burden for (marine mammal mortality and injury report) is estimated to average 15 minutes per individual response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

Public comment is sought regarding: Whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the burden estimate; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collection of information, including through the use of automated collection techniques or other forms of information technology. Send comments on these or any other aspects of the collection of information to NMFS Office of Protected Resources at the **ADDRESSES** above, by email to *OIRA_Submission@omb.eop.gov,* or fax to (202) 395–7285.

Notwithstanding any other provision of the law, no person is required to respond to, and no person shall be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number.

Executive Order 12866, Regulatory Planning and Review, and Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs

This proposed rule has been determined to be not significant for the purposes of Executive Orders 12866 and 13563. This rule is not expected to be an Executive Order 13771 regulatory action because this rule is not significant under Executive Order 12866.

National Environmental Policy Act

NMFS prepared a draft EA for this proposed rule that discussed the potential impacts of this action on the environment. In addition to the no action alternative (status quo), one alternative (preferred and the basis of this proposed rule) is analyzed.

NMFS identified Alternative 2, issuing national guidelines and specific measures for safely deterring marine mammals as well as prohibitions, as the preferred alternative for the proposed action. Under Alternative 2, NMFS would issue national guidelines prescribing methods and technologies to safely deter marine mammals, as well as specific measures for safely deterring endangered or threatened marine mammals, in a manner that would allow fishermen and property owners to protect their catch, fishing gear, and property without killing or seriously injuring marine mammals. Alternative 2 also includes prohibitions of certain deterrents that NMFS has determined would have a high adverse effect on marine mammals.

Under the No Action alternative, Alternative 1, NMFS does not issue guidelines or specific measures for safely deterring marine mammals or promulgate prohibitions on deterrents that we have determined would have a high adverse effect on marine mammals, thereby maintaining the status quo. The MMPA requires NMFS to establish guidelines for safely deterring marine mammals and specific measures for ESA-listed marine mammals. Therefore, Alternative 1 is inconsistent with the statutory obligation under the MMPA to prescribe guidelines and specific measures for safely deterring marine mammals from endangering personal safety, and damaging property, fishing gear, or catch.

The preferred alternative, Alternative 2, would not result in any high adverse impacts on the human environment, including protected marine populations, commercial fisheries, fishermen, or other regulatory programs. Additionally, certain deterrents that have a significant adverse effect on marine mammals would be prohibited.

A copy of the draft EA is available from NMFS (see **ADDRESSES**).

Endangered Species Act

There are 22 marine mammal species under NMFS jurisdiction that are listed as endangered or threatened under the ESA that may be affected by this rulemaking. There is also critical habitat designated for seven of those species where deterrents may be used. NMFS will consult internally pursuant to section 7 of the ESA on issuing these guidelines and recommended specific measures. NMFS will conclude the consultation prior to a determination on the issuance of the final rulemaking.

Coastal Zone Management

This proposed rule would not affect the land or water uses or natural resources of the coastal zone, as specified under section 307 of the Coastal Zone Management Act.

List of Subjects

50 CFR Part 216

Administrative practice and procedure, Alaska, Exports, Fish, Fisheries, Fishing, Fishing vessels, Imports, Indians, Labeling, Marine mammals, Reporting and recordkeeping requirements.

50 CFR Part 229

Administrative practice and procedure, Confidential business information, Fisheries, Marine mammals, Reporting and recordkeeping requirements.

Samuel D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR parts 216 and 229 are proposed to be amended as follows:

PART 216—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

■ 1. The authority citation for part 216 continues to read as follows:

Authority: 16 U.S.C. 1371 *et seq.,* unless otherwise noted.

■ 2. Add subpart J to part 216 to read as follows:

Subpart J—Authorization for Deterring Marine Mammals Under the Marine Mammal Protection Act of 1972

Sec.

216.110 Basis and purpose.
216.111 Scope.
216.112 Definitions.
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216.114 Specific measures for deterring threatened and endangered marine mammals.
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Subpart J—Authorization for Deterring Marine Mammals Under the Marine Mammal Protection Act of 1972

§ 216.110 Basis and purpose.

(a) The regulations in this subpart implement section 101(a)(4) of the Marine Mammal Protection Act (MMPA) of 1972, as amended, 16 U.S.C. 1371(a)(4). Provided deterrence actions do not result in death or serious injury, section 101(a)(4) provides exceptions to the prohibition against take of marine mammals for:

(1) The owner of fishing gear or catch, or an employee or agent of such owner, to deter a marine mammal from damaging the gear or catch;

(2) The owner of other private property, or an agent, bailee, or employee of such owner, to deter a marine mammal from damaging private property;

(3) Any person, to deter a marine mammal from endangering personal safety; or

(4) A government employee, to deter a marine mammal from damaging public property.

(b) This subpart provide guidelines and recommended specific measures designed to safely deter marine mammals without causing death or serious injury. While this subpart and recommended specific guidelines in this subpart are not required, individuals are protected from liability under section 101(a)(4)(B) for actions to deter marine mammals that are consistent with the guidelines or specific measures in this subpart even if a marine mammal is killed or seriously injured as a result of the action.

(c) This subpart also prohibit the use of certain deterrent methods that the Agency has determined have a significant adverse effect on marine mammals.

§ 216.111 Scope.

(a) The regulations in this subpart apply only to those marine mammals under the jurisdiction of the National Marine Fisheries Service (NMFS).

(b) The regulations in this subpart do not apply to section 109(h) of the Marine Mammal Protection Act or the regulations promulgated in § 216.22.

(c) The regulations in this subpart do not apply to take of a marine mammal if such taking is imminently necessary in self-defense or to save the life a person in immediate danger pursuant to section 101(c) of the Marine Mammal Protection Act.

(d) The regulations in this subpart do not apply to tribal fishermen participating in a fishery pursuant to a treaty between the Indian tribe and the United States.

(e) Lasers; underwater electrical fencing, nets, and barriers; electric prods; electroshock weapon technology, and any other deterrent not specifically identified for a given taxa are not included in the guidelines or recommended specific measures in this subpart for deterring marine mammals. Any person using such deterrents does so at their own risk and is liable for any resulting mortality or serious injury of a marine mammal.

§ 216.112 Definitions.

In addition to the definitions in the Marine Mammal Protection Act and in § 216.3, and unless otherwise defined in this chapter, the terms in this chapter have the following meaning:

Acoustic alarm means any acoustic non-impulsive deterrent, including but not limited to pingers and transducers.

Acoustic deterrent means any deterrent that produces sound either in air or underwater.

Acoustic deterrent web tool means a web-based tool for a deterrent user to calculate the potential for a programmable non-impulsive device to induce onset of permanent threshold shift for marine mammals. If the device meets the evaluation criteria, a certificate documenting the device as specified would be issued. The evaluation criterion considers whether a deterrent has the potential to result in a permanent threshold shift (based on each marine mammal hearing group) at distances > 100 meters from the source after an hour of exposure.

Aerial pyrotechnic means a device that creates an exothermic chemical reaction to make heat, light, gas, smoke, and/or sound in air, commonly referred to as fireworks in air.

Approved means that the use of the deterrent method has been evaluated by NMFS and that any mortality or serious injury of a marine mammal resulting from the use of that method will not be a violation of the MMPA if the user has followed NMFS's guidelines or recommendations for the use of that method in this subpart.

Bird bomb means a pyrotechnic device, an impulsive explosive acoustic deterrent, which is designed to detonate in air and is discharged from a handheld launcher, similar to a starter pistol, using 6 mm 0.22 caliber firing caps to propel cartridges from a single-shot launcher.

Chemo-sensory deterrent means any deterrent that pertains to the sensing of chemicals by taste, including non-regulated substances (*e.g.,* hot sauce, vinegar) and chemical irritants and corrosive chemicals as defined by the Occupational Safety and Health Administration.

Cracker shell means a pyrotechnic device, an impulsive explosive acoustic deterrent, which is discharged from a 12-gauge shotgun and detonates in air or just below the surface in water.

Electrical deterrent means any deterrent that produces electricity as a means to deter a marine mammal upon contact.

Explosive means the same as defined in 27 CFR 555.11, any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite and other high explosives, black powder, pellet powder, initiating explosives, detonators, safety fuses,

squibs, detonating cord, igniter cord, and igniters.

Firearm means any weapon, such as a pistol or rifle, capable of firing a missile or projectile using an explosive as a propellant.

Impulsive acoustic deterrent means any acoustic deterrent that produces sounds that are typically transient, brief, broadband, and consist of high peak sound pressure with rapid rise time and decay.

Impulsive explosive acoustic deterrent means any acoustic impulsive deterrent that contains an explosive as defined in this section. This term includes explosive pest control devices, as that term is defined by the U.S. Department of Alcohol, Tobacco, and Firearms, such as bird bombs, cracker shells, seal bombs, and underwater firecrackers.

Impulsive non-explosive acoustic deterrent means any acoustic impulsive deterrent that does not contain an explosive, including the following:

(1) Banging pipes or other objects;

(2) Low frequency, broadband deterrents; and

(3) Pulsed power devices.

Manually-deployed means any deterrent used by hand.

Non-impulsive acoustic deterrent means any acoustic deterrent that produces sounds that can be broadband, narrowband, or tonal, brief or prolonged, continuous or intermittent, and typically do not have high peak sound pressure, including the following:

(1) Acoustic alarms;

(2) In-air noisemakers;

(3) Predator sounds or marine mammal alarm vocalizations emitted by underwater speakers; and

(4) Passive acoustic in-air deterrents.

Physical barrier means any object that blocks passage by a marine mammal, including the following:

(1) Containment booms, waterway barriers, and log booms;

(2) Gates or closely spaced poles;

(3) Horizontal bars such as bull rails;

(4) Rigid fencing; and

(5) Swim-step protectors.

Safe speed means the same as defined under 33 CFR 83.06 and the International Regulations for Preventing Collisions at Sea 1972 (see 33 U.S.C. 1602).

Seal bomb means an impulsive explosive acoustic deterrent that is thrown by hand, contains no more than 40 grains of explosive material housed in a sealed cardboard tube, fitted with a waterproof fuse, and weighted to sink below the surface of the water before detonating underwater.

Sling shot means a Y-shaped stick or frame with an elastic strap attached to the prongs, used for manually flinging small projectiles such as rocks.

Tactile deterrent means any deterrent that physically comes in contact with a marine mammal, whether deployed manually or projected by an accompanying device, including the following:

(1) Electrical deterrents;

(2) Projectiles used with firearms;

(3) Projectiles used with compressed air or gas;

(4) Projectiles deployed with any other device;

(5) Sharp or blunt objects, fixed in place or manually deployed; and

(6) Water deterrents.

Underwater firecracker means a pyrotechnic device that is an impulsive explosive acoustic deterrent, designed with a fuse and water-resistant casing that allows the device to detonate at the surface of the water or underwater. Underwater firecrackers are similar to seal bombs, but have a much shorter fuse.

Visual deterrent means any deterrent that relies on a marine mammal's visual acuity and perception, including the following:

(1) Air dancers, flags, pinwheels, and streamers;

(2) Bubble curtains;

(3) Flashing lights or strobe lights;

(4) Human attendants;

(5) Patrol animals;

(6) Predator shapes;

(7) Vessel chasing;

(8) Vessel patrolling; and

(9) Unmanned aircraft systems.

§ 216.113 Guidelines for safely deterring marine mammals.

(a) *General.* (1) The guidelines in this section for safely deterring marine mammals must be followed in order for the protection for liability, provided under section 101(a)(4)(B) of the MMPA to apply even if death or serious injury of a marine mammal results from such deterrence. The guidelines in this section apply to all marine mammals under NMFS' jurisdiction that are not listed as threatened or endangered under the Endangered Species Act of 1973.

(2) [Reserved]

(b) *Mysticetes.* (1) Visual deterrents, including bubble curtains; flashing or strobe lights; predator shapes; vessel patrolling; and unmanned aircraft systems (UASs), are approved to deter mysticetes provided the user abides by the following:

(i) Flashing or strobe lights must conform to any standards established by Federal law.

(ii) Vessel patrolling of fishing gear is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the whale.

(iii) UAS are approved provided the user abides by the following:

(A) Only vertical takeoff and landing aircraft are allowed;

(B) Users shall fly UASs no closer than 5 m from an animal;

(C) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals;

(D) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal; and

(E) When deploying a UAS, users shall follow approach regulations for threatened and endangered marine mammals, including humpback whales in Alaska and North Atlantic right whales, pursuant to 50 CFR 223.214 and 224.103 and any other applicable approach regulations for marine mammals, and shall adhere to those approach requirements in the event any such requirement conflicts with the provisions of this subpart.

(2) Physical barriers, including containment booms, waterway barriers, and log booms, are approved to deter mysticetes provided the user abides by the following:

(i) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of marine mammals.

(ii) Lines in the water shall be kept stiff, taut, and non-looping.

(iii) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(3) Tactile deterrents, including foam projectiles propelled by a toy gun; blunt objects, such as blunt tip poles and brooms, deployed manually; and water hoses, sprinklers, and water guns, are approved to deter mysticetes provided the user abides by the following:

(i) Blunt objects must be deployed using a prodding motion.

(ii) Tactile deterrents must only strike the posterior end of an animal's body, taking care to avoid the animal's head and blowhole.

(iii) Water deterrents must impact near an animal before striking the animal.

(4) Impulsive non-explosive acoustic deterrents, including banging objects underwater, are approved for deterring mysticetes provided the user abides by the following:

(i) The user must first conduct a visual scan in all directions for other marine mammals within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed.

(ii) If Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed.

(iii) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur at least 11 m from a mysticete with a minimum of 18 seconds between strikes.

(5) Non-impulsive acoustic deterrents pursuant to paragraphs (b)(5)(i) and (ii) of this section are approved.

(i) Acoustic alarms, predator sounds and alarm vocalizations of marine mammals emitted by underwater speakers with source levels <170 dB root mean square sound pressure level (RMS) are approved for mysticetes; any such emission by underwater speakers capable of producing sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(ii) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(c) *Odontocetes.* (1) Visual deterrents, including bubble curtains, flashing or strobe lights, predator shapes, vessel patrolling, and UASs, are approved to deter odontocetes provided the user abides by the following:

(i) Flashing or strobe lights must conform to any standards established by Federal law.

(ii) Vessel patrolling of fishing gear is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the odontocete.

(iii) UAS are approved provided the user abides by the following:

(A) Only vertical takeoff and landing aircraft are allowed;

(B) Users shall fly UASs no closer than 5 m from an animal;

(C) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals;

(D) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal; and

(E) When deploying a UAS from a motorized or non-motorized vessel, users shall follow approach regulations for killer whales in Washington at 50 CFR 224.103(e) and any other applicable approach regulations for marine mammals, and shall adhere to those approach requirements in the event any such requirement conflicts with the provisions of this subpart.

(2) Physical barriers, including containment booms, waterway barriers, and log booms, are approved to deter odontocetes provided the user abides by the following:

(i) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of marine mammals.

(ii) Lines in the water shall be kept stiff, taut, and non-looping.

(iii) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(3) Tactile deterrents, including foam projectiles propelled by a toy gun; blunt objects, such as blunt tip poles and brooms, deployed manually; and water hoses, sprinklers, and water guns, are approved to deter odontocetes provided the user abides by the following:

(i) Blunt objects must be deployed using a prodding motion.

(ii) Tactile deterrents must only strike the posterior end of an animal's body, taking care to avoid the animal's head and blowhole.

(iii) Water deterrents must impact near an animal before striking the animal.

(4) Impulsive non-explosive acoustic deterrents, including banging objects underwater are approved for deterring odontocetes, except for Dall's porpoise, harbor porpoise, pygmy sperm whales, and dwarf sperm whales, provided the user abides by the following:

(i) The user must first conduct a visual scan in all directions for other marine mammals within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed.

(ii) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed.

(iii) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur at least 3 m from any other species of odontocete with a minimum of 18 seconds between strikes.

(5) Non-impulsive acoustic deterrents pursuant to paragraphs (c)(5)(i) and (ii) of this section are approved.

(i) Acoustic alarms and predator sounds and alarm vocalizations of marine mammals emitted by underwater speakers with source levels <170dB RMS are approved for odontocetes; any such emissions by underwater speakers capable of producing sounds ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(ii) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(d) *Pinnipeds.* (1) Visual deterrents, including air dancers, flags, pinwheels, and streamers; bubble curtains; flashing or strobe lights; human attendants; predator shapes; vessel patrolling; and UASs, are approved to deter pinnipeds provided the user abides by the following:

(i) Flags, pinwheels, and streamers must be installed and maintained to reduce the risk of entanglement or entrapment of marine mammals.

(ii) Flashing or strobe lights must conform to any standards established by Federal law.

(iii) Vessel patrolling of fishing gear or property is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the pinniped.

(iv) UAS are approved provided the user abides by the following:

(A) Only vertical takeoff and landing aircraft are allowed;

(B) Users shall fly UASs no closer than 5 m from an animal;

(C) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals;

(D) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal; and

(E) When deploying a UAS, users shall follow approach regulations for endangered Steller sea lions in 50 CFR 224.103(d) and any other applicable approach regulations for marine mammals, and shall adhere to those approach requirements in the event any

such requirement conflicts with the provisions of this subpart.

(2) Physical barriers, including containment booms, waterway barriers, and log booms, are approved to deter pinnipeds provided the user abides by the following:

(i) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of marine mammals.

(ii) Lines in the water shall be kept stiff, taut, and non-looping.

(iii) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(3) Tactile deterrents pursuant to paragraphs (d)(3)(i) through (vi) of this section are approved.

(i) Electric deterrents, including electric mats and electric fences are approved for pinnipeds provided the user abides by the following:

(A) Electric mats shall not exceed 24V nominal; and

(B) Electric fences shall be no more than 3000V and properly maintained to ensure required voltage and reduce the risk of entanglement or entrapment.

(ii) Foam projectiles propelled by a toy gun are approved for deterring pinnipeds provided the foam projectile only strikes the posterior end of an animal's body, taking care to avoid the animal's head.

(iii) Non-toxic and water-soluble paintballs deployed using paintball guns and low velocity sponge grenades deployed using hand-held launchers are approved for deterring pinnipeds provided the user abides by the following:

(A) Paintballs must be deployed at a minimum distance of 14 m from a phocid and 3 m from an otariid;

(B) Sponge grenades must be deployed at a minimum distance of 14 m from a phocid and 10 m from an otariid; and

(C) The paintball or sponge grenade must only strike the posterior end of an animal's body, taking care to avoid the animal's head.

(iv) Blunt objects such as rocks deployed via sling shot are approved for deterring pinnipeds provided the user abides by the following:

(A) Blunt objects must first impact near an animal before striking the animal;

(B) Blunt objects must only strike the posterior end of an animal's body taking care to avoid the animal's head; and

(C) Blunt objects deployed via sling shot must not be sharp or metallic.

(v) Blunt objects, such as blunt tip poles and brooms, deployed manually, are approved for deterring pinnipeds provided the user abides by the following:

(A) Blunt objects must be deployed using a prodding motion; and

(B) Blunt objects must only impact the chest or strike the posterior end of an animal's body, taking care to avoid the animal's head.

(vi) Water deterrents, including hoses, sprinklers, and water guns, are approved to deter pinnipeds provided they impact near an animal before striking the posterior end of the animal's body, taking care to avoid the animal's head.

(4) Impulsive explosive acoustic deterrents pursuant to paragraphs (d)(4)(i) through (vi) of this section are approved.

(i) Aerial pyrotechnics, bird bangers, bird whistlers and screamers, and bear bangers used with pencil launchers, are approved for deterring pinnipeds provided they have a source level below 142 dB RMS and the user abides by the following:

(A) Aerial pyrotechnics and bird bangers must detonate in air a minimum of 23 m from a phocid and a minimum of 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(B) Bird whistlers and screamers must detonate in air a minimum of 5 m from a phocid and a minimum of 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(C) Bear bangers deployed by pencil launchers must detonate in air a minimum of 2 m from a pinniped; users shall aim in the air above and between themselves and the pinniped; and

(D) All necessary permits or authorizations from local, state, and/or Federal authorities have been obtained, must be maintained onsite, and be available for inspection upon request by any authorized officer.

(ii) Propane cannons are approved for deterring pinnipeds provided the propane cannon is deployed at least 2 m from a pinniped.

(iii) Cracker shells discharged from a 12-gauge shotgun are approved for deterring pinnipeds, except for Steller sea lions in all areas west of 144° W longitude and east of 144° W longitude north of 55°49′22.00″ N latitude, provided the user abides by the following:

(A) For airborne cracker shells, cracker shells must detonate in air at least 24 m away from a phocid and at least 2 m away from an otariid; if both taxa are present, the minimum distance for phocids shall apply.

(B) For deploying cracker shells underwater:

(*1*) The user must first conduct a visual scan in all directions for Dall's porpoise, harbor porpoise, pygmy sperm whales and dwarf sperm whales within 100 m; if the user cannot see 100 m due to darkness or weather conditions, cracker shells shall not be deployed underwater;

(*2*) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, cracker shells shall not be deployed underwater;

(*3*) If no Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, underwater cracker shells must detonate at least 3 m away from a phocid and at least 2 m away from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(*4*) Cracker shells must detonate behind the target animal to deter from the rear and must not strike the animal or detonate in the path of or toward the head of the animal; and

(*5*) Users are permitted to deploy cracker shells only once every 6 minutes and must repeat the visual scan in all direction as required in this subsection prior to each deployment of cracker shells.

(C) All necessary permits or authorizations from local, state, and/or Federal authorities have been obtained, must be maintained onsite, and be available for inspection upon request by any authorized officer.

(iv) Bird bombs discharged from a shot launcher pistol are approved provided the user abides by the following:

(A) The bird bombs must detonate in air at least 8 m away from a phocid and at least 2 m away from an otariid; if both taxa are present, the minimum distance for phocids shall apply; and

(B) All necessary permits or authorizations from local, state, and/or Federal authorities have been obtained, must be maintained onsite, and be available for inspection upon request by any authorized officer.

(v) Underwater firecrackers are approved for deterring pinnipeds, except for Steller sea lions in all areas west of 144° W longitude and east of 144° W longitude north of 55°49′22.00″ N latitude, provided the user abides by the following:

(A) The underwater firecracker must detonate a minimum of 2 m behind a pinniped, meaning the firecracker must not strike the animal or detonate in front of the animal; and

(B) All necessary permits or authorizations from local, state, and/or Federal authorities have been obtained,

must be maintained onsite, and be available for inspection upon request by any authorized officer.

(vi) Seal bombs are approved for deterring pinnipeds, except for Steller sea lions in all areas west of 144° W longitude and east of 144° W longitude north of 55°49′22.00″ N latitude, provided the user abides by the following:

(A) The user must first conduct a visual scan in all directions for cetaceans within 100 m before deploying a seal bomb; if the user cannot see 100 m due to darkness or weather conditions, a seal bomb shall not be deployed;

(B) If cetaceans are sighted within 100 m of the user, a seal bomb shall not be deployed;

(C) If no cetaceans are sighted within 100 m of the user, a seal bomb must detonate at least 20 m away from a phocid and at least 2 m away from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(D) Users are permitted to deploy only one seal bomb per 3-minute interval and must repeat the visual scan in all directions as required in this subsection prior to each deployment;

(E) Users must manually deploy seal bombs behind an animal by the appropriate minimum distance described in paragraph (d)(4)(vi)(C) of this section, meaning the seal bomb must detonate behind an animal and not strike an animal or detonate in front of the animal, in the direction the animal is traveling, or in the middle of a group of animals; and

(F) All necessary permits or authorizations from local, state, and/or Federal authorities have been obtained, must be maintained onsite, and be available for inspection upon request by any authorized officer.

(5) Impulsive non-explosive acoustic deterrents pursuant to paragraphs (d)(5)(i) thorough (iii) of this section are approved.

(i) Banging objects underwater is approved for deterring pinnipeds provided the user abides by the following:

(A) The user must first conduct a visual scan in all directions for other marine mammals within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed;

(B) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed; and

(C) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur at least 8 m away from a phocid and at least 2 m away from an otariid with a minimum of 18 seconds between strikes; if both taxa are present, the minimum distance for phocids shall apply.

(ii) Banging objects in air, such as bells and in-air passive acoustic deterrents, are approved for deterring pinnipeds provided the user maintains a minimum distance of at least 24 m from a phocid and at least 2 m from otariid; if both taxa are present, the minimum distance for phocids shall apply.

(iii) Low frequency, broadband devices and pulsed power devices with the following specifications are approved for deterring pinnipeds provided the user abides by the following:

(A) The user must first conduct a visual scan in all directions for cetaceans within 100 m before deploying low frequency, broadband devices and pulsed power devices; if the user cannot see 100 m due to darkness or weather conditions, low frequency, broadband devices and pulsed power devices shall not be deployed;

(B) If cetaceans are sighted within 100 m of the user, low frequency, broadband devices and pulsed power devices shall not be deployed; and

(C) If no cetaceans are sighted within 100 m of the user, low frequency, broadband devices and pulsed power devices must maintain the appropriate silent interval and engage the devices according to the minimum distances specified in Table 1 to this paragraph (d)(5)(iii)(C); if both phocids and otariids are present, the minimum distance for phocids shall apply.

TABLE 1 TO PARAGRAPH (d)(5)(iii)(C)—MINIMUM SILENT INTERVALS AND DISTANCES FOR LOW FREQUENCY, BROADBAND AND PULSED POWER DEVICES

Deterrent	Source level (RMS SPL)	Minimum silent interval between signals	Phocid pinniped minimum distance	Otariid pinniped minimum distance
Pulsed Power Device	220 dB	1200 seconds (20 minutes).	1 meter	1 meter.
Low frequency, broadband device	219 dB	300 seconds	5 meters	1 meter.
Low frequency, broadband device	215 dB	120 seconds	5 meters	1 meter.
Low frequency, broadband device	208 dB	30 seconds	4 meters	1 meter.

(6) Non-impulsive acoustic deterrents pursuant to paragraphs (d)(6)(i) through (iii) of this section are approved.

(i) Acoustic alarms, predator sounds and alarm vocalizations of marine mammals emitted by underwater speakers with source levels <170 dB RMS are approved for pinnipeds; any such emission by underwater speakers capable of producing sounds ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(ii) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(iii) Air horns, in-air noisemakers, sirens, and whistles with source levels <158 dB RMS are approved for deterring pinnipeds provided the user abides by the following:

(A) Air horns must be deployed at least 4 m away from a phocid and at least 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(B) In-air noisemakers must be deployed at least 5 m away from a phocid and at least 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(C) Sirens must be deployed at least 2 m away from a phocid and from an otariid; and

(D) Whistles must be deployed at least 3 m away from a phocid and at least 2 m from an otariid; if both taxa are

present, the minimum distance for phocids shall apply.

§ 216.114 Specific measures for deterring threatened and endangered marine mammals.

(a) *General.* This section includes specific measures that are approved for deterring certain threatened and endangered marine mammals. The specific measures in this section must be followed in order for the protection from liability provided by MMPA section 101(a)(4)(A) to apply should the death or serious injury of a marine mammal listed as endangered or threatened under the Endangered Species Act result from the deterrence action.

(b) *Mysticetes.* All deterrents included in the guidelines in § 216.113(b) are allowed for deterring mysticetes listed as threatened or endangered under the Endangered Species Act subject to the specified use conditions identified in § 216.113(b).

(c) *Odontocetes*—(1) *Beluga whales, Cook Inlet Distinct Population Segment.* (i) Visual deterrents pursuant to paragraphs (c)(1)(i)(A) through (E) of this section are approved.

(A) Bubble curtains are approved.

(B) Flashing or strobe lights are approved provided the lights conform to any standards established by Federal law.

(C) Predator shapes are approved.

(D) Vessel patrolling of fishing gear is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the whale.

(E) UAS are approved provided the user abides by the following:

(*1*) Only vertical takeoff and landing aircraft are allowed;

(2) Users shall fly UASs no closer than 5 m from an animal;

(*3*) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals; and

(*4*) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal.

(ii) Water hoses, sprinklers, and water guns are approved tactile deterrents provided the user abides by the following:

(A) Tactile deterrents must only strike the posterior end of an animal's body, taking care to avoid the animal's head and blowhole; and

(B) Water deterrents must impact near an animal before striking the animal.

(2) *False killer whales, Main Hawaiian Islands Insular Distinct Population Segment.* (i) Visual deterrents pursuant to paragraphs (c)(2)(i)(A) through (E) of this section are approved.

(A) Bubble curtains are approved.

(B) Flashing or strobe lights are approved provided the lights conform to any standards established by Federal law.

(C) Predator shapes are approved.

(D) Vessel patrolling of fishing gear is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the whale.

(E) UAS are approved provided the user abides by the following:

(*1*) Only vertical takeoff and landing aircraft are allowed;

(*2*) Users shall fly UASs no closer than 5 m from an animal;

(*3*) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals; and

(*4*) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal.

(ii) Blunt objects, such as blunt tip poles and brooms, deployed manually as well as water hoses, sprinklers, and water guns are approved tactile deterrents provided the user abides by the following:

(A) Blunt objects must be deployed using a prodding motion;

(B) Tactile deterrents must only strike the posterior end of an animal's body, taking care to avoid the animal's head and blowhole; and

(C) Water deterrents must impact near an animal before striking the animal.

(3) *Killer whales, Southern Resident Distinct Population Segment.* (i) Visual deterrents pursuant to paragraphs (c)(3)(i)(A) through (E) of this section are approved.

(A) Bubble curtains are approved.

(B) Flashing or strobe lights are approved provided the lights conform to any standards established by Federal law.

(C) Predator shapes are approved.

(D) Vessel patrolling of fishing gear is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the whale.

(E) UAS are approved provided the user abides by the following:

(*1*) Only vertical takeoff and landing aircraft are allowed;

(*2*) Users shall fly UASs no closer than 5 m from an animal;

(*3*) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals;

(*4*) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal; and

(*5*) When deploying a UAS from a motorized or non-motorized vessel, users shall follow approach regulations for killer whales in Washington at 50 CFR 224.103(e), and shall adhere to those approach requirements in the event any such requirement conflicts with the provisions of this subpart.

(ii) Containment booms, waterway barriers, and log booms are approved physical barriers provided the user abides by the following:

(A) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of marine mammals;

(B) Lines in the water shall be kept stiff, taut, and non-looping; and

(C) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(iii) Foam projectiles propelled by a toy gun and water hoses, sprinklers, and water guns, are approved tactile deterrents provided the user abides by the following:

(A) Tactile deterrents must strike the posterior end of an animal's body, taking care to avoid the animal's head and blowhole; and

(B) Water deterrents must impact near an animal before striking the animal.

(iv) Impulsive non-explosive acoustic deterrents pursuant to paragraph (c)(3)(iv)(A) of this section are approved.

(A) Banging objects underwater is approved for deterring Southern Resident killer whales provided the user abides by the following:

(*1*) The user must first conduct a visual scan in all directions for other odontocetes within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed;

(*2*) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed; and

(*3*) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur no closer than required approach distances pursuant to 50 CFR 224.103(e) with a minimum of 18 seconds between strikes.

(B) [Reserved]

(v) Non-impulsive acoustic deterrents pursuant to paragraphs (c)(3)(v)(A) and (B) of this section are approved.

(A) Acoustic alarms and predator sounds and alarm vocalizations of

marine mammals emitted by underwater speakers with source levels <170 dB RMS are approved; any such emission by underwater speakers capable of producing sounds ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(B) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(4) *Sperm whales.* (i) Visual deterrents pursuant to paragraphs (c)(4)(i)(A) through (E) of this section are approved.

(A) Bubble curtains are approved.

(B) Flashing or strobe lights are approved provided the lights conform to any standards established by Federal law.

(C) Predator shapes are approved.

(D) Vessel patrolling of fishing gear is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the whale.

(E) UAS are approved provided the user abides by the following:

(*1*) Only vertical takeoff and landing aircraft are allowed;

(*2*) Users shall fly UASs no closer than 5 m from an animal;

(*3*) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals; and

(*4*) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal.

(ii) Containment booms, waterway barriers, and log booms are approved physical barriers provided the user abides by the following:

(A) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of marine mammals;

(B) Lines in the water shall be kept stiff, taut, and non-looping; and

(C) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(iii) Foam projectiles propelled by a toy gun; blunt objects, such as blunt tip poles, brooms, deployed manually; and water hoses, sprinklers, and water guns, are approved tactile deterrents provided the user abides by the following:

(A) Blunt objects must be deployed using a prodding motion;

(B) Tactile deterrents must only strike the posterior end of an animal's body, taking care to avoid the animal's head and blowhole; and

(C) Water deterrents must impact near an animal before striking the animal.

(iv) Impulsive non-explosive acoustic deterrents pursuant to paragraph (c)(4)(iv)(A) of this section are approved.

(A) Banging objects underwater is approved for deterring sperm whales provided the user abides by the following:

(*1*) The user must first conduct a visual scan in all directions for other odontocetes within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed;

(*2*) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed; and

(*3*) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur at least 3 m from the whale with a minimum of 18 seconds between strikes.

(B) [Reserved]

(v) Non-impulsive acoustic deterrents pursuant to paragraphs (c)(4)(v)(A) and (B) of this section are approved.

(A) Acoustic alarms and predator sounds and alarm vocalizations of marine mammals emitted by underwater speakers with source levels <170 dB RMS are approved; any such emission by underwater speakers capable of producing sounds ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(B) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(d) *Pinnipeds.* All deterrents included in the guidelines in § 216.113(d) are recommended specific measures for deterring pinnipeds listed as threatened or endangered under the Endangered Species Act identified in that subsection except for the Hawaiian monk seal and western Distinct Population of Steller sea lions in paragraphs (d)(1) and (2) of this section.

(1) *Hawaiian monk seal.* (i) Air dancers, flags, pinwheels, and streamers; bubble curtains; flashing or strobe lights; human attendants; predator shapes; vessel patrolling; and UASs, are approved visual deterrents for Hawaiian monk seals provided the user abides by the following:

(A) Flags, pinwheels, and streamers must be installed and maintained to reduce the risk of entanglement or entrapment of marine mammals.

(B) Flashing or strobe lights must conform to any standards established by Federal law.

(C) Vessel patrolling of fishing gear or property is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with a Hawaiian monk seal.

(D) UAS are approved provided the user abides by the following:

(*1*) Only vertical takeoff and landing aircraft are allowed;

(*2*) Users shall fly UASs no closer than 5 m from an animal;

(*3*) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals; and

(*4*) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal.

(ii) Containment booms, waterway barriers, and log booms are approved physical barriers to deter Hawaiian monk seals provided the user abides by the following:

(A) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of seals;

(B) Lines in the water shall be kept stiff, taut, and non-looping; and

(C) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(iii) Tactile deterrents pursuant to paragraphs (d)(1)(iii)(A) through (E) of this section are approved.

(A) Electric mats and electric fences are approved for Hawaiian monk seals provided the user abides by the following:

(*1*) Electric mats shall not exceed 24V nominal; and

(*2*) Electric fences shall be no more than 3000V and properly maintained to ensure required voltage and reduce the risk of entanglement or entrapment.

(B) Foam projectiles propelled by a toy gun are approved for deterring

Hawaiian monk seals provided the foam projectile only strikes the posterior end of an animal's body, taking care to avoid the animal's head.

(C) Non-toxic and water-soluble paintballs deployed using paintball guns and low velocity sponge grenades deployed using hand-held launchers are approved for deterring Hawaiian monk seals provided the user abides by the following:

(*1*) Paintballs must be deployed at a minimum distance of 14 m from a phocid and 3 m from an otariid;

(*2*) Sponge grenades must be deployed at a minimum distance of 14 m from a phocid and 10 m from an otariid; and

(*3*) The paintball or sponge grenade must strike the posterior end of an animal's body, taking care to avoid the animal's head.

(D) Blunt objects, such as blunt tip poles, brooms, deployed manually, are approved for deterring Hawaiian monk seals provided the user abides by the following:

(*1*) Blunt objects must be deployed using a prodding motion; and

(*2*) Blunt objects must only impact the chest or strike the posterior end of an animal's body, taking care to avoid the animal's head.

(E) Water hoses, sprinklers, and water guns are approved to deter Hawaiian monk seals provided the user impacts an area near an animal before striking the posterior end of the animal's body, taking care to avoid the animal's head.

(iv) Impulsive non-explosive acoustic deterrents pursuant to paragraphs (d)(1)(iv)(A) through (C) of this section are approved.

(A) Banging objects underwater is approved for deterring Hawaiian monk seals provided the user abides by the following:

(*1*) The user must first conduct a visual scan in all directions for other marine mammals within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed;

(*2*) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed; and

(*3*) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur at least 8 m away from a Hawaiian monk seal.

(B) Banging objects in air, such as bells, and in-air passive acoustic deterrents, such as aluminum cans, are approved for deterring Hawaiian monk seals provided the user maintains a distance of at least 2 m from the seal.

(C) Low frequency, broadband devices and pulsed power devices with the following specifications are approved for deterring Hawaiian monk seals provided the user abides by the following:

(*1*) The user must first conduct a visual scan in all directions for cetaceans within 100 m before deploying low frequency, broadband devices and pulsed power devices; if the user cannot see 100 m due to darkness or weather conditions, low frequency, broadband devices and pulsed power devices shall not be deployed;

(*2*) If cetaceans are sighted within 100 m of the user, low frequency, broadband devices and pulsed power devices shall not be deployed;

(*3*) If no cetaceans are sighted within 100 m of the user, low frequency, broadband devices and pulsed power devices must maintain the appropriate silent interval and engage the devices according to the minimum distances specified in Table 2 to this paragraph (d)(1)(iv)(C)(*3*); if both phocids and otariids are present, the minimum distance for phocids shall apply.

TABLE 2 TO PARAGRAPH (d)(1)(iv)(C)(*3*)—MINIMUM SILENT INTERVALS AND DISTANCES FOR LOW FREQUENCY, BROADBAND AND PULSED POWER DEVICES

Deterrent	Source level (RMS SPL)	Minimum silent interval between signals	Phocid pinniped minimum distance	Otariid pinniped minimum distance
Pulsed Power Device	220 dB	1,200 seconds (20 minutes).	1 meter	1 meter.
Low frequency, broadband device	219 dB	300 seconds	5 meters	1 meter.
Low frequency, broadband device	215 dB	120 seconds	5 meters	1 meter.
Low frequency, broadband device	208 dB	30 seconds	4 meters	1 meter.

(v) Non-impulsive acoustic deterrents pursuant to paragraphs (d)(1)(v)(A) through (C) of this section are approved.

(A) Acoustic alarms, predator sounds and alarm vocalizations of marine mammals emitted by underwater speakers with source levels <170 dB RMS are approved for Hawaiian monk seals; any such emission by underwater speakers capable of producing sounds ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(B) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(C) Air horns, in-air noisemakers, sirens, and whistles with source levels <158 dB RMS are approved for deterring Hawaiian monk seals provided the user abides by the following:

(*1*) Air horns must be deployed at least 4 m away from a Hawaiian monk seal;

(*2*) In-air noisemakers must be deployed at least 5 m away from a Hawaiian monk seal;

(*3*) Sirens must be deployed at least 2 m away from a Hawaiian monk seal; and

(*4*) Whistles must be deployed at least 3 m away from a Hawaiian monk seal.

(2) *Steller sea lion, western Distinct Population Segment (DPS).* The specific measures in this paragraph (d)(2) apply in Alaska where western DPS Steller sea lions commonly occur (all areas west of 144° W longitude and east of 144° W longitude north of 55°49′22.00″ N) latitude unless otherwise specified in this section.

(i) Air dancers, flags, pinwheels, and streamers; bubble curtains; flashing or strobe lights; human attendants; predator shapes; vessel patrolling; and UASs, are approved visual deterrents to deter western DPS Steller sea lions provided the user abides by the following:

(A) Flags, pinwheels, and streamers must be installed and maintained to

reduce the risk of entanglement or entrapment of marine mammals.

(B) Flashing or strobe lights must conform to any standards established by Federal law.

(C) Vessel patrolling of fishing gear or property is approved provided the user maintains a consistent and safe speed, in compliance with any and all applicable speed limitations, and fixed direction to avoid coming into contact with the pinniped.

(D) UAS are approved provided the user abides by the following:

(*1*) Only vertical takeoff and landing aircraft are allowed;

(*2*) Users shall fly UASs no closer than 5 m from an animal;

(*3*) UAS altitude adjustments shall be made away from animals or conducted slowly when above animals;

(*4*) A UAS shall hover over a target animal only long enough to deter the animal and shall not come in direct contact with the animal; and

(*5*) When deploying a UAS, users shall follow approach regulations for endangered Steller sea lions in 50 CFR 224.103(d) and any other applicable approach regulations for marine mammals, and shall adhere to those approach requirements in the event any such requirement conflicts with the provisions of this subpart.

(ii) Containment booms, waterway barriers, and log booms are approved physical barriers to deter western Steller sea lions provided the user abides by the following:

(A) All containment booms, waterway barriers, and log booms shall be constructed, installed, and maintained to reduce the risk of entanglement or entrapment of marine mammals;

(B) Lines in the water shall be kept stiff, taut, and non-looping; and

(C) Booms/barriers must not block major egress and ingress points in channels, rivers, passes, and bays.

(iii) Tactile deterrents pursuant to paragraphs (d)(2)(iii)(A) through (F) of this section are approved.

(A) Electric mats and electric fences are approved for western Steller sea lions provided the user abides by the following:

(*1*) Electric mats shall not exceed 24V nominal; and

(*2*) Electric fences shall be no more than 3000V and properly maintained to ensure required voltage and reduce the risk of entanglement or entrapment.

(B) Foam projectiles propelled by a toy gun are approved for deterring western Steller sea lions provided the foam projectile only strikes the posterior end of an animal's body, taking care to avoid the animal's head.

(C) Non-toxic and water-soluble paintballs deployed using paintball guns and low velocity sponge grenades deployed using hand-held launchers are approved for deterring western Steller sea lions provided the user abides by the following:

(*1*) Paintballs must be deployed at a minimum distance of 14 m from a phocid and 3 m from an otariid;

(*2*) Sponge grenades must be deployed at a minimum distance of 14 m from a phocid and 10 m from an otariid; and

(*3*) The paintball or sponge grenade must only strike the posterior end of an animal's body, taking care to avoid the animal's head.

(D) Blunt objects such as rocks deployed via sling shot are approved for deterring western Steller sea lions provided the user abides by the following:

(*1*) Blunt objects must first impact near an animal before striking an animal.

(*2*) Blunt objects must only strike the posterior end of an animal's body, taking care to avoid the animal's head; and

(*3*) Blunt objects deployed via sling shot must not be sharp or metallic.

(E) Blunt objects, such as blunt tip poles, brooms, deployed manually, are approved for deterring western Steller sea lions provided the user abides by the following:

(*1*) Blunt objects must be deployed using a prodding motion; and

(*2*) Blunt objects must only impact the chest or strike the posterior end of an animal's body, taking care to avoid the animal's head.

(F) Water hoses, sprinklers, and water guns, are approved to deter western Steller sea lions provided the user impacts near an animal before striking the posterior end of the animal's body, taking care to avoid the animal's head.

(iv) Certain airborne impulsive explosive acoustic deterrents are allowed for western Steller sea lions east of 144° W longitude and north of 55°49′22.00″ N latitude as specified in paragraphs (d)(2)(iv)(A) and (B) of this section:

(A) Aerial pyrotechnics, bird bangers, bird whistlers and screamers, and bear bangers used with pencil launchers, are approved provided they have a source level below 142 dB RMS and the user abides by the following:

(*1*) Aerial pyrotechnics and bird bangers must detonate in air a minimum of 23 m from a phocid and a minimum of 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply.

(*2*) Bird whistlers and screamers must detonate in air a minimum of 5 m from a phocid and a minimum of 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply.

(*3*) Bear bangers deployed by pencil launchers must detonate in air a minimum of 2 m from a pinniped; users shall aim in the air above and between themselves and the pinniped.

(*4*) All necessary permits or authorizations from local, state, and/or Federal authorities have been obtained, must be maintained onsite, and be available for inspection upon request by any authorized officer.

(B) Propane cannons are approved for deterring pinnipeds provided the propane cannon is deployed at least 2 m from a western Steller sea lion.

(v) Impulsive non-explosive acoustic deterrents pursuant to paragraphs (d)(2)(v)(A) through (C) of this section are approved.

(A) Banging objects underwater is approved for deterring western Steller sea lions provided the user abides by the following:

(*1*) The user must first conduct a visual scan in all directions for other marine mammals within 100 m; if the user cannot see 100 m due to darkness or weather conditions, banging objects underwater is not allowed;

(*2*) If Dall's porpoise, harbor porpoise, pygmy sperm whales or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater is not allowed; and

(*3*) If no Dall's porpoise, harbor porpoise, pygmy sperm whales, or dwarf sperm whales are sighted within 100 m of the user, banging objects underwater must occur at least 8 m away from a phocid and at least 2 m away from an otariid with a minimum of 18 seconds between strikes; if both taxa are present, the minimum distance for phocids shall apply.

(B) Banging objects in air, such as bells and in-air passive acoustic deterrents, are approved for deterring western Steller sea lions provided the user maintains a distance of at least 2 m from the animal; if phocids are present the user must maintain a distance of at least 24 m from the phocid.

(C) Low frequency, broadband devices and pulsed power devices with the following specifications are approved for deterring western Steller sea lions provided the user abides by the following:

(*1*) The user must first conduct a visual scan in all directions for cetaceans within 100 m before deploying low frequency, broadband devices and pulsed power devices; if the user cannot see 100 m due to darkness or weather conditions, low frequency, broadband devices and pulsed power devices shall not be deployed;

(*2*) If cetaceans are sighted within 100 m of the user, low frequency, broadband devices and pulsed power devices shall not be deployed;

(*3*) If no cetaceans are sighted within 100 m of the user, low frequency, broadband devices and pulsed power devices must maintain the appropriate silent interval and engage the devices according to the minimum distances specified in Table 3 to this paragraph (d)(1)(v)(C)(*3*); if both phocids and otariids are present, the minimum distance for phocids shall apply.

TABLE 3 TO PARAGRAPH (d)(1)(v)(C)(*3*)—MINIMUM SILENT INTERVALS AND DISTANCES FOR LOW FREQUENCY, BROADBAND AND PULSED POWER DEVICES

Deterrent	Source level (RMS SPL)	Minimum silent interval between signals	Phocid pinniped minimum distance	Otariid pinniped minimum distance
Pulsed Power Device	220 dB	1200 seconds (20 minutes).	1 meter	1 meter.
Low frequency, broadband device	219 dB	300 seconds	5 meters	1 meter.
Low frequency, broadband device	215 dB	120 seconds	5 meters	1 meter.
Low frequency, broadband device	208 dB	30 seconds	4 meters	1 meter.

(vi) Non-impulsive acoustic deterrents pursuant to paragraphs (d)(2)(vi)(A) through (C) of this section are approved.

(A) Acoustic alarms, predator sounds and alarm vocalizations of marine mammals emitted by underwater speakers with source levels <170 dB RMS are approved for western Steller sea lions; any such emission by underwater speakers capable of producing sounds ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use such underwater speakers.

(B) Any non-impulsive acoustic deterrent capable of producing underwater sound ≥170 dB RMS must be evaluated and approved via the NMFS Acoustic Deterrent Web Tool before any attempt is made to use the device. If the device meets the evaluation criteria, the user will receive a certificate authorizing use of the device as specified. The certificate must be maintained onsite and be available for inspection upon request by any authorized officer.

(C) Air horns, in-air noisemakers, sirens, and whistles with source levels <158 dB RMS are approved for deterring western Steller sea lions provided the user abides by the following:

(*1*) Air horns must be deployed at least 4 m away from a phocid and at least 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(*2*) In-air noisemakers must be deployed at least 5 m away from a phocid and at least 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply;

(*3*) Sirens must be deployed at least 2 m away from a phocid and from an otariid; and

(*4*) Whistles must be deployed at least 3 m away from a phocid and at least 2 m from an otariid; if both taxa are present, the minimum distance for phocids shall apply.

§ 216.115 Prohibitions.

It is unlawful for any person subject to the jurisdiction of the United States to:

(a) Target a deterrent action at a marine mammal calf or pup;

(b) Strike a marine mammal's head or blowhole when attempting to deter a marine mammal;

(c) Deploy or attempt to deploy a deterrent into the middle of a group of marine mammals;

(d) Feed or attempt to feed a marine mammal as defined at § 216.3 for the purposes of deterrence;

(e) Deter or attempt to deter a marine mammal demonstrating any sign of aggression, including charging or lunging, except when necessary to deter a marine mammal from endangering human safety;

(f) Approach certain marine mammals listed under the Endangered Species Act pursuant to 50 CFR 223.214 and 224.103, including humpback whales in Alaska, North Atlantic right whales, western Steller sea lions, and killer whales in Washington, and approach other marine mammals pursuant to any other applicable approach regulations such as those at § 216.19 and 15 CFR 922.184;

(g) Discharge a firearm to deter any marine mammals under NMFS' jurisdiction, except as provided in § 216.113(d)(4)(iii) and (iv);

(h) Discharge a firearm at or within 100 yards (91.4 m) of a Steller sea lion west of 144° W longitude per 50 CFR 224.103(d)(1)(i);

(i) Use a powerhead, as defined at 50 CFR 600.10, to deter a marine mammal;

(j) Use, for deterring a marine mammal, any firearm, airsoft gun, or any other deterrent included in this section that has been altered from its original manufactured condition;

(k) Use any projectiles deployed with a crossbow, bow, or spear gun to deter a marine mammal;

(l) Use any sharp objects to deter a marine mammal;

(m) Use patrol animals, such as guard dogs, for deterring pinnipeds;

(n) Chase any marine mammals with a vessel;

(o) Use any chemical irritants, corrosive chemicals, and other taste or smell deterrents to deter marine mammals;

(p) Deploy explosives for deterring a marine mammal, except as provided in §§ 216.113(d)(4) and 216.114(d)(2)(iv);

(q) Deploy or attempt to deploy explosives without all valid and necessary local, state, and Federal permits onboard or onsite;

(r) Deploy any underwater impulsive deterrents, including seal bombs, underwater cracker shells, banging objects, pulsed power devices, and low frequency broadband devices if visibility <100 m;

(s) Deploy underwater cracker shells or use banging objects underwater if a Dall's porpoise, harbor porpoise, pygmy sperm whale, or dwarf sperm whale has been seen within 100 m in any direction during a visual scan prior to deployment;

(t) Deploy seal bombs, pulsed power devices, or low frequency broadband devices if any cetaceans have been seen within 100 m in any direction during a visual scan prior to deployment;

(u) Deploy any non-impulsive acoustic deterrent, including underwater speakers, capable of producing source levels ≥170 dB RMS unless the certificate of approval from the NMFS Acoustic Deterrent Web Tool is onboard or onsite;

(v) Tamper with NMFS Acoustic Deterrent Web Tool or falsify an approval certificate for any non-impulsive acoustic deterrent capable of

producing underwater sound ≥170 dB RMS;

(w) Fail to comply with the reporting requirements in § 216.116; and

(x) Provide false information to the Assistant Administrator when reporting an injured or dead marine mammal pursuant to § 216.116.

§ 216.116 Reporting requirements.

(a) Any person engaged in deterring a marine mammal must report all observed mortalities and injuries of marine mammals pursuant to any such deterrence under the guidelines or specific measures in this subpart. Reports must be sent within 48 hours after the end of a fishing trip or within 48 hours of an occurrence of mortality or injury. Reports must be submitted to the Assistant Administrator and must provide:

(1) The name and address of the person deterring the marine mammal(s);

(2) The vessel name, and Federal, state, or tribal registration numbers of the registered vessel and/or the saltwater angler registration number if deterrence occurred during fishing;

(3) A description of the fishery, including gear type and target catch, or of the property where the deterrence occurred;

(4) A description of the deterrent, including number of attempts/deployments, specifications of devices, and any other relevant characteristics;

(5) The species and number of each marine mammal killed or injured in the course of deterrence or a description of the animal(s) killed or injured if the species is unknown;

(6) The disposition of the animal (*e.g.,* injured or dead, type of wounds);

(7) The date, time, and approximate geographic location of such occurrence; and

(8) Any other relevant information such as the behavior of the animal in response to the deterrent, other protected species in the area, etc.

(b) [Reserved]

PART 229—AUTHORIZATION FOR COMMERCIAL FISHERIES UNDER THE MARINE MAMMAL PROTECTION ACT OF 1972

■ 3. The authority citation for part 229 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq.;* § 229.32(f) also issued under 16 U.S.C. 1531 *et seq.*

■ 4. In § 229.4, revise paragraph (i) to read as follows:

§ 229.4 Requirements for Category I and II fisheries.

* * * * *

(i) *Deterrence.* Persons engaged in a Category I or II fishery must comply with all deterrence prohibitions in 50 CFR 216.115 and are encouraged to follow the guidelines and recommended specific measures in 50 CFR part 216 to safely deter marine mammals from damaging fishing gear, catch, or other private property or from endangering personal safety.

* * * * *

■ 5. In § 229.5, revise paragraph (e) to read as follows:

§ 229.5 Requirements for Category III fisheries.

* * * * *

(e) *Deterrence.* Persons engaged in a Category III fishery must comply with all deterrence prohibitions in 50 CFR 216.115 and are encouraged to follow the guidelines and recommended specific measures in 50 CFR part 216 to safely deter marine mammals from damaging fishing gear, catch, or other private property or from endangering personal safety.

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