

# The Marine Mammal Protection Act (P.L. 92-522): Primer and Issues for Congress

January 5, 2024

**Congressional Research Service** https://crsreports.congress.gov R47892



# The Marine Mammal Protection Act (P.L. 92-522): Primer and Issues for Congress

Congress passed the Marine Mammal Protection Act (MMPA) in 1972 (P.L. 92-522; 16 U.S.C. §§1361-1423h) to conserve marine mammal populations and protect them from extinction or depletion as a result of human activities. Since enactment, Congress has amended the MMPA at times and passed the most recent comprehensive amendments in 1994 (P.L. 103-238). The MMPA intersects with other marine-related legislation, such as the Endangered Species Act (16 U.S.C. §§1531-1544) and the Magnuson-Stevens Fishery Conservation and Management Act (16

#### **SUMMARY**

#### R47892

January 5, 2024

Anthony R. Marshak Analyst in Natural Resources Policy

U.S.C. §§1801-1891d). The MMPA, as amended, contains five main provisions, each of which is codified as a separate title and subchapter. Titles I, II, and IV focus on marine mammal protection broadly, whereas Titles III and V focus on specific marine mammal species. Only Titles I, II, and IV are summarized below.

Title I of the MMPA, "Conservation and Protection of Marine Mammals," includes the majority of the act's provisions, which focus on conserving and protecting marine mammals to ensure they remain "a significant functioning element in the ecosystem" and at "optimum sustainable populations" (i.e., population size resulting in maximum productivity). The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Fish and Wildlife Service (FWS) primarily administer these provisions, together with the Marine Mammal Commission (MMC; discussed below). Title I includes provisions for

- the moratorium on taking and importing marine mammals and marine mammal products, including exemptions and issuance of permits by federal agencies for limited *takes* (i.e., harassing, hunting, capturing, killing, or attempting those activities) of marine mammals;
- federal agencies to determine the status of marine mammal stocks through regular population assessments and to develop plans to conserve depleted stocks (i.e., stocks below their optimum sustainable populations) or strategic stocks (i.e., populations where human-caused mortality exceeds the maximum amount that may be removed while maintaining their optimum sustainable populations);
- federal agency regulations and administration of the MMPA;
- commercial fishing implications of the MMPA; and
- domestic and international government engagements, research grants, and regional programs and provisions.

Title II of the MMPA established the MMC, whose mission is "to provide independent, science-based oversight of domestic and international policies and actions of federal agencies addressing human impacts on marine mammals and their ecosystems." Title II also includes provisions for the MMC's composition and functioning, including committees and consultations with federal agencies.

Title IV of the MMPA established the Marine Mammal Health and Stranding Response Program. This program collects and disseminates information on the health of marine mammals, coordinates responses to marine mammal strandings, and establishes a process for handling *unusual mortality events* (i.e., unexpected strandings that include a significant die-off of any marine mammal populations and demand an immediate response).

Congress has long shown interest in the MMPA, marine mammal conservation in general, and conservation's associated trade-offs with ocean sectors. Some Members and committees have discussed the emerging threats from environmental and human-associated stressors, including climate change, on marine mammal populations and their habitats; impacts to subsistence communities that depend on these species; and data gaps in understanding the ecology and population dynamics of marine mammals, including effects from emerging domestic and international offshore activities. Congress also has contemplated marine mammal management in the context of ecosystem-based management approaches that consider multiple ocean use sectors, and with respect to the effects of marine mammal conservation on fisheries species and fishing practices. These concerns also have been raised by some stakeholders in recent years, including with respect to evolving conservation and management practices in consideration of these environmental and socioeconomic factors. Congress may consider whether or not to enact refinements or comprehensive amendments to the MMPA.

## Contents

Introduction	1
Purpose of the Marine Mammal Protection Act	3
Implementation of the Marine Mammal Protection Act	4
Title I: Conservation and Protection of Marine Mammals	6
Moratorium on Taking and Importing Marine Mammals and Marine Mammal	
Products	6
Authorizations, Permits, and Specific Exemptions	
Marine Mammal Status Determinations, Stock Assessments, and Conservation Plans	
Status Determinations	
Stock Assessments	
Conservation Plans and Requirements	
Administration, Regulations, and Program Reviews	
Commercial Fishing and the MMPA	
Taking of Marine Mammals Incidental to Commercial Fishing Operations	
Take Reduction Plans	
Commercial Fisheries Gear Development and Marine Mammal Research Grants	
Federal-State Engagements, International Agreements, and Regional Provisions	
Federal Cooperation with States	
International Agreements	
Regional Provisions	
Title IV: Marine Mammal Health and Stranding Response	
Unusual Mortality Events	24
Issues and Options for Congress	25
Climate Change and the Marine Mammal Protection Act	26
Ecosystem-Based Management and the MMPA	
Trade-Offs Between Marine Mammal Conservation and Fisheries	

## Figures

Figure 1. Percentage of Strategic Marine Mammal Stocks in U.S. Regions over Time...... 15

## Tables

Table 1. Authorizations and Permits for Incidental and	
Directed Takes of Marine Mammals	. 8

## Contacts

Author Information
--------------------

## Introduction

Marine mammals (e.g., whales, dolphins, seals, polar bears) inhabit ocean ecosystems and directly influence the biology and functioning of those systems. Some marine mammals prey on fish and shellfish species. Others, such as sirenians (i.e., manatees and dugongs), graze on seagrasses and other submerged aquatic vegetation. Both activities structure marine ecosystems and impact the services those ecosystems provide to co-occurring species and coastal communities.

Marine mammals are vulnerable to numerous human-associated threats.<sup>1</sup> These threats have reduced marine mammals' populations over time and may lead to further impacts on their survival.<sup>2</sup> Activities that have affected marine mammal populations include historical whaling on various large whale species and incidental captures of marine mammals in fishing gear. In addition, marine mammals are at risk for injury or death associated with vessel strikes, poaching, harassment, pollution, and underwater acoustic sources.<sup>3</sup> These risks are in addition to the effects of climate change on these species,<sup>4</sup> including observed impacts to their prey sources, habitats, and migration patterns.<sup>5</sup>

Increases the populations of some marine mammal species from previously declining levels have been observed in recent decades. Increases in observed populations include the eastern North Pacific gray whales, west Arctic bowhead whales, and a number of seal and sea otter populations.<sup>6</sup> Despite certain observed population rebounds, marine mammals remain vulnerable to climate change and human-associated impacts, and some marine mammal populations remain low.<sup>7</sup>

Given past and emerging threats to marine mammal populations, and observed recoveries of certain species due in part to protection and conservation efforts, many stakeholders—including some in Congress—have prioritized the ongoing protection and conservation of these species. Some constituents have amplified concerns about threats to marine mammals because they are drawn to these aesthetic species. Others emphasize the economic importantance of these species and the need for ongoing protections; for example, marine mammal tourism is a valuable industry, with the whale-watching industry generating millions of dollars each year throughout

<sup>&</sup>lt;sup>1</sup> National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), "Marine Mammals," https://www.noaa.gov/education/resource-collections/marine-life/marine-mammals (hereinafter, NOAA, NMFS, "Marine Mammals").

<sup>&</sup>lt;sup>2</sup> Ana D. Davidson et al., "Drivers and Hotspots of Extinction Risk in Marine Mammals," *Proceedings of the National Academy of Sciences*, vol. 109, no. 9 (2012), pp. 3395-3400.

<sup>&</sup>lt;sup>3</sup> Ibid; NOAA, NMFS, "Marine Mammals."

<sup>&</sup>lt;sup>4</sup> Matthew D. Lettrich et al., "Vulnerability to Climate Change of United States Marine Mammal Stocks in the Western North Atlantic, Gulf of Mexico, and Caribbean," *PLoS One*, vol. 18, no. 9 (2023), e0290643, pp. 1-37 (hereinafter, Lettrich et al., "Vulnerability to Climate Change").

<sup>&</sup>lt;sup>5</sup> Ibid; Frances M.D. Gulland et al., "A Review of Climate Change Effects on Marine Mammals in United States Waters: Past Predictions, Observed Impacts, Current Research and Conservation Imperatives," *Climate Change Ecology*, vol. 3 (2022), 100054, pp. 1-17 (hereinafter, Gulland et al., "Climate Change Effects on Marine Mammals).

<sup>&</sup>lt;sup>6</sup> A. M. Magera et al., "Recovery Trends in Marine Mammal Populations," *PLoS One*, vol. 8, no. 10 (2013), e77908, pp. 1-12.

<sup>&</sup>lt;sup>7</sup> NOAA, NMFS, "Marine Mammals"; Lettrich et al., "Vulnerability to Climate Change"; Department of Commerce and NOAA, "Final 2022 Marine Mammal Stock Assessment Reports," 88 *Federal Register* 54592-54605, August 11, 2023.

U.S. coastal regions.<sup>8</sup> Futhermore, experts also highlight and consider the ecosystem services these species provide. For example, large whales have been shown to enhance the productivity of ocean waters by bringing nitrogen and other nutrients to the surface (i.e., *the whale pump*) to support marine food webs and to sequester carbon dioxide from the atmosphere.<sup>9</sup> Thus, marine mammal protection and conservation remain priorities, including in the context of management trade-offs with other ocean sectors.

Congress enacted the Marine Mammal Protection Act (MMPA) in 1972 (P.L. 92-522; 16 U.S.C. §§1361-1423h) to conserve all marine mammal populations and protect them from extinction or depletion as a result of human activities.<sup>10</sup> Congress found that marine mammals should not be permitted to diminish below sustainable thresholds (i.e., below a population size at which they may replenish themselves effectively and continue functioning within their ecosystems).<sup>11</sup> The MMPA, as amended, contains five main provisions, each of which is codified as a separate title and subchapter in the legislation:

- Title I: Conservation and Protection of Marine Mammals. This title includes provisions with respect to ensuring sustainable population levels, minimizing impacts from fishing and non-fishing activities on marine mammals, accounting for marine mammal population status, and intergovernmental collaborations.
- Title II: Marine Mammal Commission (MMC). This title includes provisions for the establishment and functioning of the MMC.
- Title III: International Dolphin Conservation Program. This title includes provisions for the protection and conservation of dolphins and other marine mammals with respect to tuna fisheries. This title is not discussed in this report.
- Title IV: Marine Mammal Health and Stranding Response. This title includes provisions with respect to coordinating a marine mammal stranding network,<sup>12</sup> investigating and responding to unusual mortality events, administering marine mammal rescue assistance grant programs, and establishing a marine mammal health monitoring and analysis platform.

<sup>&</sup>lt;sup>8</sup> McDowell Group, *Economic Analysis of Whale Watching Tourism in Alaska*, prepared for NOAA, October 2020, pp. 1-38, https://media.fisheries.noaa.gov/2020-11/Economic-Analysis-Whale-Watching-Tourism-Alaska.pdf?VersionId= null; Simon O'Connor et al., *Whale Watching Worldwide: Tourism Numbers, Expenditures and Expanding Economic Benefits*, International Fund for Animal Welfare, a special report from the International Fund for Animal Welfare, prepared by Economists at Large, Yarmouth, MA, 2009, pp. 1-295, https://www.mmc.gov/wp-content/uploads/ whale\_watching\_worldwide.pdf.

<sup>&</sup>lt;sup>9</sup> Joe Roman and James J. McCarthy, "The Whale Pump: Marine Mammals Enhance Primary Productivity in a Coastal Basin," *PLoS One*, vol. 5, no. 10 (2010), e13255, pp. 1-8. Heidi C. Peterson et al., "Whales in the Carbon Cycle: Can Recovery Remove Carbon Dioxide?," *Trends in Ecology and Evolution*, vol. 38, no. 3 (2023), pp. 238-249.

<sup>&</sup>lt;sup>10</sup> The Marine Mammal Protection Act (MMPA; P.L. 92-522; 16 U.S.C. §§1361-1423h), under 16 U.S.C. §1362(1), defines *depletion* or *depleted* as

any case in which—(A) the Secretary [of Commerce or of the Interior], after consultation with the Marine Mammal Commission and the Committee of Scientific Advisors on Marine Mammals established under [16 U.S.C. §§1401-1407], determines that a species or population stock is below its optimum sustainable population; (B) a State, to which authority for the conservation and management of a species or population stock is transferred under [16 U.S.C. §1379], determines that such species or stock is below its optimum sustainable population; or (C) a species or population stock is listed as an endangered species or a threatened species under the Endangered Species Act of 1973 [16 U.S.C. §1531 et seq.].

<sup>&</sup>lt;sup>11</sup> 16 U.S.C. §§1361(2).

<sup>&</sup>lt;sup>12</sup> See footnote 155 for a definition of *stranding*.

• Title V: Polar Bears. This title includes provisions regarding polar bear management, international agreements, and U.S. participation in the multilateral Agreement on the Conservation of Polar Bears.<sup>13</sup> This title is not discussed in this report.

This report provides a brief overview of the MMPA, including its implementation by the National Oceanic and Atmospheric Administration (NOAA), U.S. Fish and Wildlife Service (FWS), and MMC. The report discusses selected provisions under certain titles, including provisions to (1) conserve and protect marine mammals to ensure they remain a sustainable, functional element in the ecosystem (Title I), (2) establish the MMC (Title II), and (3) create a marine mammal health and stranding response program (Title IV). The report is not organized to cover the MMPA in a section-by-section format under each title but rather with high-level summary information by theme and with corresponding nationally focused sections grouped accordingly. This report also provides a discussion of selected issues for Congress with respect to the MMPA, including considerations regarding climate change, ecosystem-based management, and trade-offs between marine mammal conservation and fisheries.

## **Purpose of the Marine Mammal Protection Act**

The MMPA's aim is to prevent marine mammals and their populations from declining beyond the point where these species are no longer functioning elements of marine ecosystems. Specifically, declining beyond a population size at which marine mammals remain biologically meaningful and exert predatory controls or other ecological effects on other organisms.<sup>14</sup> The MMPA defines a *marine mammal* as "any mammal which (A) is morphologically adapted to the marine environment (including sea otters and members of the orders Sirenia, Pinnipedia and Cetacea), or (B) primarily inhabits the marine environment (such as the polar bear); and, for the purposes of this chapter, includes any part of any such marine mammal, including its raw, dressed, or dyed fur or skin."<sup>15</sup> The act declares that certain species and populations of marine mammals are in danger of extinction or depletion and that they should not be permitted to diminish below their *optimum sustainable population* (OSP),<sup>16</sup> or beyond the point where they cease to be a significant functioning element in their particular ecosystem.<sup>17</sup> The act's primary objectives for marine mammal management are to maintain the health and stability of the marine ecosystem and to maintain OSPs of marine mammals in consideration of a given habitat's carrying capacity.<sup>18</sup> The

1. The maximum population of a species that an area or specific ecosystem can support (continued...)

<sup>&</sup>lt;sup>13</sup> United Nations, *Agreement on the Conservation of Polar Bears (with Final Act and Resolution)*, vol. 2898, no. 50540, November 15, 1973, pp. 245-257, https://treaties.un.org/doc/Publication/UNTS/Volume%202898/Part/volume-2898-I-50540.pdf.

<sup>&</sup>lt;sup>14</sup> 16 U.S.C. §1361(2); NOAA, NMFS, "Marine Mammal Protection Act Policies, Guidance, and Regulations," https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-policies-guidanceand-regulations; Erica Fleishman et al., "Monitoring Population-Level Responses of Marine Mammals to Human Activities," *Marine Mammal Science*, vol. 32, no. 3 (2016), pp. 1004-1021.

<sup>&</sup>lt;sup>15</sup> 16 U.S.C. §1362(6).

<sup>&</sup>lt;sup>16</sup> 16 U.S.C. §1361(1)-(2); The MMPA, under 16 U.S.C. §1362(9), defines *optimum sustainable population* (OSP) as "with respect to any population stock, the number of animals which will result in the maximum productivity of the population or the species, keeping in mind the carrying capacity of the habitat and the health of the ecosystem of which they form a constituent element."

<sup>17 16</sup> U.S.C. §1361(2).

<sup>&</sup>lt;sup>18</sup> 16 U.S.C. §1361(6); Marine Mammal Commission (MMC), "Marine Mammal Protection Act," https://www.mmc.gov/about-the-commission/our-mission/marine-mammal-protection-act/. The MMPA does not define *carrying capacity*. NOAA defines *carrying capacity* as

act additionally focuses on measures to replenish any species or population that has already diminished below its OSP and to protect marine mammal essential habitats (and areas of similar significance for each species of marine mammal) from the adverse effects of human actions.<sup>19</sup> Experts and stakeholders have referred to the recovery of multiple seal populations off New England and California—and increases in humpback, blue, and gray whales in recent decades—as evidence of the act's value.<sup>20</sup> Furthermore, the act emphasizes the importance of and need for marine mammal research and conservation.<sup>21</sup>

# **Implementation of the Marine Mammal Protection Act**

Three federal agencies implement the MMPA, sharing responsibility for carrying out the act's conservation and management provisions:

- NOAA's National Marine Fisheries Service (NMFS; also known as *NOAA Fisheries*) is responsible for the protection of cetaceans and pinnipeds (other than walruses).<sup>22</sup>
- FWS is responsible for the protection of walruses, sirenians, sea otters, and polar bears.<sup>23</sup>
- The MMC, established in Title II of the MMPA,<sup>24</sup> provides independent, sciencebased administration of domestic and international policies and federal agency actions addressing human impacts on marine mammals and their ecosystems.<sup>25</sup>

Additionally, NMFS and FWS have developed regulations to implement the MMPA, including for managing fishing and non-fishing impacts on marine mammals and regarding the import,

<sup>19</sup> The MMPA extends essential habitats to marine mammal rookeries and mating grounds. 16 U.S.C. §1361(2).

<sup>24</sup> 16 U.S.C. §§1401-1407.

indefinitely without deterioration of the character and quality of the resource; 2. The level of use, at a given level of management, at which a natural or man-made resource can sustain itself over a long period of time. For example, the maximum level of recreational use, in terms of numbers of people and types of activity that can be accommodated before the ecological value of the area declines.

NOAA, NOAA Fisheries Glossary, NOAA Technical Memorandum NMFS-F/SPO-69, 2006, p. 5, https://repository.library.noaa.gov/view/noaa/12856.

<sup>&</sup>lt;sup>20</sup> Joe Roman et al., "The Marine Mammal Protection Act at 40: Status, Recovery, and Future of U.S. Marine Mammals," *Annals of the New York Academy of Sciences*, vol. 1286, no. 2013 (2013), pp. 29-49 (hereinafter, Roman et al., "Marine Mammal Protection Act at 40").

<sup>&</sup>lt;sup>21</sup> 16 U.S.C. §§1361(3)-(4).

<sup>&</sup>lt;sup>22</sup> Cetaceans (i.e., Order Cetacea) include dolphins and whales. Pinnipeds (i.e., Order Pinnipedia) include seals, sea lions, and walruses. 16 U.S.C. §1362(12). In accordance with provisions for the Secretary of Commerce; NOAA, NMFS, "Marine Mammal Protection: Conservation & Management," https://www.fisheries.noaa.gov/topic/marinemammal-protection/conservation-&-management (hereinafter, NOAA, NMFS, "Marine Mammal Protection: Conservation & Management").

<sup>&</sup>lt;sup>23</sup> Sirenians (i.e., Order Sirenia) include manatees and dugongs. 16 U.S.C. §1362(12). In accordance with provisions for the Secretary of the Interior; U.S. Fish and Wildlife Service (FWS), "Marine Mammals," https://www.fws.gov/ program/marine-mammals; NOAA, NMFS, "Marine Mammal Protection: Conservation & Management."

<sup>&</sup>lt;sup>25</sup> The MMC regularly consults with NMFS, FWS, and other federal agencies; MMC, "Our Mission," https://www.mmc.gov/about-the-commission/our-mission/ (hereinafter, MMC, "Our Mission"); NOAA, NMFS, "Marine Mammal Protection: Conservation & Management."

export, and transportation of marine mammals.<sup>26</sup> MMC regulations also govern agency practices, compliance with other legislation, and public availability of agency materials.<sup>27</sup>

#### The Marine Mammal Commission

The mission of the Marine Mammal Commission (MMC) is "to provide independent, science-based oversight of domestic and international policies and actions of federal agencies addressing human impacts on marine mammals and their ecosystems."

The MMC is an independent advisory agency composed of three members (commissioners), who are knowledgeable in marine ecology and resource management. Commissioners serve three-year terms and are not eligible for reappointment. The commissioners are appointed by the President and confirmed by the Senate. The President also designates a chair of the MMC from among the commissioners; the chair may appoint and assign duties to an executive director and administrative staff, with the MMC's approval.

MMC duties include the following:

- Reviewing and studying U.S. activities pursuant to existing laws and international conventions relating to marine mammals
- Reviewing (1) the condition of marine mammal stocks, (2) methods for their protection and conservation, (3) humane means for taking marine mammals, (4) proposed or in-place research programs under the Marine Mammal Protection Act (MMPA; P.L. 92-522; 16 U.S.C. §§1361-1423h), and (5) all applications for scientific research permits and those for public display or for enhancing the survival of a species or stock
- Conducting and/or facilitating studies relating to the protection and conservation of marine mammals
- Recommending federal actions for the protection and conservation of marine mammals
- Recommending federal measures to further policies of the MMPA, including activities that protect Indians and Alaskan Natives whose livelihood may be adversely affected by actions taken pursuant to the MMPA
- Recommending policies to the Secretary of State for protecting and conserving marine mammals covered under international agreements or arrangements

The MMC also includes a Committee of Scientific Advisors on Marine Mammals (the Committee), which consists of nine scientists appointed by the MMC chair after consultation with the chairs of the Council on Environmental Quality and the National Academy of Sciences and the directorate of the Smithsonian Institution and the National Science Foundation. The MMC is to consult with the Committee on all studies, recommendations, and research programs that it proposes or undertakes and in reviewing all applications for scientific research permits. The MMC also is to have access to all studies and data compiled by federal agencies regarding marine mammals. If the MMC does not adopt a recommendation made by the Committee or any of its members, the MMPA requires the MMC to transmit a detailed explanation of its reasons for not accepting such recommendations to Congress and the appropriate federal agency. Furthermore, although the MMC is not a regulatory agency, its comments are to be taken into consideration by relevant action agencies. Should an agency choose to not follow the MMC's recommendations, it must provide a rationale for taking a different approach.

The MMC is to provide an annual report to Congress in consultation with the Secretary of Commerce and/or the Secretary of the Interior. All reports and recommendations made by the MMC are required to be publicly available.

**Sources:** 16 U.S.C. §§1401-1407; Marine Mammal Commission (MMC), "Home – Marine Mammal Commission," https://www.mmc.gov/; MMC, "About the Commission," https://www.mmc.gov/about-the-commission/.

<sup>&</sup>lt;sup>26</sup> NMFS regulations are found at 50 C.F.R. §§216.1-219.40, 228.1-229.37. USFWS regulations are found at 50 C.F.R. §§14.18, 18.1-18.152.

<sup>&</sup>lt;sup>27</sup> 50 C.F.R. §§501.1-560.8.

# **Title I: Conservation and Protection of Marine Mammals**

Title I of the MMPA contains the majority of the act's provisions that pertain to the conservation and protection of marine mammals.<sup>28</sup> Title I is organized into multiple sections that cover the following topics:

- The moratorium on taking and importing marine mammals and marine mammal products, including exemptions and issuance of permits
- Agencies that determine the status of marine mammal stocks and develop plans to conserve depleted stocks
- Regulations and administration of the MMPA
- Commercial fishing implications of the MMPA
- Domestic and international government engagements, research grants, and regional programs and provisions

The following sections primarily provide summaries of nationally centric elements under Title I of the MMPA. Title I also includes several regionally focused programs,<sup>29</sup> which are briefly described below (see "Regional Provisions").

## Moratorium on Taking and Importing Marine Mammals and Marine Mammal Products

The MMPA established a moratorium on the taking of marine mammals in U.S. waters, except in certain cases.<sup>30</sup> The MMPA, under 16 U.S.C. §1362(13), defines *take* as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." Section 102 of the MMPA also prohibits any person or vessel under U.S. jurisdiction from taking or possessing any marine mammal on the high seas, except as provided for by an international treaty, convention, or agreement to which the United States is a party.<sup>31</sup> These prohibitions extend to the transport, purchase, sale, or export of any marine mammal or marine mammal products, or any offers thereof unless explicitly permitted by NMFS or FWS (see "Permits and Other Specific Exemptions").<sup>32</sup> The prohibitions additionally apply to any commercial fishing practices in violation of any regulations or limitations related to the conservation and protection of marine mammals issued for that fishery (see "Commercial Fishing and the MMPA").<sup>33</sup>

The MMPA directs the Secretary of Commerce or the Secretary of the Interior (i.e., *the Secretary*<sup>34</sup>) to issue regulations carrying into effect the prohibitions in MMPA on the taking and importing of marine mammals. In promulgating regulations, the Secretary must use "the best

<sup>&</sup>lt;sup>28</sup> Title I of the MMPA, 16 U.S.C. §§1371-1393, is also codified as Subchapter II of 16 U.S.C. §§1362-1423h (i.e., Chapter 31 – Marine Mammal Protection).

<sup>&</sup>lt;sup>29</sup> Under §§110 and 119-120 of the MMPA. 16 U.S.C. §§1380(c)-(d), 1388-1389.

<sup>&</sup>lt;sup>30</sup> Under §§101 and 104 of the MMPA. 16 U.S.C. §§1371(a)-(f), 1374.

<sup>&</sup>lt;sup>31</sup> 16 U.S.C. §1372(a)(1)-(5).

<sup>&</sup>lt;sup>32</sup> 16 U.S.C. §1371(a)(4).

<sup>33 16</sup> U.S.C. §1371(a)(5).

<sup>&</sup>lt;sup>34</sup> In this report, *the Secretary* refers to the Secretary of Commerce and/or the Secretary of the Interior as appropriate to jurisdiction, unless otherwise specified.

scientific evidence available" and consult with the MMC.<sup>35</sup> Regulations are to be periodically reviewed and may be modified at the Secretary's discretion.<sup>36</sup> The Secretary is to account fully for multiple factors when prescribing these regulations, including the existing and future levels of marine mammal species and their populations; international treaties and agreements; the marine ecosystem; and fisheries, economic, and technological considerations.<sup>37</sup>

#### Authorizations, Permits, and Specific Exemptions

The MMPA includes specific requirements and allowable exemptions (e.g., for subsistence uses by Alaska Natives) related to the moratorium. It also grants authority to the Secretary to allow the taking of marine mammals or issue permits for certain activities that involve marine mammals.<sup>38</sup> For example, the MMPA includes provisions for the authorized *incidental taking* (i.e., taking that is infrequent, unavoidable, unexpected, or accidental and that causes *negligible impact*)<sup>39</sup> of marine mammals during commercial fishing operations (see "Taking of Marine Mammals Incidental to Commercial Fishing Operations"),<sup>40</sup> as well as during non-fishing activities (e.g., offshore energy exploration).<sup>41</sup> **Table 1** includes information about the different types of authorizations issued by federal agencies for incidental takes (e.g., an incidental take authorization) or directed takes (i.e., a specific permit to allow for an intentional interaction under a specific purpose that may result in take) of marine mammals during specific activities. Further information is provided in the below sections.<sup>42</sup>

<sup>40</sup> As administered by the Secretary of Commerce. 16 U.S.C. §§1371(a)(2), 1373-1374, 1387, 1416.

<sup>&</sup>lt;sup>35</sup> Under §103, 16 U.S.C. §1373(a).

<sup>&</sup>lt;sup>36</sup> 16 U.S.C. §1373(e).

<sup>&</sup>lt;sup>37</sup> 16 U.S.C. §1373(b).

<sup>&</sup>lt;sup>38</sup> 16 U.S.C. §§1371-1374; NOAA, NMFS, "Incidental Take Authorizations Under the Marine Mammal Protection Act," https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act (hereinafter, NOAA, NMFS, "Incidental Take Authorizations Under the Marine Mammal Protection Act"; FWS, "Incidental Take Authorizations for Marine Mammals," https://www.fws.gov/service/incidental-take-authorizations-marine-mammals (hereinafter, FWS, "Incidental Take Authorizations for Marine Mammals").

<sup>&</sup>lt;sup>39</sup> 50 C.F.R. §216.103.

<sup>&</sup>lt;sup>41</sup> These authorizations are administered by either the Secretary of Commerce or the Secretary of the Interior, depending on jurisdiction. 16 U.S.C. §1371(a)(5). The MMPA does not define *negligible impact*. 50 C.F.R. §18.27(c) defines *negligible impact* as "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

<sup>&</sup>lt;sup>42</sup> NOAA, NMFS, "Understanding Permits and Authorizations for Protected Species—What's the Difference Between Directed and Incidental Take?," https://www.fisheries.noaa.gov/insight/understanding-permits-and-authorizations-protected-species#what%E2%80%99s-the-difference-between-directed-and-incidental-take?-.

Type of Authorization	Authorized Activities	Federal Agency	Citations	
Incidental Takes				
Marine Mammal Authorization	Incidental take of marine mammals during U.S. commercial fishing operations	NMFS	16 U.S.C. §§1371, 1387(c), 1416;	
			50 C.F.R. §§229.1-229.37	
Incidental Take	Incidental take of marine	FWS or NMFS	16 U.S.C. §1371(a)(5)(A)-(D);	
Authorization (ITA)	mammals during non- fishing activities, including those by the military, energy, scientific, and marine construction sectors		50 C.F.R. §§18.1-18.152; 50 C.F.R. §§216.1-219.40	
Incidental Harassment Authorization	An ITA for small-scale non-fishing activities or those expected to result only in marine mammal harassment	FWS or NMFS	See citations for an ITA.	
Letter of Authorization (LOA)	An ITA for larger-scale activities or those that may cause serious injury	·····		16 U.S.C. §1373(a); see also citations for an ITA.
		FWS issues ITRs		
		MMC consults on specifically issued regulations for a given activity		
Directed Takes				
Permits	Specific permits may be issued for scientific, public display, enhancement, relocation, and/or photography purposes or for importing polar bear parts	NMFS, FWS, and in consultation with the MMC	16 U.S.C. §§1371, 1374; 50 C.F.R. §§18.1-18.34; 50 C.F.R. §§216.1-216.50	

# Table I. Authorizations and Permits for Incidental and Directed Takes of Marine Mammals

**Sources:** 16 U.S.C. §§1371, 1374, 1387, 1416; 50 C.F.R. §§18.1-18.152; 216.1-219.40; National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), "Understanding Permits and Authorizations for Protected Species," https://www.fisheries.noaa.gov/insight/understanding-permits-and-authorizations-protected-species; NOAA, NMFS, "Incidental Take Authorizations Under the Marine Mammal Protection Act," https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act; NOAA, NMFS, "Marine Mammal Authorization Program," https://www.fisheries.noaa.gov/ national/marine-mammal-protection/marine-mammal-authorization-program; U.S. Fish and Wildlife Service (FWS), "Incidental Take Authorizations for Marine Mammals," https://www.fws.gov/service/incidental-take-authorizations-marine-mammals; FWS, "3-200-43: Take/Import/Transport/Export of Marine Mammals or Amendment of Permit (MMPA; ESA)," https://www.fws.gov/service/3-200-43-takeimporttransportexport-marine-mammals-or-amendment-permit-mmpa-esa.

**Notes:** MMC = Marine Mammal Commission. Incidental Harassment Authorizations, Letters of Authorization, and Incidental Take Regulations are all types of Incidental Take Authorizations. The Marine Mammal Protection Act (P.L. 92-522; 16 U.S.C. §§1361-1423h) defines *take* as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal." NMFS defines a *directed take* as an activity that is a purposeful interaction with the protected animal for a specific purpose that may result in a take. NMFS defines *incidental take* as "an accidental taking. This does not mean that the taking is unexpected, but rather it includes those

takings that are infrequent, unavoidable or accidental." FWS defines *incidental, but not intentional, taking* as "takings which are infrequent, unavoidable, or accidental. It does not mean that the taking must be unexpected."

#### Incidental Take Authorizations

The MMPA and its implementing regulations give NOAA and FWS the authority to authorize incidental takes of small numbers of marine mammals within a specified geographic region during particular non-fishing oceanic activities.<sup>43</sup> Additionally, the MMPA allows the Secretary to issue permits allowing for marine mammals to be taken incidentally during military readiness activities.<sup>44</sup> Authorization of incidental takes from the relevant agency to a given party is provided through an *incidental take authorization*. There are two types of these authorizations:

1. An Incidental Harassment Authorization (IHA), which may be issued for smallscale activities or activities expected to result only in harassment of marine mammals.

The MMPA further defines *harassment* as "any act of pursuit, torment, or annoyance which—(i) has the potential to injure a marine mammal or marine mammal stock in the wild; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."<sup>45</sup>

The MMPA and its implementing agencies categorize harassment as *Level A harassment*, which has the potential to cause a permanent threshold shift or other types of nonserious injury,<sup>46</sup> and *Level B harassment*, which has the potential to disturb marine mammals and disrupt their behavioral patterns.<sup>47</sup>

2. Letter of Authorization (NOAA, FWS) and/or Incidental Take Regulation (FWS) for larger-scale activities or activities that may cause serious injury or mortality to marine mammals.<sup>48</sup> NOAA and FWS also publish specific regulations related to these authorized takes, in consultation with the MMC.<sup>49</sup>

Incidental Take Authorizations are issued to applicants following review by NOAA or FWS and notice and opportunity for public comment in the *Federal Register*.<sup>50</sup> When issuing

<sup>&</sup>lt;sup>43</sup> 16 U.S.C. §1371(a)(5); 50 C.F.R. §216; the incidental taking of California sea otters, including with respect to their translocation, is not included under these provisions, as established in P.L. 99-625 and 16 U.S.C. §§1371(a)(5)(E)(vi). P.L. 99-625 is otherwise known as "An Act to improve the operation of certain fish and wildlife programs."

<sup>&</sup>lt;sup>44</sup> 16 U.S.C. §§1371(a)(5)(A)(ii)-(iv), 1371(a)(5)(D)(vi)-(vii), 1371(a)(5)(F); 16 U.S.C. §703 note.

<sup>&</sup>lt;sup>45</sup> 16 U.S.C. §1362(18).

<sup>&</sup>lt;sup>46</sup> 16 U.S.C. §1362(18)(A)(i), (B)(i), (C).

<sup>&</sup>lt;sup>47</sup> 16 U.S.C. §1362(18)(A)(ii), (B)(ii), (D).

<sup>&</sup>lt;sup>48</sup> NOAA issues a Letter of Authorization (LOA) for larger-scale activities for periods up to five years for nonmilitary readiness activities and seven years for military readiness activities. Under a different process, FWS issues an Incidental Take Regulation (ITR) as an initial step for authorizing larger-scale activities. Once FWS promulgates an ITR, U.S. citizens covered in the ITR may then request an LOA to carry out activities that fall under the ITR analysis. NOAA, NMFS, "Incidental Take Authorizations Under the Marine Mammal Protection Act"; FWS, "Incidental Take Authorizations for Marine Mammals."

<sup>&</sup>lt;sup>49</sup> NOAA, NMFS, "Incidental Take Authorizations Under the Marine Mammal Protection Act"; FWS, "Incidental Take Authorizations for Marine Mammals."

<sup>&</sup>lt;sup>50</sup> 16 U.S.C. §1371(a)(5); NOAA, NMFS, "Apply for an Incidental Take Authorization,"

https://www.fisheries.noaa.gov/national/marine-mammal-protection/apply-incidental-take-authorization; FWS, "Incidental Take Authorizations for Marine Mammals."

authorizations, the agency typically works with applicants to define appropriate monitoring and mitigation measures for minimizing adverse effects on marine mammals.<sup>51</sup>

#### **Endangered Species Act Intersections**

The Marine Mammal Protection Act (MMPA; P.L. 92-522; 16 U.S.C. §§1361-1423h) intersects with the Endangered Species Act (ESA; 16 U.S.C. §§1531-1544), as related to ESA-listed threatened and endangered marine mammals and with respect to required consultations for specific activities. Section 7 of the ESA (16 U.S.C. §1536(b)(4)) includes specific reference to marine mammals and the MMPA.

Section 7(a) of the ESA requires interagency consultation on any proposed actions or activities that may affect ESA-listed species or their designated *critical habitat*. The authorized taking of marine mammals under the MMPA, as covered under agency-issued incidental take authorizations, is a federal action that requires an ESA Section 7 consultation.

Section 7(b) of the ESA states that if an endangered or threatened marine mammal species is involved in the activity requiring consultation, the taking of that marine mammal is to be authorized under the MMPA prior to any written statement from the Secretary on the impact of incidental taking on the ESA-listed species. That written statement also is to specify "reasonable and prudent measures that the Secretary considers necessary or appropriate to minimize such impact" and, in the case of marine mammals, specifies those measures that are necessary to comply with the MMPA regarding such taking. Therefore, the National Oceanic and Atmospheric Administration (NOAA) or U.S. Fish and Wildlife Service (FWS) cannot issue an incidental take statement for marine mammals under the ESA until an MMPA incidental take authorization has been issued.

There are other intersections between the MMPA and the ESA. For example, provisions codified along with the ESA regarding the *translocation* of California sea otters stipulate that any incidental taking during an otherwise lawful activity in the *management zone*, or necessary sea otter relocation or management action, may not be treated as violating the MMPA (16 U.S.C. §1536 note). Additionally, Section 17 of the ESA (16 U.S.C. §1543) states that no provision of the ESA "shall take precedence over any more restrictive conflicting provision" of the MMPA.

**Sources:** 16 U.S.C. §§1536(a)-(b), 1536 note, 1539(j), 1543; NOAA, National Marine Fisheries Service (NMFS), "ESA Section 7 Consultation Tools for Marine Mammals on the West Coast," https://www.fisheries.noaa.gov/ west-coast/endangered-species-conservation/esa-section-7-consultation-tools-marine-mammals-west; NOAA, NMFS, "Incidental Take Authorizations Under the Marine Mammal Protection Act,"

https://www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act; FWS, "Incidental Take Authorizations for Marine Mammals," https://www.fws.gov/service/incidental-take-authorizationsmarine-mammals.

Notes: The ESA, under 16 U.S.C. §1532(5)(A), defines critical habitat for a threatened or endangered species as

the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 1533 of this title, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 1533 of this title, upon a determination by the Secretary that such areas are essential for the conservation of the species.

16 U.S.C. §1536 note defines *translocation* as occurring from the existing range of the parent population to another location (i.e., known as the *management zone*, which surrounds the *translocation zone* to which an experimental sea otter population is relocated and does not include the existing range of the parent population or adjacent range where expansion is necessary for the recovery of the species).

16 U.S.C. §1539(j) defines an *experimental population* as "any population (including any offspring arising solely therefrom) authorized by the Secretary for release under paragraph (2), but only when, and at such times as, the population is wholly separate geographically from nonexperimental populations of the same species."

<sup>&</sup>lt;sup>51</sup> NOAA, NMFS, "Apply for an Incidental Take Authorization," https://www.fisheries.noaa.gov/national/marinemammal-protection/apply-incidental-take-authorization; FWS, "Incidental Take Authorizations for Marine Mammals."

#### Permits and Other Specific Exemptions

The Secretary also may issue a permit that exempts activities from the moratorium on taking and importing marine mammals during the following actions, as specified in Sections 101 and 104:

- Scientific research, public display, or enhancing the survival or recovery of a species.<sup>52</sup>
- Photography for educational or commercial purposes.<sup>53</sup>
- Importing polar bear parts taken in sport hunts in Canada.<sup>54</sup>

These permits may be issued if the proposed taking or importation is reviewed by the MMC and the Committee of Scientific Advisors on Marine Mammals (see the text box on the MMC for more information about the committee).<sup>55</sup> The Secretary is to publish a public notice of each application made for a permit, and to invite written data or views from interested parties with respect to the taking or importation proposed in that application, before any decision to issue a permit.<sup>56</sup> The Secretary also may modify, suspend, or revoke any issued permit.<sup>57</sup>

In addition, the MMPA includes exemptions (i.e., those that do not require a permit) for marine mammal takes performed in self-defense or national defense,<sup>58</sup> for ensuring the health and survival of a marine mammal (i.e., "Good Samaritan exemption),<sup>59</sup> and for takes associated with Alaska Native subsistence activities or for creating and selling authentic Native articles of handicrafts and clothing.<sup>60</sup>

#### Penalties for Taking or Possessing a Marine Mammal

Section 105 of the MMPA states that the Secretary may assess a civil penalty (i.e., a fine) to any person who violates any provision, permit, or regulation after notice and opportunity for a hearing.<sup>61</sup> Additionally, as included in Section 106, any vessel or other conveyance subject to U.S. jurisdiction that is employed in any manner in the unlawful taking of any marine mammal shall have its entire cargo or the monetary value thereof subject to seizure and forfeiture and liable for any civil penalties issued by a district court.<sup>62</sup> As stipulated in Section 107, the Secretary enforces all MMPA provisions related to Title I and may designate officers and employees of any U.S. state or territory to enforce these provisions.<sup>63</sup>

- <sup>61</sup> 16 U.S.C. §1375.
- 62 16 U.S.C. §1376.
- 63 16 U.S.C. §1377.

<sup>&</sup>lt;sup>52</sup> 16 U.S.C. §§1371(a)(1), 1374(c)(1)-(2).

<sup>&</sup>lt;sup>53</sup> 16 U.S.C. §§1371(a)(1), 1374(c)(1), (6).

<sup>&</sup>lt;sup>54</sup> 16 U.S.C. §§1371(a)(1), 1374(c)(1), 1374(c)(5), 1374(e).

<sup>&</sup>lt;sup>55</sup> 16 U.S.C. §§1371(a)(1), 1374(c).

<sup>&</sup>lt;sup>56</sup> 16 U.S.C. §1371(d).

<sup>&</sup>lt;sup>57</sup> 16 U.S.C. §1371(e).

<sup>&</sup>lt;sup>58</sup> 16 U.S.C. §§1371(c), (f).

<sup>&</sup>lt;sup>59</sup> 16 U.S.C. §1371(d).

<sup>&</sup>lt;sup>60</sup> 16 U.S.C. §1371(b).

## Marine Mammal Status Determinations, Stock Assessments, and Conservation Plans

Status determinations for marine mammals (i.e., depleted or not depleted) are necessary for understanding the sustainability of these species and any potential threats to the viability of their populations. Assessments of marine mammal populations (i.e., stock assessments) provide information on population trends, productivity rates, and estimates of mortality and serious injury to inform status determinations.<sup>64</sup> This information allows federal agencies to evaluate the effectiveness of conservation and protection measures and to adjust management approaches as necessary.<sup>65</sup>

#### **Status Determinations**

The MMPA, under Section 115, requires the Secretary to determine the status of a marine mammal species or stock (i.e., whether it is depleted or should no longer be designated as such) through the issuance of a rule after notice and opportunity for public comment.<sup>66</sup> The Secretary may independently initiate a determination or may do so in response to a petition for a status review.<sup>67</sup> The Secretary is to make any determination based on the best scientific information available, including as conducted through a stock assessment, and may publish a call for scientific information from individuals, organizations, institutions, or informal working groups.<sup>68</sup> For example, NOAA evaluates the status of marine mammal stocks with respect to whether a stock is depleted as defined under statute, its status relative to OSP (i.e., within OSP, below OSP, or unknown), its designation as strategic or not, its status relative to the MMPA "zero mortality goal," and based on a summary of trends in abundance and human-caused mortality and serious injury.<sup>69</sup> In addition to those stocks determined to be depleted through population assessments, MMPA provisions identify any marine mammal population that is listed under the ESA as depleted.<sup>70</sup> As of November 2023, 51 domestic and foreign marine mammal stocks were listed as depleted.<sup>71</sup>

#### **Stock Assessments**

The Secretary conducts stock assessments of marine mammals to evaluate the status of each stock in U.S. waters, as required by the MMPA.<sup>72</sup> The assessment for each marine mammal contains scientific information on its geographic range, trends in abundance, population structure, human-

65 Ibid.

<sup>&</sup>lt;sup>64</sup> NOAA, NMFS, "Marine Mammal Stock Assessments," https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments.

<sup>66 16</sup> U.S.C. §1383b(a).

<sup>67 16</sup> U.S.C. §1383b(a)(2)-(3).

<sup>&</sup>lt;sup>68</sup> 16 U.S.C. §1383b(a)(2).

<sup>&</sup>lt;sup>69</sup> S. Bettridge, "Guidelines for Preparing Stock Assessment Reports Pursuant to the Marine Mammal Protection Act," NOAA, NMFS, Protected Resources Policy Directive Marine Mammal Protection Act 02-204, February 7, 2023, p. 16, https://www.fisheries.noaa.gov/s3/2023-05/02-204-01-Final-GAMMS-IV-Revisions-clean-1-kdr.pdf.

<sup>70 16</sup> U.S.C. §1362(1)(C).

<sup>&</sup>lt;sup>71</sup> These species include 30 distinct populations of dolphins, porpoises, and whales; 13 distinct populations of pinnipeds; 4 species of sirenians; 3 species of sea otters; and the polar bear. MMC, "Status of Marine Mammal Species and Populations," https://www.mmc.gov/priority-topics/species-of-concern/status-of-marine-mammal-species-and-populations/.

<sup>&</sup>lt;sup>72</sup> As included in Section 117 of the MMPA. 16 U.S.C. §1386.

caused mortality and serious injury, interactions with commercial fisheries,<sup>73</sup> and additional threats.<sup>74</sup> Each assessment is to determine whether a given marine mammal stock (1) has a level of human-caused mortality and serious injury unlikely to cause the stock to be reduced below its OSP or (2) is determined to be a *strategic stock*, including a description of the reasons for that classification.<sup>75</sup> Regional Scientific Review Groups (SRGs) advise the Secretary on these assessments.<sup>76</sup>

The MMPA defines a *strategic stock* as a marine mammal population that is listed, or likely to be listed, as a threatened or endangered species under the ESA or for which direct human-caused mortality is greater than its *potential biological removal level* (PBRL).<sup>77</sup> The term *strategic stock* also includes those stocks that are designated as depleted under the MMPA.<sup>78</sup>

The MMPA defines *PBRL* as the maximum number of animals, not including natural mortalities, that may be removed from the population while allowing it to reach or maintain its OSP.<sup>79</sup> Thus, the PBRL is a direct measure of the maximum allowable mortalities from human activities that may occur to that marine mammal stock to keep its population at sustainable levels.

The goal of a stock assessment is to estimate the PBRL for the stock, including a description of the information used to calculate this level and the recovery factor.<sup>80</sup>

The Secretary is to review stock assessments annually for strategic stocks and those for which significant new information is available, and at least once every three years for all other stocks.<sup>81</sup> If the status for a given stock has changed or can be more accurately determined, then the Secretary is to revise the stock assessment following SRG advice and considering public comment.<sup>82</sup> The Secretary is to make available all draft stock assessments, or any revisions thereof, for public comment over a 90-day period.<sup>83</sup> Additionally, the Secretary is to consider the best scientific information available, the advice of the appropriate regional SRG, and public comments before issuing any final stock assessments.<sup>84</sup> Section 117 gives authority to the

<sup>&</sup>lt;sup>73</sup> 16 U.S.C. §1386(a)(4) states that descriptions of commercial fisheries that interact with the stock are to include

<sup>(</sup>A) the approximate number of vessels actively participating in each such fishery; (B) the estimated level of incidental mortality and serious injury of the stock by each such fishery on an annual basis; (C) seasonal or area differences in such incidental mortality or serious injury; and (D) the rate, based on the appropriate standard unit of fishing effort, of such incidental mortality and serious injury, and an analysis stating whether such level is insignificant and is approaching a zero mortality and serious injury rate.

<sup>&</sup>lt;sup>74</sup> 16 U.S.C. §1386(a).

<sup>&</sup>lt;sup>75</sup> 16 U.S.C. §1386(a)(5).

<sup>&</sup>lt;sup>76</sup> 16 U.S.C. §1386(d). Regional Scientific Review Groups (SRGs) include individuals with expertise in marine mammal biology, ecology, population dynamics and modeling, and commercial fishing, among other factors. The SRGs advise the Secretary on marine mammal population status and trends, uncertainties and research needs, habitat and environmental impacts to marine mammals, and appropriate marine mammal conservation and management measures for alleviating impacts.

<sup>&</sup>lt;sup>77</sup> 16 U.S.C. §1362(19). The MMPA also states that the *potential biological removal level* is a mathematical product of "(A) The minimum population estimate of the stock; (B) one-half the maximum theoretical or estimated net productivity rate of the stock at a small population size; and (C) a recovery factor of between 0.1 and 1.0."

<sup>&</sup>lt;sup>78</sup> Ibid.

<sup>&</sup>lt;sup>79</sup> 16 U.S.C. §1362(20).

<sup>80 16</sup> U.S.C. §1386(a)(6).

<sup>81 16</sup> U.S.C. §1386(c).

<sup>&</sup>lt;sup>82</sup> 16 U.S.C. §§1386(b), 1386(c)(2), 1386(d); see footnote 76.

<sup>83 16</sup> U.S.C. §1386(b).

<sup>84 16</sup> U.S.C. §§1386(a)-(d).

Secretary of Commerce, in consultation with the Secretary of the Interior, MMC, and other parties, to establish three independent regional SRGs representing the Alaskan, Pacific (including Hawaii and Pacific Island territories), and Atlantic (including the Gulf of Mexico) regions.<sup>85</sup>

NOAA and FWS have conducted marine mammal stock assessments since 1995.<sup>86</sup> Figure 1 includes trends in the percentages of strategic marine mammal stocks (i.e., out of the total number of marine mammal stocks) that have been identified in annual stock assessment reports. The percentage of strategic stocks in a given region indicates how many relative stocks exist where human-caused mortality exceeds the PBRL or are below OSP, which can indicate the effectiveness of the MMPA as implemented.<sup>87</sup> Over time, the highest percentage of strategic stocks have consistently occurred in the Atlantic region (including Gulf of Mexico and U.S. Caribbean stocks), with decreases observed from the 1990s to mid-2000s. Increases in the percentages of strategic stocks were observed for the Alaskan region since the 1990s, while less pronounced decreases occurred in the Pacific region over time. The trends for all three regions generally have remained consistent since the 2010s, with occasional fluctuations occurring for Alaskan and Atlantic stocks. Declines in the percentages of Atlantic strategic stocks over time, and of Pacific stocks to a lesser extent, suggest effectiveness of MMPA protection and conservation efforts in those regions. Furthermore, increases in percentages of Alaskan strategic stocks during the 1990s and 2000s could suggest lower effectiveness of these efforts or the presence of other factors (e.g., climate, environmental, and human-associated stressors) differentially affecting Alaskan marine mammal populations.<sup>88</sup> However, consistency of strategic stock percentages in more recent decades also may suggest consistency in MMPA effectiveness among regions, as noted in one study.<sup>89</sup>

<sup>85 16</sup> U.S.C. §1386(d).

<sup>&</sup>lt;sup>86</sup> 16 U.S.C. §1386(a); NOAA, NMFS, "Marine Mammal Stock Assessment Reports by Region,"

https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region; FWS, "Marine Mammal Stock Assessment Reports," https://www.fws.gov/project/marine-mammal-stock-assessment-reports.

<sup>&</sup>lt;sup>87</sup> Roman et al., "Marine Mammal Protection Act at 40."

<sup>&</sup>lt;sup>88</sup> Gulland et al., "Climate Change Effects on Marine Mammals."

<sup>&</sup>lt;sup>89</sup> Ibid.



Figure 1. Percentage of Strategic Marine Mammal Stocks in U.S. Regions over Time

**Sources:** National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service, "Marine Mammal Stock Assessment Reports by Region," https://www.fisheries.noaa.gov/national/marinemammal-protection/marine-mammal-stock-assessment-reports-region; U.S. Fish and Wildlife Service (FWS), "Marine Mammal Stock Assessment Reports," https://www.fws.gov/project/marine-mammal-stock-assessmentreports.

**Notes:** Data are shown for the percentage of marine mammals identified as strategic stocks in NOAA and FWS marine mammal stock assessment reports. Years for which data are not shown reflect that no stock assessment was conducted for that region during that year. Data from NOAA and FWS stock assessment reports are combined for years 2022 and 2023 given different agency reporting schedules for those years. The Alaskan region includes all marine mammals in state and federal waters of the state of Alaska. The Atlantic region includes all marine mammals in U.S. state and federal waters off the Atlantic coast, northern Gulf of Mexico, and Caribbean regions. The Pacific region includes all marine mammals in U.S. state and federal waters off the U.S. West Coast and Pacific Island territories.

#### **Conservation Plans and Requirements**

The MMPA mandates the Secretary to take action for those stocks that it determines to be depleted (i.e., below its OSP or listed under the Endangered Species Act [16 U.S.C. §§1531-1544]). The MMPA, under Section 115, requires the Secretary to prepare conservation plans for any species or stock designated as depleted unless the Secretary determines that doing so would not promote that species' or stock's conservation.<sup>90</sup> The MMC also may provide recommendations for conservation plans.<sup>91</sup> The purpose of each plan is to conserve and restore the species or stock to its OSP.<sup>92</sup>

The Secretary also may determine that a *take reduction plan* is necessary to reduce the incidental taking of marine mammals in the course of commercial fishing operations from a strategic stock or for species or stocks that are affected by a commercial fishery.<sup>93</sup> If so, any conservation plan also is to incorporate that take reduction plan for that species or stock.

<sup>&</sup>lt;sup>90</sup> 16 U.S.C. §1383b(b). In addition to these requirements, the statute mandates that the Secretary also prepare conservation plans specifically for North Pacific fur seals and Stellar sea lions.

<sup>91 16</sup> U.S.C. §1402(a)(4), (6).

<sup>&</sup>lt;sup>92</sup> 16 U.S.C. §1383b(b)(2).

<sup>93 16</sup> U.S.C. §1383b(b)(4).

The MMPA defines *take reduction plan* as a plan that is designed to assist in the recovery of or prevent the depletion of each strategic stock that is affected by a commercial fishery that is included in the Secretary's list of commercial fisheries (see "Commercial Fishing and the MMPA" and "Take Reduction Plans" for more information).<sup>94</sup>

## Administration, Regulations, and Program Reviews

The MMPA grants authority for the Secretary to engage with other federal agencies through multiple means to carry out the requirements of the MMPA. The Secretary collaborates with other federal agencies to implement provisions of the MMPA; conduct marine mammal program reviews; and issue measures, including those focused on lowering effects on strategic stocks.<sup>95</sup> For example, NMFS regulations state that the Secretary of Commerce may "utilize, by agreement, the personnel, services, and facilities of any other Federal Agency for the purposes of enforcing this MMPA."<sup>96</sup>

Additionally, under the MMPA, the Secretary is required to review annually the operation of each U.S. participatory program that involves the taking of marine mammals.<sup>97</sup> In the context of the MMPA, a program may include activities and responsibilities administered by federal agencies with respect to marine mammal protection and conservation. The Secretary may suspend the operation of a program that cannot be administered in the United States or in accordance with the MMPA and is to inform the public and Congress about the reasons for any suspension.<sup>98</sup> The Secretary also is to include any legislative recommendations for resolving the issues leading to suspension of the program.<sup>99</sup> Furthermore, if the Secretary determines that impacts to marine mammal habitats may be causing the decline or impeding the recovery of a strategic stock, the Secretary "may develop and implement conservation or management measures to alleviate those impacts."<sup>100</sup>

## **Commercial Fishing and the MMPA**

The MMPA contains requirements that address the conservation of marine mammals for commercial fishing operations. These requirements include limiting incidental takes during fishing;<sup>101</sup> developing and devising commercial fisheries gear and commercial fishing practices to minimize incidental takes;<sup>102</sup> and granting take exemptions for commercial fisheries under certain circumstances.<sup>103</sup>

<sup>&</sup>lt;sup>94</sup> 16 U.S.C. §1362(24). See report sections "Taking of Marine Mammals Incidental to Commercial Fishing Operations" and "Take Reduction Plans" for more information on the list of commercial fisheries and take reduction plans.

<sup>&</sup>lt;sup>95</sup> As included under Section 112 of the MMPA, "Regulations and Administration." 16 U.S.C. §1382.

<sup>&</sup>lt;sup>96</sup> 50 C.F.R. §216.8.

<sup>97 16</sup> U.S.C. §1382(d).

<sup>98</sup> Ibid.

<sup>&</sup>lt;sup>99</sup> Ibid.

<sup>&</sup>lt;sup>100</sup> 16 U.S.C. §1382(e). The Secretary may implement these measures following consultations with the MMC, appropriate federal agencies, and opportunity for public comment.

<sup>101 16</sup> U.S.C. §1387.

<sup>&</sup>lt;sup>102</sup> 16 U.S.C. §1381.

<sup>&</sup>lt;sup>103</sup> 16 U.S.C. §§1383a, 1387.

#### Taking of Marine Mammals Incidental to Commercial Fishing Operations

Section 118 of the MMPA prohibits the intentional lethal take of any marine mammal in the course of commercial fishing operations.<sup>104</sup> Section 118 also governs the incidental taking of marine mammals during commercial fishing operations of U.S. permitted vessels, including the goal of reducing incidental marine mammal mortality to insignificant levels (i.e., approaching a zero mortality and serious injury rate).<sup>105</sup> NMFS regulations further state that any incidental kill or incidental serious injury of marine mammals permitted during commercial fishing operations is to be reduced to those levels.<sup>106</sup>

The MMPA directs the Secretary of Commerce to publish an annual list of commercial fisheries, for which different degrees of marine mammal incidental takes are associated.<sup>107</sup> These include Category I fisheries, which are associated with frequent incidental takes; Category II fisheries, in which occasional incidental taking occurs; and Category III fisheries, which have a remote likelihood of or no known incidental taking of marine mammals.<sup>108</sup> In the 2023 annual list of commercial fisheries, examples of Category I fisheries include Hawaiian deep-set longline fisheries,<sup>109</sup> which are known to affect multiple species of dolphins and whales, and Northeast/Mid-Atlantic American lobster trap/pot fisheries, which affect multiple dolphin and porpoise populations as well as seals and whales.<sup>110</sup> An example of a Category II fishery is the Alaska Bering Sea and Aleutian Islands pollock trawl fishery, which affects several species of seals, Steller sea lion, humpback whales, and Pacific white-sided dolphin.<sup>111</sup> The Gulf of Maine Atlantic herring purse seine fishery, which affects the harbor seal, is an example of a Category III fishery.<sup>112</sup>

Section 118 states that the Secretary may grant a marine mammal authorization to a registered vessel engaged in a Category I or II listed fishery upon receipt of a completed registration form.<sup>113</sup> The Secretary of Commerce may suspend or revoke an authorization and may charge fees for those authorizations.<sup>114</sup> Furthermore, any vessel owner engaged in a Category I or II

<sup>110</sup> NOAA, NMFS, "Fisheries Summary Tables."

111 Ibid.

 $<sup>^{104}</sup>$  16 U.S.C. 1387(a)(5); 16 U.S.C. 1387(a)(4) stipulates that the incidental taking of California sea otters is not included under these provisions, as also included in Section 101 (16 U.S.C. 100(5)(E)(vi)).

<sup>&</sup>lt;sup>105</sup> 16 U.S.C. §1387(a)-(b).

<sup>&</sup>lt;sup>106</sup> 50 C.F.R. §229.1(g); FWS regulations also reference that goal at 50 C.F.R. §18.24.

<sup>&</sup>lt;sup>107</sup> 16 U.S.C. §§1383a(b)(1)(A)-(C), 1387(c)(1)(A)-(C).

<sup>&</sup>lt;sup>108</sup> Ibid; NOAA, NMFS, "Marine Mammal Protection Act List of Fisheries," https://www.fisheries.noaa.gov/national/ marine-mammal-protection/marine-mammal-protection-act-list-fisheries.

<sup>&</sup>lt;sup>109</sup> NOAA, NMFS, "Fisheries Summary Tables," https://www.fisheries.noaa.gov/national/marine-mammal-protection/ list-fisheries-summary-tables (hereinafter, NOAA, NMFS, "Fisheries Summary Tables"); a *longline* is a continuous mainline set below the surface and supported in the water column horizontally by floats with branch lines attached at intervals on the mainline. NOAA, NMFS, "Hawaii Deep-set Longline Fishery - MMPA List of Fisheries," https://www.fisheries.noaa.gov/national/marine-mammal-protection/hawaii-deep-set-longline-fishery.

<sup>&</sup>lt;sup>112</sup> Ibid; a *purse seine* is a deep nylon mesh net with floats on the top and lead weights on the bottom. Rings are fastened at intervals to the lead line, and a purse line runs completely around the net through the rings. When fishing for Atlantic herring, one end of the net remains in the vessel and the other end is attached to a power skiff or *bug boat* that is deployed from the stern of the vessel and remains in place while the vessel encircles a school of fish with the net. Then the net is pursed and brought back aboard the vessel through a hydraulic power block. NOAA, NMFS, "Gulf of Maine Atlantic Herring Purse Seine Fishery - MMPA List of Fisheries," https://www.fisheries.noaa.gov/national/marine-mammal-protection/gulf-maine-atlantic-herring-purse-seine-fishery-mmpa-list.

<sup>&</sup>lt;sup>113</sup> 16 U.S.C. §1387(c)(2)-(3); NOAA, NMFS, "Marine Mammal Authorization Program,"

https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-authorization-program. <sup>114</sup> 16 U.S.C. §1387(c)(4).

fishery who fails to obtain and maintain a current marine mammal authorization is in violation of the MMPA.<sup>115</sup> Additionally, the Secretary of Commerce is to monitor the incidental mortality and serious injury of marine mammals during the course of commercial fishing operations, including through an on-board observer, as may be required by the Secretary of Commerce as a condition of an authorization.<sup>116</sup> Any commercial fishing vessel owner or operator is to report to the Secretary of Commerce all incidental mortalities and injuries of marine mammals in the course of commercial fishing operations.<sup>117</sup>

#### **Take Reduction Plans**

The MMPA includes provisions to address commercial fishery interactions with strategic marine mammal stocks. The Secretary of Commerce is to develop and implement a take reduction plan to protect or restore a marine mammal population, as included in Section 118 of the MMPA.<sup>118</sup> Take reduction plans are designed to assist in the recovery of, or prevent the depletion of, each strategic stock that interacts with a Category I or II commercial fishery.<sup>119</sup> Additionally, these plans can be created for any other marine mammal stocks that interact with a Category I commercial fishery.<sup>120</sup> Take reduction plans are intended to reduce the incidental mortality or serious injury of a strategic stock during commercial fishing to levels less than its determined PBRL.<sup>121</sup> The plan's immediate goal is to reduce those levels to less than the PBRL within six months of its implementation, with a long-term goal of reducing them to insignificant levels reaching a zero mortality and serious injury rate.<sup>122</sup>

Each take reduction plan is to include

- information in the final stock assessment for that marine mammal population, and any substantial new information;
- an estimate of the total number of animals from that stock that are incidentally lethally taken or seriously injured each year during commercial fishing, including their age and gender if possible;
- recommended regulatory or voluntary measures to reduce incidental mortality and serious injury; and
- recommended dates to achieve the specific plan objectives.<sup>123</sup>

The Secretary may request a take reduction team to address a single stock that interacts with a given fishery, a stock that extends over one or more regions or fisheries, or multiple stocks within a region or fishery.<sup>124</sup> For example, the Atlantic Large Whale Take Reduction Team addresses North Atlantic right whales, humpback whales, and fin whales covered under the Atlantic Large

<sup>&</sup>lt;sup>115</sup> 16 U.S.C. §1387(c)(3).
<sup>116</sup> 16 U.S.C. §§1387(c)(3)(B), 1387(d).
<sup>117</sup> 16 U.S.C. §1387(e).
<sup>118</sup> 16 U.S.C. §1387(f).
<sup>119</sup> 16 U.S.C. §1387(f)(1).
<sup>120</sup> Ibid.
<sup>121</sup> 16 U.S.C. §1387(f)(2).
<sup>122</sup> Ibid.
<sup>123</sup> 16 U.S.C. §1387(f)(4)(A)-(D).
<sup>124</sup> 16 U.S.C. §1387(f)(6).

Whale Take Reduction Plan (ALWTRP), including the whales' interactions with trap and pot gears and gillnets.<sup>125</sup>

The Secretary may issue emergency regulations if he or she finds the incidental mortality and serious injury of marine mammals is having, or is likely to have, an immediate and significant adverse impact on a marine mammal stock, including those with take reduction plans.<sup>126</sup> The Secretary is to consult with the MMC, all appropriate FMCs, state fishery managers, and the appropriate Take Reduction Team, if one is established, regarding these regulations.<sup>127</sup> These regulations may apply to a species with a take reduction plan in effect, a take reduction plan in development, or for a stock or species for which a take reduction plan does not exist and is not being developed.<sup>128</sup> For example, in February 2023, NMFS extended a 2022 temporary emergency rule under the ALWTRP to prohibit the use of buoy lines between federal and state waters within the Massachusetts Restricted Area through April 2023.<sup>129</sup> This action was taken to reduce the threat of incidental mortality and serious injury to North Atlantic right whales from lobster and Jonah crab trap/pot fisheries, for which there is a high risk of overlap and entanglement.<sup>130</sup> There has been litigation related to this issue.<sup>131</sup>

#### Commercial Fisheries Gear Development and Marine Mammal Research Grants

The MMPA includes provisions aimed at reducing incidental takes of marine mammals in fishing gear through multiple means. The Secretary of Commerce is authorized to undertake a research and development (R&D) program to devise fishing methods and develop gear to reduce the incidental take of marine mammals by commercial fishing.<sup>132</sup> The Secretary of Commerce, after consultation with the MMC, also is to issue regulations to reduce that incidental taking to the lowest practicable level; these regulations are to account for any research results from the R&D program.<sup>133</sup> For example, the ALWTRP includes gear making requirements for lobster and Jonah crab traps/pots with respect to markings, colors, buoy lines, breaking strengths of ropes and other gear links, and other measures to minimize effects on whales.<sup>134</sup> Agents of the Secretary of Commerce are authorized to board and accompany any commercial fishing vessel to conduct

<sup>&</sup>lt;sup>125</sup> NOAA, NMFS, "Atlantic Large Whale Take Reduction Team," https://www.fisheries.noaa.gov/new-england-midatlantic/marine-mammal-protection/atlantic-large-whale-take-reduction-team; NOAA, NMFS, "Atlantic Large Whale Take Reduction Plan," https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/atlanticlarge-whale-take-reduction-plan.

<sup>126 16</sup> U.S.C. §1387(g).

<sup>127 16</sup> U.S.C. §1387(g)(2).

<sup>&</sup>lt;sup>128</sup> 16 U.S.C. §1387(g)(1)(A)-(C).

 <sup>&</sup>lt;sup>129</sup> NOAA, "Taking of Marine Mammals Incidental to Commercial Fishing Operations; Atlantic Large Whale Take Reduction Plan Regulations," 88 *Federal Register* 7362-7369, February 3, 2023.
 <sup>130</sup> Ibid.

<sup>&</sup>lt;sup>131</sup> For example, see Gabrielle Benjamin and Read Porter, *Understanding the North Atlantic Right Whale Litigation*, Marine Affairs Institute at Roger Williams University School of Law, Rhode Island Sea Grant Legal Program, Maine Sea Grant, June 2021, pp. 1-16, https://seagrant.gso.uri.edu/wp-content/uploads/2021/07/Understanding-the-North-Atlantic-Right-Whale-Litigation-FINAL.pdf; and *Penobscot Bay Pilot*, "Federal Court of Appeals Rules in Favor of Maine Lobstermen in Right Whale Case," June 16, 2023, https://www.penbaypilot.com/article/federal-court-appealsrules-favor-maine-lobstermen-right-whale-case/175215.

<sup>&</sup>lt;sup>132</sup> As included under §111 of the MMPA. 16 U.S.C. §1381. The statute, under 16 U.S.C. §1381(a), states that the program is to reduce the incidental taking of marine mammals in connection with commercial fishing to "the maximum extent practicable."

 <sup>&</sup>lt;sup>133</sup> 16 U.S.C. §1381(b); These regulations have been in effect since August 30, 1995. 50 C.F.R. §§229.1-229.37.
 <sup>134</sup> 50 C.F.R. §§229.32(b)-(c).

research and observe operations that assist in the development of improved fishing methods and gear.<sup>135</sup>

Section 110 of the MMPA also authorizes the Secretary to make marine mammal research grants, or to provide financial assistance for research into new methods of locating and catching yellowfin tuna without incidental taking of marine mammals.<sup>136</sup> The Secretary may provide these funds following review by the MMC.<sup>137</sup>

#### Parallels Between the MMPA and the Magnuson-Stevens Fishery Conservation and Management Act

Both the Marine Mammal Protection Act (MMPA; P.L. 92-522; 16 U.S.C. §§1361-1423h) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA; 16 U.S.C. §§1801-1891d) include provisions related to commercial fisheries and nontarget catch, including marine mammals. Sections 101 and 118 of the MMPA authorize the Secretary of Commerce to manage incidental takes of marine mammals in commercial fisheries, including reducing those takes to the lowest practicable level and with a zero-mortality rate goal.

The MSA includes provisions about nontarget catch, bycatch reduction agreements and incentives (16 U.S.C. §§1822(h), 1862(f)-(g)), and a Bycatch Reduction Engineering Program (16 U.S.C. §1865) administered by the National Oceanic and Atmospheric Administration (NOAA), as well as provisions for the monitoring of commercial fisheries bycatch (16 U.S.C. §§1821(h)(2)(B), 1822(e)(1)(A), 1881a(b)(2)). Provisions with respect to international bycatch reduction agreements and regarding nontarget catch, as codified through the High Seas Driftnet Moratorium Protection Act (P.L. 104-43), also include living marine resources (e.g., marine mammals; 16 U.S.C. §1826k). Marine mammal entanglements with fishing gear are included in NOAA national bycatch reports. Each fishery management plan (FMP) produced by regional fishery management councils also is required to include a standardized reporting methodology to assess the amount and type of bycatch occurring in that fishery, with conservation and management measures for its minimization (16 U.S.C. §1853(a)(11)). FMPs also may include conservation and management measures that provide harvest incentives to fishers that employ fishing practices that result in lower levels of bycatch or mortality of bycaught species (16 U.S.C. §1853(b)(10)). Furthermore, the MSA specifies areas of federal fisheries research that include the development and testing of new gear technology and fishing techniques to minimize bycatch, including incidental harvest research and a bycatch reduction program (16 U.S.C. 1881d(d)).

**Sources:** 16 U.S.C. §§1371(a)(2), 1387; 1821(h)(2)(B), 1822(e)(1)(A), 1822(h), 1826k, 1853(a)(11), 1853(b)(10), 1862(f)-(g), 1865, 1881a(b)(2), 1881d(d); NOAA, *NOAA Fisheries Glossary*, NOAA Technical Memorandum NMFS-F/SPO-69, June 2006, p. 5, https://repository.library.noaa.gov/view/noaa/12856; NOAA, NMFS, "National Bycatch Report," https://www.fisheries.noaa.gov/resource/document/national-bycatch-report.

**Notes:** The MSA, under 16 U.S.C. §1802(2), defines *bycatch* as "fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program." NOAA's definition of *bycatch reduction (excluder) device* extends the bycatch definition in the context of its reduction to include "unwanted (nontarget and prohibited) species (e.g., jellyfish), smaller fish (juveniles), and threatened or endangered species (e.g., sea turtles, marine mammals)."

## Federal-State Engagements, International Agreements, and Regional Provisions

The MMPA directs the Secretary to cooperate with states and to participate in proceedings under international marine mammal protection and conservation agreements.<sup>138</sup>

<sup>&</sup>lt;sup>135</sup> 16 U.S.C. §1381(d). The statute also states that the Secretary provides the cost for quartering and maintaining those agents.

<sup>&</sup>lt;sup>136</sup> 16 U.S.C. §1380(a).

<sup>&</sup>lt;sup>137</sup> 16 U.S.C. §1380(b).

<sup>&</sup>lt;sup>138</sup> 16 U.S.C. §§1378-1379, 1383. MMPA §108 (16 U.S.C. §1378) is entitled "International Program" and focuses on (continued...)

#### **Federal Cooperation with States**

All marine mammals in U.S. waters are managed under federal jurisdiction.<sup>139</sup> Section 109 mandates that no state may enforce, or attempt to enforce, any state law or regulation related to the taking of marine mammals within the state unless the Secretary has transferred authority for the conservation and management of that species to that state.<sup>140</sup> Congress authorized the Secretary to transfer the authority for the conservation and management of marine mammals to a state where the species inhabits.<sup>141</sup> This transfer allows the state to enforce any state law or regulation related to the taking of marine mammals, which is to be consistent with federal law.<sup>142</sup>

Certain Hawaiian marine mammals, such as Hawaiian monk seals, humpback whales, and several species of dolphins, also remain protected under Hawaii state laws.<sup>143</sup> The State of Hawaii Department of Land and Natural Resources (HDLNR) regulated Hawaiian monk seals and other marine mammals prior to the enactment of the MMPA and the ESA, after which the management of Hawaiian marine mammals became a federal responsibility.<sup>144</sup> HDLNR retained its management responsibilities, including for those species included under federal acts, as included under Hawaii state laws.<sup>145</sup>

#### **International Agreements**

The MMPA authorizes the Secretary, through the Secretary of State, to initiate negotiations with other countries to develop bilateral or multilateral international agreements for the protection and conservation of marine mammals.<sup>146</sup> Further, the Secretaries are to initiate negotiations with foreign governments that are engaged in commercial fishing operations detrimental to any species or stock of marine mammal and work to enter into treaties with those countries to protect marine mammals, among other duties.<sup>147</sup> The MMPA provisions are deemed to be in addition to, and not in contravention of, the provisions of any existing international treaty, convention, agreement, or statute that applies to the taking of marine mammals.<sup>148</sup>

international agreements, including (1) the duties of the Secretary, (2) consultations and studies concerning North Pacific fur seals, and (3) reporting and proposed actions regarding discussions with foreign governments on marine mammals and yellowfin tuna fisheries.

<sup>139</sup> NOAA, NMFS, "Laws and Policies: Marine Mammal Protection Act."

<sup>&</sup>lt;sup>140</sup> 16 U.S.C. §1379(a).

<sup>&</sup>lt;sup>141</sup> MMPA §109. 16 U.S.C. §1379(a).

<sup>142</sup> Ibid; 50 C.F.R. §§403.01-403.08.

<sup>&</sup>lt;sup>143</sup> State of Hawaii Department of Land and Natural Resources (HDLNR), Division of Boating and Ocean Recreation, "Protecting Marine Species," https://dlnr.hawaii.gov/dobor/protecting-marine-species/ (hereinafter, HDLNR, "Protecting Marine Species").

<sup>&</sup>lt;sup>144</sup> NOAA, NMFS, *Recovery Plan for the Hawaiian Monk Seal (Monachus schauinslandi)*, August 22, 2007, pp. I-2, https://repository.library.noaa.gov/view/noaa/3521.

<sup>&</sup>lt;sup>145</sup> Ibid; HDLNR, "Protecting Marine Species"; for example, HRS §195D-4.5 prohibits the taking of Hawaiian monk seals.

<sup>146</sup> As included under MMPA §108. 16 U.S.C. §1378.

<sup>&</sup>lt;sup>147</sup> 16 U.S.C. §1378(a)(1)-(2).

<sup>&</sup>lt;sup>148</sup> MMPA §113. 16 U.S.C. §1383(a). The MMPA does not directly specify if the United States must be a signatory to each treaty, convention, agreement, or statute.

#### **Regional Provisions**

The MMPA includes regional provisions, where Congress has directed the Secretary of Commerce to examine marine mammals in the context of regional ecosystems.<sup>149</sup> The act also includes provisions regarding marine mammal cooperative agreements in Alaska and for two regional task forces that investigate areas with pinniped-fishery interactions.<sup>150</sup> Information regarding these regional studies and efforts is briefly summarized below:

- Section 110 of the MMPA directed concurrent investigations and research program development into the roles and conservation of marine mammals in the Gulf of Maine ecosystem,<sup>151</sup> and for the Bering Sea ecosystem.<sup>152</sup>
- Section 119 includes provisions with respect to marine mammal cooperative agreements in Alaska.<sup>153</sup>
- Section 120 includes provisions with respect to the Pacific Coast and Gulf of Maine Task Forces, which are tasked to investigate pinniped-fishery interactions.<sup>154</sup>

<sup>149 16</sup> U.S.C. §1380(c)-(d).

<sup>&</sup>lt;sup>150</sup> 16 U.S.C. §§1388-1389. These task forces are to account for interactions between fisheries and pinnipeds (i.e., seals and sea lions), including concerns about pinniped predation on certain Pacific salmon stocks and potential impacts to seafood species reared through aquaculture in the Gulf of Maine.

<sup>&</sup>lt;sup>151</sup> 16 U.S.C. §1380(c). The Secretary of Commerce, in consultation with the MMC, adjacent coastal states, and experts from multiple backgrounds, convened a 1995 workshop to assess human-caused factors affecting the health and stability of the Gulf of Maine ecosystem. Workshop participants recommended interdisciplinary research and integrated management approaches, including those for marine mammals, that identify linkages between ecosystem components and their sensitivity and resilience to stressors. 16 U.S.C. §1380(c); David Dow and Eugenia Braasch, eds., *The Health of the Gulf of Maine Ecosystem: Cumulative Impacts of Multiple Stressors*, Regional Association for Research on the Gulf of Maine, under contract from NOAA NMFS, Workshop Report, Dartmouth College, RARGOM Report 96-1, Hanover, NH, April 30, 1996, http://www.gulfofmaine.org/resources/gomc-library/

health%20of%20gom%20ecosystem%20cumulative%20impacts\_workshop%20report.pdf.

<sup>&</sup>lt;sup>152</sup> 16 U.S.C. §1380(d). Congress required the Secretary of Commerce, in consultation with the Secretary of the Interior, MMC, the State of Alaska, and Alaska Native organizations, to undertake a scientific research program to monitor the health and stability of the Bering Sea marine ecosystem, including marine mammals. In years since, federal agencies and partners have developed several ecosystem-based monitoring programs for the Bering Sea region, such as the NOAA Bering Sea Ecosystem Assessments, the National Science Foundation 2005 Bering Ecosystem Study (BEST), and the North Pacific Research Board Bering Sea Integrated Ecosystem Research Program (BSIERP). The Secretary and the MMC are to include the status and findings of these research programs in their annual reports to Congress. NOAA, NMFS, "Southeastern Bering Sea Ecosystem Assessment," https://www.fisheries.noaa.gov/alaska/ ecosystems/southeastern-bering-sea-ecosystem-assessment; NOAA, NMFS, "Northeastern Bering Sea Ecosystem Assessment," https://www.fisheries.noaa.gov/alaska/ecosystems/northeastern-bering-sea-ecosystem-assessment; NOAA, NMFS, "Understanding Ecosystem Processes in the Bering Sea: First Year Field Highlights from the BEST-BSIERP Partnership," https://apps-afsc.fisheries.noaa.gov/Quarterly/amj2009/AMJ09featurelead.htm.; North Pacific Research Board, "The Bering Sea Research Project," https://nprb.org/bering-sea-project/.

<sup>&</sup>lt;sup>153</sup> 16 U.S.C. §§1388(a)-(b). These agreements allow the Secretary to enter into cooperative agreements with Alaska Native organizations to conserve marine mammals and to provide comanagement of subsistence use by Alaska Natives. The cooperative agreements also may include grants to Alaska Native organizations to collect and analyze data on marine mammal populations, monitor their harvest, participate in marine mammal research, and develop marine mammal comanagement structures with federal and state agencies.

<sup>&</sup>lt;sup>154</sup> §120(a)-(f) allow the Secretary of Commerce to permit the intentional, humane, lethal taking of pinnipeds that are having a significant negative impact on the recovery of salmonid fishery stocks listed under the Endangered Species Act [16 U.S.C. §§1531-1544] in the waters of the Columbia River and its tributaries. Eligible entities for permits include the states of Washington, Oregon, and Idaho and specified tribes. 16 U.S.C. §1389(a)-(f); §120(h) also includes provisions for a Gulf of Maine task force to advise the Secretary on issues or problems regarding pinnipeds interacting in a dangerous or damaging manner with aquaculture resources in the Gulf of Maine. 16 U.S.C. §1389(h).

# Title IV: Marine Mammal Health and Stranding Response

Congress authorized the Marine Mammal Health and Stranding Response Program (MMHSRP) in the 1992 amendments to the MMPA to account for marine mammal stranding events.<sup>155</sup> The MMPA, under Title IV, mandates the Secretary of Commerce to establish the MMHSRP in consultation with the Secretary of the Interior, the MMC, individuals with knowledge and experience in (1) marine science, (2) marine mammal science, (3) marine mammal veterinary and husbandry practices, and (4) marine conservation, including *stranding network participants*.<sup>156</sup>

As prescribed in the MMPA, the program is to

- facilitate the collection and dissemination of reference data on the health of marine mammals and health trends of wild marine mammal populations;
- correlate the health of marine mammals and their wild populations with available data on physical, chemical, and biological environmental parameters; and
- coordinate responses to *unusual mortality events* (UMEs) by establishing a process in the Department of Commerce.<sup>157</sup>

The MMHSRP works with volunteer stranding and entanglement networks and with local, tribal, state, and federal government agencies to coordinate and conduct emergency responses to stranded or entangled marine mammals, including for UMEs (see "Unusual Mortality Events").<sup>158</sup> The program provides standing network members with a stranding agreement from the NMFS regional offices to ensure all activities are performed in consideration of the safety of both responders and marine mammals.<sup>159</sup> Network participants provide staff and local response capabilities, and they independently raise funds to cover the majority of their costs.<sup>160</sup> The Secretary of Commerce, in consultation with the Secretary of the Interior, also is to collect and periodically update existing information on procedures, practices, and criteria for rescuing and rehabilitating stranded or entangled marine mammals.<sup>161</sup> Each stranding network participant that responds to a given stranding or entanglement is to submit data regarding the stranding to the

160 Ibid.

<sup>155 16</sup> U.S.C. §1421-1421h. The MMPA, under 16 U.S.C. §1421h(6), defines stranding as

an event in the wild in which—(A) a marine mammal is dead and is—(i) on a beach or shore of the United States; or (ii) in waters under the jurisdiction of the United States (including any navigable waters); or (B) a marine mammal is alive and is—(i) on a beach or shore of the United States and unable to return to the water; (ii) on a beach or shore of the United States and, although able to return to the water, is in need of apparent medical attention; or (iii) in the waters under the jurisdiction of the United States (including any navigable waters), but is unable to return to its natural habitat under its own power or without assistance.

<sup>&</sup>lt;sup>156</sup> 16 U.S.C. §1421(a); The MMPA, under 16 U.S.C. §1421h(7), defines a *stranding network participant* as a person who is authorized by an agreement under 16 U.S.C. §1382(c) to take marine mammals as described in 16 U.S.C. §1379(h)(1) in response to a stranding.

<sup>&</sup>lt;sup>157</sup> 16 U.S.C. §1421(b), 1421c; The MMPA, under 16 U.S.C. §1421h(9), defines an *unusual mortality event* as "a stranding that (A) is unexpected; (B) involves a significant die-off of any marine mammal population; and (C) demands immediate response."

<sup>&</sup>lt;sup>158</sup> NOAA, NMFS, "Marine Mammal Health and Stranding Response Program," https://www.fisheries.noaa.gov/ national/marine-life-distress/marine-mammal-health-and-stranding-response-program (hereinafter, NOAA, NMFS, "Marine Mammal Health and Stranding Response Program."

<sup>159</sup> Ibid.

<sup>&</sup>lt;sup>161</sup> 16 U.S.C. §1421a(b).

NOAA Administrator or the FWS Director.<sup>162</sup> The Secretary is to make that information available to researchers, stranding network participants, and the public.<sup>163</sup>

The MMPA also stipulates that the Secretary is to "make provision for the storage, preparation, examination, and archiving of marine mammal tissues" in the National Marine Mammal Tissue Bank and to issue guidance for the tissue bank's operations.<sup>164</sup> In addition to tissues taken during UMEs, the tissue bank is to include tissue samples from other sources in the wild, including samples from marine mammals taken incidental to commercial fishing operations, for subsistence purposes, biopsy samples, and any other samples collected in accordance with tissue bank standards.<sup>165</sup> The Secretary also is to maintain a central, publicly accessible database with that information.<sup>166</sup> Title IV of the MMPA established the John H. Prescott Marine Mammal Rescue and Response Grant Program and the John R. Geraci Marine Mammal Rescue and Rapid Response Fund for emergency assistance in cases outside of a UME.<sup>167</sup> The Secretary may grant emergency financial assistance for stranding events or entanglements that occur to marine mammals under the Secretary's jurisdiction.<sup>168</sup>

### **Unusual Mortality Events**

The MMPA requires the Secretary of Commerce to consult with the Secretary of the Interior during all mandated activities regarding unusual mortality events (UMEs),<sup>169</sup> including in the establishment of a marine mammal UME working group consisting of experts who provide guidance for

- determining whether a UME is occurring;
- determining if response actions to a given UME are no longer necessary after a UME has begun; and
- developing a contingency plan to assist the Secretary in responding to UMEs.<sup>170</sup>

The Secretary, after receiving notification from a *stranding network participant* that a UME might be occurring, is to contact as many members of the UME working group as possible for guidance within 24 hours post-notification.<sup>171</sup> Within 48 hours post-notification, the Secretary is to make a determination as to whether a UME is occurring, inform the stranding network of that determination, and designate one or more onsite coordinators for the event (i.e., one or more appropriate regional directors of the National Marine Fisheries Service [NMFS] or the U.S. Fish and Wildlife Service, or their designees) if the Secretary determines that a UME is occurring.<sup>172</sup> The onsite coordinator is to make immediate recommendations to stranding network participants

<sup>&</sup>lt;sup>162</sup> 16 U.S.C. §1421a(c).

<sup>163 16</sup> U.S.C. §1421a(d).

<sup>&</sup>lt;sup>164</sup> 16 U.S.C. §1421f.

<sup>&</sup>lt;sup>165</sup> 16 U.S.C. §1421f(a)(3).

<sup>&</sup>lt;sup>166</sup> 16 U.S.C. §1421f(c)-(d).

<sup>&</sup>lt;sup>167</sup> 16 U.S.C. §1421f-1.

<sup>&</sup>lt;sup>168</sup> Ibid; 16 U.S.C. §1421f-1(a)(1).

<sup>&</sup>lt;sup>169</sup> 16 U.S.C. §1421c.

<sup>&</sup>lt;sup>170</sup> 16 U.S.C. §1421c(a)(1)(A).

<sup>&</sup>lt;sup>171</sup> 16 U.S.C. §1421c(a)(2)(A).

<sup>&</sup>lt;sup>172</sup> 16 U.S.C. §1421c(a)(2)(B).

on how to proceed with response activities and to coordinate and direct the activities of all persons responding to a UME.<sup>173</sup>

The Secretary of Commerce is to issue a detailed contingency plan for responding to any UME in consultation with the Secretary of the Interior and the UME working group.<sup>174</sup> The plan is to include information regarding contacts for responding to a UME; tissues and analyses needed for diagnosing UME causes; necessary training, mobilization, and other procedures; and requirements needed to minimize death and provide appropriate care for marine mammals, among other contents.<sup>175</sup>

The MMPA also established the Marine Mammal Unusual Mortality Event Fund in the U.S. Treasury.<sup>176</sup> This fund serves to make advance, partial, or progress payments for costs incurred in response to a UME; for reimbursing any stranding network participants for costs incurred in the collection, preparation, analysis, and transportation of marine mammal tissues and samples collected during a UME for the National Marine Mammal Tissue Bank; and for the care and maintenance of a marine mammal.<sup>177</sup> The Secretary also may accept, solicit, and use the services of volunteers and accept and may solicit donations for this fund.<sup>178</sup>

## **Issues and Options for Congress**

Congress and stakeholders have commented on the effectiveness of the MMPA since its enactment in 1972. Congress last passed comprehensive amendments in 1994 (P.L. 103-238) and has only slightly amended certain provisions since then. Some stakeholders have raised concerns regarding how current law may address recent and emerging threats to marine mammals, such as climate change.<sup>179</sup> Other experts and stakeholders have considered if and how MMPA provisions align with holistic ecosystem-based management efforts.<sup>180</sup> Fishers and those from other marine sectors have raised concerns about trade-offs among marine mammal conservation efforts, species recovery, and impacts on marine fisheries. If Congress seeks to address any of these potential issues, several options could be considered. These options include oversight of certain agency activities, including directing studies to inform consideration of changes in implementing the MMPA. These issues and potential options related to the authorization elements of the MMPA are discussed below.

<sup>&</sup>lt;sup>173</sup> 16 U.S.C. §1421c(c)(1)-(2).

<sup>&</sup>lt;sup>174</sup> 16 U.S.C. §1421c(b).

<sup>&</sup>lt;sup>175</sup> 16 U.S.C. §1421c(b)(2).

<sup>&</sup>lt;sup>176</sup> 16 U.S.C. §1421d.

<sup>&</sup>lt;sup>177</sup> 16 U.S.C. §1421d(b).

<sup>&</sup>lt;sup>178</sup> 16 U.S.C. §1421d(d).

<sup>&</sup>lt;sup>179</sup> Gulland et al., "Climate Change Effects on Marine Mammals"; Bradley Varner, *Reviewing the Marine Mammal Protection Act Through a Modern Lens*, Michigan State University Animal Legal and Historical Center, 2022, https://www.animallaw.info/article/reviewing-marine-mammal-protection-act-through-modern-lens#id-8.

<sup>&</sup>lt;sup>180</sup> Christian Riisager-Simonsen et al., "Using Ecosystem-Services Assessments to Determine Trade-Offs in Ecosystem-Based Management of Marine Mammals," *Conservation Biology*, vol. 34, no. 5 (2020), pp. 1152-1164 (hereinafter, Riisager-Simonsen et al., "Using Ecosystem-Services Assessments"); David Fluharty, "Chapter 12: Ecosystem-Based Approaches to Ocean Management in the United States: Weaving Together Multiple Strands," in *The Ecosystem Approach in Ocean Planning and Governance*, eds. David Langlet and Rosemary Rayfuse (Leiden, The Netherlands: Koninklijke Brill NV, 2019), pp. 371-412 (hereinafter, Fluharty, "Ecosystem-Based Approaches to Ocean Management").

## **Climate Change and the Marine Mammal Protection Act**

Climate change can affect multiple aspects of aquatic and terrestrial ecosystems that support marine mammals. For example, studies have attributed polar bear habitat loss, increased disease proliferation in marine mammals, and greater incidence of harmful algal bloom toxins in north Pacific seals and walruses to climate change.<sup>181</sup> Additionally, experts suggest that increased predation on southern sea otters has resulted from northward distribution shifts of white sharks associated with warming ocean temperatures.<sup>182</sup> Furthermore, changes in whale migration routes and timing at feeding grounds may be related to ocean warming, shifts in prey resources, loss of sea ice, and changes in upwelling intensity.<sup>183</sup> Arctic sea ice loss has also led to reductions in polar bear marine foraging habitat, lowered energetic diet from greater reliance on terrestrial food sources, and altered foraging and rearing habitats for narwhals and multiple species of pinnipeds, including Pacific walrus.<sup>184</sup>

Researchers, certain stakeholders, and some in Congress have raised concerns regarding marine mammals' vulnerability to climate change, including how the present framework in the MMPA may address the effect of climate change on these species.<sup>185</sup> Some stakeholders have petitioned for the MMPA to evolve beyond focusing on threats from human actions to addressing emerging threats to marine mammal conservation and "long-term chronic threats" such as global climate change.<sup>186</sup> They have noted that refinements to the MMPA or additional legislation similar to the MMPA are important, given these ongoing threats.<sup>187</sup> Others point out that the MMPA as written currently requires agencies to develop programs to minimize threats to marine mammals but does not explicitly include indirect threats such as climate change.<sup>188</sup> They also note that certain programs currently collect and incorporate data regarding inferred impacts on marine mammals from human-induced climate change, which could suggest that amendments to statutory language may not be necessary.<sup>189</sup>

If Congress chooses to address the MMPA in the context of climate change, one option would be to consider amending the statute or providing direction to the Secretary to implement certain activities. For example, H.R. 1383, introduced in the 118<sup>th</sup> Congress, proposes amending the MMPA to include requirements for protecting marine mammals adversely affected by climate change and would establish a program within NOAA to monitor those adverse impacts to marine mammals.<sup>190</sup> The bill also would require NMFS and FWS to issue regulations that list U.S.

189 Ibid.

<sup>&</sup>lt;sup>181</sup> Gulland et al., "Climate Change Effects on Marine Mammals."

<sup>182</sup> Ibid.

<sup>183</sup> Ibid.

<sup>&</sup>lt;sup>184</sup> Ibid; Anthony M. Pagano and Terrie M. Williams, "Physiological Consequences of Arctic Sea Ice Loss on Large Marine Carnivores: Unique Responses by Polar Bears and Narwhals," *Journal of Experimental Biology*, vol. 224, Suppl. 1 (2021), jeb228049, pp. 1-13; Anthony M. Pagano et al., "Effects of Sea Ice Decline and Summer Land Use on Polar Bear Home Range Size in the Beaufort Sea," *Ecosphere*, vol. 12, no. 10 (2021), e03768, pp. 1-19.

<sup>&</sup>lt;sup>185</sup> Lettrich et al., "Vulnerability to Climate Change"; International Marine Mammal Project, "Climate Change Impacts on Marine Mammals," https://savedolphins.eii.org/news/climate-change-impacts-on-marine-mammals; U.S. Congress, Senate Committee on Commerce, Science, and Transportation, Subcommittee on Oceans, Fisheries and Coast Guard, *Future of the Marine Mammal Protection Act*, 108<sup>th</sup> Cong., 1<sup>st</sup> sess., July 16, 2003, S. Hrg. 108-981.

 <sup>&</sup>lt;sup>186</sup> U.S. Congress, Senate Committee on Commerce, Science, and Transportation, Subcommittee on Oceans, Fisheries and Coast Guard, *Future of the Marine Mammal Protection Act*, 108<sup>th</sup> Cong., 1<sup>st</sup> sess., July 16, 2003, S. Hrg. 108-981.
 <sup>187</sup> Ibid.

<sup>&</sup>lt;sup>188</sup> Roman et al., "Marine Mammal Protection Act at 40"; Gulland et al., "Climate Change Effects on Marine Mammals."

<sup>&</sup>lt;sup>190</sup> Similar legislation was introduced in previous Congresses (H.R. 3692 in the 117<sup>th</sup> and H.R. 8795 in the 116<sup>th</sup>).

marine mammal species for which climate change is likely to result in a decline in population abundance, impeded population recovery, or reduced carrying capacity. These regulations would include climate impact management plans for listed species. Furthermore, the bill would direct NMFS and FWS to review agreements with foreign governments concerning the management of marine mammals that are or may be affected by climate change and would direct the Department of State to initiate amendments to those agreements or negotiate their development.

H.R. 3764, introduced in the 117<sup>th</sup> Congress, proposed establishing various requirements to protect marine mammals from climate change and other threats. Title VII of the bill, "Strengthening Marine Mammal Conservation," would have added a new section to Title I of the MMPA to include a list of marine mammal species expected to be adversely affected by climate change and for federal climate impact plans. The bill would have required NOAA to monitor climate impacts on marine mammals and the Secretary to consider adverse climate impacts when estimating PBRL. At a House Committee on Natural Resources hearing in June 2021, both FWS and NOAA testified in support of this bill and expressed that it aligned with agency priorities at the time.<sup>191</sup> Both agencies recommended incorporating the climate impact plan requirements into existing plans and minimizing duplicative approaches for marine mammal conservation.<sup>192</sup>

As an alternative approach, Congress could choose to retain the present language in the MMPA and other corresponding legislation. This approach would allow agencies to address marine mammal management within the constraints of existing authorities, which some argue may already allow for addressing certain climate change impacts.<sup>193</sup> Some Members of Congress have expressed concerns about provisions in H.R. 3692, introduced in the 117<sup>th</sup> Congress, regarding new federal agency consultation requirements for MMPA amendments for marine mammal climate impact management plans. Some Members and stakeholders have questioned whether these additional requirements and consultation timeframes would lead to delays in activities adjacent to waterways.<sup>194</sup> Some Members also have raised concerns about the accuracy of marine mammal population projections that may inform the list of marine mammals proposed in H.R. 3764.<sup>195</sup>

## **Ecosystem-Based Management and the MMPA**

The MMPA includes multiple references to the importance of marine mammals as functioning elements in the ecosystems of which they are part and stipulates that the management of these species is to focus on maintaining the health and stability of the marine ecosystem.<sup>196</sup> Since the MMPA's enactment, federal agencies have implemented ecosystem management approaches that

<sup>&</sup>lt;sup>191</sup> U.S. Congress, House Committee on Natural Resources, Legislative Hearing on H.R. 660, "Shovel-Ready Restoration Grants for Coastlines and Fisheries Act of 2021"; H.R. 1415, "Tribal Coastal Resiliency Act"; H.R. 1689, "Offshore Wind for Terrirories Act"; H.R. 2750, "Blue Carbon for our Planet Act"; H.R. 3160, "Keep Americans' Waterfronts Working Act"; H.R. 3228, "National Coastal Resilience Data and Services Act"; H.R. 3692, "Marine Mammal Climate Change Protection Act"; H.R. 3748, "Blue Globe Act"; H.R. 3764, "Ocean-Based Climate Solutions Act of 2021"; H.R. 3817, "Regional Ocean Partnership Act"; H.R. 3864, "Chesapeake Bay Oyster Research Act"; H.R. 3892, "National Oceans and Coastal Security Improvements Act"; and H.R. 3906, "Blue Carbon Protection Act," 117<sup>th</sup> Cong., 1<sup>st</sup> sess., June 22, 2021, Serial No. 117-6 (Washington: GPO, 2021), pp. 1-129 (hereinafter, U.S. Congress, House Committee on Natural Resources, 2021).

<sup>192</sup> Ibid.

<sup>&</sup>lt;sup>193</sup> Roman et al., "Marine Mammal Protection Act at 40"; Gulland et al., "Climate Change Effects on Marine Mammals."

<sup>&</sup>lt;sup>194</sup> U.S. Congress, House Committee on Natural Resources, 2021.

<sup>195</sup> Ibid.

<sup>&</sup>lt;sup>196</sup> For example, 16 U.S.C. §§1361(2), 1361(5), 1373(b)(3).

consider multiple ocean sectors and living marine resources and have conducted integrated assessments to inform these practices.<sup>197</sup>

Stakeholders and federal agencies have noted that the MMPA was the first legislation to mandate an ecosystem-based approach to managing marine resources.<sup>198</sup> NOAA has emphasized that the MMPA shifted the focus of conservation from species to ecosystems and included protection for population stocks, species, and subspecies.<sup>199</sup> NOAA and partners also note that the MMPA shifted the burden of proof from resource managers to resource users to show that any proposed impacts on marine mammals would not adversely affect the resource or the ecosystem.<sup>200</sup>

MMPA provisions currently account for the effects of human activities on marine mammals and their incidental takes; however, some experts and stakeholders have raised concerns about the scope of current management approaches and their ability to effectively manage multiple marine mammal stressors.<sup>201</sup> For example, some stakeholders have acknowledged the increasing complexities of marine mammal threats and have noted that the management of interacting environmental factors and ocean sectors warrants further consideration in the MMPA.<sup>202</sup> Alternatively, other stakeholders have expressed concerns about the complexity, costs, and administrative challenges associated with ecosystem-based management approaches.<sup>203</sup>

If Congress chooses to consider a legislative approach to address multiple human ocean uses and marine mammals in concert, one option would be to amend the MMPA to focus on addressing the cumulative effects of multiple stressors from human activities on marine mammals. For example, H.R. 3764, introduced in the 117<sup>th</sup> Congress, would have amended the MMPA to include provisions for mitigating the effects of vessel traffic and included additional provisions related to monitoring and mitigating ocean noise effects on marine mammals.

As an alternative approach, Congress may decide to retain the present statute and direct agencies through appropriations or oversight activities that focus on the effects of specific ocean uses or sectors on marine mammals. For example, Congress provided appropriations to NMFS for

<sup>&</sup>lt;sup>197</sup> NOAA, "Integrated Ecosystem Assessment (IEA) – Ecosystem-Based Management,"

https://www.integratedecosystemassessment.noaa.gov/about-iea/ecosystem-based-management.

<sup>&</sup>lt;sup>198</sup> NOAA, NMFS, "Laws & Policies: Marine Mammal Protection Act," https://www.fisheries.noaa.gov/topic/laws-policies/marine-mammal-protection-act (hereinafter, NOAA, NMFS, "Laws and Policies: Marine Mammal Protection Act"); NOAA defines *ecosystem-based management* as

an approach that takes major ecosystem components and services—both structural and functional into account in managing fisheries. It values habitat, embraces a multispecies perspective, and is committed to understanding ecosystem processes. Its goal is to rebuild and sustain populations, species, biological communities, and marine ecosystems at high levels of productivity and biological diversity so as not to jeopardize a wide range of goods and services from marine ecosystems while providing food, revenue, and recreation for humans.

NOAA, NOAA Fisheries Glossary, NOAA Technical Memorandum NMFS-F/SPO-69, 2006, pp. 11-12, https://repository.library.noaa.gov/view/noaa/12856.

<sup>&</sup>lt;sup>199</sup> Ibid; the MMPA defines *population stock* as "a group of marine mammals of the same species or smaller taxa in a common spatial arrangement that interbreed when mature."

<sup>200</sup> NOAA, NMFS, "Laws and Policies: Marine Mammal Protection Act."

<sup>&</sup>lt;sup>201</sup> Riisager-Simonsen et al., "Using Ecosystem-Services Assessments"; Fluharty, "Ecosystem-Based Approaches to Ocean Management."

<sup>&</sup>lt;sup>202</sup> U.S. Congress, Senate Committee on Commerce, Science, and Transportation, Subcommittee on Oceans, Fisheries and Coast Guard, *Future of the Marine Mammal Protection Act*, 108<sup>th</sup> Cong., 1<sup>st</sup> sess., July 16, 2003, S. Hrg. 108-981.

<sup>&</sup>lt;sup>203</sup> Ayeisha A. Brinson and Kristy Wallmo, "Stakeholder Attitudes Toward Ecosystem-Based Fisheries Management," *Marine Fisheries Review*, vol. 77, no. 3 (December 2015), pp. 17-30; Anthony R. Marshak et al., "International Perceptions of an Integrated, Multi-sectoral, Ecosystem Approach to Management," *ICES Journal of Marine Science*, vol. 74, no. 1 (2017), pp. 414-420.

offshore wind energy expansions and protected species needs, including marine mammals, as specified in the explanatory statements for the Consolidated Appropriations Act, 2022 (P.L. 117-103), and Consolidated Appropriations Act, 2023 (P.L. 117-328).<sup>204</sup> Congress directed NOAA in the FY2023 explanatory statement to address "consultation and permitting, stock assessment, management, and protected resources needs related to the expansion of offshore wind energy projects."<sup>205</sup> Congress also could consider additional oversight like that in H.R. 1056, during the 118<sup>th</sup> Congress. As introduced, H.R. 1056 would direct the comptroller general to conduct a study to assess the sufficiency of the environmental review process for offshore wind projects, including in consideration of impacts to whales, finfish, and other marine mammals. Such studies could inform the options and consequences of amending the MMPA regarding its interactions with specific sector activities. Alternatively, Congress may direct agencies to assess cumulative stressors from human activities and environmental phenomena on marine mammals through approaches recommended by experts, which may inform ecosystem-based management.<sup>206</sup> Congress also may opt to retain current approaches as defined in the MMPA and leave additional considerations regarding marine mammal interactions with ocean sectors to the discretion of particular agencies.

### **Trade-Offs Between Marine Mammal Conservation and Fisheries**

Trade-offs between MMPA-implemented conservation and protection efforts and their impacts on commercial fishing operations have been a regular issue of concern for some Members of Congress and stakeholders. For example, the use of emergency actions, gear regulations, and fishing closures to limit commercial fishing impacts on large whales has generated attention in recent years, including economic considerations for fishers.<sup>207</sup> Some stakeholders perceive these actions as overreaching and too restrictive for fishers, whereas others emphasize the necessity of these actions or argue for increased protection.<sup>208</sup> Some experts also suggest that *underfishing* (i.e., fishing below optimal levels) may result from certain fishing regulations associated with marine mammal conservation requirements in the MMPA.<sup>209</sup> Additionally, prohibitions and protections mandated by the MMPA have led to rebounds in some marine mammal populations (e.g., seals, sea lions) and have caused some stakeholders to raise concerns about heightened

<sup>&</sup>lt;sup>204</sup> "Explanatory Statement Submitted by Ms. DeLauro, Chair of the House Committee on Appropriations, Regarding the House Amendment to the Senate Amendment to H.R. 2471, Consolidated Apporpriations Act, 2022," *Congressional Record*, vol. 168, part 42-Book III (March 9, 2022), p. H1776; "Explanatory Statement Submitted by Mr. Leahy, Chair of the Senate Committee on Appropriations, Regarding H.R. 2617, Consolidated Appropriations Act, 2023," *Congressional Record*, vol. 168, part 198 (December 20, 2022), p. S7908.

<sup>&</sup>lt;sup>205</sup> "Explanatory Statement Submitted by Mr. Leahy, Chair of the Senate Committee on Appropriations, Regarding H.R. 2617, Consolidated Appropriations Act, 2023," *Congressional Record*, vol. 168, part 198 (December 20, 2022), p. S7908.

<sup>&</sup>lt;sup>206</sup> National Academies of Sciences, Engineering, and Medicine, *Approaches to Understanding the Cumulative Effects of Stressors on Marine Mammals* (Washington, DC: The National Academies Press, 2017), pp. 1-98, https://nap.nationalacademies.org/catalog/23479/approaches-to-understanding-the-cumulative-effects-of-stressors-on-marine-mammals.

<sup>&</sup>lt;sup>207</sup> Ed Komenda, "Oregon crabbers and environmentalists are at odds as a commission votes on rules to protect whales," *Associated Press*, August 4, 2023, https://apnews.com/article/oregon-whale-entanglements-crabbing-rules-02ad8b9ca27359eb1f395e1d347357b9; Rob Hotakainen, "NOAA broke law by not protecting right whales, judge rules," *E&E News Greenwire*, June 11, 2022, https://www.eenews.net/articles/noaa-broke-law-by-not-protecting-right-whales-judge-rules/; Kirk Moore, "Federal judge turns down lobstermen's attempt to block right whale rules," *National Fisherman*, September 9, 2022, https://www.nationalfisherman.com/northeast/federal-judge-turns-down-lobstermen-s-attempt-to-block-right-whale-rules.

<sup>&</sup>lt;sup>208</sup> Ibid.

<sup>&</sup>lt;sup>209</sup> Kimberly L. Oremus et al., "Underfished or unwanted? Much blame cast upon fisheries policy may be misguided," *Science*, vol. 380, no. 6645 (2023), pp. 585-588.

marine mammal predation on fisheries species.<sup>210</sup> Furthermore, some stakeholders have noted that the MMPA does not include provisions to handle recovered populations—unlike the ESA, which allows for delisting of species once they have recovered—and have called for agencies to implement more flexible regulations for thriving populations of marine mammals.<sup>211</sup> Although increases in the number of incidental takes may be allowed with growing marine mammal populations, some experts state that negative and potentially unsafe interactions with marine mammals are also likely to increase.<sup>212</sup>

If Congress chooses to address the trade-offs of marine mammal conservation with fisheries, including potential economic effects to fishers from fishing restrictions, one option would be to consider amending the MMPA. The MMPA includes provisions specifying that take reduction plans are to account for the economics of a given fishery and the availability of existing technology.<sup>213</sup> Additionally, interim provisions in the MMPA regarding exemptions for commercial fisheries mandated that the Secretary account for these factors when prescribing emergency regulations.<sup>214</sup> Congress could specify these considerations further. For example, to assist fishers in modifying their gears to minimize entanglement risk to North Atlantic right whales, H.R. 7042 and S. 3765, introduced in the 117th Congress, would have established grants for states to assist lobster and Jonah crab harvesters with the costs of gear modification in accordance with the ALWTRP. The Consolidated Appropriations Act, 2023, included a grant authority for the Secretary of Commerce to establish a program to provide annual competitive financial assistance and multiyear grants and direct payments to vessel operators and participants in the fishing industry.<sup>215</sup> Eligible uses of these funds include "subsidizing acquisition of innovative gear technologies to improve adoption of those technologies by fisheries participants."<sup>216</sup> Congress also may consider amending the MMPA in support of continued fishing restrictions or limiting specific fishing practices to particular situations. Congress may additionally opt to retain current approaches and leave discretion to agencies regarding these considerations.

An additional option would be for Congress to consider directing agencies to examine interactions between marine mammals and commercial fisheries to account for the effects of marine mammal conservation actions on the fishing industry. Congress has used this approach recently for certain topics. For example, Congress has directed NOAA in explanatory statements accompanying appropriations acts to evaluate the feasibility, safety, and economic implications of management actions relating to North Atlantic right whales.<sup>217</sup> Congress also directed NMFS to study interactions between the U.S. fishing fleet and false killer whales in the western Pacific and

<sup>&</sup>lt;sup>210</sup> R. C. Fletcher, "Exploding Populations of California Sea Lions: A Crisis with No Political Solution on the Horizon," *Proceedings of the Vertebrate Pest Conference*, vol. 23, no. 23 (2008), pp. 178-180 (hereinafter, Fletcher, "Exploding Populations").

<sup>&</sup>lt;sup>211</sup> Bellamy Paithorp, "Pacific Northwest Tribes Want a New Strategy to Manage Marine Mammals," National Public Radio, November 14, 2022, https://www.npr.org/2022/11/14/1136617285/pacific-northwest-tribes-want-a-new-strategy-to-manage-marine-mammals.

<sup>&</sup>lt;sup>212</sup> Ibid; Fletcher, "Exploding Populations."

<sup>&</sup>lt;sup>213</sup> 16 U.S.C. §1387(f)(2).

<sup>&</sup>lt;sup>214</sup> 16 U.S.C. §1383a(g)(3); these interim provisions were in effect until the mid-1990s and are included under §114, "Interim Exemption for Commercial Fisheries." 16 U.S.C. §1383. They were replaced by §118, "Taking of Marine Mammals Incidental to Commercial Fishing Operations." 16 U.S.C. §1387.

<sup>&</sup>lt;sup>215</sup> Consolidated Appropriations Act, 2023, Legislative Text, *Congressional Record*, vol. 168, part 197 (December 19, 2022), pp. S7784-S7785.

<sup>&</sup>lt;sup>216</sup> 16 U.S.C. §1393(c)(2).

<sup>&</sup>lt;sup>217</sup> Ibid.

to assess fishing interference by dolphins on Gulf of Mexico and South Atlantic fisheries.<sup>218</sup> Furthermore, Congress could consider directing additional research into technological innovations for mitigating fisher-marine mammal interactions. For example, in P.L. 116-188, Congress established the Theodore Roosevelt Genius Prize for Reducing Human Predator Conflict, which is a competition to encourage technological innovations that reduce the frequency of human-predator conflict using nonlethal means that may include tagging technologies.<sup>219</sup> Congress could consider similar provisions in the MMPA for the development of technologies toward minimizing human-marine mammal conflicts for commercial fisheries. Another option for Congress would be to conduct additional oversight of NOAA and FWS research into these topics. For example, in the explanatory statement of the Consolidated Appropriations Act, 2021 (P.L. 116-260), Congress directed NOAA to brief the committees on the prospect of expanding research monitoring the mortality of spring Chinook salmon in the Columbia River to understand the impacts of marine mammal predation.<sup>220</sup> Such studies, research, and oversight activities may inform Congress's decision on whether to consider amending the MMPA.

### **Author Information**

Anthony R. Marshak Analyst in Natural Resources Policy

## Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.

<sup>&</sup>lt;sup>218</sup> U.S. Congress, House Committee on Appropriations, *Consolidated Appropriations Act, 2021 on H.R. 133/*P.L. 116-220 [Legislative Text and Explanatory Statement] Book 1 of 2, Divisions A-F, committee print, 117<sup>th</sup> Cong., 1<sup>st</sup> sess., March 2021, H.Prt 43-479, pp. 215-216.

<sup>&</sup>lt;sup>219</sup> 16 U.S.C. §742b note; USFWS, "Theodore Roosevelt Genius Prize Competitions," https://www.fws.gov/service/ theodore-roosevelt-genius-prize-competitions.

<sup>&</sup>lt;sup>220</sup> U.S. Congress, House Committee on Appropriations, *Consolidated Appropriations Act, 2021 on H.R. 133/*P.L. 116-220 [*Legislative Text and Explanatory Statement*] Book 1 of 2, Divisions A-F, committee print, 117<sup>th</sup> Cong., 1<sup>st</sup> sess., March 2021, H.Prt 43-479, p. 221.