

# Marine Mammals

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## Overview:

Mammals that make the sea their home for part or all of their lives are protected under Marine Mammal law. Many of these animals are deeply affected by human activity, fisheries, and environmental changes. Several innovative programs and rehabilitation efforts are tirelessly working to restore threatened and endangered marine animals.

This will be a look into (I) The Marine Mammal Protection Act and the federal agencies responsible for implementing the legislation, (II) Protection of Marine Mammals in the Lowcountry, and (III) Oil and Gas Affect on Marine Mammals.

## I. The Marine Mammal Protection Act

When Congress passed the Marine Mammal Protection Act (“MMPA”) in 1972<sup>1</sup>, it marked the first legislation to mandate an ecosystem-based approach to marine resource management. Congress passed the MMPA in response to increasing concerns among scientists and the public that human activities have caused a significant decline in some species of marine mammals. The MMPA established a national policy to prevent marine mammals species and population stocks from declining beyond the point where they ceased to be significant functioning elements of the ecosystems of which they are a part.<sup>2</sup> This section will include (A) Federal entities responsible for the implementation of the MMPA, (B) Legislative Affect, and (C) Protection, Conservation, and Recovery of Marine Mammals.

### A. Federal entities responsible for implementing the MMPA

The MMPA is managed by the federal government and protects all marine animals. The National Marine Fisheries Service (“NMFS”), part of the National Oceanic and

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<sup>1</sup> Marine Mammal Protection Act of 1972., 95 P.L. 522; 86 Stat. 1027.

<sup>2</sup> NOAA Fisheries - Laws & Policies, Marine Mammal Protection Act, <https://www.fisheries.noaa.gov/topic/laws-policies#marine-mammal-protection-act> (Last visited May 20, 2019).

Atmospheric Administration (“NOAA”) within the Department of Commerce, is responsible for the protection of whales, dolphins, porpoises, seals, and sea lions. The U.S. Fish and Wildlife Service (“FWS”), part of the Department of the Interior, is responsible for the protection of walrus, manatees, sea otters, and polar bears. The Marine Mammal Commission (“MMC”) provides independent, science-based oversight of domestic and international policies and actions of federal agencies addressing human impacts on marine mammals and their ecosystems.<sup>3</sup> The Animal and Plant Health Inspection Service, a part of the Department of Agriculture, does not have authority under the MMPA but is responsible for regulations managing marine mammals at public display facilities under the Animal Welfare Act.<sup>4</sup>

## **B. Legislative Affect**

Protections for marine mammals are enforced by the NOAA which partners with numerous federal, state, territorial, and commonwealth marine conservation law enforcement agencies through joint enforcement agreements. These agencies encourage compliance with and enforces all of the marine statutes and regulations for which the NOAA Fisheries is responsible, including the MMPA.<sup>5</sup> The NOAA Fisheries explains some of its key statutes:

The Marine Mammal Protection Act:

- Established a national policy to prevent marine mammal species and population stocks from declining beyond the point where they ceased to be significant functioning elements of the ecosystems of which they are a part.<sup>6</sup>
- Included protection for population stocks in addition to species and subspecies—a population stock is a group of marine mammals of the same

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<sup>3</sup> The Marine Mammal Center, The Marine Mammal Protection Act of 1972, Amended 1994, <http://www.marinemammalcenter.org/what-we-do/rescue/marine-mammal-protection-act.html> (Last visited May 18, 2019).

<sup>4</sup> Animal Welfare Act of 1970., 91 P.L. 579; 84 Stat. 1560.

<sup>5</sup> NOAA Fisheries - Marine Mammal Protection, Understanding Marine Mammal Protections, June 25, 2017, <https://www.fisheries.noaa.gov/insight/understanding-marine-mammal-protections#which-marine-mammals-do-es-noaa-fisheries-protect?> (Last visited May 22, 2019).

<sup>6</sup> 16 U.S.C. § 1382.

species or smaller taxa in a common spatial arrangement that interbreed when mature.<sup>7</sup>

- Shifted the burden from resource managers to resource users to show that proposed taking of living marine resources would not adversely affect the resource or the ecosystem—“take” as defined in the MMPA means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.<sup>8</sup>
- Established the concept of “optimum sustainable populations” to ensure healthy ecosystems. Prior to the MMPA, the management of marine species was aimed at producing a “maximum sustainable yield” to ensure the species replenished itself for an adequate harvest in subsequent years.<sup>9</sup>
- Directed federal agencies to seek changes in international agreements, such as the Convention for the Regulation of Whaling and the North Pacific Fur Seal Convention, so they corresponded to the protections outlined in the act.<sup>10</sup>

When Congress passed the MMPA in the early 1970s, it was an innovative piece of legislation that not only shifted the focus of conservation from species to ecosystems, but also contains elements never before established in legislation.<sup>11</sup>

### **C. Protection, Conservation, and Recovery of Marine Mammals**

The NOAA Fisheries has issued regulations, national policies, and provides guidance to promote efficiency and consistency in implementing the MMPA to conserve and recover marine mammal species. The Marine Mammal Protection Act established a prohibition on the “take” of marine mammals in U.S. waters, the take of marine

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<sup>7</sup> 16 U.S.C. § 1387.

<sup>8</sup> 16 U.S.C. §§ 1371-1373.

<sup>9</sup> 16 U.S.C. § 1421(a).

<sup>10</sup> 16 U.S.C. § 1378.

<sup>11</sup> NOAA Fisheries - Laws & Policies, Marine Mammal Protection Act, <https://www.fisheries.noaa.gov/topic/laws-policies#marine-mammal-protection-act> (Last visited May 20, 2019).

mammals by U.S. citizens on the high seas, and the importation of marine mammals or marine mammal products in the United States.<sup>12</sup>

Defined under the MMPA, a “take” is to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal.” This includes the collection of dead animals or parts thereof, the restraint or detention of a marine mammal, no matter how temporary, tagging a marine mammal, the negligent or intentional operation of an aircraft or vessel, the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal, or feeding or attempting to feed a marine mammal in the wild.<sup>13</sup>

Additionally, the NOAA Fisheries monitor and reduce threats to marine mammals through research, permits and mitigation measures, regulatory actions, partnerships, and assistance programs for educational and compliance purposes. The NOAA Fisheries advocates that we can all help protect marine mammals by following wildlife viewing guidelines, following responsible boating and fishing practices, proper disposal of chemicals and waste, making wise consumer choices in regards to seafood and marine animal viewing, reporting sick, injured, or dead animals, and reporting violations of the MMPA.<sup>14</sup>

## **II. Protection of Marine Mammals in the Lowcountry**

The Lowcountry Marine Mammal Network (“LMMN”) is a nonprofit organization focused on protecting marine mammals such as dolphins, whales, and seals in South Carolina waters. The Lowcountry is home to approximately 350 dolphins that rely on clean, safe, and quiet water to hunt, socialize, and rear young.<sup>15</sup> Along with the South Carolina Marine Mammal Stranding Network (“SCMMSN”), the LMMN seeks

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<sup>12</sup> NOAA Fisheries - Marine Mammal Protection, Understanding Marine Mammal Protections, June 25, 2017, <https://www.fisheries.noaa.gov/insight/understanding-marine-mammal-protections#which-marine-mammals-do-es-noaa-fisheries-protect?> (Last visited May 22, 2019).

<sup>13</sup> 16 U.S.C. § 1371.

<sup>14</sup> NOAA Fisheries - Marine Mammal Protection, Understanding Marine Mammal Protections, June 25, 2017, <https://www.fisheries.noaa.gov/insight/understanding-marine-mammal-protections#which-marine-mammals-do-es-noaa-fisheries-protect?> (Last visited May 22, 2019).

<sup>15</sup> Lowcountry Marine Mammal Network <https://www.lowcountrymarinemammalnetwork.org/about-us> (Last visited May 17, 2019).

to increase awareness about marine mammals in South Carolina and educate the general public on federal regulations and ways to protect both marine mammals and their environment.<sup>16</sup>

Approximately 50 marine mammals become stranded in South Carolina every year, 80% of which are bottlenose dolphins. The SCMMSN responds to and retrieves stranded animals from beaches and waterways in hopes to learn more about their cause of death, anatomy and physiology, distribution, and life history.<sup>17</sup> Organizations such as LMMN and SCMMSN relentlessly work to protect and conserve marine mammals and their environments in South Carolina, but do not impose penalties for the mistreatment of marine life. Instead, marine mammals are protected by federal law under the MMPA and violations of the MMPA can result in fines imprisonment, or seizure of vessels and licenses.

### **III. Oil and Gas Affects on Marine Mammals**

Oil and gas development in the marine environment is executed in stages, all of which have the potential to impact marine mammals. The stages include (A) Exploration, (B) Construction and Installation, (C) Production and Transport, (D) Decommissioning and Site Clearance, and (E) Chemical Spills and Leaks.

#### **A. Exploration**

Exploration for oil and gas is the process of searching for and characterizing hydrocarbon reserves which includes geological and geophysical surveys, including seismic surveys. Seismic airguns emit high energy, low-frequency impulsive sound that travels long distances. These seismic surveys can cause disruption of important marine mammal behaviors, and - at close range - physiological injury. Exploratory drilling may disturb marine mammals based on the sounds of drilling or support

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<sup>16</sup> Lowcountry Marine Mammal Network <https://www.lowcountrymarinemammalnetwork.org/about-us> (Last visited May 17, 2019).

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vessels or aircrafts. Drilling may also result in oil spills which have detrimental effects on marine mammals.<sup>18</sup>

## **B. Construction and Installation**

When suitable oil and gas reserves are found, the next stage involves construction and installation of drilling platforms. These constructions can cause marine mammals to avoid or leave their preferred habitat which increases the risk of ship strikes. Additionally, all of the activity involved in the construction and use of drilling platforms may increase the amount of debris in surrounding waters, thus creating hazards for marine mammals.<sup>19</sup>

## **C. Production and Transport**

The production and transport stage involves the drilling of wells, extraction of oil and gas, and transport of the oil to refineries as the gas to markets, either through pipelines or in tankers. Both drilling and seismic activity involved in producing and transporting the oil and gas generates sound that may be harmful to marine mammals.<sup>20</sup>

## **D. Decommissioning and Site Clearance**

Decommissioning can involve various types of non-explosive cutter tools, but a variety of explosives can also be used to remove underwater structures. Both non-explosive and explosive methods can introduce significant sound into the marine environment, which may be harmful to marine mammals and their prey.<sup>21</sup>

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<sup>18</sup> Marine Mammal Commission, Oil and Gas Development and Marine Mammals <https://www.mmc.gov/priority-topics/offshore-energy-development-and-marine-mammals/offshore-oil-and-gas-development-and-marine-mammals/> (Last visited May 21, 2019).

<sup>19</sup> Marine Mammal Commission, Oil and Gas Development and Marine Mammals <https://www.mmc.gov/priority-topics/offshore-energy-development-and-marine-mammals/offshore-oil-and-gas-development-and-marine-mammals/> (Last visited May 21, 2019).

<sup>20</sup> Marine Mammal Commission, Oil and Gas Development and Marine Mammals <https://www.mmc.gov/priority-topics/offshore-energy-development-and-marine-mammals/offshore-oil-and-gas-development-and-marine-mammals/> (Last visited May 21, 2019).

<sup>21</sup> Marine Mammal Commission, Oil and Gas Development and Marine Mammals <https://www.mmc.gov/priority-topics/offshore-energy-development-and-marine-mammals/offshore-oil-and-gas-development-and-marine-mammals/> (Last visited May 21, 2019).

## **E. Chemical Spills and Leaks**

Spills and leaks can occur at all stages of oil and gas development, with varying effects based on the type and amount of substance spilled. Spills and leaks can have long-term detrimental effects on marine mammals and can degrade their habitat. Response efforts to contain and clean up oil spills also have the potential to affect marine mammals through increased sound from vessel traffic as well as increased risk of ship strikes.<sup>22</sup>

Organizations such as the National Marine Fisheries Service and the U.S. Fish and Wildlife Service are taking action to monitor and mitigate the detrimental effects of oil and gas development on marine mammals.

For as long as humans have studied marine life, we have found that marine mammals play a vital role in their ecosystem, which is why legislation such as the MMPA has moved from the study of species to the study of ecosystems. Marine mammals bring depth and beauty to ocean life, and that is why it is important we relentlessly protect and conserve marine mammals and their environments.

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<sup>22</sup> Marine Mammal Commission, Oil and Gas Development and Marine Mammals <https://www.mmc.gov/priority-topics/offshore-energy-development-and-marine-mammals/offshore-oil-and-gas-development-and-marine-mammals/> (Last visited May 21, 2019).