



NOAA FISHERIES

Protected Resources

The Office of Protected Resources works to conserve, protect, and recover species through research, management, and education in conjunction with our Regional Offices, Science Centers, and various partners.



Marine Mammals and Commercial Fisheries

Minimizing Bycatch through Research and Collaboration

Why Take Reduction Planning?

The Marine Mammal Protection Act (MMPA) specifies that NOAA Fisheries develop and implement Take Reduction Plans to prevent the depletion and assist in the recovery of certain marine mammal stocks that are killed or seriously injured in commercial fisheries.

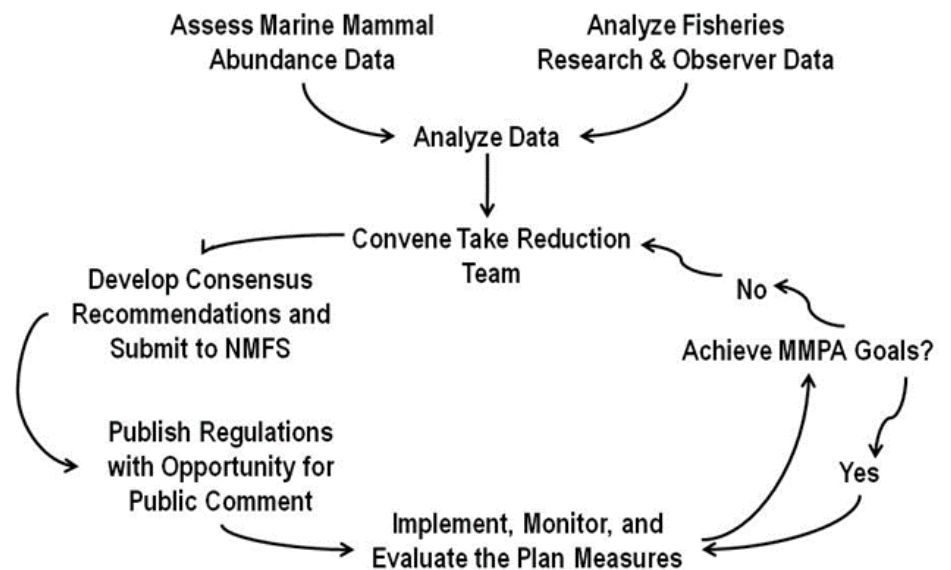
Components of a Plan

Each Plan is designed to minimize deaths and serious injuries through a combination of voluntary and regulatory measures. Each plan must include:

- An analysis of the most recent marine mammal Stock Assessment Reports,
- Estimates of total mortality and serious injury for each marine mammal stock,
- Recommended regulatory or voluntary bycatch reduction measures, and
- A timeline for achieving the take reduction goals.

Take Reduction Planning Process

- Take Reduction Teams are established when Category I or II fisheries interact with strategic marine mammal stocks.
- Teams are composed of members from the fishing industry, fishery management councils, Federal agencies, coastal states, academia, and environmental organizations.
- NOAA Fisheries develops regulations based on Team consensus recommendations.
- After public comments are received, NOAA Fisheries implements, monitors, and evaluates measures set forth within the Plans.



Collaboration

Take reduction planning and monitoring would not be possible without strong collaboration between NOAA Fisheries and its partners, including the fishing industry, scientists, environmental groups, and other government agencies. Teams assess the best available data when recommending research priorities and management measures within each Plan.

Resources

Marine Mammal Take Reduction Program

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-take-reduction-plans-and-teams>

MMPA List of Fisheries

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-protection-act-list-fisheries>

Marine Mammal Stock Assessment Reports

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessment-reports-region>

Marine Mammal Protection

<https://www.fisheries.noaa.gov/topic/marine-mammal-protection>

Bycatch

<https://www.fisheries.noaa.gov/topic/bycatch>



Goals, Assessments and Reevaluation

Under the MMPA, Plans must achieve both short and long-term goals for reducing bycatch.

- The immediate goal of each Plan is to reduce bycatch to below the stock's Potential Biological Level (PBR) within six months of implementation. PBR is the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. ($PBR = N_{min} * 0.5 * R_{max} * FR$)
- The long-term goal of each Plan is to reduce bycatch to insignificant levels approaching a zero mortality and serious injury rate (ZMRG) within five years. ($ZMRG = 10\% PBR$)
- During the planning and monitoring processes, the economic situation and technology available within the fishery are taken into consideration when estimated incidental mortality and serious injury are below PBR

Current Teams and Plans

Atlantic Ocean

Atlantic Large Whale

- Species: North Atlantic right, humpback and fin whales
- Fisheries: Trap/pot and gillnet
- Status: Monitoring and assessing the Plan that was amended in 2015

Atlantic Trawl Gear

- Species: White-sided and common dolphins and pilot whales
- Fisheries: Mid-water and bottom trawls
- Status: Strategy developed in 2008 for monitoring bycatch and conducting priority research and outreach projects

Bottlenose Dolphin

- Species: Atlantic coastal bottlenose dolphins
- Fisheries: Gillnet, long haul seine, stop net; trap/pot; VA pound net
- Status: Monitoring and assessing the Plan that was amended in 2012 and 2015

Harbor Porpoise

- Species: Gulf of Maine and Bay of Fundy harbor porpoise
- Fisheries: Northeast sink and Mid-Atlantic gillnet
- Status: Monitoring and assessing the Plan that was amended in 2013

Pelagic Longline

- Species: Pilot whales and Risso's dolphins
- Fisheries: Pelagic longline
- Status: Amendments to the 2009 Plan under development

Pacific Ocean

Pacific Offshore Cetacean

- Species: Beaked, pilot, pygmy sperm, sperm, and humpback whales
- Fisheries: California drift gillnet
- Status: Bycatch for beaked and pygmy sperm whales has been reduced to insignificant levels

False Killer Whale

- Species: Hawaii pelagic and insular, and Palmyra Atoll false killer whales
- Fisheries: Hawaii deep-set and shallow-set longline
- Status: Amendments to the 2012 Plan under development