

False Killer Whale Take Reduction Team and Plan

Frequently Asked Questions



NOAA Fisheries is publishing a final rule to implement a False Killer Whale Take Reduction Plan under the Marine Mammal Protection Act (MMPA). The Plan includes measures to reduce incidental mortalities and serious injuries (i.e., bycatch) of false killer whales in the Hawaii-based commercial longline fisheries.

False Killer Whale Background

Q: What is a false killer whale?

A: The false killer whale (*Pseudorca crassidens*) is a member of the oceanic dolphin family. False killer whales are found worldwide, mainly in tropical and warm-temperate waters.

Q: How many false killer whales are there in our region, and where are they found?

A: Five “stocks” of false killer whales have been identified in the Pacific Islands Region. The “Hawaiian Islands Stock Complex” includes the Northwestern Hawaiian Islands, Main Hawaiian Islands Insular, and Hawaii Pelagic stocks. Separate stocks are defined in U.S. waters around Palmyra Atoll and American Samoa.

The most recent U.S. Pacific Marine Mammal Stock Assessment Reports provide a description of the range and a best estimate of abundance for each stock:

1. The Main Hawaiian Islands Insular stock, which inhabits waters within 140 kilometers (approximately 75 nautical miles) of the main Hawaiian Islands, is estimated to have 151 individuals.
2. The Hawaii Pelagic stock, which is found in waters greater than 40 km (22 nautical miles) from the main Hawaiian Islands, is estimated to have 1,503 individuals.



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3. The Northwestern Hawaiian Islands stock, which includes animals inhabiting waters within 93 km (50 nautical miles) of the Northwestern Hawaiian Islands and Kauai, is estimated to have 552 individuals.
 4. The Palmyra Atoll stock, which is found within the U.S. Exclusive Economic Zone (EEZ) around Palmyra Atoll, is estimated to have 1,329 individuals.
 5. The American Samoa stock is found within the U.S. EEZ around American Samoa. We do not have an estimate of abundance for this stock.
- The Hawaii Pelagic, Main Hawaiian Islands Insular, and Northwestern Hawaiian Islands stocks have partially overlapping ranges.

Q: Are false killer whales endangered?

A: False killer whales as a species are not endangered. However, NOAA Fisheries listed the Main Hawaiian Islands Insular population of false killer whales as an endangered “distinct population segment” based on an evaluation of risk to the population. Several factors contribute to a high risk of extinction for the Main Hawaiian Islands Insular false killer whale including their small and recently declining population size, exposure to environmental contaminants, competition for food with commercial fisheries, incidental (accidental) hooking and entanglement, and acts of prohibited take.

Of the five false killer whale stocks defined in the region, only the Main Hawaiian Islands Insular stock is listed under the Endangered Species Act (see table below). The Main Hawaiian Islands Insular stock and the Hawaii Pelagic stocks are directly addressed in and protected under the Take Reduction Plan. Neither of these two management actions (the Endangered Species Act listing rule nor the Take Reduction Plan rule) affects the Northwestern Hawaiian Islands, Palmyra Atoll, or American Samoa false killer whale stocks.

False Killer Whale Stock	Affected by the Proposed Endangered Species Act Listing?	Protected under the Take Reduction Plan?
Main Hawaiian Islands Insular	YES	YES
Hawaii Pelagic	NO	YES
Northwestern Hawaiian Islands	NO	NO
Palmyra Atoll	NO	NO
American Samoa	NO	NO

“Take” of False Killer Whales

Q: What is “take”?

A: The MMPA defines “take” as “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.” The MMPA prohibits take of marine mammals, except in certain circumstances. For example, the incidental, or unintentional, take of marine mammals during commercial fishing is allowed, but the MMPA provides a system for monitoring and controlling the level of incidental take.

Q: What is the problem?

A: During Hawaii-based longline fishing operations, false killer whales can become hooked or entangled in fishing gear and, as a result, may become seriously injured or killed. These “takes” often occur when false killer whales are preying on the longline catch or bait.

Currently, these takes are occurring at a level that is unsustainable for the Hawaii Pelagic and Main Hawaiian Islands Insular stocks (i.e., takes exceed a threshold called the “Potential Biological Removal” level, or PBR, for each stock). In response, the MMPA requires NOAA Fisheries to convene a Take Reduction Team (TRT) to draft a plan for reducing mortalities and serious injuries of false killer whales that occur incidental to commercial fishing activities.

Q: How much take is occurring?

A: False killer whales are taken in both the Hawaii-based deep-set (tuna targeting) and shallow-set (swordfish targeting) longline fisheries, though take rates are higher in the deep-set fishery.

Deep-set longline fishery

Using observer data from 2006-2010, NOAA Fisheries estimates the Hawaii-based deep-set (tuna targeting) longline fishery had 13.6 incidental mortalities and serious injuries per year of false killer whales from the Hawaii Pelagic stock inside the U.S. EEZ around the Hawaiian Islands, and an additional 11.2 on the high seas (waters outside of the U.S. EEZ). Over the same time period, NOAA Fisheries estimates the deep-set longline fishery had

0.5 incidental mortalities and serious injuries per year from the Main Hawaiian Islands Insular stock, and 0.3 per year from the Palmyra Atoll stock. These figures are reported in the Draft 2012 Stock Assessment Report.

Shallow-set longline fishery

The Hawaii-based shallow-set (swordfish targeting) longline fishery has 100% observer coverage. From 2006-2010, the fishery seriously injured or killed 0.2 Hawaii Pelagic false killer whales per year within the U.S. EEZ around the Hawaiian Islands, and an additional 0.1 per year on the high seas (waters outside of the U.S. EEZ). Over the same time period, the fishery had no incidental takes of the Main Hawaiian Islands Insular or Palmyra Atoll stocks of false killer whales. These figures are reported in the Draft 2012 Stock Assessment Report.

Take Reduction Team (TRT)

Q: What is a Take Reduction Team (TRT)?

A: A TRT is an advisory group tasked with developing a plan for reducing mortalities and serious injuries of particular marine mammal stocks. A TRT includes appointed representatives from federal and state agencies, fishery management councils, academic and scientific organizations, environmental groups, and the commercial fishing industry. TRTs provide advice on the development, implementation, monitoring, and evaluation of Take Reduction Plans (TRPs). TRT members participate in negotiation discussions, and represent viewpoints and relay information to their constituencies.

Q: How many TRTs are there in the U.S.?

A: NOAA Fisheries has convened 10 TRTs, including the False Killer Whale TRT. The False Killer Whale TRT is the first TRT in the Pacific Islands Region.

Q: Can I be on the False Killer Whale TRT?

A: NOAA Fisheries already appointed TRT members on the basis of their expertise regarding the conservation or biology of false killer whales, or the fishing practices that result in the incidental mortality and serious injury of such species (i.e., longline fishing), as required by the MMPA. However, all TRT meetings are open to the public, and all interested stakeholders are encouraged to attend. Each meeting has a brief comment period during which members of the public may provide remarks directly relevant to the items presented or discussed during the meeting. NOAA Fisheries will announce upcoming TRT meetings on the NOAA Fisheries Pacific Islands Regional Office website, including information on the dates, times, and location.

Q: What has the False Killer Whale TRT done so far?

A: The False Killer Whale TRT had four multi-day meetings between February and July 2010. At these meetings, the TRT evaluated a wide range of data and analyses, and developed recommendations for a suite of measures to reduce mortalities and serious injuries of false killer whales in the Hawaii-based longline fisheries. On July 19, 2010, the TRT submitted to NOAA Fisheries their consensus recommendations in the form of a "Draft Take Reduction Plan" (Draft TRP).

Q: How did NOAA Fisheries use the TRT's recommendations?

A: NOAA Fisheries evaluated the TRT's consensus recommendations to determine whether they would achieve the MMPA's take reduction goals. Additionally, NOAA Fisheries considered a variety of other factors, including enforceability of the measures and any safety concerns. NOAA Fisheries then used the TRT's recommendations (the Draft TRP) as the basis of the proposed and final rules.

Take Reduction Plan (TRP)

Q: What is a Take Reduction Plan (TRP)?

A: A TRP is a plan to reduce incidental mortality and serious injury of marine mammals stocks in commercial fisheries to specified levels. The MMPA states that the immediate goal of a TRP is to reduce, within six months of its implementation, the incidental mortality or serious injury of marine mammals from commercial fishing to levels less than PBR. The long-term goal is to reduce, within five years of its implementation, the incidental mortality and serious injury of marine mammals from commercial fishing operations to insignificant levels approaching a zero mortality and serious injury rate, taking into account the economics of the fishery, the availability of existing technology, and existing state or regional fishery management plans.

Q: Which marine mammal stocks are affected by the False Killer Whale TRP?

A: The False Killer Whale TRP addresses mortality and serious injury of the Main Hawaiian Islands Insular and Hawaii Pelagic false killer whale stocks. NOAA Fisheries has determined that these are "strategic" stocks, which means that the number of incidental mortalities and serious injuries in commercial fisheries exceeds the stocks' PBR levels. The stocks are known to be taken by the Hawaii-based longline fisheries at unsustainable levels.



Q: Which fisheries are regulated by the False Killer Whale TRP?

A: The False Killer Whale TRP has regulations for the Hawaii-based deep-set and shallow-set pelagic longline fisheries. The False Killer Whale TRP also includes research recommendations specific to Hawaii’s nearshore hook-and-line fisheries, though these fisheries are not regulated under the TRP. The scope of the False Killer Whale TRP may be expanded in the future to include other fisheries if information shows other fisheries have unsustainably high levels of false killer whale takes.



Q: What is in the False Killer Whale TRP?

A: The False Killer Whale TRP contains eight regulatory measures (i.e., measures required by regulation) and six non-regulatory measures (i.e., measures that NOAA Fisheries will implement, but which are not required by regulation). In addition, the False Killer Whale TRP includes prioritized research recommendations to better inform long-term solutions to reduce false killer whale bycatch.

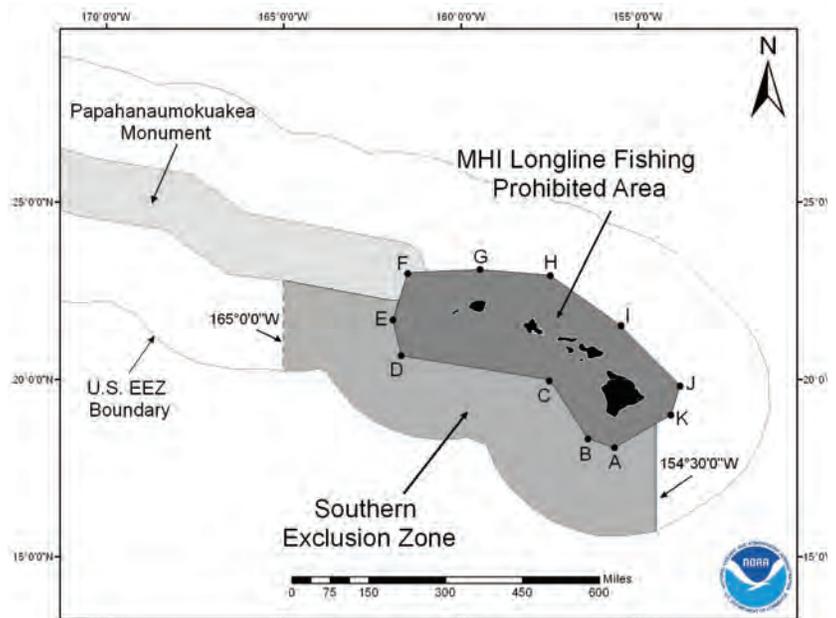
Q: What are the regulatory measures in the False Killer Whale TRP?

A: The regulatory measures include:

- Two gear requirements for the Hawaii-based deep-set longline fishery:
 - The TRP requires that on deep-set longline trips, only certain hook types can be used. Specifically, hooks must be circle hooks with the wire diameter of 4.5 mm or smaller, and a 10 degree offset or less. To facilitate enforcement of the wire diameter requirement, the TRP requires that the hook shank must contain round (non-flattened) wire that can be measured with a caliper or similar gauge. The hook requirement is intended to reduce the overall number of false killer whale hookings, and reduce the severity of injuries following an interaction. These circle hooks are generally weaker than many of the hooks currently used in the fishery, so some animals may be able to bend or straighten the hook more easily and release themselves.
 - The TRP also specifies a minimum diameter (2.0 millimeters) for monofilament branch lines, as a proxy for breaking strength. This measure will reduce the likelihood that the line will break under the strain of a hooked or entangled marine mammal. While it may seem counter-intuitive to keep the whale on the line, it can allow vessel crew to attempt de-hooking or to cut the line close to the animal. It reduces the chance that the animal will break the line and swim off, still hooked, with substantial trailing gear still attached, which may later cause serious injuries to the animal.

The TRP specifies that if any line material other than monofilament is used, it must have a comparable minimum breaking strength (400 lbs).

- Two longline management areas (shown in the lower right figure):
 - The TRP establishes a longline fishing prohibited area around the Main Hawaiian Islands. Under existing regulations, the area is already closed to longline fishing eight months of the year. In the remaining four months of the year, existing regulations allowed the northern part of the boundary to shift inward to allow longline fishing closer to the islands, so the closure area is smaller. The TRP removes the seasonal boundary change, so the larger area is closed year-round. The closure protects both the Main Hawaiian Islands Insular and Hawaii Pelagic false killer whale stocks from being caught by longlines in that area. This is particularly important because the Main Hawaiian Islands Insular stock is listed an endangered “Distinct Population Segment” under the Endangered Species Act.



- The TRP establishes a “Southern Exclusion Zone” (SEZ) south of the Main Hawaiian Islands. The area will remain open unless the deep-set longline fishery reaches a specific level of observed false killer whale bycatch. The area would then be closed to deep-set fishing as a consequence of exceeding sustainable levels of bycatch. The area was selected because it encompasses the locations of a large number of observed false killer whale interactions. The SEZ, if triggered, would be re-opened when certain bycatch reduction thresholds were met.

- Four regulatory measures to improve captain and crew response to hooked or entangled marine mammals:
 - Expand the curriculum of the existing mandatory Protected Species Workshops for longline vessel owners and captains to include additional information on marine mammal handling and release techniques and best practices for avoiding interactions;
 - Require a placard containing information on marine mammal handling and release to be posted on the longline vessel;
 - Require vessel captains supervise the handling and release any hooked or entangled marine mammal; and
 - Require a placard instructing the vessel crew to inform the captain of any hooked or entangled marine mammal to be posted on the longline vessel.

Q: What are the non-regulatory measures in the False Killer Whale TRP?

A: The TRP includes six non-regulatory measures, or actions that will not be required by regulations, but which NOAA Fisheries will carry out to improve data quality, efficiency, and dissemination to the TRT and the public. These measures will improve our ability to understand and manage false killer whale bycatch. NOAA Fisheries will:

- Adjust the observer program's sampling strategy and observer allocation to allow a more precise marine mammal bycatch estimate to be calculated;
- Make specific changes to observer training and data collection protocols to gather information that will help us to better understand the nature of false killer whale interactions with longline gear;
- Notify the TRT when there is an observed interaction of a known or possible false killer whale;
- Expedite the determination of the severity of false killer whales' injuries;
- Expedite the processing of data from NMFS' 2010 Hawaiian Islands Cetacean and Ecosystem Assessment Survey, which will result in updated abundance estimates for all cetaceans in Hawaiian waters, including false killer whales; and
- Periodically reconvene the TRT to monitor the success of the plan and evaluate any new information.

Q: How did the False Killer Whale TRP change between the proposed and final rule?

A: The proposed rule opened a 90-day period for public comment. During this process, NOAA Fisheries received comments, concerns, and information from numerous individuals, organizations, and businesses. Following the close of the public comment period, NOAA Fisheries worked to address those comments and concerns, as appropriate. NOAA Fisheries also used additional information pertinent to the decision-making process to modify the TRP as appropriate.

Differences between the proposed and final rule include:

- Reorganization of the regulations, to be clear that all TRP regulations are issued under the authority of the MMPA;
- Removal of the Palmyra Atoll false killer whale stock from the scope of the Plan, since longline fisheries have only a very low level of interactions with this non-strategic stock;
- Revised hook requirements for the deep-set longline fishery, by removing the size specification, increasing the maximum allowable wire diameter, and requiring that only a portion of the shank contain round wire, rather than the entire hook; and
- Revised trigger calculation and procedures for opening and closing the Southern Exclusion Zone, to more closely conform to the TRT's recommendations.

Q: How does the final rule (NOAA Fisheries' False Killer Whale TRP) differ from the TRT's recommendations (the Draft False Killer Whale TRP)?

A: The final rule contains nearly all of the TRT's recommended measures, with some modifications. These differences include:

- The TRT recommended that NOAA Fisheries increase annual observer coverage in the deep-set longline fishery from 20% to 25%. Instead, NOAA Fisheries is maintaining 20% overall annual observer coverage, but adjusting its sampling strategy and observer allocation to increase the precision of the resulting marine mammal bycatch estimates; and
- The TRT recommended that NOAA Fisheries require (by regulation) that longline vessel crew notify the captain in the event of marine mammal hooking or entanglement. NOAA Fisheries is not including this requirement in the rule. NOAA Fisheries believes it is the captain's responsibility to establish procedures to ensure he or she is aware of any marine mammal interactions, and could meet his or her regulatory requirement to supervise their handling and release.



Q: What happens after the False Killer Whale TRP is finalized?

A: All of the regulations go into effect 30 days after the TRP is published in the Federal Register, except the gear requirements for the deep-set longline fishery, which go into effect 90 days after publication. NOAA Fisheries will monitor the TRP's progress and ensure it meets the MMPA goal of reducing false killer whale mortalities and serious injuries in the fisheries to appropriate levels. NOAA Fisheries will reconvene the TRT on a regular basis during this monitoring phase, depending on available funding.

If the take reduction goals are not met, or if new information becomes available that indicates a change to the TRP is necessary, NOAA Fisheries will reconvene the TRT to develop additional consensus recommendations for reducing mortalities and serious injuries. After considering the TRT's recommendations, NOAA Fisheries would subsequently amend the TRP through a proposed and final rule.

Where can I get more info about the TRP for false killer whales?

More information about the False Killer Whale TRP, the TRT, and other false killer whale issues may be found at: http://www.fpir.noaa.gov/PRD/prd_false_killer_whale.html

General information on the NOAA Fisheries Take Reduction Program may be found at: <http://www.nmfs.noaa.gov/pr/interactions/trt/>

Acronyms

EEZ – Exclusive Economic Zone

MMPA – Marine Mammal Protection Act

PBR – Potential Biological Removal

TRP – Take Reduction Plan

TRT – Take Reduction Team

Glossary

Pelagic – pertaining to the part of the open sea or ocean comprising the water column, i.e., all of the sea other than that near the coast or the sea floor.

Insular – associated with one or more islands.

Serious injury – any injury that will likely result in mortality (>50% of the time).

Stock – as defined by the MMPA, the term “stock” means a group of marine mammals of the same species or smaller taxa in a common spatial arrangement, that interbreed when mature.



All photos were taken under NOAA Fisheries permit SWFSC 14097

