

NMFS WEST COAST REGION – PROTECTED RESOURCES DIVISION
REPORT ON CETACEAN AND SEA TURTLE PROTECTIONS

Cetaceans: MMPA Negligible Impact Determination Process

Section 101(a)(5)(E) of the Marine Mammal Protection Act (MMPA), provides that NMFS shall allow, for a period of up to three years, the incidental taking of marine mammal species listed under the Endangered Species Act (ESA) by persons using vessels of the United States with valid fishing permits, *if NMFS makes certain determinations*. NMFS must first determine, after notice and opportunity for public comment, that: 1) the incidental mortality and serious injury from commercial fisheries will have a *negligible impact* on the affected species or stock; 2) a recovery plan has been developed or is being developed for such species or stock under the ESA; and 3) where required under section 118 of the MMPA, a monitoring program has been established, vessels engaged in such fisheries are registered in accordance with section 118 of the MMPA, and a take reduction plan has been developed or is being developed for such species or stock.

The MMPA mandates that each commercial fishery be classified by the level of mortality and serious injury of marine mammals occurring incidental to each fishery. The List of Fisheries classifies U.S. commercial fisheries into one of three categories according to the level of incidental mortality or serious injury of marine mammals. This classification is based on the rate, in numbers of animals per year, of incidental mortality and serious injury of marine mammals due to commercial fishing operations relative to a stock's Potential Biological Removal (PBR) level, defined (50 CFR 229.2) as the maximum number of animals, not including natural mortality, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population. The DGN fishery is currently categorized as a Category I fishery (annual mortality and serious injury of a stock in a given fishery is greater than or equal to 50 percent of the PBR level) due to interactions with sperm whales in 2010.

In order to make a negligible impact determination, NMFS must consider the total human-related mortality and serious injury to the affected stock of marine mammals. This includes the known or estimated takes from all human sources, such as commercial fisheries and ship strikes. There are five criteria that NMFS adopted in 1999 to make negligible impact determinations for MMPA 101(a)(5)(E) permits (64 FR 28800; May 27, 1999). Criterion 1 is the starting point for analysis. If Criterion 1 is not satisfied, NMFS may use one of the other criteria as appropriate.

1. The threshold for initial determination will remain at 0.1 PBR. If total human-related serious injuries and mortalities are less than 0.1 PBR, all fisheries may be permitted.
2. If total human-related serious injuries and mortalities are greater than PBR, and fisheries-related mortality is less than 0.1 PBR, individual fisheries may be permitted if management measures are being taken to address non-fisheries-related serious injuries and mortalities. When fisheries-related mortality and serious injury is less than 10 percent of the total, the appropriate management action is to address components that account for the major portion of the total.

3. If total fisheries-related serious injuries and mortalities are greater than 0.1 PBR and less than PBR and the population is stable or increasing, fisheries may be permitted subject to individual review and certainty of data. Although the PBR level has been set up as a conservative standard that will allow recovery of a stock, there are reasons for individually reviewing fisheries if serious injuries and mortalities are above the threshold level. First, increases in permitted serious injuries and mortalities should be carefully considered. Second, as serious injuries and mortalities approach the PBR level, uncertainties in elements such as population size, reproductive rates, and fisheries-related mortalities become more important.
4. If the population abundance of a stock is declining, the threshold level of 0.1 PBR will continue to be used. If a population is declining despite limitations on human-related serious injuries and mortalities below the PBR level, a more conservative criterion is warranted.
5. If total fisheries-related serious injuries and mortalities are greater than PBR, permits may not be issued.

The DGN fishery is currently permitted to take humpback whales and sperm whales for a period of up to three years (expiring September 4, 2016) based on negligible impact determinations under Criterion 3 for both species.

Potential Biological Removal (PBR) levels for marine mammals with recent recorded interactions with the DGN fishery:

Species	PBR
Sperm whale	1.5 (under review: <i>Moore and Barlow</i> , in prep)
Humpback whale	11
Northern right whale dolphin	48
Common dolphin	3,440
California sea lion	9,200

In instances where fishery related mortality exceeds PBR, an MMPA permit cannot be issued for the fishery. For the DGN fishery, this occurrence has resulted in the convening of the Take Reduction Team to make recommendations on measures to reduce bycatch to levels below PBR. For species also protected under the ESA, incidental take exemption for that species cannot be provided if the MMPA authorization cannot be issued.

Sea Turtles: Summary of 2012 DGN Biological Opinion Sea Turtle Take Estimates and Terms and Conditions

In the 2012 Biological Opinion on the DGN fishery, NMFS estimated the maximum total incidental take and mortality of ESA-listed sea turtle individuals that could be expected.

	Annual Take	5-Year Take Total	Expected Mortalities During 5-Year Period
Leatherback turtle	up to 3	up to 10	up to 7
Loggerhead turtle	up to 3	up to 7	up to 4
Olive ridley turtle	up to 1	up to 2	up to 1
Green turtle	up to 1	up to 2	up to 1

Given the context of less than 100 percent observer coverage of the DGN fishery, NMFS expects the 5 year observer record to reflect the following levels of observed incidental take, which is proportionally consistent with the expected total incidental take and an expectation of observer coverage levels of 20 percent.

	Observed take during 5-year period (20% observer coverage)
Leatherback turtle	up to 2*
Loggerhead turtle	up to 2*
Olive ridley turtle	1
Green turtle	1

* could occur within the same season