1.0 **Introduction.** The Marine Mammal Protect Act (MMPA) requires NOAA’s National Marine Fisheries Service (NMFS) to distinguish between injuries to marine mammals that are serious and those that are non-serious (e.g., 101(a)(2), (4) and(5); 101(d); 108(a)(2); 117; 118; 120 (j)(2); and the unnumbered section cited as the “Dolphin Protection Consumer Information Act”). Sections 117 and 118 specifically direct NMFS to consider the human-caused mortality and serious injury to marine mammals for stock assessments and management of fisheries interactions. NMFS issues this Policy Directive and accompanying Procedural Directive to establish a consistent and transparent process within NMFS for distinguishing serious from non-serious injuries of marine mammals, for applying these criteria to injury cases, and for documenting injury determinations.

Specifically, the MMPA establishes the following:

- **Section 117(a)** directs NMFS to prepare stock assessment reports (SAR) for all stocks of marine mammals that occur in waters under the jurisdiction of the United States, including an estimate of the annual human-caused mortality and serious injury by source.
- **Section 118(a)(1)** states, “…it shall be the immediate goal that incidental mortality or serious injury of marine mammals occurring in the course of commercial fishing operations be reduced to insignificant levels approaching a zero mortality and serious injury rate…”
- **Section 118(c)** directs NMFS to publish an annual list of commercial fisheries and classify each fishery with respect to its level of incidental mortality and serious injury of marine mammals.
- **Section 118(f)** contains complex guidance to develop take reduction plans that have short and long term goals to reduce mortality and serious injury of marine mammals incidental to commercial fishing.

1.1 **Interpretation of the Statutory Meaning of Serious Injury**

Serious injury has regulatory meaning under the MMPA; however, the MMPA and its legislative history do not provide guidance qualifying the level of severity for injuries that are considered serious. Therefore, to implement MMPA Sections
117 and 118, NMFS defined serious injury in its regulations (50 CFR 229.2) as “any injury that will likely result in mortality.” While this definition provides guidance on which injuries should be considered serious injuries, it allows subjective interpretation of the likelihood that an injury will result in mortality, ranging from “death is more likely than survival” to “there is near certainty that death will occur.” Therefore, NMFS clarifies its interpretation of the statutory meaning of “serious injury” in this Policy Directive.

NMFS interprets the regulatory definition of serious injury (i.e., “any injury that will likely result in mortality,” emphasis added) as any injury that is “more likely than not” to result in mortality, or any injury that presents a greater than 50 percent chance of death to a marine mammal. Thus, the definition does not require that all such injured animals actually die, but rather requires only that the animal is more likely than not to die. In situations where NMFS has clear veterinary medical guidance, or data of known outcomes of various injury types within an appropriate taxonomic group (e.g., large cetaceans, small cetaceans, pinnipeds), injuries that are known to result in mortality in more than 50 percent of documented cases are considered serious injuries. In situations where such data do not exist, expert opinions or an approach of prorating data are used.

Further, an injury must directly contribute to the death or likely death of the animal to be classified as a serious injury. Serious injuries can include cases where an animal initially survives, but later dies or is expected to die as a consequence of the injury.

NMFS’ interpretation of “likely” in this regulatory context is consistent with the intent of the conservation principles of both the MMPA and the Endangered Species Act (ESA). This intent is represented in House (U.S. House of Representatives Report 92-707, December 4, 1971) and Senate (U.S. Senate Report 92-863, June 15, 1972) Committee reports from the initial passage of the MMPA, which noted that people who requested authorization to take marine mammals carried the significant burden to show that the requested taking must not disadvantage marine mammal populations or species. Further, this interpretation was supported in a court decision concerning an Oregon Coast Coho salmon ESA listing action (See Trout Unlimited v. Lohn, Civ. No. 06–01493 (D. Or. Oct. 5, 2007). In that case, NMFS interpreted the term “likely” as it relates to the ESA definition of “threatened” (“...likely to become an endangered species…”), to mean “more likely than not” (71 FR 3033, January 19, 2006, at page 3043; 73 FR 7816, February 11, 2008).

2.0 Objectives.
2.1 To promote a consistent and transparent process within NMFS for distinguishing serious from non-serious injuries to marine mammals as a means to more effectively implement sections 117 and 118 of the MMPA.
2.2 To provide a systematic process for assigning injuries as serious or non-serious when information is, or was, historically, considered insufficient to make a determination (i.e., the injury events would otherwise be classified as “cannot be determined”).
3.0 Authorities and Responsibilities. This Policy Directive and accompanying Procedural Directive establish the process and criteria NMFS will use to distinguish between serious and non-serious injuries of marine mammals, as well as document the determinations. The process and criteria in these documents will apply to injury determinations made after the date of effectiveness, and will not be applied retroactively to past injury determinations. In addition to the standard annual review process, marine mammal program staff within NMFS’ Office of Protected Resources, in consultation with staff in the Regional Offices and Science Centers, will review this Policy Directive and the accompanying Procedural Directive every five years or whenever information indicates that a revision of the guidance may be warranted. The review will be based upon the best available scientific information, input from the MMPA Scientific Review Groups, as appropriate, and experience gained in implementing the Policy. If new information becomes available sooner than the five year review time frame, NMFS will consider whether revisions are warranted and update the process (including the specific data points, proration fractions, etc.) laid out in the Procedural Directive, if necessary.

After completing this review, NMFS’ Office of Protected Resources will compile the updated, recommended revisions to the process and criteria for distinguishing serious from non-serious injuries of marine mammals. The Director, Office of Protected Resources, will then once again review, consult with Regional Administrators, Science Center Directors, and Office Directors, as appropriate, and then approve the updated NMFS policy.

4.0 Measuring Effectiveness.
4.1 NMFS’ Office of Protected Resources will lead the effort to assess the effectiveness of objective 2.1 of this Policy Directive by evaluating whether Science Center staff responsible for distinguishing serious from non-serious injuries apply the Policy and Procedural Directives to annual injury determinations, thus meeting the objectives of consistency and transparency. A group of Headquarters, Regional Office, and Science Center staff will review a subsample of each Science Center’s injury determinations for the first two years after this Policy Directive is implemented. The Director of NMFS’ Office of Protected Resources will appoint a representative to this group from the Office of Protected Resources, and will request Regional Offices, Science Centers, and Office of Science and Technology each appoint a representative with the appropriate expertise to the group (e.g., determination staff). This group will review a subsample of each Science Center’s injury determinations, asking:

4.1.1. Are staff responsible for making determinations (determination staff) interpreting the definition of “serious injury” as “more likely than not”? If the interpretation outlined in this Policy Directive is applied by determination staff, the Policy Directive will be considered effective relative to the objective of consistency.

4.1.2. Are determination staff following the guidance and process for documenting injury determinations outlined in the Procedural Directive? If the process outlined in the Procedural Directive is followed by determination staff, the Policy Directive will be considered effective relative to the objective of transparency.
4.1.3 Is NMFS interpreting and accounting for serious injuries in a manner consistent with the intent of the MMPA? If the process outlined in the Procedural Directive is followed by determination staff, the Policy Directive will be considered effective relative to the objective of effectively implementing the MMPA.

4.2 NMFS’ Office of Protected Resources will assess the effectiveness of objective 2.2 of this Policy Directive by evaluating whether Science Center staff apply the interpretation of serious injury and follow the process outlined in Section III of the Procedural Directive. This process was developed to allow NMFS to reduce the number of undetermined injury events. NMFS’ interpretation of the serious injury definition coupled with the approach described in the Procedural Directive allows NMFS to evaluate the majority of documented injury events for human-caused serious injury and mortality to marine mammals. However, NMFS recognizes the results still underestimate serious injuries and mortalities, given the likelihood of undetected and unreported events. If the process outlined in Section III of the Procedural Directive is followed by determination staff, the Policy Directive will be considered effective relative to objective 2.2.

After the initial review to measure the effectiveness of the Policy Directive, NMFS’ Office of Protected Resources will continue this review every five years in conjunction with the review of the Policy and Procedural Directives discussed under Section 3.0.

5.0 References.
The attached Procedural Directive outlines NMFS’ criteria for distinguishing between serious and non-serious injuries of marine mammals, a process for applying these criteria to injury cases, and a process for documenting these injury determinations.

The attached Decision Memorandum (signed by Samuel D. Rauch, Deputy Assistant Administrator for Regulatory Programs, May 1, 2009) supports NMFS’ interpretation of serious injury as an injury that is “more likely than not” to result in the death of a marine mammal.


/s/ 01/13/12
Eric Schwaab  Date
Assistant Administrator for Fisheries