

considered an insignificance threshold ( $T_{ins}$ ), below which incidental mortality and serious injury can be considered insignificant? Second, if a fishery or group of fisheries has a level of mortality greater than this  $T_{ins}$  and available technologies would not allow further reductions within the feasible economics of that fishery, could NMFS determine that these fisheries had met the ZMRG?

#### Insignificance Threshold

NMFS is considering three options to estimate  $T_{ins}$  for each stock of marine mammals. When incidental mortality and serious injury is below  $T_{ins}$  for a stock of marine mammals, then that level of mortality and serious injury would be insignificant to the affected stock. Table 1 summarizes each option and identifies arguments for and against each option. For each option, Table 1 also summarizes the number of fisheries that would have mortality and serious injury above the  $T_{ins}$  for one or more stocks of marine mammals, and it summarizes the number of marine mammal stocks for which the  $T_{ins}$  would be exceeded by mortality and serious injury incidental to commercial fisheries.

Each option is a mathematical equation that may not be applicable to every stock of marine mammals. These equations may use default or assumed values for population growth rates, and these values may not reflect the actual growth rates for the stock. Therefore,

NMFS would evaluate the  $T_{ins}$  for each stock of marine mammals and adjust them as necessary to account for case-specific situations, such as declining or very small populations.

#### Available Technology and Economic Feasibility

NMFS must also consider options for applying the available technology and economic feasibility considerations required by section 118(f)(2) of the MMPA for reducing incidental take to insignificant levels of mortality and serious injury approaching a zero mortality and serious injury rate. A first option would be to accept the statement in MMPA section 118(b)(1) that fisheries shall reduce incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero mortality and serious injury rate. Using this approach, available technology and economic feasibility would not be considered in evaluating whether or not a fishery had achieved the ZMRG.

However, available technology and economic feasibility would have to be considered in developing and implementing a take reduction plan to reduce incidental mortality and serious injury toward insignificant levels approaching a zero mortality and serious injury rate.

A second option would be to incorporate available technology and economic feasibility into an initial assessment of whether or not fisheries had achieved the ZMRG by the statutory

due date. If incidental mortality and serious injury by a commercial fishery was less than the PBR of all marine mammals but exceeded  $T_{ins}$  of one or more stocks on April 30, 2001, and existing technology would not allow further reductions of incidental mortality and serious injury in an economically feasible manner, then that fishery would have complied with the deadline specified in the MMPA. If, however, existing technology would allow further reduction in mortality within the constraints of economic feasibility, then that fishery would have to apply the appropriate technology to satisfy the ZMRG. This option would also allow for future development of technologies to continue to reduce incidental mortality and serious injury to insignificant levels approaching zero, and a fishery with incidental mortality above  $T_{ins}$  would have to incorporate newly developed technologies if such incorporation was economically feasible.

#### Comments Solicited

In the discussion above, NMFS has described a range of options for various aspects of the implementation of the ZMRG. NMFS solicits public comments about any of these options or suggestions of other options for consideration in a proposed rule. NMFS also solicits information from the public that would support the choice among options for implementing the ZMRG.

TABLE 1.—OPTIONS FOR THE INSIGNIFICANCE THRESHOLD

Option	Option 1 10 percent of PBR	Option 2 10 percent Delay in Recovery	Option 3 0.1 percent $N_{min}^1$ (cetaceans); 0.3 percent $N_{min}$ (pinnipeds)
Definition	Mortality and serious injury is less than 10 percent of the PBR level.	Mortality and serious injury would not cause more than a 10 percent delay in recovery..	Mortality and serious injury is less than 0.1 percent of the minimum population estimate of a stock of cetaceans and 0.3 percent of a stock of pinnipeds
	.....	Mortality and serious injury is less than 0.2 percent of the minimum population estimate of a stock for cetaceans and 0.6 percent for pinnipeds <sup>2</sup> .	Mortality and serious injury would not cause more than a 5 percent delay in recovery
	.....	Would maintain populations at or above 90 percent of the carrying capacity.	Would maintain populations at or above 95 percent of the carrying capacity
Pros	Familiar to NMFS' constituents because this definition was proposed in the 1995 proposed rule implementing section 118 of the MMPA (60 FR 31666, June 16, 1995). Easy to calculate and explain because it is based on the well understood PBR equation.	Easy to calculate because it is equivalent to the PBR equation using a recovery factor of 0.1 for all stocks.  Can be calculated through modeling to take other population parameters into account (e.g., severely declining stock).	Easy to calculate because it is equivalent to the PBR equation using a recovery factor of 0.05 for all stocks  Can be calculated through modeling to take other population parameters into account (e.g., severely declining stock)