Comments on the proposal for MPAs with the MBNMS.

Ray Hilborn May 2008

When examining any management action I ask first, "What is the objective," how would we evaluate any specific proposal. The MBNMS proposal begins with the following statement:

"the primary purpose of this action is to protect biodiversity and protect natural habitats, populations, biological communities and ecological processes"

Since the level of protection would be maximized by absolute protection, including protection from non-consumptive recreational use, and there is a clear tradeoff between human use, and level of protection, this objective statement provides no basis for determining how much protection is appropriate. Implicit throughout the report is the assertion that the current levels of protection are not sufficient, but there is no basis for making any decisions on how much is enough.

The report argues that only a small portion of species are protected under MSFCMA, ESA, MMPA and this implies that exploited species that are well managed are not protected. Further this implies that an ecosystem that is being fished under the guidelines of the MSFCMA is not protected, yet the clear intent of MSFCMA is to protect the productivity of species and ecosystems for sustainable utilization. In short, there is a clear implication in this document that protection means no human impact.

I believe it can be argued that the legal frameworks of the MSFCMA, ESA, MMPA, NEPA etc is to specifically protect the marine ecosystems in Federal waters, and to protect them so that sustainable human use is possible. The EFH provisions of MSFCMA are clearly designed for such provisions. The assertion that the existing legislation does not provide for protection seems to be fallacious.

The literature review is highly biased. For instance the Myers and Worm 2003 paper arguing that all the big fish of the ocean had declined by 90% by 1980, has repeatedly been shown to be wrong (Sibert et all 2006). The authors discuss the status of California grey whales, and cite a highly controversial genetics paper suggesting that the stock is not fully rebuilt, while ignoring the extensive work by NOAA and the Scientific Committee of the International Whaling Commission which suggest the stock has returned to its unfished abundance. In short the authors of this report have made no attempt to make a balanced analysis of the evidence on any of the issues but have been highly selective in their choice of literature to discuss. The literature review of MPA's is similarly highly biased, and (among other things) makes no attempt to recognize (1) the historically low exploitation rates on fishes in the system, (2) the fact that bottom contact gear historically covered only a small portion of the total habitat, (3) the recovery of the groundfish community in recent years to greater than 50% of its unfished abundance and (4) the extensive portion of the MBNMS that is closed to trawling.

The report is highly deficient in not recognizing the extent of existing areas closed to fishing, both from trawl bans, rockfish conservation areas, essential fish habitat and existing closed areas such as the Davidson Seamount. The report makes no attempt to determine if the protection from these activities is sufficient to achieve the objectives of the NMSA.

The document argues that the ecosystem needs further protection, and that the major ecosystem changes have been in the groundfish community. While admitting that some of the overexploited groundfish have begun to recover, the possibility that all of the ecosystem concerns cited are already addressed by the combination of various management agencies is ignored, and the document implies that the ecosystem has gotten worse since the original designation of the MBNMS. The document totally ignores the fact that the groundfish stocks (not including hake) are now at greater than 50% of the estimated unfished biomass and increasing.

The report argues that ONMS does not regulate fishing in the sanctuary and does not consider establishment of MPAs in the MBNMS as tools of fisheries management. This is patently silly. The primary human activity that would be regulated by MPAs is fishing, and any establishment of MPAs modifies the fisheries management regime in the MBNMS. The entire document suggest that the primary ecosystem change that has occurred has been in the groundfish stocks, and that fishing has been the dominant impact on groundfish. It is thus impossible to separate fisheries management from the status of the ecosystem.

Sibert, J, Hampton, J, Kleiber, P, and Maunder, M. Biomass, Size, and Trophic Status of Top Predators in the Pacific Ocean. Science. 2006;314: 1773-1776.