UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Monterey Bay National Marine Sanctuary
299 Foam Street
Monterey, California 93940

February 15th, 2008

Dear Members of the MPA Working Group and Sanctuary Advisory Council,

As you know, the time has come for a decision on the need for marine protected areas (MPAs) in federal waters of the Monterey Bay National Marine Sanctuary (MBNMS). I want to begin by thanking you for contributing your perspectives and knowledge to the consideration of this important issue. Your involvement over the last five years has been invaluable to increasing our understanding of the issue. The presentations and discussions we had at the December Advisory Council meeting were especially helpful and I commend you for your thoughtful input.

The National Marine Sanctuary Program (NMSP) has broad congressional direction to protect marine ecosystems. While the scope of this mandate allows for the management flexibility needed to protect dynamic sanctuary environments, charting the best course of action often takes time and patience. This is due to both the complexity of ocean issues and the NMSP's emphasis on extensive public input. In 2001, the MBNMS solicited this input from the public as part of a review and rewrite of its management plan. Over a five year period, the MBNMS received thousands of comments, held over a hundred meetings, and with the help of the SAC, identified 26 priority action areas that represent the future of Sanctuary management. Of these 26, the highest priority was the issue of marine protected areas in the Sanctuary. Given the complexity and diversity of opinions on this topic, the MBNMS convened a multi-stakeholder working group to develop a plan for evaluating the utility and potential siting of MPAs. As the State of California was re-focusing on MPAs in state waters through the Marine Life Protection Act, the MBNMS working group focused its attention on MPAs in the Sanctuary's federal waters (beyond 3 miles).

Over the last five years MBNMS staff and the members of the MPA working group have compiled data layers, completed a resource assessment, conducted socioeconomic studies, sponsored workshops, and developed a web-based decision support tool. However, while the working group was able to compile and consider all of this information, it was not able to agree on the fundamental question of whether there is a need for MPAs in federal waters. It was the MBNMS's hope that consensus on the question of need could be reached, or that by focusing on specific areas, all sides might be able to live with particular MPA configurations. However, in the absence of consensus on this question it is the MBNMS's responsibility to consider the arguments on both sides and make a decision regarding whether to move forward with a process to propose new MPAs. To that end, in December 2007, the MPA working group members presented their arguments for and against federal water MPAs to the Sanctuary Advisory Council, which in turn gave its advice to the MBNMS. Since then, we have received about twelve thousand comments on this issue and I have continued to meet with stakeholders and partners to explain the process and solicit input.

With the benefit of the community's advice, input from partner agencies, and the last six years of consideration, the MBNMS has concluded that there is a need for MPAs in the federal waters of the Sanctuary. The following pages discuss the reasons in support of this decision.

The Role of the National Marine Sanctuaries Act (NMSA)

The NMSA is unique in that the primary purpose is to set aside nationally significant areas of the marine environment for their permanent protection and to provide comprehensive ecosystem management to achieve this goal. As such, the NMSA provides broad authority for management actions focused on the protection and conservation of the full spectrum of biological diversity at a sanctuary. It can also fill gaps in protection that other authorities, such as the Magnuson-Stevens Fishery Conservation Act (MSFCA), Marine Mammal Protection Act, or Endangered Species Act, are not able to address. Through the NMSA, Congress mandated that national marine sanctuaries be managed to maintain the habitats and ecological services of the natural assemblage of living resources that inhabit these nationally signigicant marine areas. Among the purposes and policies of the NMSA is provision of authority for comprehensive and coordinated management to maintain the natural biological communities and to protect, restore, and enhance natural habitats, populations, and ecological processes. In specifying the management of "natural biological communities," "natural assemblages of living resources," and "natural habitats," rather than focusing on species populations *per se*, Congress essentially mandated that national marine sanctuaries be managed to protect and conserve ecosystem structure and function.

The Benefits of MPAs

As has been described to the Advisory Council in the past, the MBNMS has used zoning, or spatial management, extensively since its designation in 1992. The MBNMS has zones where:

- A harmful human activity otherwise prohibited throughout the Sanctuary is allowed (motorized personal watercraft, harbor dredge disposal, jade collecting)
- A harmful human activity is specifically prohibited (shark chumming, low over-flights)

These areas have proven effective in the context of managing the Sanctuary ecosystem by restricting or otherwise managing human activities.

Scientific research has shown that carefully crafted MPAs can be effective tools for conserving the diversity of animals and plants, protecting habitats, and increasing both numbers and individual sizes of some species. Recent studies have shown that an MPA, in which the removal or alteration of marine life is prohibited or restricted, generally contains a greater abundance of species, higher diversity of species, and larger fish within its boundaries relative to similar habitats outside the protected area. These larger fish produce many more young than do smaller fish, and studies for some species have shown that their young are healthier and more likely to survive. MPAs have also been shown to be a useful tool for preventing, slowing, or reversing the degradation of ocean habitats and maintaining the diversity and abundance of species inhabiting them.

Ocean ecosystems worldwide are threatened because of pollution, overfishing, habitat destruction or coastal development. In response, many governments, scientists, conservation organizations, commercial groups and citizens are increasingly discussing the idea of establishing new, well-designed MPAs to complement existing ocean management strategies.

In the United States, both the U.S. Commission on Ocean Policy and Pew Oceans Commission recently declared that our oceans are in trouble, and are calling for MPAs to be used as a management tool to support the protection of ocean ecosystems.

Existing Spatial Management Efforts in the MBNMS

Interest in implementing a system of marine protected areas has increased in California too. In 1999, the Legislature and Governor approved the Marine Life Protection Act (MLPA) mandating the state to design and manage an improved network of marine protected areas in state waters to protect marine life and habitats, marine ecosystems, and marine natural heritage. Currently the California Resources Agency and California Department of Fish and Game are partnering with others to achieve the goals of the MLPA, with initial efforts focused on developing a MPA network for California's central coast region. In September 2007, after an intensive public processes in ocean governance, the first round of 29 new state MPAs (204 square miles) went into effect on the central coast. 27 of the 29 areas are within the MBNMS.

In the federal waters of the Sanctuary, there are other spatial management measures in place that protect Sanctuary resources from extraction. For example, in 2002, as a means of protecting depleted groundfish species such as bocaccio and canary rockfishes, the Pacific Fishery Management Council and NOAA Fisheries imposed depth-based restrictions on the trawl and non-trawl groundfish fisheries termed Rockfish Conservation Areas (RCAs). Furthermore, in June of 2006, NOAA Fisheries published the final rule designating and protecting Essential Fish Habitat (EFH) for Pacific groundfish. The action closed large areas of the west coast, primarily to bottom trawling.

However, while the existing spatial management measures in state and federal waters of the Sanctuary provide valuable protections from fishing impacts in certain habitats. Those habitats further offshore are either not adequately represented in existing MPAs, or not fully protected by the gear based restrictions associated with EFH or the temporary RCAs.

The Need for MPAs in the MBNMS

The MBNMS has three principal reasons for moving forward with MPAs in the federal waters of the Sanctuary: 1) There is a need for areas where the natural ecosystem structure and function are restored and maintained; 2) there is a need for research areas to examine human impacts to the marine environment; and 3) there is a need to preserve some areas in their natural state for future generations. Additional detail in support of these reasons is provided below. Further, the MBNMS, in consultation with NOAA Fisheries, will be releasing shortly an ecosystem analysis in support of this decision.

1) There is a need for areas where the natural ecosystem structure and function is restored and maintained.

The environmental condition of the Sanctuary is subject to major alterations that are largely due to the effects of human activities. Threats to Sanctuary resources, such as water quality or habitat complexity, fall into two general categories: 1) those that involve exploitation of resources above a certain level or threshold and 2) those that destroy or degrade marine habitats

and their associated biological communities. Exploitation includes both directed harvest and incidental take of marine life. Threats to habitat include activities leading to physical alteration, various sources of pollution, coastal development, and introduction of alien species. Many of these threats are interrelated and have cumulative impacts.

The Sanctuary ecosystem has been impacted from human activity (e.g., fishing activities) to a degree where the MBNMS believes that it is appropriate to set aside some areas in federal waters where these impacts are minimized. These impacts include altered size and age structure of fish and invertebrate species, altered habitats, altered species assemblages and biodiversity, reduced abundance, and altered ecosystem function. Where appropriate, it is envisioned MPAs in Federal waters could build off of and supplement the state MPAs established under the MLPA in the Sanctuary. While there are other management measures in place such as those under the MSFCA, their stated purpose is to manage fisheries and are not designed to provide areas where the natural ecosystem structure and function are restored and maintained throughout the Sanctuary's representative habitats.

It is important to reiterate that the primary purpose of any action taken by the MBNMS to establish MPAs in the Sanctuary is the conservation of Sanctuary ecosystem structure and function. This action would not be taken for the purpose of managing any single human activity or impact, but rather to manage for the protection of the Sanctuary ecosystem from a wide variety of existing or potentially new threats.

2) There is a need for research areas to examine human impacts to the marine environment.

Setting aside areas of the Sanctuary as MPAs can provide critical research opportunities in offshore habitats in order to more fully understand the effects of fishing and other uses on the Sanctuary environment. Even though the Sanctuary is one of the better understood marine areas in the world, there is a need to better distinguish human induced change from natural variability. In its 2001 publication entitled "Marine Protected Areas – Tools for Sustaining Ocean Ecosystems," the National Research Council characterized the need for MPAs to help understand marine ecosystems:

> *Understanding the influence of human actions on marine systems is critical to evaluating the need for and effectiveness of management actions, but differentiating between natural and anthropogenic events is extremely difficult. Any indicator of change in a system must be compared to a well-defined natural standard, or benchmark, against which the magnitude of the change can be evaluated to determine its cause and significance. Without control areas, such as MPAs, that are relatively free from human influence to compare with areas altered by human activities, explaining the sources of variability becomes even more difficult...There is a significant need for fishery-independent sampling programs that include areas closed to fishing and other activities that disturb fish populations and habitats.*

While the new MPAs in state waters do afford the opportunity to distinguish human induced change from natural variation and fluctuation, offshore habitats are not represented. These

deeper water habitats are distinct from those nearshore as is their likely response to fishing impacts. Understanding impacts in these commercially important offshore areas is not only critical to effective Sanctuary management, but is also potentially key to effective ecosystem based fisheries management.

The Marine Life Protection Act was intended in part to help the State understand the marine environment by providing the opportunity to study areas that are not directly impacted by fishing. Having comparable areas in federal waters, potentially adjacent to state MPAs, would have the benefit of not only providing a greater range of habitat types in which to study the effects of fishing, but larger contiguous areas could provide better control sites and enhanced opportunity for complementary federal and state research efforts.

3) There is a need to preserve some areas in their natural state for future generations.

Section 301(a)(4)(c) of NMSA states that the National Marine Sanctuary System will maintain for future generations the habitat, and ecological services, of the natural assemblages of living resources that inhabit national marine sanctuaries (16 U.S.C. 1431(a)(4)(c)). There are certain areas of the Monterey Bay National Marine Sanctuary environment with extraordinary features or attributes, such as habitat, biological diversity, or sensitivity, and warrant a higher level of protection than is currently provided by MBNMS regulations or those of other authorities, so that those features remain conserved for future generations in as close to a natural state as possible This rationale of "wildernesses of the sea" (areas of the marine environment that, like their counterpart on land, have inherent or intrinsic value due solely to their unique and/or exceptional qualities and receive the maximum level of protection) received strong support during the public comments periods on this process, as well as during the comment period for the Joint Management Plan Review.

In addition, affording these areas with an elevated level of protection will provide them security against currently unknown human and environmental impacts and threats that may arise in the future. Changes in technology to a wide variety of marine-dependent human activities, such as energy development, communication systems, desalination, or aquaculture often result in significant deviations from how the activity had been previously conducted. In many cases, although these technological changes occur quickly, it takes several years for their impacts to be fully understood. Although the impacts of these activities may not immediately be known, it is the NMSP's responsibility to steward our sanctuaries and to ensure, as much as possible, that they are enjoyed and appreciated by the American public in the future. Providing certain areas of the Sanctuary with elevated protection, while continuing to allow compatible uses elsewhere, furthers this goal.

Furthermore, by managing these areas with additional protections in place, the MBNMS seeks to reduce the effects of cumulative impacts from human activities or from large scale environmental changes, such as climate change that are already occurring or may occur in the future. Restricting extractive or invasive human activities in these areas is expected to limit the effects on their special qualities to only those impacts that may occur as part of environmentally-driven events. Marine protected areas, by controlling for impacts for extractive human activities, will allow the MBNMS to assess the nature and severity of these events over time.

Conclusion

While this decision comes after years of public process and stakeholder input, much work remains ahead. Over the next several months, MBNMS staff will be asking the Sanctuary Advisory Council and the Pacific Fishery Management Council for input on how best to build on the efforts of the MPA working group to ensure an effective and timely public process.

In deciding to move ahead, the NMSP is committing to dedicate the resources necessary to fully capitalize on the community's continued input as well as to adequately understand the ecological and socioeconomic impacts of any proposed action.

Any regulatory action proposed by NOAA to designate MPAs in Federal waters, whether under the NMSA, MSFCA or both, to specifically designate areas will be accompanied with a full environmental analysis per the requirements of the National Environmental Policy Act and the Administrative Procedure Act.

Thank you again for your valuable time and advice, and willingness to help chart the course.

Sincerely,

Paul Michel

Paul Michel
Superintendent