

# **Monterey Bay National Marine Sanctuary**

**Marine Protected Area Planning Process**

**April 18, 2008**

**Sanctuary Advisory Council Meeting**

# **The National Marine Sanctuaries Act**

- Congress mandated that national marine sanctuaries be managed to protect biodiversity and ecosystem components
- Focus is on protection and management of natural habitats, populations, biological communities and ecological processes
- The NMSA provides for a comprehensive and coordinated approach to conservation and management of special marine areas: ecosystem-based management
- NMSA may complement single species management of the Magnuson-Stevens Act, the ESA and MMPA

# Impacts to ecosystem components in MBNMS

- Natural and anthropogenic impacts to ecosystem components of the MBNMS
  - Seasonal upwelling, El nino, climate change, etc.
  - Pollution, invasive species, disease, destructive fishing practices (over fishing, trawling impacts to benthic environment), coastal development, aquaculture, etc.
- Tools to address impacts
  - Water quality programs, effective fishery management practices (by the PFMC), marine zoning:
  - MPAs to address impacts to ecological interactions among biological populations, communities, and their habitat, *and* future impacts to the system

*Use of complementary tools to reach multiple management objectives*

# MPAs as a tool for ecosystem-based management

Research has shown that carefully crafted MPAs can be effective tools for maintaining and improving:

## Populations

- species diversity
- species number and size
- larger fish produce many more young that are healthier and more likely to survive

## Communities

- community structure such as trophic structure in foodwebs
- benthic habitat quality (more complex and heterogeneous)

## Ecosystems

- ecosystem productivity and stability
- ecosystem resiliency: ability to recover, resist and reverse natural and human disturbances
- serve as research areas to better distinguish between natural and anthropogenic perturbations to ecosystem components

# Existing Protections

## EFH-RCA-MLPA

Existing spatial management measures in state and federal waters of the Sanctuary provide valuable protections from impacts in certain habitats, but habitats further offshore are either:

- Not adequately represented in existing MPAs, or
- Not adequately protected by the gear based restrictions associated with EFH or the RCAs
- Fishery-based MPAs that protect single species - not ecological interactions of non target species and the habitat

# Existing MBNMS Zoning

Zones or MPAs are not a new tool of spatial management for the MBNMS:

- Certain human activities otherwise prohibited throughout the Sanctuary are allowed (motorized personal watercraft, harbor dredge disposal, jade collecting)
- Certain human activities are specifically prohibited (shark chumming, low over-flights)

# **MPAs in federal waters of the MBNMS as an ecosystem-based tool to address**

- Preservation of unique and rare areas in their natural state for the benefit of future generations
- Preservation of areas where natural ecosystem components are maintained and/or restored
- Designation of research areas to differentiate between natural variation versus human impacts to ecological processes and components.

## **....unique and rare areas... ....for the benefit of future generations**

- The NMSA states that the NMSP will maintain for future generations the habitat, and ecological services, of the natural assemblages of living resources
- Intrinsic or inherent value: areas of unique and exceptional natural qualities
- Examples may include deep-sea coral and sponge communities, chemosynthetic biological communities
- Proactively steward special places within the MBNMS



## **....areas where natural ecosystem components are maintained and/or restored**

- Fishing activities have altered population abundances, and size and age structure of species, community composition, and habitat structure.
- Impacts of fishing on community and ecosystem structure still not well understood.
- Precautionary approach dictates setting aside a few areas where human activities are minimized to hedge against scientific and management uncertainty.
- Intact ecosystem components are also more resilient to natural and anthropogenic impacts.

## **....research areas to differentiate between natural variation and human impacts .....**

- Developing an understanding of the interactions of living marine resources is key to effective management.
- Setting aside areas of the Sanctuary as MPAs can provide critical research opportunities in offshore habitats in order to distinguish natural variation from human induced impacts
- While the new MPAs in state waters do afford the opportunity to distinguish human induced change from natural variation, offshore habitats are not adequately represented

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# The Decision - clarifications

- Was not a comment on existing conservative management measures by the PFMC - recent stock assessments show improvements to some fishery stocks.
- Does not mean the MBNMS wants to manage fisheries - the CDFG and PFMC/NMFS manage fisheries.
- Was made after an evaluation of current management measures, including supplemental information provided to the MBNMS by the ACSF, at meeting MBNMS MPA objectives
- Included many hours of work by stakeholders, including scientists, on the MBNMS MPA working group
- Process is coordinated with our local partners at CDFG, PFMC, NMFS
- Affects only the federal portions of the MBNMS, not any other west coast sanctuary
- Does not automatically require a change to the Designation Document

# Clarification of Purpose

- The primary purpose for this decision is the protection of biodiversity and ecosystem components of the Sanctuary
- The immediate action is to evaluate opportunities for enhancing or modifying existing PFMC MPAs, or creating additional MPAs to meet MMNMS goals.
- Any future action would not be taken for the purpose of managing any single human activity or impact

# The Process Ahead

- Asking the PFMC and SAC for input on how best to build on the efforts of the MPA working group to ensure an effective and timely public process:
  - *Attended the April PFMC meeting week of April 7, 2008*
  - *Coordinated with NOAA Fisheries in drafting the Rational for the MPA Decision*
- Asking for input on “Concepts for a Process” and proposed timeline (see handouts)

# Process Concepts (1-5)

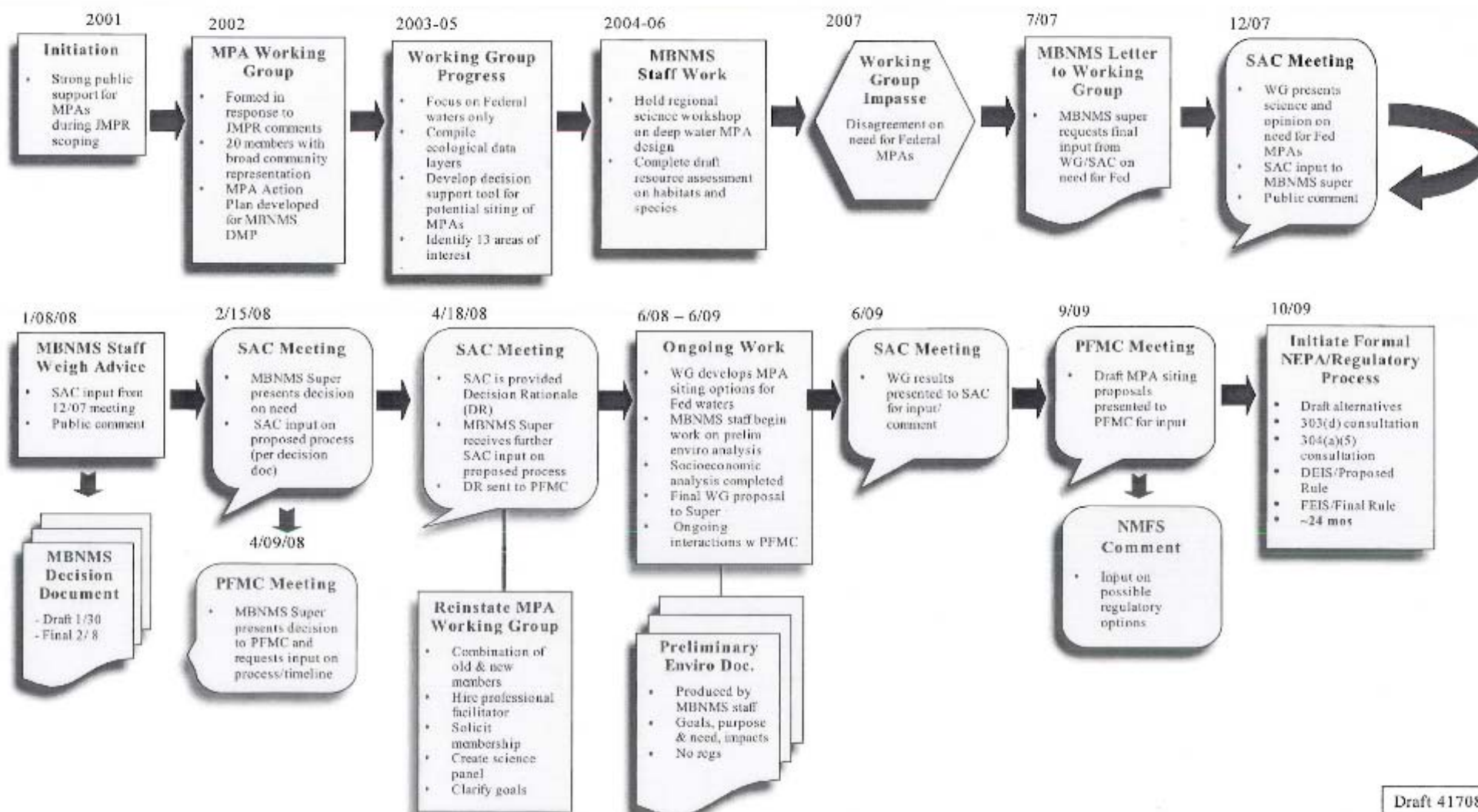
1. The process ahead should capitalize on previous work
2. The membership of the MPA working group should remain approximately the same, some adjustment may be warranted
3. Science members should remain involved but serve as subject matter experts, not as stakeholders. A separate but public science panel should be convened to evaluate eventual proposals - *include PFMC SSC members as part of science panel*
4. Working group meetings should be professionally facilitated
5. Working group and science panel meetings should be public and any products made publicly available

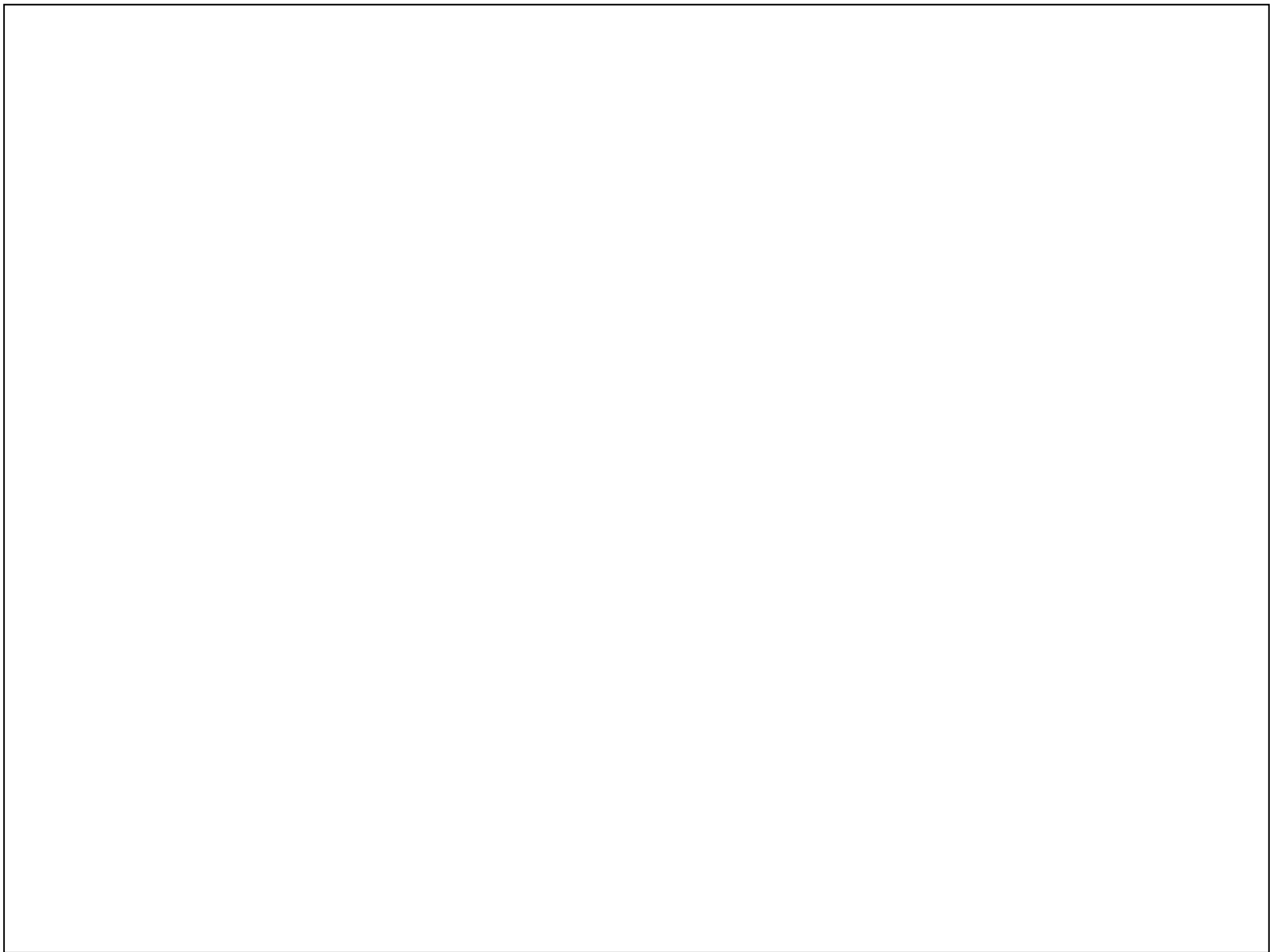
# Process Concepts (6-11+)

6. The MPA planning process should provide for dialogue with and input from PFMC (*prior to the NEPA phase and frequently*)
7. There is a need for socioeconomic study
8. A starting point for discussions should be the Areas of Interest identified by the working group adjacent to MPAs in state waters
9. Adjacent State and Federal waters MPAs should generally have parallel regulations
10. The working group will have approx. 6 meetings over 6 months to develop proposals to forward to the SAC.
11. Decisions on implementing authority will be made in the future
12. *Include a thorough characterization of existing protective measures as the status quo alternative and include the Davidson Seamount as part of the Sanctuary when developing the alternatives*



# DRAFT DECISION PROCESS AND TIMELINE for the MONTEREY BAY NMS CONSIDERATION OF MARINE PROTECTED AREAS





# Use and protection of marine resource

- “to facilitate to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities.”  
(Section 301(b)(6))
- This provision of the NMSA indicates that in the interest of facilitating public and private uses of sanctuary resources, resource protection is the primary objective and therefore takes precedence. Human uses and/or activities should be facilitated only where practicable in the context of resource protection.
- Vast portions (>98%) of the MBNMS facilitate commercial and recreational extraction. Less than 2% is off limits to all forms of fishing in nearshore marine reserves implemented by the state.