Monterey Bay National Marine Sanctuary
Ecosystem-based Management Initiative
SAC Meeting December 9th
EBM Initiative
Goal

Enhance ecosystem-based management & marine spatial planning in MBNMS by applying the best available science and integrating and coordinating with partner agencies.
Current MBNMS seascape

- zones created in isolation
- overlapping jurisdictions
- Sector by sector management

EBM Initiative proposes to work collaboratively with various zoning agencies to create a plan that incorporates EBM goals with goals of other organizations.
EBM Initiative
Objectives

- Maintain/restore marine ecosystem health and function;
- Ensure protection of unique and rare features;
- Facilitate research to differentiate between natural variation versus human impacts;
- Facilitate ecologically and economically sustainable uses, including fisheries.
Basic steps of Initiative

1. Information gathering
2. Propose & implement strategies
3. Monitor, adapt, assess
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Step 1. Information Gathering

1. Define criteria
2. ID Threats & Opportunities

Proposed Actions

- Spatial: Develop map of options
- Non-spatial: Propose strategies

GIS stakeholder tool

Create EBM Marine Spatial Plan for MBNMS & Implement Projects

Public Input
Step 1. Information gathering
FY 2011

Follow-up Research Areas

Unique rare workshop

Recreational uses workshop

Sustainable Uses workshop

Integrated Ecosystem Assessment Complete

Ecosystem Health workshop

Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  Oct  Nov  Dec

Interagency Consultation

Essential Fish Habitat Review (NOAA Fisheries)

Central Coast Ground Fish Project

Halibut Trawl Fishing proposal (Monterey)
Stakeholder engagement

- Public comment
- Collaborations
- Partner Advice
- Sanctuary Advisory Committee
- Workshops
- EBM Subcommittee
- Proposals for ideas

Information gathering

Propose & Implement Strategies

Adaptive Management

Represents stakeholder engagement
Step 1. Information gathering
Sources of Foundational Information

DRAFT Integrated Ecosystem Assessment

Monterey Bay National Marine Sanctuary
CONDITION REPORT 2009

Natural Resource Assessment

Integrated Ecosystem Assessments: Developing the Scientific Basis for Ecosystem-Based Management of the Ocean

A series of prominent and controversial papers about the role of marine ecosystems has occupied the pages of high-profile journals over the last decade (1–7). While some might quarrel with the point where large-scale, comprehensive EBM is broadly accepted as crucial for effective marine conservation and resource management (10), while some policy makers clearly grasp the utility of an EBM approach, untangling the goals of EBM, IEs, as we envision them, does not necessarily imply single-sector management: instead, they inform the management of diverse, potentially conflicting, oceanic sectors. As such, we envision EBM as...
Objective 1. Ecosystem Health

Information gathering

DRAFT IEA completed

Natural Resource Assessment

DRAFT II. IEA completed

Ecosystem Health workshop

Scoping Stakeholder engagement

Oct 2010

Mar 2011

Oct 2011

Nov 2011
Integrated Ecosystem Assessment

2010
- Ecosystem health
- Ground fish
- Salmon
- Sturgeon

2011
- Ecosystem health
- Ground fish
- Salmon
- Sturgeon
- Pelagic species
- Water quality
- Forage Fish
Objective 2. Unique & Rare

Information gathering

- Prepare workshop
- Work with partners
- Unique/Rare workshop
- Local Knowledge
- Scoping Stakeholder engagement
- Follow-up
- Criteria for Unique Rare identified

- Nov 2010
- Feb 2011
- Sept 2011
- Dec 2011
Objective 3. Facilitate Research

Information gathering

Research Areas workshop

Workshop report completed & distributed

Follow up

Criteria for Research Areas Developed

Stakeholder engagement

- Oct 2010
- Dec 2010
- Jan 2010
- Nov 2011
October 26th, National Marine Fisheries Service Santa Cruz Lab

**Participants:** Expert scientists with experience in MBNMS. Collaborative partners (e.g. fishermen). EBM Subcommittee.

**Open to the public**

**Solicited input from EBM Subcommittee for attendees.**
Objective 4. Promote sustainable uses

Information gathering

- **Sustainable uses brainstorming**
- **Sustainable Use workshop #1**
- **Sustainable Use workshop #2**

Stakeholder engagement:
- **Oct 2010**
- **Apr 2011**
- **Oct 2011**

Potential projects by partners and ocean interest users:

- Individual Transfer Quota Central California Coast
- Emerging Issues
Step 2. Propose and implement strategies
Pathways (existing & emerging)

- Sustainable fishing projects
- Essential Fish Habitat
- MSA/NMSA
- ITQ Ground fish project
- Sustainable seafood market
- Coastal & Marine Spatial Planning
- Ecosystem Fishery Manager Plan
National Priority Objectives

1. Ecosystem-Based Management: Adopt ecosystem-based management as a foundational principle for the comprehensive management of the ocean, our coasts, and the Great Lakes.


3. Inform Decisions and Improve Understanding: Increase knowledge to continually inform and improve management and policy decisions and the capacity to respond to change and challenges. Better educate the public through formal and informal programs about the ocean, our coasts, and the Great Lakes.

4. Coordinate and Support: Better coordinate and support Federal, State, tribal, local, and regional management of the ocean, our coasts, and the Great Lakes. Improve coordination and integration across the Federal Government, and as appropriate, engage with the international community.

5. Resiliency and Adaptation to Climate Change and Ocean Acidification: Strengthen resiliency of coastal communities and marine and Great Lakes environments and their abilities to adapt to climate change impacts and ocean acidification.

6. Regional Ecosystem Protection and Restoration: Establish and implement an integrated ecosystem protection and restoration strategy that is science-based and aligns conservation and restoration goals at the Federal, State, tribal, local, and regional levels.

7. Water Quality and Sustainable Practices on Land: Enhance water quality in the ocean, along our coasts, and in the Great Lakes by promoting and implementing sustainable practices on land.

8. Changing Conditions in the Arctic: Address environmental stewardship needs in the Arctic Ocean and adjacent coastal areas in the face of climate-induced and other environmental changes.

9. Ocean, Coastal, and Great Lakes Observations, Mapping, and Infrastructure: Strengthen and integrate Federal and non-Federal ocean observing systems, sensors, data collection platforms, data management, and mapping capabilities into a national system, and integrate that system into international observation efforts.

• Consistent with EBM Initiative
Through collaborative participatory process:

- A comprehensive spatial, integrated EBM plan for MBNMS that optimizes resource protection with sustainable uses

- This plan will be developed by considering other agency policy decisions (i.e. EFH Review, Ecosystem FMP)

- Modifications in spatial & non-spatial management may be proposed

- Modifications in management may be achieved thru regulatory & non-regulatory means
Moving toward…

Enhanced Ecosystem Health