

National Marine Sanctuaries
National Oceanic and Atmospheric Administration



NATIONAL MARINE
SANCTUARIES

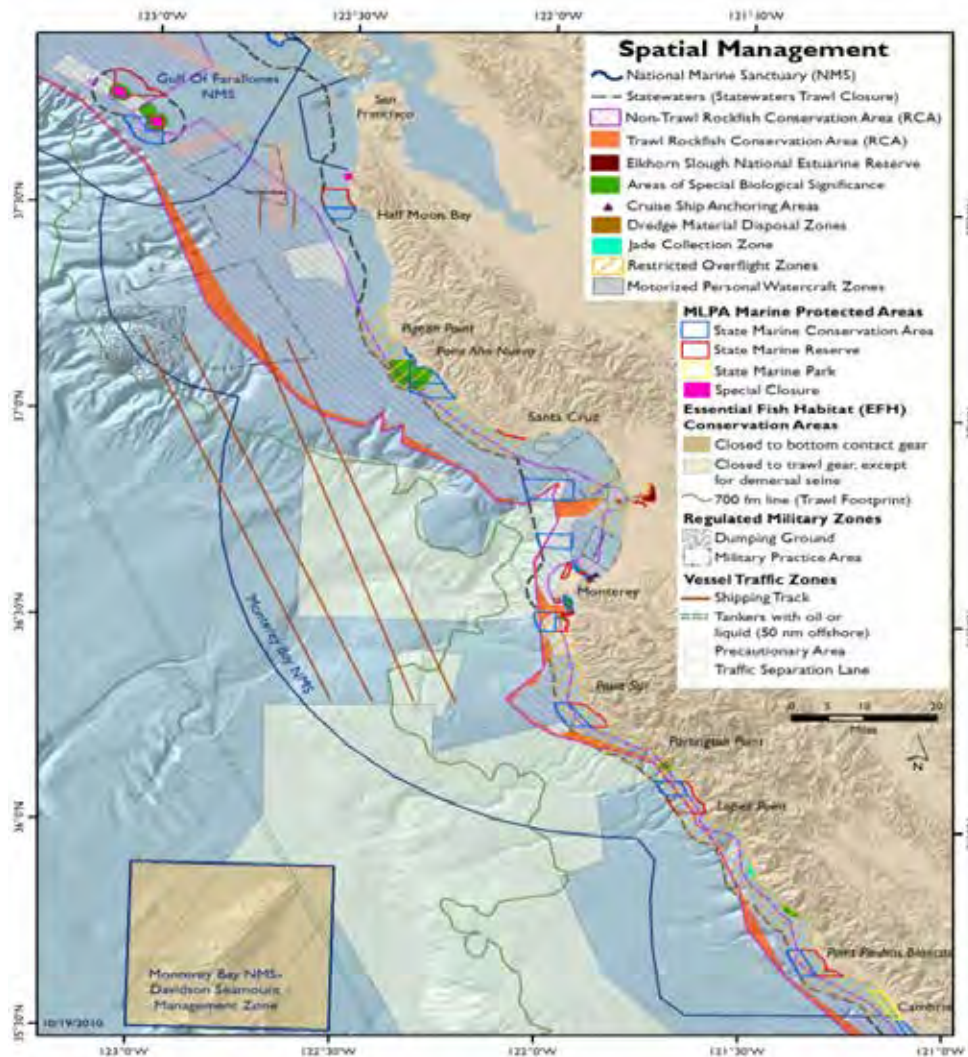
MONTEREY BAY

Monterey Bay National Marine Sanctuary Ecosystem-based Management Initiative

SAC Meeting Carmel Valley


April 21st, 2011

EBM Initiative Goal



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

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

2010

2011

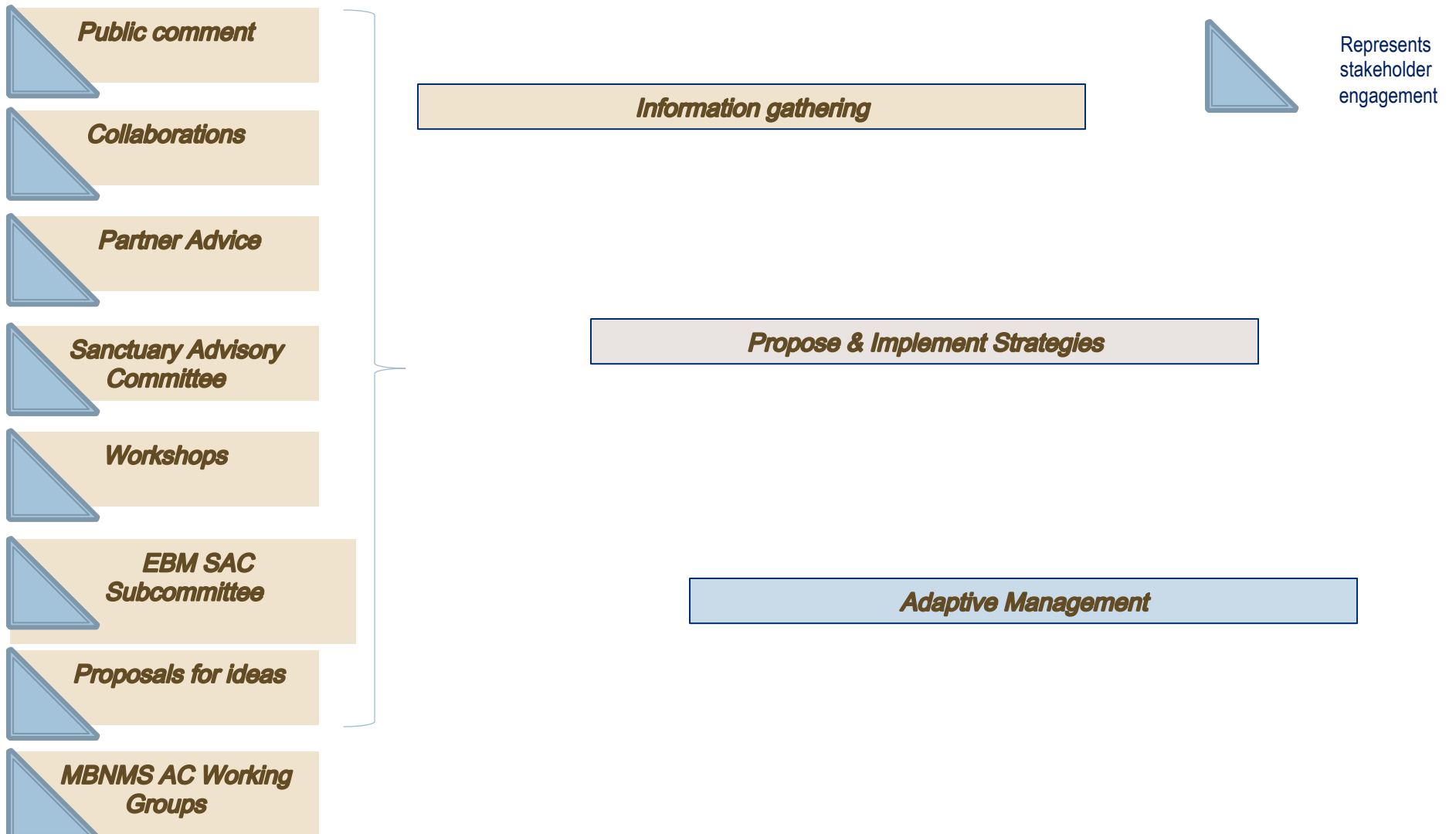
2012

2013

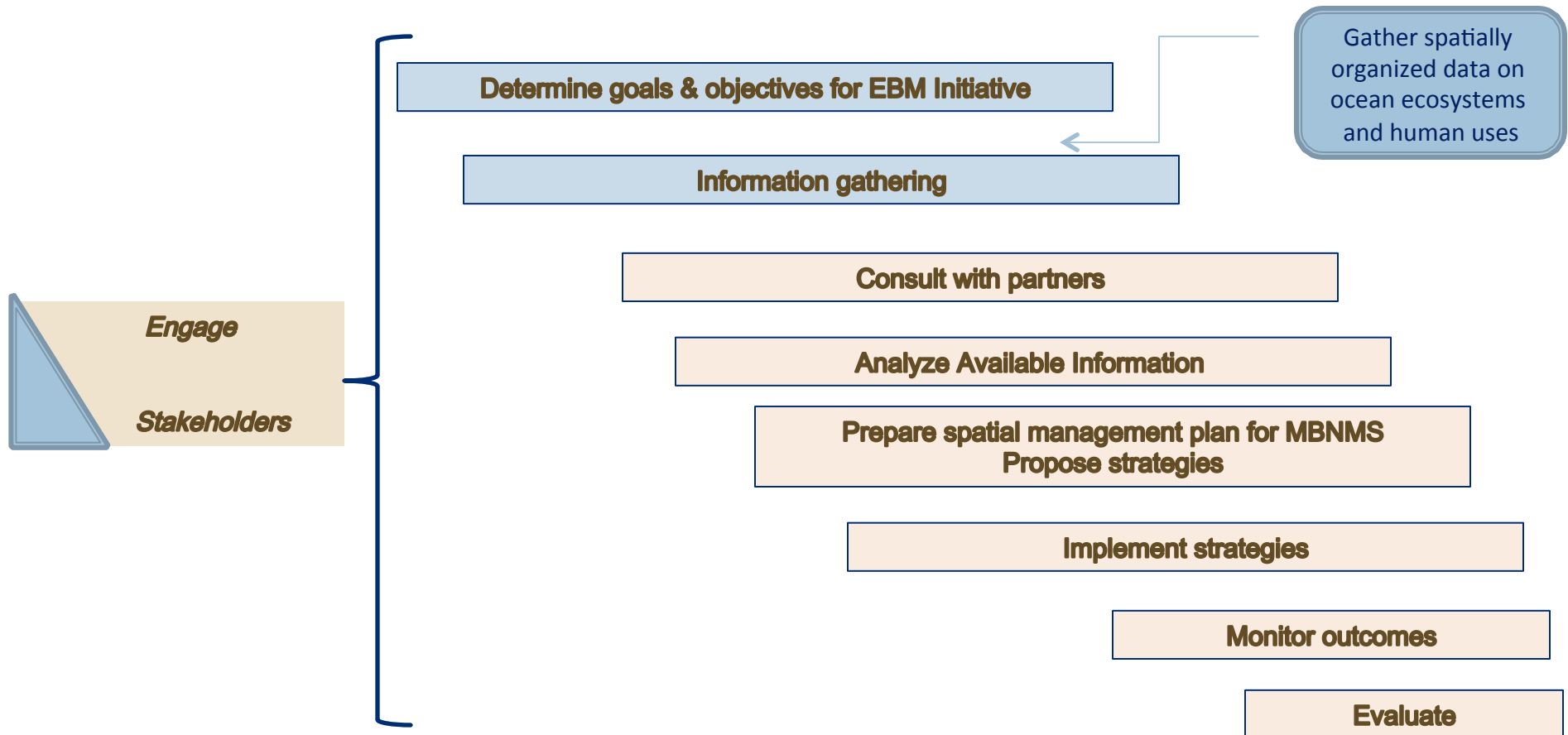
2014

2015

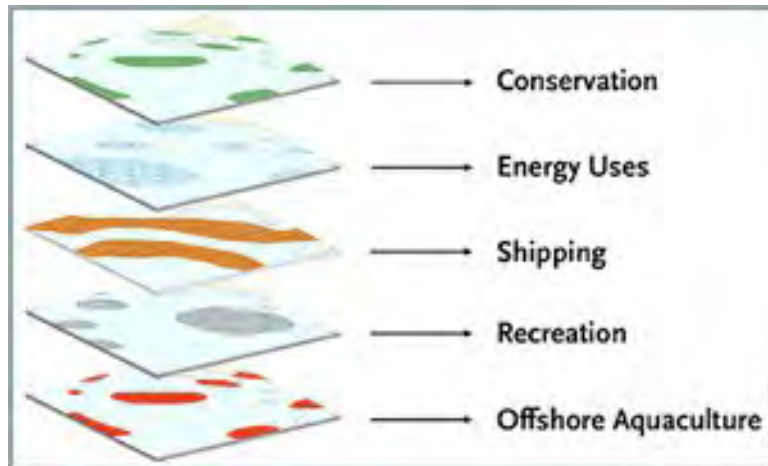
Stakeholder engagement



EBM Coastal & Marine Spatial Planning



Potential Stakeholders

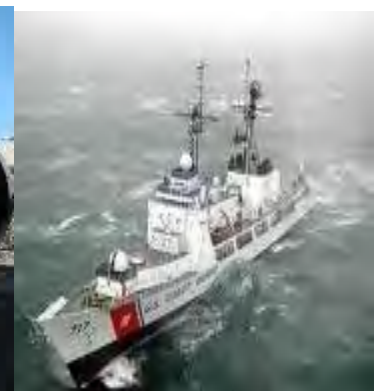


Stakeholder groups in MBNMS

- Agricultural community
- Boaters, fishers, sailors, divers
- Industry- shipping, business, aquaculture, cruise ships, labs, aquariums
- Alternative energy- power plants, wave energy, wind turbines



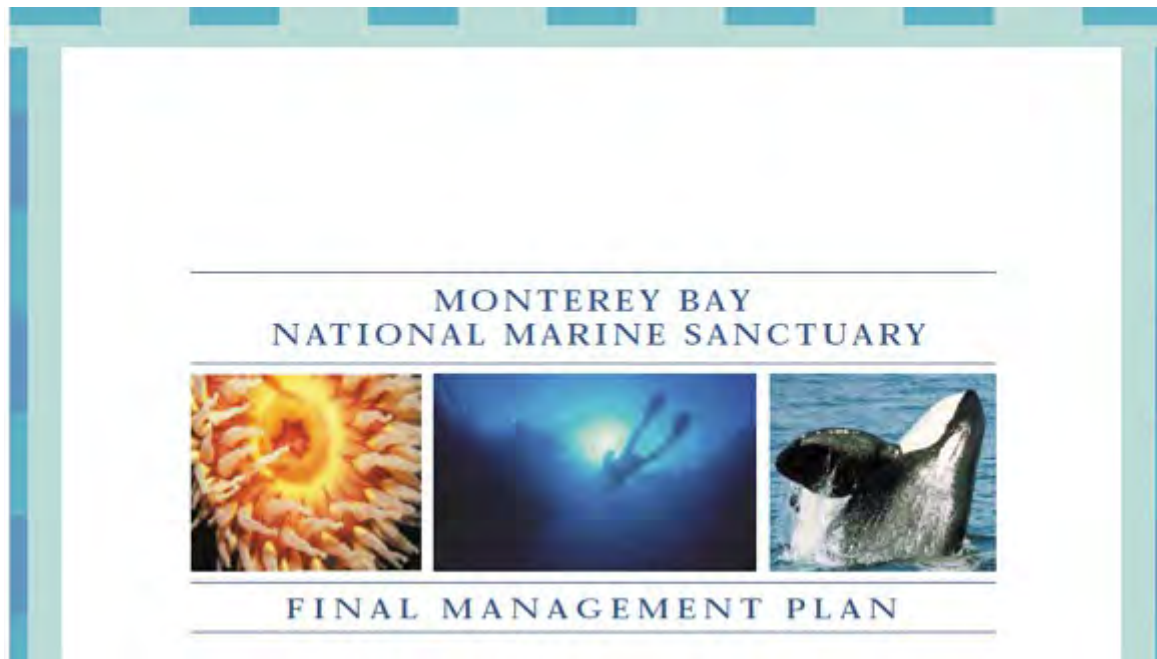
We need your help to identify who and what different groups are doing and how they can get engaged in the EBM Initiative...



EBM Initiative aligned with MBNMS Management Plan

Addresses Mgt Plan

- Coastal development
- Ecosystem protection
- Partnerships & opportunities
- Water Quality
- Wildlife disturbance
- Cross-Cutting





1. Information Gathering FY 2010-2012

Short term actions

1. Information gathering

Follow up Research Workshop

Unique rare Workshop May 2011

*Ecosystem health
IEA revision and data gathering*

*Sustainable Use
Recreational boating speaker series*

*Sustainable Use
Identify projects and host workshop*

2010

2011

2012

Objective 1. Ecosystem Health

Information gathering

*1st
Generation
IEA
completed*

*Natural
Resource
Assessment*

*DRAFT IEA
completed*

*Ecosystem
Health
workshop*

Scoping
Stakeholder engagement

**Oct
2010**

**Mar
2011**

**Oct
2011**

**Nov
2011**

An Integrated Ecosystem
Assessment of the California
Current

Ecosystem Health, Salmon, Groundfish, and Green
Sturgeon



Objective 1: Ecosystem Health

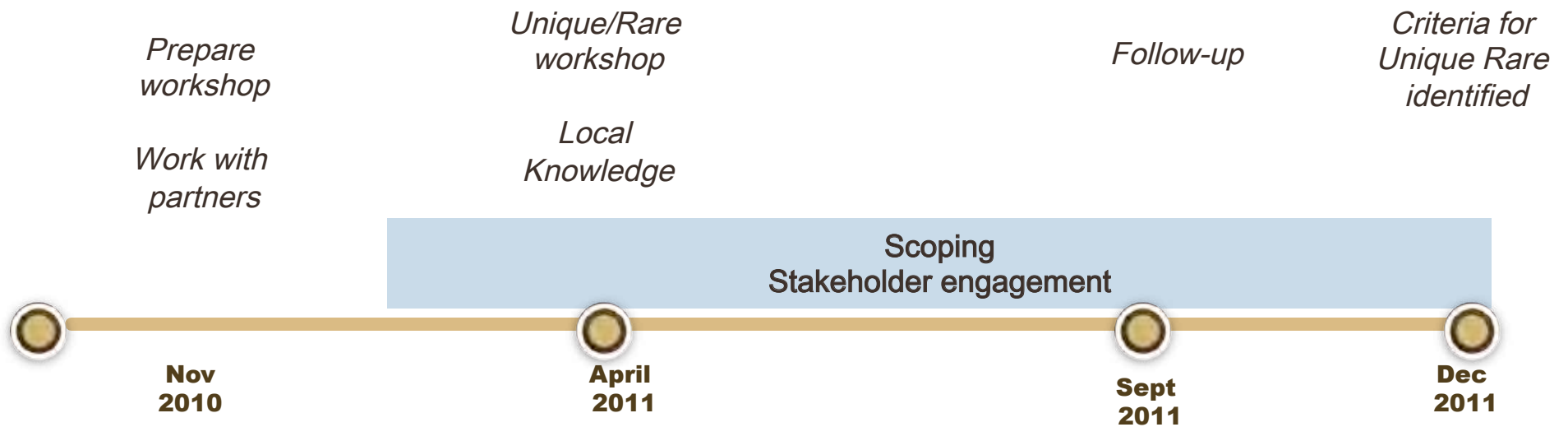
Integrated Ecosystem Assessment

- Scoping of the national IEA will be piloted in Monterey Bay
- 2011-2012
- To determine desired ecosystem services that public wants from Monterey Bay



Objective 2. Protect Unique & Rare

Information gathering



Objective 2. Unique/Rare

- May 24th Unique and Rare information gathering workshop
- NMFS Santa Cruz
- Goal: identify biological, oceanographic, geological features and submerged cultural resources that are unique and rare in Monterey Bay National Marine Sanctuary and to identify supporting data sources and information gaps.

Unique & Rare workshop

- **Location:** National Marine Fisheries Service
 - Southwest Fisheries Science Center
110 Shaffer Road, Santa Cruz, CA 95060

When: 8:30am - 5:00pm on Tuesday May 24, 2011

Workshop Objectives:

- 1: Briefly describe the MBNMS EBM Initiative
- 2: Refine the draft list of unique and/or rare features
- 3: Review the attributes applied to features
- 4: Identify relevant data sources (e.g., GIS data layers, scientific papers, unpublished data, expert opinion) and information gaps
- 5: Provide opportunity to share the process being used to identifying unique and/or rare features in MBNMS and gain feedback

Questions/Homework for you

Unique/Rare workshop

Communicate with your constituents to find out:

- 1) What are the Unique and Rare Features in the MBNMS- including submerged cultural resources, biological, oceanographic, and geological?
- 2) Are there data sources available to inform the URF workshop?

Objective 3. Facilitate Research

Information gathering

*Research
Areas
workshop*

*Workshop
report
completed
& distributed*

*Follow up
Task Force*

*Identify
strategies to
facilitate
research*

Stakeholder engagement

**Oct
2010**

**April
2011**

**Dec
2011**

Research Areas workshop

Key findings

- Many scientists feel they are also stakeholders
- Current spatial management is very complicated. Each agency focused on own mandates and regulations. CMSP allows more holistic and cooperative perspective.
- Regulations and permitting requirements limit ability to do research.
- Areas are needed where manipulative research is promoted to study both applied and basic research questions.
- Sentinel sites could serve to protect scientific equipment with efficient enforcement, and add value by co-locating compatible individual research studies, sharing equipment, or data.

Research workshop summary Submitted to National Marine Sanctuary Conservation Series



NATIONAL MARINE SANCTUARIES

- Home
- About Your Sanctuaries
- Visiting Your Sanctuaries
- Expeditions
- Education
- Science
- Condition Reports
- Science Needs
- Characterization
- Monitoring
- Research
- Historical Ecology
- In the Field
- Conservation Series
- References
- Socioeconomics
- Maritime Heritage
- Management
- Resource Protection
- Laws & Events
- Photos & Videos



SANCTUARY SCIENCE

Conservation Series

The Marine Sanctuaries Conservation Series provides a forum for publication and discussion of the complex issues the National Marine Sanctuary Program faces. Topics of published reports will vary substantially and may include descriptions of educational programs, discussions on resource management issues, and results of scientific research and monitoring projects. The Series will facilitate integration of natural sciences, socioeconomic and cultural sciences, education, and policy development to accomplish the diverse needs of NOAA's resource protection mandate.



- April 2011
- Distributed to participants & interested parties after formal review
- Press Release

Objective 4. Promote sustainable uses

Information gathering

*Sustainable
uses
brainstorming*

*Recreational
Boating
Speaker Series*

*Sustainable
Use workshop
#1*

Socio-economic profile

Stakeholder engagement



**Oct
2010**



**Aug
2011**



**Dec
2011**

Potential projects by partners and ocean interest users

Individual Transfer Quota Central California Coast
Emerging Issues

Sustainable Fishing Association

Objective 4: Promote sustainable uses



- MBNMS & Save our Shores received National Geographic grant
- Engage recreational boating community-
yachting & kayaking, paddling
- Speaker Series – May-July 2011

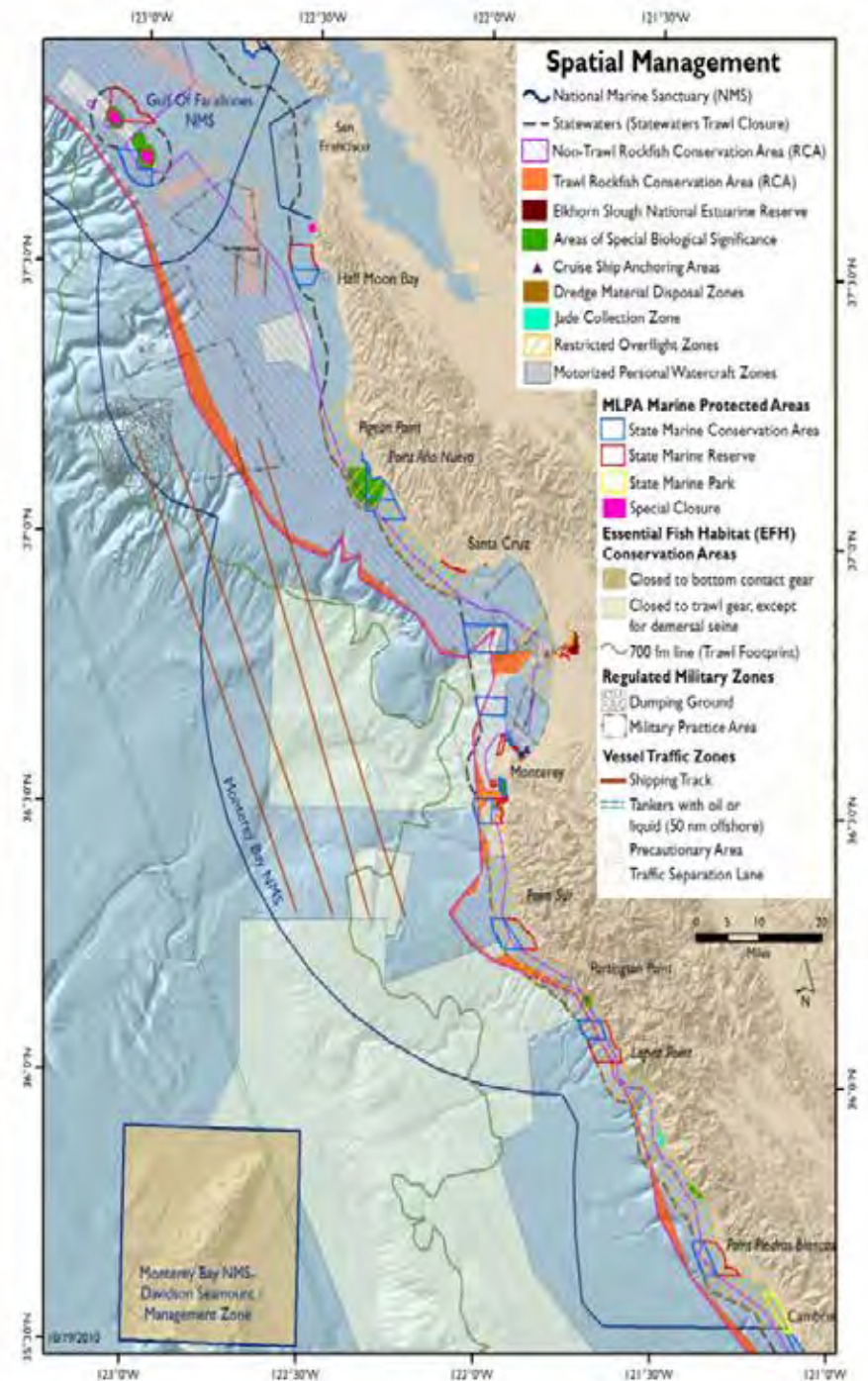




2. Propose & Implement Strategies FY 2011-2013

Potential pathways and partnerships

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



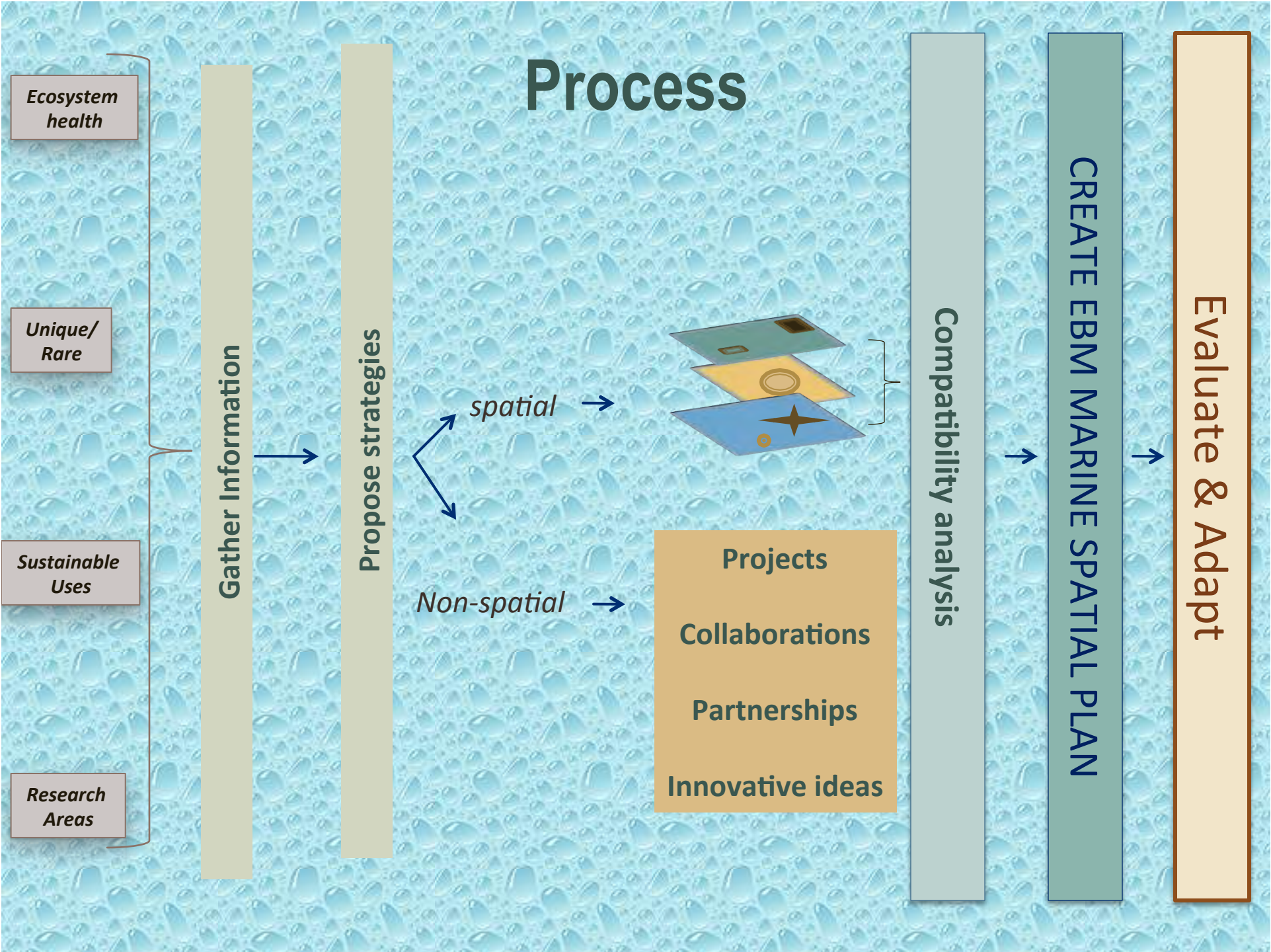
Propose & Implement Strategies

- Are there key intersection points that you know of?
- Engage and involve existing programs, activities and initiatives



3. Evaluate & Adaptive Management FY 2013-.....

Process



Ecosystem health

Unique/Rare

Sustainable Uses

Research Areas

Gather Information

Propose strategies

spatial →
Non-spatial →

Projects
Collaborations
Partnerships
Innovative ideas

Compatibility analysis

CREATE EBM MARINE SPATIAL PLAN

Evaluate & Adapt

Long term actions

1. Information gathering

- Collect information on 4 objectives
- Understand human uses and socio-economics of MBNMS
- Understand compatibility and cumulative impacts of different uses
- Host Coastal and Marine spatial planning partner summit

2. Propose & implement strategies

- Work to identify regulatory and non-regulatory strategies
- Work with collaborators to influence existing processes and initiatives
- Partner with stakeholders to propose innovative programs
- Propose strategies based on information gathering
- Create marine spatial plan for MBNMS in collaboration with partners

3. Monitor, adapt, assess

- Monitor marine resources and activities within MBNMS
- Evaluate effectiveness of different strategies
- Adapt management based on findings

2010

2011

2012

2013

2014

What are we working toward?

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

National Marine Sanctuaries
National Oceanic and Atmospheric Administration



How you can play an important
role in making the EBM
Initiative a success!

We need your help...

- Input on EBM Initiative Process and Plan
- Helping us engage with stakeholders
- Help us broaden our communications to interested parties across Monterey Bay

Who should we talk to? Are there speaking opportunities to share the EBM Initiative?

- What are the opportunities to engage with your constituents?
- Are there upcoming venues to inform and involve wider groups in EBM Initiative?
- A few upcoming opportunities:
 - Ideas????

Moving toward....



Enhanced
Ecosystem Health