

PLACE-BASED CONSERVATION IN THE US: THE EMERGENCE AND CHALLENGES OF MARINE PROTECTED AREAS

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The
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SCIENCE, TOOLS AND TRAINING FOR THE NATION'S MPAS

Presentation Overview

- **What are MPAs and how are they used to conserve and manage the nation's marine resources?**
- **MPAs emerge on the policy scene**
- **Opportunities and challenges**

What Is An MPA?

- **Marine Protected Area:** “any area of the marine environment that has been reserved by federal, state, territorial, tribal or local laws or regulations to provide lasting protection to part or all of the natural or cultural resources therein” (E.O. 13158)
- **Familiar Examples Of U.S. MPAs Include:**
 - national parks, wildlife refuges, monuments and marine sanctuaries
 - fisheries closures, critical habitat, habitat areas of particular concern
 - state parks, conservation areas, reserves and preserves
- **What Is Not An MPA?:** areas where access is restricted for reasons other than conservation (e.g. security zones, shellfish closures, sewage discharge areas, pipeline and cable corridors), or unprotected areas that are logistically inaccessible due to weather, sea state, etc.

MPAs Have Many Uses

- Maintain biodiversity + ecosystem integrity
- Protect endangered + threatened species
- Sustain and rebuild fisheries stocks
- Reduce by-catch among non-target species
- Protect important fisheries habitat
- Provide recreational, scientific + educational opportunities
- Protect cultural resources
- Maintain traditional cultural connections to the sea

Three Overarching Goals Of U.S. MPAs

- **Natural Heritage** → biodiversity, ecosystem integrity and ecological services
- **Cultural Heritage** → cultural resources, maritime history and traditional connections to the sea.
- **Sustainable Production** → sustainable extraction of living resources within the MPA or outside its boundaries

Who Manages MPAs In The U.S.?

- **FEDERAL AGENCIES**

- **Department of Commerce / NOAA**

- *National Marine Sanctuaries*
 - *Fisheries Closures*
 - *Marine Mammal and Endangered Species Areas*
 - *National Estuarine Research Reserves (w/ states)*

- **Department of the Interior**

- *National Parks, Seashores, Monuments + Recreation Areas*
 - *National Wildlife Refuges*

- **STATE, TERRITORIAL AND COMMONWEALTH AGENCIES**

- **TRIBES**

- **LOCAL AUTHORITIES**

MPAs Emerge In The Ocean Policy Arena

- While MPAs are not a new idea, the past decade has seen a marked increase in:
 - International MPA initiatives
 - Scientific research on MPAs
 - MPA recommendations by expert panels
 - Inclusion of MPAs in federal ocean policy
 - Creation or revision of federal and state MPAs
 - Growing concerns among stakeholders

International MPA Initiatives

- IUCN global inventory of MPAs, guidelines for MPA design, management and evaluation
- CBD proposed global system of MPAs
- Innovative use of MPA networks in a many countries, including Australia, New Zealand, Thailand, Belize, Canada, Italy, and many others
- International MPA partnerships with NGOs
- Recent consideration of high seas MPAs

Growing Focus on MPA Science

- Natural Science Themes:
 - Exploration, mapping and habitat characterization
 - Siting and design models
 - Ecological connectivity among habitats
 - Fisheries applications and implications
 - Monitoring and evaluation of performance
- Social Science Themes:
 - Attitudes, perceptions and beliefs about the ocean
 - Coastal communities: composition and dynamics
 - Institutions and governance
 - Cultural resources and heritage
 - Current and historical uses of marine ecosystems
 - Economics of MPAs

Recommendations by Expert Panels

Diverse Perspectives

- NAS National Research Council Report
- AAAS Scientific Consensus Statement
- MCBI-Cousteau Society Recommendations
- Pew Oceans Commission Report

Common Themes = MPAs can be useful tools if they are:

- *Science-based*
- *Designed and supported by stakeholders*
- *Regularly monitored and evaluated*
- *Integrated within existing resource management approaches*

MPAs and US Ocean Policy Since 1998

- Statutory Reauthorizations
- National Oceans Conference
- Coral Reef Exec. Order and Action Plans
- Congressional Oceans Caucus
- Executive Order 13158
- Commerce Secretary Evans
- *National Ocean Policy Commission ('03?)*

MPA Activity Around The U.S.

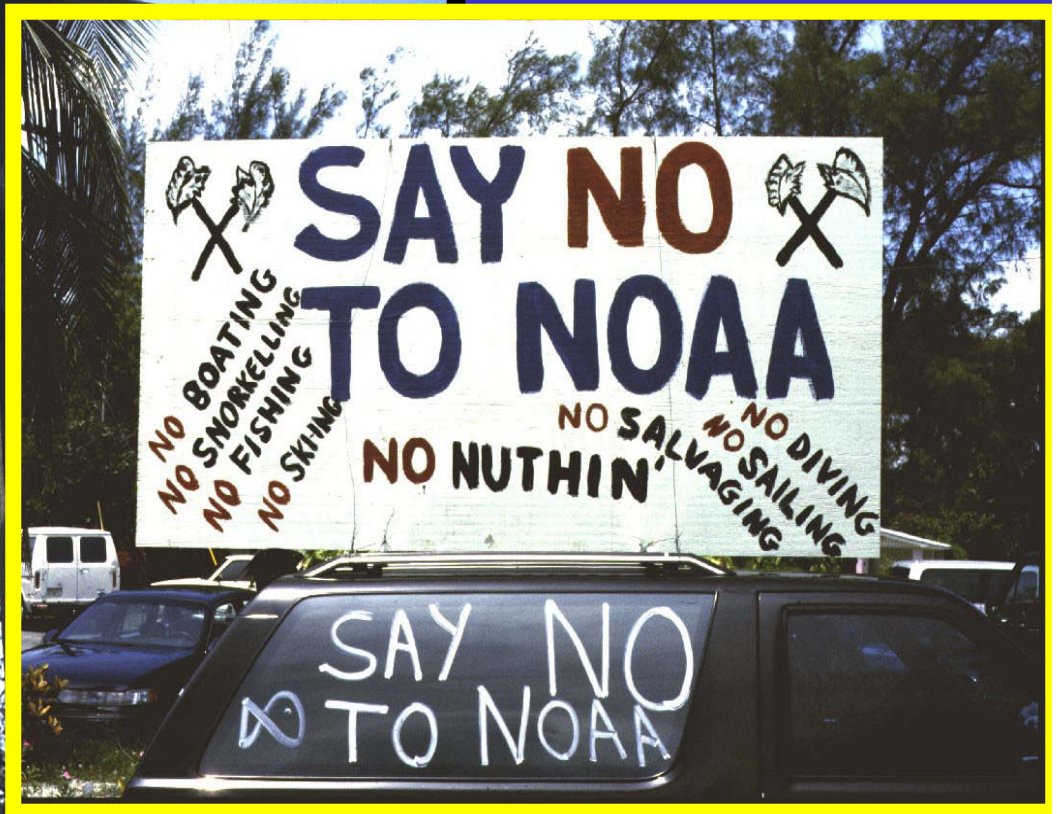
- **Federal MPA Programs:**
 - revising management plans of existing MPAs
 - establishing new sites, as appropriate
- **State MPA Initiatives:**
 - new and revised MPAs
 - networks of ecologically connected MPAs
- **Regional-Scale MPA Planning:**
 - Fishery Management Councils
 - Commission on Environmental Cooperation

The Pacific: An Example of MPA Activity

- **State Level MPA Planning:**
 - Channel Islands Marine Reserves
 - CA Marine Life Protection Act
 - Oregon's Ocean Policy Advisory Committee
 - South Slough National Estuarine Research Reserve
 - Washington (2 state agency processes)
 - Northwest Straits Commission
- **Federal Level MPA Planning:**
 - 5 National Marine Sanctuary management plan revisions
 - Channel Islands NMS marine reserve scoping
 - Olympic National Park intertidal reserves
 - Pacific Fishery Management Council
 - Groundfish closure
 - Cowcod closure
 - Marine reserves strategy
 - Essential Fish Habitat

see PacificMPA.org

Other Perspectives On MPAs



Emerging Stakeholder Concerns

- Confusing terminology and goals
- Arbitrary conservation targets
- Poorly understood socio-economic impacts
- Effectiveness rarely monitored or evaluated
- Enforcement is difficult
- Complex and overlapping planning and implementation processes
- A solution in search of a problem

The Nation Responds

- Executive Order 13158 on Marine Protected Areas directs federal agencies to develop a *framework for the design, management, and evaluation of an effective national system of MPAs* that:
 - Uses straightforward and consistent terminology
 - Is built upon rigorous and accessible science
 - Matches specific MPAs to clearly articulated needs
 - Recognizes the human dimension of marine conservation
 - Engages stakeholders in planning and management
 - Builds capacity to plan, manage, enforce and evaluate MPAs
 - Is managed adaptively through monitoring and evaluation
 - Integrates MPAs of all types into the broader context of ecosystem management and conservation.

Framework Consists of 3 Elements

- **Knowledge:** – understanding the current and future contributions of MPAs in meeting diverse conservation and management needs and objectives at local, regional and national scales
- **Capacity:** strengthening the ability of MPA programs and stakeholders to effectively design, plan, manage and evaluate MPAs of all types
- **Participation:** fostering innovative and constructive ways to engage diverse stakeholder interests in the national dialogue on MPAs

TOWARDS AN EFFECTIVE NATIONAL SYSTEM OF MPAs

