

Acknowledging the Human Dimension And Engaging Stakeholders in MPA Design and Management

A Social Science Strategy for MPAs



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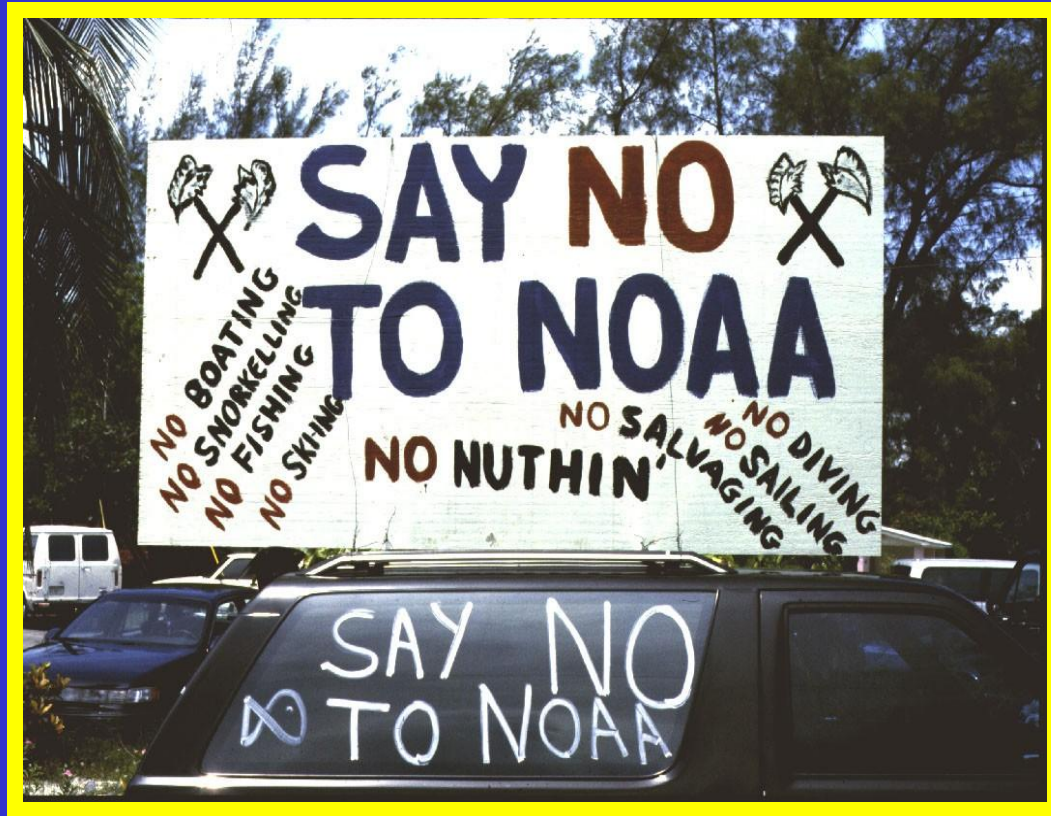
not humans

humans

Who Cares About Those Messy Humans Anyway?

- Socioeconomic impact evaluations are legally required by most MPA statutes
 - If you don't do it, do it wrong, or do it too late, the MPA may be challenged or ineffective, or both
- People are really the key actors in marine ecosystems
 - “We really manage people, not fish”
- People's use of, and attitudes toward, the ocean are complex, variable and profoundly important to successful MPAs

But Everyone Loves MPAs, Right?



When Is Social Science Important for MPAs?

- Planning Phase
 - Understanding human uses, values, communities, and institutions
 - Designing and running an effective designation process
 - Ensuring sustained community engagement and support
- Management Phase
 - Recognizing, evaluating and adapting to emerging uses
 - Regular input from local advisory groups
- Evaluation Phase
 - Understanding the effects of the MPA on human uses and values

Challenges In Applying Social Science to MPAs

- Overshadowed by ecological concerns
- Focused largely on consumptive users
- Very little baseline data anywhere
- Minimal integration with natural science

- Not always considered a ‘real science’
- Confused w/ public outreach + education
- Marginalized: too little and too late
- Little cohesion or coordination w/in Soc Sci

- Minimal funding, esp. compared to Nat Sci
- Few social scientists working on MPAs

Filling The Knowledge Gap: The National MPA Center's Social Science Research Strategy

- **Purpose:** to strengthen the human dimension in MPA design, management and evaluation
- **How:** increase allocation of resources and effort toward MPA social science and capacity building
 - **National strategy focused on high level issues**
 - **Regional research priorities created locally**
- **Targets:** agencies, funders, Congress and



Priority Social Science Themes for MPAs

- Use patterns
- Economics of MPAs
- Attitudes, perceptions and beliefs
- Community organization
- Governance and institutional structure
- Cultural heritage and resources



Ocean Uses

- Definition:
 - The way stakeholders use resources in MPAs, currently and historically
- Research Topics:
 - Baseline data on patterns of use
 - Drivers and consequences of use
 - Conflicts and compatibilities among uses



Economics of MPAs

☞ Definition:

- Economic conditions and trends associated with MPAs and their resources

☞ Research Topics:

- Baseline information
- Cost benefit analysis
- Non-market values (use and non-use)
- Variability and economic theory and tools



Attitudes, Perceptions and Beliefs

- **Definition**

- Underlying motivations that influence human preferences, choices and actions

- **Research Topics:**

- Natural world and state of the environment
- Uncertainty and attribution
- Aesthetics
- Environmental ethics
- Traditional ecological knowledge



Community Organization

- **Definition:**
 - Characteristics and function of social and geographic communities
- **Research Topics:**
 - Socio-economic conditions
 - Capacity and skills
 - Information flow and use among communities
 - Management structures and processes
 - Historic social construction of MPAs



Governance and Institutional Structure

- **Definition:**
 - Capacity, funding sources, jurisdiction, management and interactions of institutions that manage MPAs

- **Research Topics:**
 - Jurisdictional structure
 - Institutional analysis
 - Public participation and stewardship
 - Planning and establishment
 - Management and evaluation



Cultural Heritage and Resources

- Definition:
 - Historical and submerged cultural resources of MPAs
- Research Topics:
 - Protection
 - Characterization



Cross-Cutting Needs and Issues

- Baseline data
- Monitoring (long and short-term)
- Evaluation
- Data management



Impacts of the Strategy to Date

- Highlighted importance of soc sci in MPAs
- Stimulated and justified research
- Enhanced cohesion w/in research community
- Catalyzed MPA Center's work on ocean uses

- Much remains to be done!

