Marine Spatial Planning for the US: Balancing Competing Ocean Uses



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Oceans Are Becoming Crowded Places: Fishing Uses



Oceans Are Becoming Crowded Places: Non-Consumptive Uses











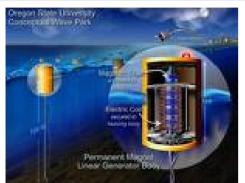








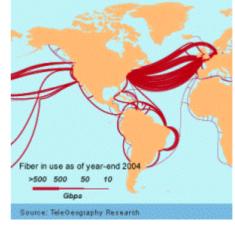
Oceans Are Becoming Crowded Places: Industrial and Military Uses













Oceans Are Becoming Crowded Places: The Other Guys



Effective Ocean Management Increasingly Requires Planning For All Ocean Uses

Ocean Management Approaches

Fisheries Management

Marine Protected Areas

Ecosystem Based Management

Regional Ocean Governance

Marine Spatial Planning

Management Target

> Ocean Uses: pattern, intensity, effects

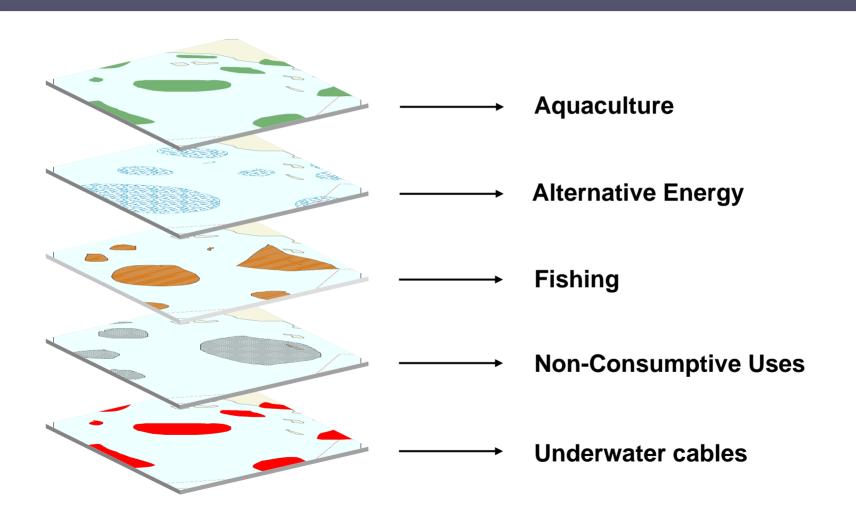
Desired Ecosystem + Societal Outcomes

Ecosystem
Health +
Services

Social, Cultural + Economic Benefits

Reduced User Conflicts

The Missing Puzzle Piece: Comprehensive Understanding of Current and Planned Ocean Uses



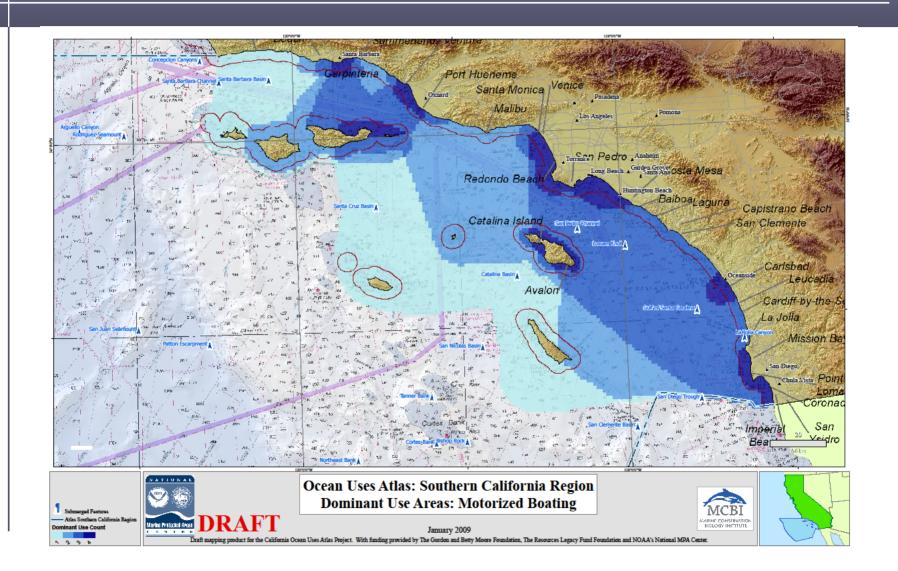
Filling the Knowledge Gap: The California Ocean Uses Atlas

- Purpose to enhance CA ocean management by filling key data gap on the full range of human uses
- Approach regional experts (e.g. managers + users) create GIS maps of 30 uses based on collective knowledge
 - non-consumptive
 - fishing
 - industrial and military
- Partners
 - NOAA Marine Protected Areas Center
 - Marine Conservation Biology Institute
 - Gordon and Betty Moore Foundation
 - Resources Legacy Fund Foundation

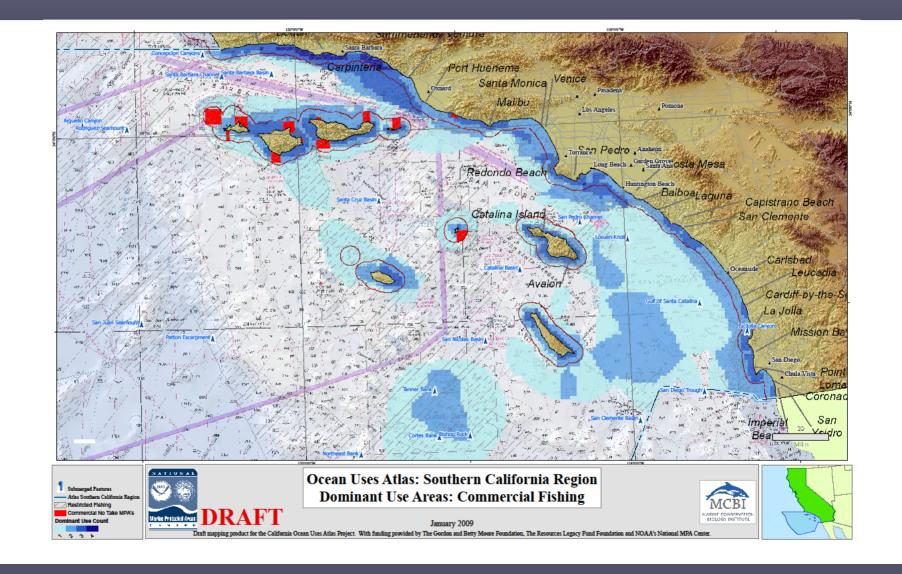


Timeline – Jan 2008 – Sep 2009

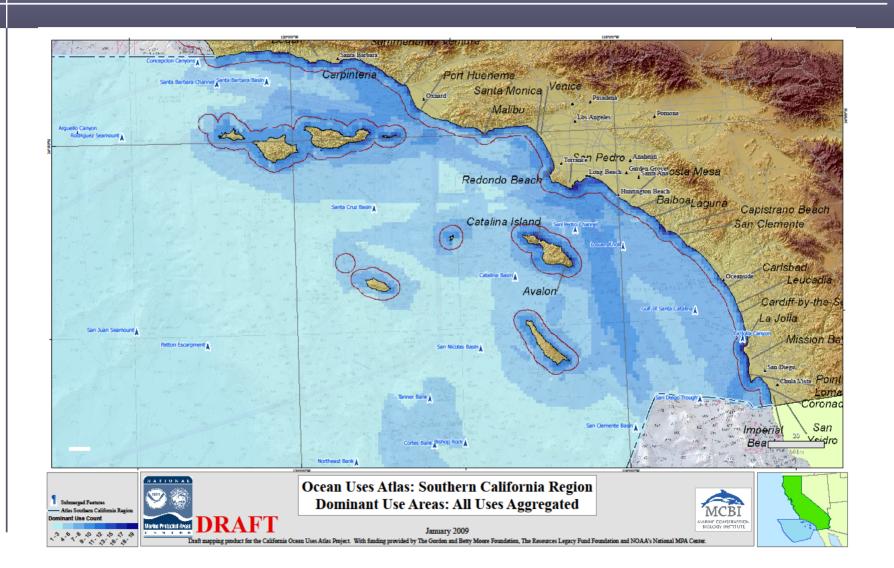
Dominant Use Area of Motorized Boating Sample Map from SoCal Atlas



Related Uses Combined: Commercial Fishing Sample Map from SoCal Atlas



All Ocean Uses Combined Sample Map from SoCal Atlas



Overlap of All 3 Use Sectors Sample Map from SoCal Atlas



Implications of Emerging Ocean Uses

Ocean uses are expanding faster than our ability to manage them

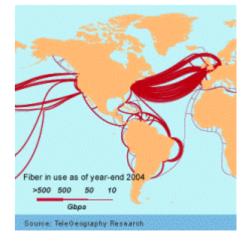
- 1. Increasing pressure on ocean resources and ecosystems
- 2. Increasing conflicts among users
- 3. Decreasing access to ocean areas necessary for specific uses











A Practical Way Forward: Marine Spatial Planning

Marine Spatial Planning is a comprehensive, ecosystem-based process through which compatible human uses are objectively and transparently allocated to appropriate ocean areas to sustain critical ecological, economic and cultural services for future generations.

Draft Working Definition, May 2009

World-Wide Examples of Comprehensive Marine Spatial Planning

- **Europe** Belgium and Germany driven by renewable energy
- Australia Great Barrier Reef Marine Park Authority driven by ecosystem declines
- Massachusetts Ocean Planning driven initially by renewable energy proposals
- US Coastal Regions New England, Gulf of Mexico, West Coast driven by suite of ocean use pressures
- US National System of MPAs driven by need for comprehensive, science-based approach to planning and management

What Will It Take? Core Components of MSP

Spatial Data and Planning Tools

- Spatially Explicit Ecosystem Information
- Spatially Explicit Ocean Uses Information
- Decision Support Tools

Policy Framework and Leadership

- Interagency Coordination and Regional Planning
- Policy Framework

Getting There From Here: Evolutionary Pathway to Comprehensive Ocean Management

Traditional sectoral management



- Sectoral management informed by comprehensive spatial data
- Collaborative, integrated, regional marine spatial planning under existing authorities



 New legal authorities and/or policy direction mandating comprehensive ocean planning and management



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