

NOAA Ecosystem program

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CICOR, Ecosystems

Credits

- PPT presentations by
 - Emily Menashes, Deputy Goal Lead. August 2006
 - Jack Dunningan et al. September 2005
 - <http://ecosystems.noaa.gov/index.htm>

NOAA Strategic goals

- Climate
 - Understand climate variability and change.
- Weather & Water
 - Serve society's needs for weather and water information.
- Ecosystems
 - Protect, restore, and manage the use of coastal and ocean resources.
- Commerce & Transportation
 - Support the Nation's commerce with information for safe, efficient and environmentally sound transportation.
- Supporting NOAA's Mission
 - Provide critical support for NOAA's mission

“Ecosystem goal” program

- Integrates effort of four offices
 - NOAA’s National Ocean Service (NOS)
 - NOAA’s National Marine Fisheries Service (NMFS)
 - NOAA’s Office of Oceanic and Atmospheric Research (OAR)
 - NOAA’s National Environmental Satellite, Data and Information Service (NESDIS)
- Acting Ecosystem Goal Team Lead: Steve Murawski

“Ecosystem goal”

- Mission
 - Protect, restore, and manage the use of coastal and ocean resources through an **ecosystem approach to management.**
- Outcomes
 - Healthy and productive coastal and marine ecosystems that benefit society.
 - A well-informed public that acts as a steward of coastal and marine ecosystems.

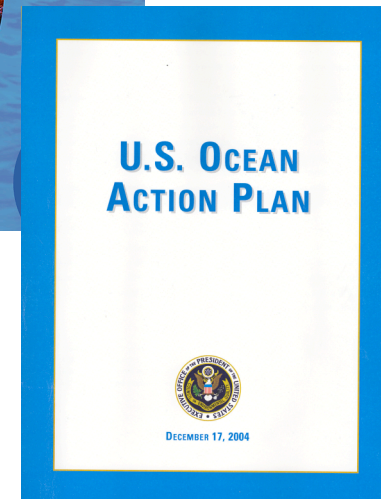
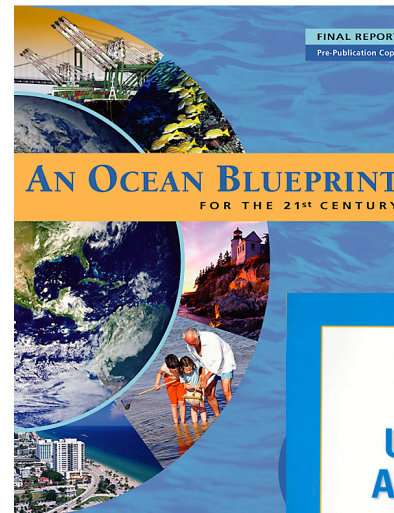
NOAA's definition of an ecosystem

- An ecosystem is:
 - A geographically specified system of organisms (including humans), and the environment and the processes that control its dynamics.
 - The environment is the biological, chemical, physical and social conditions that surround organisms



Why ecosystem based management?

- U.S. Commission on Ocean Policy
 - Ecosystem based management to improve coastal and marine resource management
- President's Ocean Action Plan
 - Ecosystem approach to management
- Ecosystem approach to management is a more rational way to manage the resources...



What is an Ecosystem Approach to Management?

Seven Characteristics of EAM

1. Geographically specified
2. Adaptive management. Management by ecosystem, monitored, and adapted to achieve desired results
3. Takes account of ecosystem knowledge and uncertainty
4. Considers multiple external influences
5. Strives to balance diverse societal objectives. Conflicts among user groups are resolved by and among stakeholders.

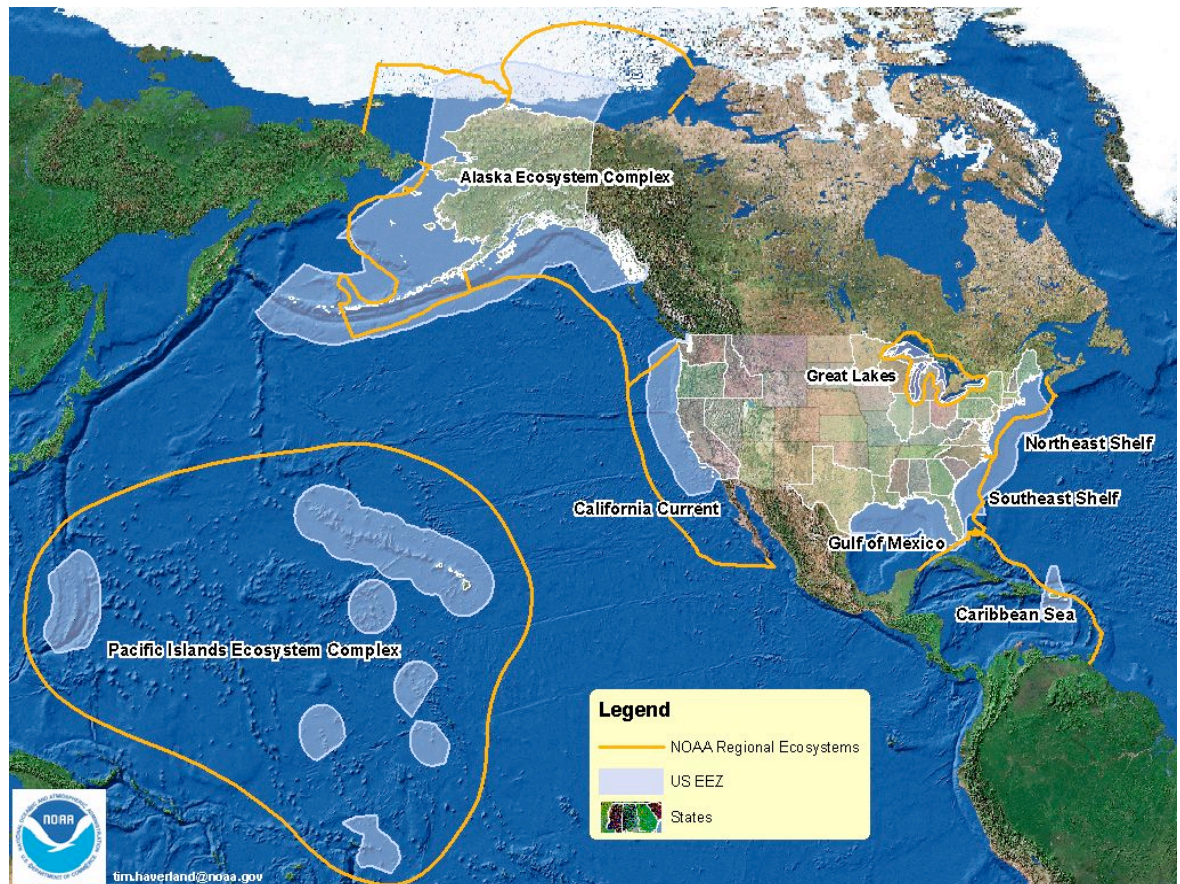
Implementation will need to be:

6. Collaborative. Collaborating with stakeholders.
7. Incremental. Gradual evolution as information and understanding with collaborative strategic goals and objectives improve

EAM Characteristics

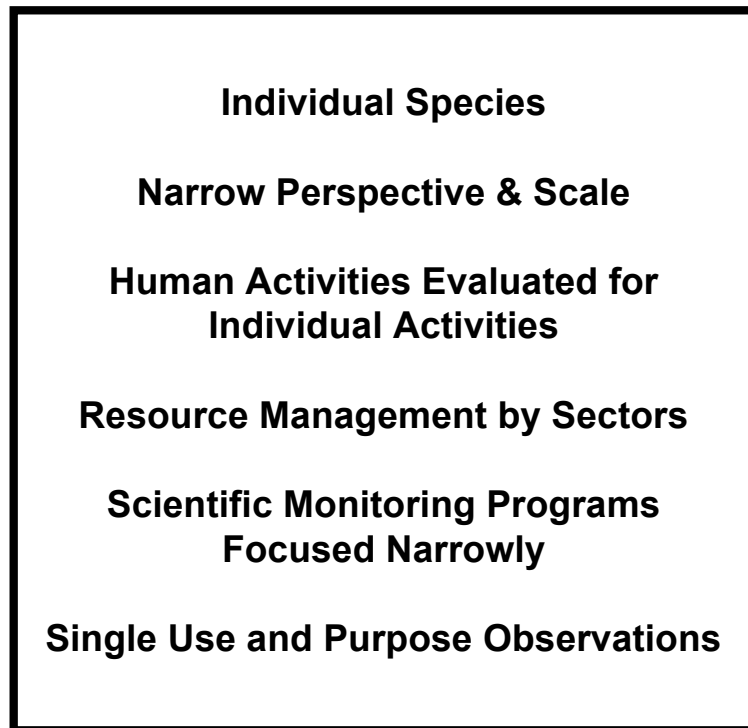
Geographically
Specified

- 8 regional ecosystems and ecosystem complexes were delineated based on LME model



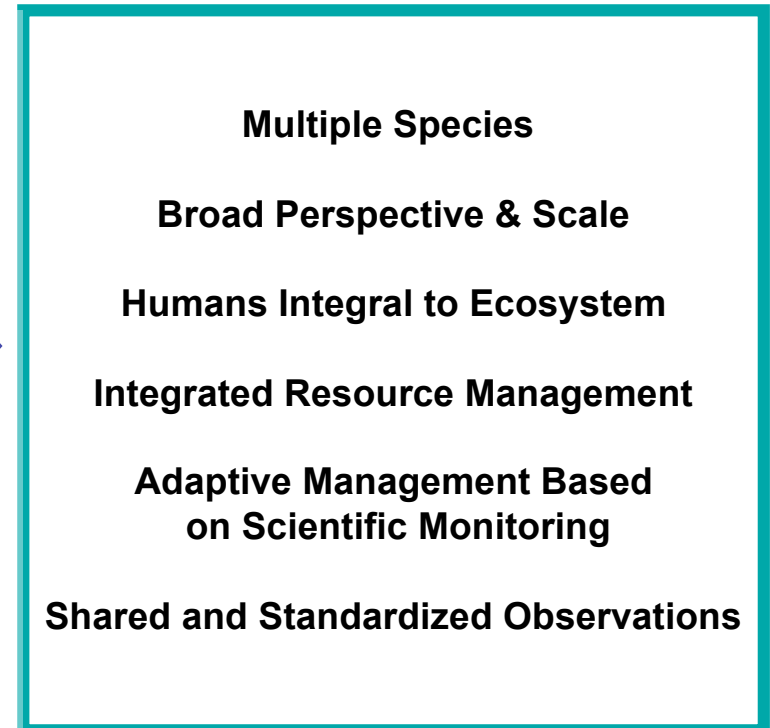
Ecosystem Management

Focus on Managing
Ecosystem parts



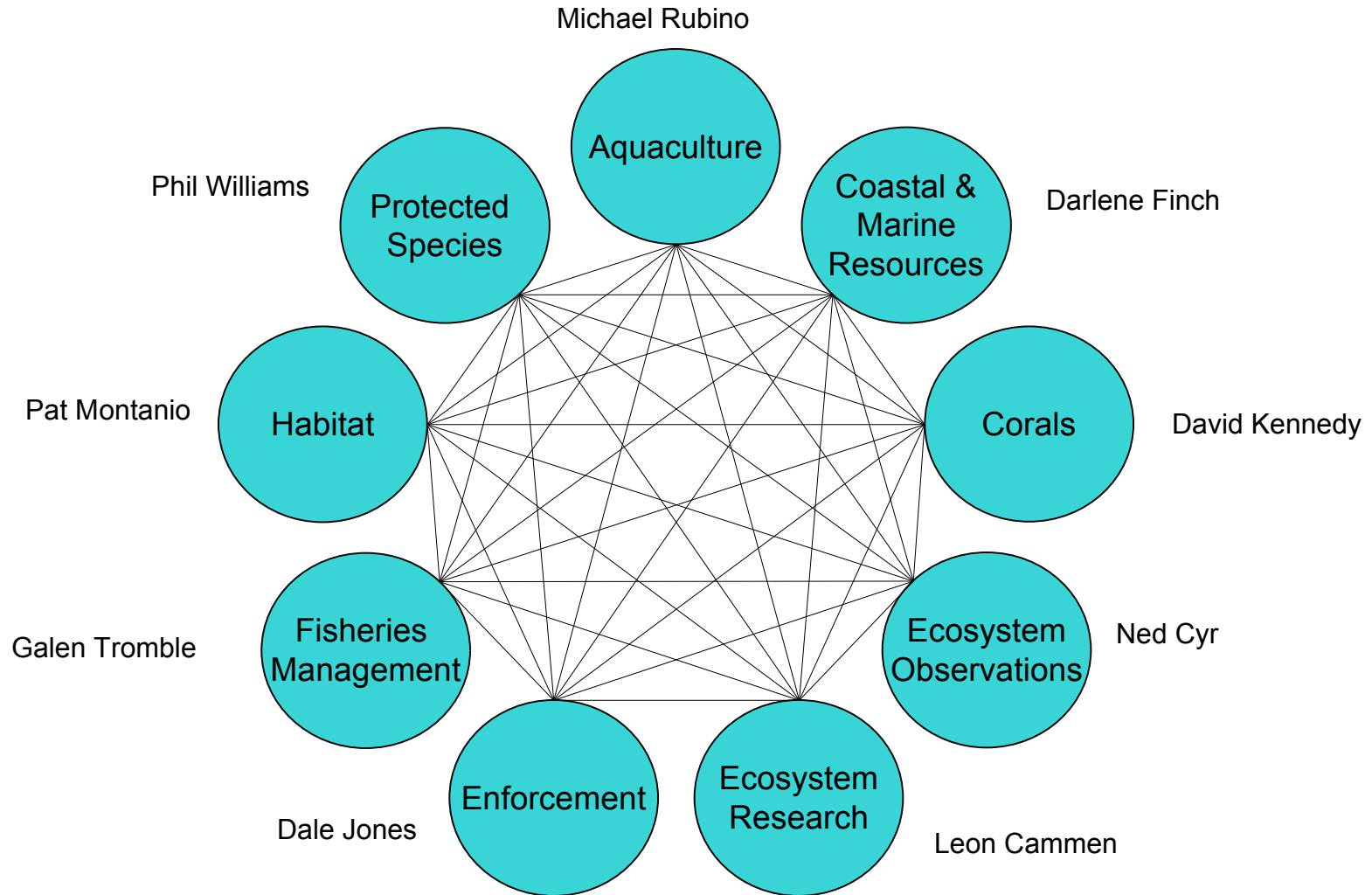
Current Mandates

Focus on Ecosystem Relationships,
Processes, and Tradeoffs



Future Mandates

Nine programs directly support NOAA's Ecosystem Goal



Aquaculture

Program Manager: Michael Rubino

- Supports production and enhancement technology development to increase seafood production and replenish depleted species.
- Addresses aquaculture-related trade issues and promotes world-wide adoption of environmentally sound aquaculture practices and technologies.
- FY 05, 2 m

Coastal and Marine Resources

Program Manager: Darlene Finch

- Promotes the health and productivity of coastal and marine ecosystems by taking a comprehensive approach to balancing protection and use of the ecosystems.
- Management and conservation efforts are implemented at a range of geographic scales in collaboration with state and local partners, and through coordination with a range of domestic and international partners.
- FY 05, 165 M

Corals

Program Manager: David Kennedy

- Supports effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems.
- Provides a wide variety of tools, products and services to help reduce the loss and degradation of coral reef ecosystems, working extensively with government, private, academic and other non-governmental partners.
- FY 05,25 M

Ecosystem Observations

Program Manager: Ned Cyr

- Designed to be a coastal and oceanic observing system that supports management programs within the Ecosystem Goal and NOAA.
- (Mostly a support program.)
- Capabilities encompass routine observations, assessments and forecasts, product development, data management, technology transfer, and information dissemination.
- FY 05,300 M

Ecosystem Research

Program Manager: Leon Cammen

- Provides scientific information and tools necessary for ecosystem management to the Ecosystem Goal and coastal stakeholders.
- Responsible for characterizations of ecosystems, ocean exploration, the development and transfer of technology and forecast tools to resource managers, the development and enhancement of ocean and coastal resources, and coastal outreach and education.
- FY 05, 186 M

Enforcement

Program Manager: Dale Jones

- Provides law enforcement services directed to obtain compliance with management regimes instituted by NOAA in support of its stewardship responsibilities for living marine resources.
- FY 05, 56 M

Fisheries Management

Program Manager: Galen Tromble

- Manages sustainable commercial and recreational fisheries by maintaining fish stocks at productive levels.
- Apply ecosystem approaches to conserve and manage fisheries within the broad ecosystem structure defined by the Fishery Management Councils, Atlantic Highly Migratory Species Program, Interstate Marine Fisheries Commissions, and state and international fisheries.
- FY 05, 120 M

Habitat

Program Manager: Pat Montanio

- Restores and protects coastal, marine, and Great Lakes habitat for the benefit of NOAA trust resources.
- Uses science-based characterization and assessment tools to understand habitat changes and evaluate project success.
- Engages local communities in on-the-ground restoration projects to build environmental awareness and stewardship values.
- FY 05,35 M

Protected Species

Program Manager: Phil Williams

- Priority activities are toward stopping the decline of protected species populations to reduce the risk of extinction. Efforts are made to stabilize populations, and to recover populations to levels that make them functional members of marine and coastal ecosystems.
- Goals are achieved through planning, regulation, partnerships, direct action, and outreach and education both domestically and internationally.
- FY 05, 170 M