

NOAA's Ecosystem Forecasting and Management



What is requested?

The FY 2005 budget request for the National Oceanic and Atmospheric Administration's Ecosystem Forecasting and Management totals \$1,158.2M, including funds to improve ecosystem approaches to management. This initiative combines resources from NOAA's Research, Fisheries, Oceans and Satellite Services to focus on the physical, chemical, and biological components of ocean and coastal ecosystems, rebuilding fishery resources, conserving and restoring living marine resources and habitats, and recovering protected species.

The requested increases include + \$6.6M to combat harmful contaminants and algal blooms, +\$1.2M to develop partnerships to manage coastal resources, +\$9.2M to establish and manage national estuarine research reserves and protected areas, +\$.9M to advance aquaculture, +\$6M to improve stock assessments, +\$9.9M to expand and modernize observer data collection and monitoring, +\$8M to improve National Environmental Policy Act (NEPA), and regulatory processing capability, +\$2.5M to improve social and economic impacts of fishery management decisions, +\$3M for recovery of protected species and restoring their habitats, and +\$5.3M to expand the use of vessel monitoring systems.

What are the benefits?

The Ecosystem Forecasting and Management effort will help identify ecosystems, analyze and coordinate federal, state and territory activities in the same geographic area, leverage resources, and eliminate duplication. This effort supports work towards healthy ecosystems and to increase the social and economic value of the marine ecosystems and resources by supporting: more observations and research to better manage fisheries, land acquisition and research to protect designated coastal areas and certain species, funds to develop partnerships to help manage coastal areas, faster preparation of analytical documents (e.g., NEPA) as well as for rulemakings, permits, grant approvals, ability to reduce invasive species, increase aquaculture, and increased coastal habitats restored.

Why do we need it?

Our oceans are in trouble. Our coasts are in trouble. Our marine resources are in trouble...all, perhaps in serious trouble (mid-term Report U.S. Commission on Ocean Policy, 2002). Half of our population lives in coastal areas, which support over \$595B in tourism (2nd largest contributor to the U.S. GNP) including \$25B annually in marine recreational fishing and over \$28.5B from commercial fishing (NOAA and Heinz Center, 2002). The most urgent and important concern in marine ecosystems is the risk of bad decision making in the face of unprecedented demand for access to and use of resources, technologies that are capable of modifying ecosystems, and public expectations for a healthy environment. These pressure points fuel controversies that have led to decisions that either waste opportunities for societal benefit or overshoot sustainable limits such that future generations suffer.

What will we do?

An ecosystem approach to management is adaptive, geographically specified, takes account of ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse societal objectives. NOAA recognizes the transition to an ecosystem management needs to be incremental and collaborative. Meeting this challenge requires NOAA to increase the use of available ecosystem data and information; integrate areas of expertise and research into cross-line office information systems; expand local, state, and constituent-based partnerships; and further develop decision and policy models to accomplish NOAA's living marine resource and costal stewardship missions. This effort will improve NOAA's capability to disseminate this information and explain its decisions to constituents in a timely, consistent, and understandable manner. We will map and survey the coastal and deep ocean waters, survey and research the interactions of marine life, improve the ecological conditions for corals, block and neutralize invasive species, protect designated coastal areas and living marine species, restore coastal and ocean habitats, increase ocean fisheries production through sustainable aquaculture, and enforce relevant laws.