HOW CAN WE MAKE THE BIGGEST IMPACT?

BY SERVING THE COASTAL RESOURCE MANAGERS OF THE NATION TO THE BEST OF OUR ABILITY.

A Blueprint for Action

A Summary of the 2001–2006 Strategic Plan for the NOAA Coastal Services Center

NOAA Coastal Services Center
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

Defining the NOAA COASTAL SERVICES CENTER

ORGANIZATIONAL SUMMARY

The NOAA Coastal Services Center brings new ideas, information and data, technology, and training to the nation's local and state coastal resource management programs. Working with partners from the public and private sectors, the Center helps the nation's coastal communities resolve site-specific natural resource issues.

Created in 1994, the Center is organizationally housed within the National Ocean Service, a division of the National Oceanic and Atmospheric Administration (NOAA). NOAA is a bureau within the U.S. Department of Commerce.

A BLUEPRI

Mission
The mission of the NOAA Coastal Services Center is to support the environmental, social, and economic well being of the coast by linking people, information, and technology.

Operating Principles
Oriented to clients

Focused on results

National in scope, local in approach

Committed to partnerships

Primary Customers
State and local coastal resource managers

Primary Partners
Local, state, and federal governments

Nonprofit organizations

Academic institutions

Private companies

Focus Areas
Smart coastal growth

Habitat

Hazards

Coastal National Spatial Data Infrastructure

Core Values
Commitment to quality – Making a commitment to high-quality products and services that positively influence coastal decision making

Catalyst for innovation and change – Being a catalyst for innovation and progressive change in the coastal management community

Collaboration – Achieving success through internal teamwork and external partnership building

Organizational assessment and reflection – Ensuring continuing relevance through critical evaluation and adaptive behavior

Respect for all – Maintaining respect for employees and customers, including their views and differences

Tools
Geographic information systems (GIS) technology

Training programs

Data and information indexing and retrieval systems

Remote sensing

Serving AMERICA'S COASTAL MANAGERS

State and local coastal resource managers are this nation's best hope for retaining the economic growth, character, and natural resources found in coastal communities. To be successful in this world of competing demands, coastal managers need access to new technical tools, information, and training. Providing this access is the role of the NOAA Coastal Services Center.

Center services are rendered in the form of projects created to resolve specific coastal management issues in specific locations. Examples can be found in the "Key Projects" sections in this document. Lessons learned from each project are transferred to other coastal managers facing similar issues.

This publication summarizes the NOAA Coastal Services Center strategic plan through the year 2006.

To see the plan in its entirety, visit *www.csc.noaa.gov/strategic_plan.pdf.*

The following components of the strategic plan are summarized in this document.

HAZARDS

Coastal hazards include both natural and man-made events (chronic and episodic) that threaten the health of coastal ecosystems and communities. Center projects in this theme area work to reduce the environmental, social, and economic impacts from coastal hazards by providing information and tools that facilitate increased decision support capabilities for coastal managers.

GOAL 1

Coastal communities have a significant reduction in loss of human, environmental, and economic impacts from both man-made and natural hazards.

Objectives

To reduce impacts from coastal hazards by developing effective hazard mitigation strategies based on the systematic evaluation of risks and vulnerabilities of Center clients and their communities.

Increase the development of techniques that more comprehensively calculate the impacts and costs of coastal hazard events and the economic benefits of hazard mitigation activities.

Increase the awareness of the hazard mitigation benefits of natural systems to promote informed and comprehensive decision making.

Broaden the focus of hazard mitigation to include social consequences such as behaviors, beliefs, and values by incorporating these considerations into Center tools and products to fully address the issue of human health and safety.

GOAL 2

The hazard-risk and vulnerability data, information, and application needs of Center clients are met.

Objectives

Develop relevant hazards data, value-added services, and applications in a useful form to promote better decision making.

Identify and provide critical hazards data and information (physical, social, economic, and environmental) through targeted and improved delivery mechanisms to promote better decision making.

Identify and adhere to industry and client group standards and protocols when developing data and applications to ensure that Center products are usable by clients.

GOAL 3

Awareness and coordination among client groups is achieved, eliminating redundancy or gaps in hazards-related activities.

Objectives

Promote awareness and sharing of vulnerability assessment methods.

Increase visibility of the Center's hazards theme activities by elevating outreach efforts to ensure effective communication, enhance the prioritization of hazards planning, and reduce redundant efforts.

Facilitate partnership building and awareness of all client groups to clarify roles, responsibilities, expertise, and expectations to more effectively reduce coastal hazards impacts.

Hazards

GOAL 4
Coastal managers have the knowledge and skills to develop and implement hazard mitigation policies and practices.

Objectives
Increase knowledge of hazard mitigation by working to inform and train current and future coastal managers.

Create training and methodologies for effective use of Center-developed data and applications to maximize the client's skills and ability to use our products.

Partner with clients to develop information, techniques, and processes to advance their policy and management options for reducing coastal hazard impacts.

Coordinate the flow of information and resources regarding training, data, and technical tools available through other sources.

Key Projects

It's not a question of "what if." Projects in this theme area help coastal communities prepare for the inevitable.

Coastal Risk Atlas
This Web-based project, created with a NOAA partnership, will provide access to much of the information communities need to perform a risk and vulnerability assessment.

Protecting Communities against Coastal Hazards
The Center-developed Community Vulnerability Assessment Tool helps communities determine and prioritize their vulnerability to coastal hazards.

Ports and Harbors
Several Center projects focus on water-dependent industry. The Protecting Our Ports and Harbors project evaluates various strategies designed to increase the resilience of ports, harbors, and their surrounding communities to earthquake and tsunami hazards in the Pacific Northwest.

Disaster Data Needs
After a hurricane, Center staff work with the Federal Emergency Management Agency (FEMA) and other organizations to determine what works and what doesn't regarding spatial data use and delivery. The results are incorporated into subsequent disaster response and recovery missions.

NOAA Flood Forecast Products
The Center is working with NOAA's National Weather Service and academic partners to develop and deliver enhanced flood forecast maps and real-time flood inundation maps and modeling capabilities to coastal communities.

COASTAL NATIONAL SPATIAL DATA INFRASTRUCTURE

The National Spatial Data Infrastructure (NSDI) is a nationwide effort to improve the utilization of geospatial data within the United States. The Center fully supports this effort for the benefit of local and state coastal resource managers. Center projects in this theme area assist coastal managers in a variety of data-related tasks, including data acquisition, processing, documentation, storage, distribution, ease of use, and inclusion in the decision-making process.

GOAL 1
The coastal management community understands and embraces the vision, concepts, and benefits of the NSDI.

Objectives
Engage coastal and marine customers and encourage participation in NSDI activities.

Demonstrate the benefits of participation in the NSDI to existing and prospective coastal and marine management practitioners.

Promote the principles and practices of the NSDI to the coastal and marine community through formal and informal education, training, and evangelism.

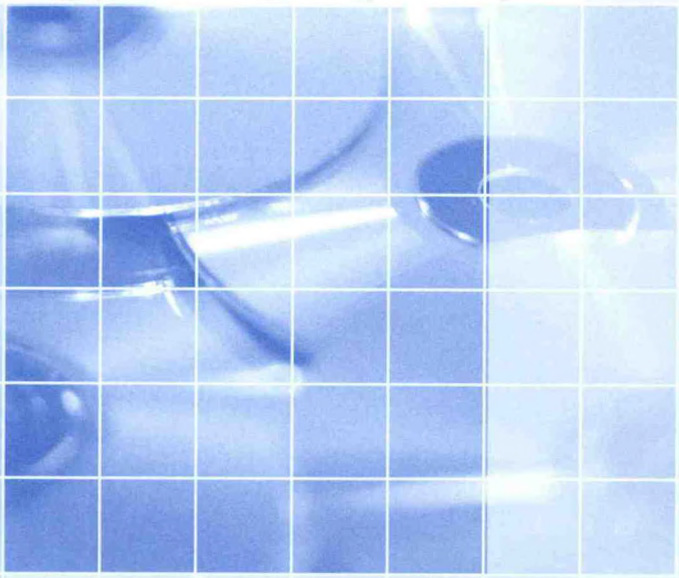
GOAL 2
Geospatial coastal and marine framework data are readily available for use by the coastal management community.

Objectives
Define the major framework data sets required for use by the coastal and marine community.

Establish Federal Geographic Data Committee (FGDC) standards for the coastal and marine framework data sets.

Develop and publish protocols for the capture and publication of important marine and coastal data and applications.

Facilitate funding mechanisms for the development, acquisition, rescue, and distribution of coastal and marine framework data sets.



GOAL 3
Innovative practices and technologies that facilitate the discovery, collection, description, access, and preservation of geospatial data are widely available to the coastal zone management community.

Objectives
Continue to develop a seamless national coastal and marine geospatial data clearinghouse.

Support the evolution of common means, such as FGDC-compliant metadata or standards, to describe and exchange coastal and marine geospatial data sets.

Develop, implement, and support architectures and technologies that enable interoperability and seamless data integration.

Offer metadata training to our coastal customers.

Ensure preservation and usefulness of data for future generations.

GOAL 4
Foster, develop, and implement geospatial data applications in response to the needs of the coastal and marine communities.

Objectives
Identify existing applications that are capable of supporting coastal resource management efforts to balance the needs of the community with effective coastal stewardship.

Foster, develop, and implement tools that allow for the easy exchange of applications, information, and results.

Develop coastal best practice documents for the use of coastal geospatial data sets and applications.

Develop applications for coastal habitat, hazards, and communities in partnership with our state and local partners.

Key Projects

Projects in this theme area revolve around improving the delivery, access, and use of information and data.

Ocean Planning Information System
This GIS for the ocean gives coastal resource managers and community leaders easy access to the information they need (regulations, environmental data, etc.) and pinpoints on a map where this information is applicable.

Pacific Islands Projects
NOAA's National Ocean Service and the Center are working to meet the special needs of this region. A satellite office, the Pacific Services Center, is being established, and a fellowship program and a regional GIS initiative are under way.

Data Access
The Center is championing the creation of new data clearinghouse servers for the Web, where similar data sets from a variety of sources can be accessed from one address.

Standards Development and Metadata
The Center is playing a lead role in the development of universal data content standards. The organization's metadata training, software, and information resources contribute to this effort by helping coastal managers organize, manage, and preserve their data.

Coastal and Marine Boundaries
The evolution of GIS and GPS (Global Positioning System) is changing and improving the way maritime boundaries are set. Many Center efforts are directed at resolving the issues that surround this change.

Remote Sensing
Remote sensing has much to offer the coastal management community. Working with the public and private sectors, the Center is dedicated to helping coastal resource managers make effective use of land cover, benthic, water quality, and topographic data.

HABITAT

Coastal habitat includes the coastal wetlands, sea bottoms, and water columns of estuarine, coastal, and ocean waters, in addition to uplands that affect these areas. Center projects in this theme area develop information and tools that help coastal managers integrate the physical, ecological, economic, and social components of habitat protection and management.

Goal
The coastal management community has the information and tools to integrate physical, ecological, economic, and social components into habitat protection and management.

Objectives
Increase access to data and information to support complete and accurate habitat characterizations.

Lead research that develops and evaluates new technologies, methodologies, and management applications for habitat characterization and restoration.

Promote and expand adaptive management methods, including consideration and use of all relevant physical, ecological, economic, and social data sets in habitat decision making.

Incorporate conceptual and predictive models to improve coastal habitat management decisions.

Goal
The coastal management community has the training, networks, and partnerships that facilitate informed decisions about habitats.

Objectives
Increase the coastal management community's understanding of spatial technologies and their applications to habitat management.

Promote adoption of protocols and standards that facilitate sharing of information and tools.

Develop and encourage interdisciplinary approaches and applications to solve problems.

Generate public support for habitat management and regulation.

Increase the capacity of the management community to effectively determine its needs and evaluate end products and activities.

Increase the capacity of the management community to understand the complexity of habitat management and to evaluate the results of management options.

Enhance informal communication within the coastal management community.

Habitat

Key Projects

Most coastal habitats are resilient over the short term, but even seemingly innocuous actions can have a tremendous impact over the long term. Projects in this theme area help coastal resource managers take stock of the many components that come together to create the coastal environment. This information is used to help managers make decisions and document how their communities and their natural resources change over time.

Environmental Characterizations
These GIS-based efforts are management tools that provide easy access to comprehensive, interdisciplinary information about a particular area's environment, people, and issues.

Satellite Imagery
The Center helps coastal managers obtain and use remotely sensed data to document cumulative change in terrestrial and oceanic environments.

Harmful Algal Bloom Project
A combination of aircraft and satellite imagery and buoy information is being used to identify and monitor harmful algal blooms.

Submerged Aquatic Vegetation
The Center has developed standardized techniques for mapping seagrass and algae. Additional new techniques for mapping corals and muddy and sandy substrates are also being investigated.

Training in Remote Sensing
Remote sensing is an effective but underutilized tool for habitat management. Center training efforts are increasing the use of remote sensing by local and state coastal managers.

Smart Coastal Growth

Smart coastal growth seeks to maintain a balance between environmental, social, economic, and quality of life issues. Center projects in this theme area assist communities in their efforts to incorporate smart growth concepts into their planning and decision-making processes.

Goal

Coastal communities will anticipate and manage growth while balancing environmental, economic, and social considerations.

Objectives

Increase the decision maker's understanding of impacts from land use decisions.

Increase understanding and utilization of existing community planning tools and techniques.

Increase the number of effective new tools and techniques available to community leaders for proactively managing growth.

Goal

Coastal communities will consider the decision-making process, public involvement, and human values and beliefs in managing culturally significant resources.

Objectives

Increase capacity of regional planners to utilize and apply data and techniques to identify sensitive resources that are valued socially and culturally.

Increase awareness and understanding of community leaders to potential benefits of socially and culturally valued resources.

Increase utilization of existing resources, networks, data, tools, and education to protect and manage cultural resources.

Increase development and application of new tools and techniques for decision making.

Increase the understanding of human values and choices and application of this knowledge by community leaders for decision making.

Key Projects

Smart Coastal Growth

How do we keep our community character and natural resources intact as our coastal zone population continues to grow? Helping coastal managers answer this question is central to the projects in this theme area.

Coastal Techniques
This Web site showcases coastal management techniques, strategies, models, and processes.

Human Dimension Series
Workshops, training, and papers help coastal managers incorporate community values into the decision-making process.

Public Issues and Conflict Management
Coastal issues can be contentious. This training helps coastal managers bring all views to the table in a productive manner.

Fellowship Program
Many of the fellows work with state coastal programs to initiate or follow through on specific smart growth initiatives.

PIVOT
The Performance Indicators Visualization and Outreach Tool (PIVOT) is a community outreach Web site that helps users visualize local issues and track management initiatives.

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