

Conserving Habitat for the Future



NOAA

NOAA Habitat Program

***NMFS Strategic Plan
2009 - 2013***





Letter from the Director

I am pleased to present the 2009-2013 Strategic Plan for the National Marine Fisheries Service (NMFS) components of the NOAA Habitat Program, which includes the Office of Habitat Conservation and the Habitat Conservation Divisions in each of the six NMFS Regional Offices. This Plan is a blueprint for action to guide the direction and priorities of the program over the next five years. It identifies specific goals, objectives, and strategies to accomplish our mission to protect and restore coastal and marine habitats.

The NOAA Habitat Program has a critical and challenging mission to protect, conserve and restore habitats for a broad range of societal benefits. These include conserving habitat for living marine resources such as commercial and recreational fisheries and protected species, increasing the resiliency of coastal communities, providing for the public's use and enjoyment, and supporting the biodiversity on which marine and coastal ecosystems depend.

This Plan was developed with input from external stakeholders including representatives from regional fishery management councils, fishing industry and seafood processing groups, environmental non-governmental organizations, and state and local agencies. The goals and objectives were developed with stakeholder comments in mind, and uses the expertise and input of a variety of NOAA programs. This effort expanded strategic discussions among many NOAA offices and identified areas for future collaboration. The Plan also considers the recommendations from the recently completed external program evaluation of the NOAA Habitat Program coordinated by the National Academy of Public Administration.

Our next step is to develop specific actions and timetables for achieving the strategic goals and objectives laid out in this Plan. Our strategic actions will be updated as needed to reflect new national priorities and changes in the many pressures that impact coastal and marine habitats, including climate change.

It took teamwork and collaboration to produce this Plan, and it will take the same to achieve the challenging vision that we have laid out for ourselves: healthy and self-sustaining coastal and marine habitats that support vital ecosystem functions, including abundant living marine resources, human uses, and resilient coastal communities. Only by working together can we efficiently and effectively respond to the significant existing and emerging pressures impacting the nation's valuable coastal and marine habitats.



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Table of Contents

Introduction	1
The role of the NOAA Habitat Program	3
Vision	5
Mission	5
Guiding Principles	6
Our Strategic Plan	
<i>Goal</i> <i>Protect coastal and marine habitats to sustain ecosystem health, function, and key services to communities and the nation.</i>	8
<i>Goal</i> <i>Restore degraded coastal and marine habitats to enhance ecosystem health, function, and services to communities and the nation.</i>	10
<i>Goal</i> <i>Expand science-based knowledge to assess, protect and restore coastal and marine habitats.</i>	12
<i>Goal</i> <i>Promote Stewardship to protect and restore coastal and marine habitats.</i>	13
Moving Forward	





Introduction

Coastal and marine habitats are some of the most biologically rich and economically valuable areas on Earth. They provide a range of critical and valuable benefits to our nation, playing an essential role in the reproduction, growth, and sustainability of commercial and recreational fisheries and protected species, providing recreational opportunities for the public's use and enjoyment, protecting life and property by helping to buffer coastal communities against natural hazards such as storms, coastal flooding, sea level rise, and tsunamis and supporting the biodiversity on which marine and coastal ecosystems depend. They are also fundamental to the commercial and recreational fishing, boating, tourism, and other coastal industries that provide more than two million jobs and over \$250 billion dollars in economic activity in 2006 (Fisheries Economics of the United States, 2006).

Human activities have significantly altered coastal and marine habitats over time. Valuable habitats continue to be degraded and lost or are made inaccessible due to coastal development, land-based pollution, fishing gear impacts, invasive species, dams and other blockages that restrict access for migratory fish species, and reductions in the amount and delivery of freshwater to estuaries. The degradation and loss of these habitats have significant economic, social, and environmental consequences. Given the continuing trend for populations to concentrate near the coasts, the pressures and potential impacts on coastal and marine habitats will only increase.

The NOAA Habitat Program made considerable progress in the past 10 years mitigating the negative impacts of these pressures. However, given the scope and complexity of the problems, significant declines in habitat quantity and quality continue in many coastal and marine habitats. There is a clear need to strengthen habitat protection and restoration programs and make them more efficient and effective through increases in authorities, resources, and improvements in focus.

Other challenges such as climate change and the demand for new sources of energy call for new approaches to manage and mitigate their potential negative impacts. These emerging issues are of particular concern because the potential impacts and consequences on already pressured coastal and marine habitats are not fully understood, nor is there full knowledge of the costs and strategies to address them. However, we know that potential impacts can be severe and wide-ranging in nature, and this brings an increased sense of urgency to efforts to find effective, long term solutions to protect and restore these finite coastal and marine habitats. Once habitats are damaged or lost it is difficult and costly to recover the services that they provide. Coordinated action is urgently needed to sustain healthy coastal and marine habitats and the communities and economies that depend on them.

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Valuable habitat continue to be degraded and lost or are made inaccessible due to coastal development, land-based pollution, fishing gear impacts, invasive species, dams and other blockages that restrict access for migratory fish species, and reductions in the amount and delivery of freshwater to estuaries.



The Role of the NOAA Habitat Program

The NOAA Habitat Program directly supports the nation's communities and economies by conserving, protecting and restoring coastal and marine habitats vital to producing the nation's commercial and recreational fisheries, recovering protected species, supporting tourism worth billions of dollars annually, and protecting coastal communities from coastal storms and flooding.

The Program's actions directly support NOAA's ecosystem outcomes of:

(1) healthy and productive coastal and marine ecosystems that benefit society; and, (2) a well-informed public that acts as a steward of coastal and marine ecosystems (see Figure 1). The NOAA Habitat Program has three primary outcomes:

- **Increased protection and conservation of habitats** that support NOAA trust resources and support ecosystem health and production;
- **Increased restoration of habitats** that support NOAA trust resources to enhance the recovery of ecosystem health and production;
- **Increased public awareness and stewardship of habitats** that support NOAA trust resources through the involvement of stakeholders and enhancement of partnerships.

The primary NMFS mandates in support of these goals include the Magnuson-Stevens Fishery Conservation and Management Act; Federal Power Act; Fish and Wildlife Coordination Act; Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA); Oil Pollution Act; and the Comprehensive Environmental Response, Compensation, and Liability Act. Activities conducted by dedicated staff at regional and national levels include:

- Protecting vital coastal and marine habitats from negative impacts of actions proposed through permit requests to federal and state agencies. In 2008, the Program conducted in 3,000 consultations to avoid, minimize, or compensate for negative impacts on habitats essential to the nation's commercial and recreational fisheries.
- Protecting and restoring coastal habitats from the upper parts of watersheds to coastal wetlands and estuaries by providing technical and financial support to local communities and other partners. In the past 10 years, the Program has worked with thousands of communities and partners to protect over 60,000 acres of coastal habitats.
- Reducing adverse effects of fishing and non-fishing activities on valuable habitats in collaboration with regional fishery management councils, commissions, and resource management agencies. For example, since 2005 the Program has worked with fishery management councils to identify and protect hundreds of thousands of square miles of bottom habitat (including sensitive deep water corals) by closing large areas off the coasts of Alaska, Washington, Oregon and California to bottom trawling.
- Protecting and restoring fish access to coastal rivers vital to fish reproduction and growth by providing technical, financial, and other support to remove barriers to fish passage. In 2008, the Program worked with government and non-government partners to remove dams and other barriers that restored access to over 600 miles of historic river habitat for fish passage to vital spawning and rearing habitats. Large-scale habitat benefits were derived through long-

term relicensing agreements with the Federal Energy Regulatory Commission (FERC) for multiple private hydro-power generating stations.

more than \$440 million to protect or restore thousands of acres of habitat and return valuable resources and services to the public.

- Conserving, protecting and restoring coastal wetlands and other habitats vital to fisheries and coastal economies and protecting coastal communities from coastal storms. Since 1997, the Program has led or participated in restoration of over 8,000 acres of coastal wetlands in Louisiana as part of the CWPPRA efforts to protect vital fisheries habitats and buffer coastal communities from storms and inundation.
- Protecting and restoring coastal and marine resources that are threatened or injured by oil spills, releases of hazardous substances, and vessel groundings. For example, at the end of 2008, 189 natural resource damage assessment cases had been settled generating

By conserving coastal and marine habitats, the Program directly contributes to the goals of other NOAA Programs including protection and recovery of protected species, maintenance of sustainable fisheries, sustainable management of the nation's coastal regions, and increased resiliency of coastal ecosystems and communities in a changing climate.

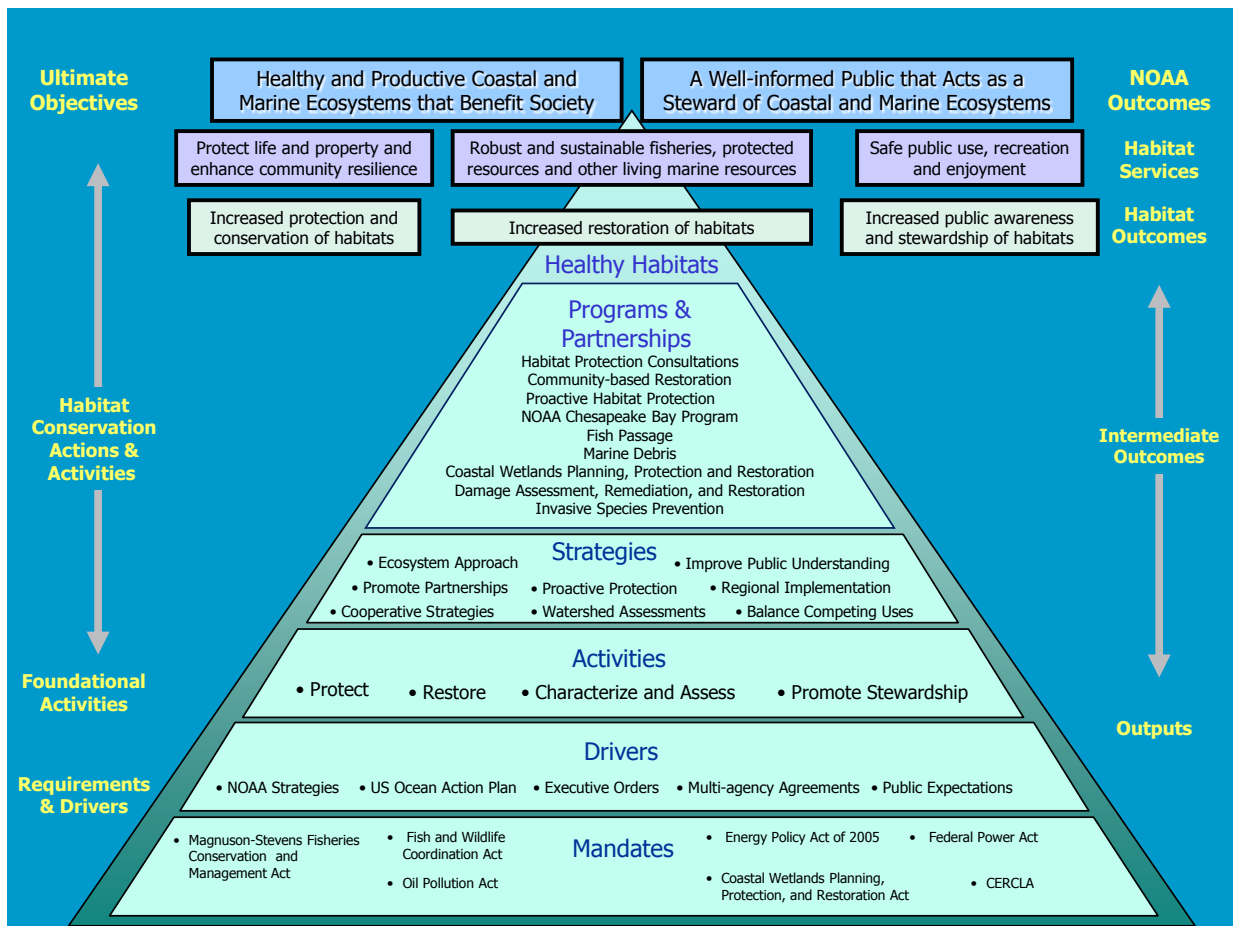


Figure 1. The mandates provided by over 30 legislative authorities, executive orders and agreements are the foundation for the activities, strategies, partnerships and program components that produce measurable habitat outcomes and services. These, in turn, support the broader outcomes of healthy and productive coastal and marine ecosystems and a well-informed public that acts as a steward of coastal and marine ecosystems identified in the NOAA Strategic Plan.

A semi-transparent white box containing text is overlaid on a background image of fishing boats at sunset. The boats are white with blue accents and green nets, docked at a pier. The water is calm, reflecting the golden light of the setting sun. The sky is a mix of soft pinks, oranges, and blues.

Our Vision

Healthy and self-sustaining coastal and marine habitats that support vital ecosystem functions, including abundant living marine resources, human uses, and resilient coastal communities.

A semi-transparent white box containing text is overlaid on a background image of reeds at sunset. The reeds are tall and green, growing in shallow water. The water is calm, reflecting the golden light of the setting sun. The sky is a mix of soft pinks, oranges, and blues.

Our Mission

To protect, restore, and promote stewardship of coastal and marine habitats.

Guiding Principles

- **Use an ecosystem approach to conserve, protect, restore, and promote stewardship of coastal and marine habitats to produce a net increase of habitat and habitat value.**

Future management efforts will be characterized by policy decisions that account for ecosystems, are long-term, fully integrate science with management, and recognize humans as integral to ecosystem functions and sustainability.

- **Proactively engage stakeholder groups and communities to improve the results of our habitat conservation activities.**

Proactive and early engagement of stakeholders who are planning development projects or restoration efforts save money, reduce damage to the environment, and improve communication among management agencies and with the public. Proactive planning encourages management agencies and the public to give priority to protecting or restoring important habitats during project planning and licensing, and is an essential component of the ecosystem approach leading to environmentally-sustainable human uses.

- **Encourage communities to become stewards for habitat conservation.**

Successful habitat conservation depends on public stewardship. The chances for success increase when businesses and communities incorporate ecosystem and sustainable development principles into their planning and development processes. A prime example is

fishing industry organizations that have worked with other stakeholders and fishery management councils to protect sensitive habitat areas.

- **Form partnerships that promote habitat conservation.**

Collaborative partnerships with federal, state, and local government agencies; non-governmental organizations; and the public maximize the benefits of habitat conservation programs. Partnerships improve protection and restoration success, with partners often serving as strong advocates for protecting, restoring, and conserving coastal and marine habitats and living resources.

- **Employ the best available science to support conservation decisions.**

Enhanced scientific understanding of ecosystem processes and services, including the socio-economic value of habitats, will improve ecosystem-based management of coastal and marine habitats.





Our Strategic Plan

Coastal development, growing energy demands, climate change, fishing and other extractive resource uses, blockages to fish migrations, and the need to maintain and improve water quality and quantity are significant challenges to protecting and restoring the nation's coastal and marine ecosystems and the marine life that depends on them.

We will respond to these challenges through the following goals, objectives, and strategies that integrate planning, implementation, and evaluation

1. Recognize the critical need to strengthen existing and develop new partnerships to leverage scarce resources
2. Move the program toward more proactive and collaborative approaches to habitat conservation. This Plan provides the framework for improving protection and restoration of coastal and marine habitats into the future.

GOAL

Protect coastal and marine habitats to sustain ecosystem health, function, and services to communities and the nation.

OBJECTIVE 1

Identify priority actions through improved planning to protect habitat at a variety of scales (national, regional, watershed, and local).

Strategies:

- Participate in regional conservation planning with partners to set priorities for habitat protection activities at appropriate geographic scales (region, watershed, and local).
- Determine priority actions specific to coastal and marine habitats that are vital to managed fish stocks and protected species identified in Fishery Management Plans and Endangered Species Act Recovery Plans.
- Identify partnerships that augment our ability to address leading threats such as coastal development, energy development, and climate change.
- Develop standardized criteria to focus actions on protecting the most valuable and vulnerable habitats at meaningful scales (ecosystem, region, or watershed).

OBJECTIVE 2

Increase protection of coastal and marine habitats by implementing more efficient and effective approaches to prevent, minimize, or mitigate impacts.

Strategies:

- Develop programmatic approaches to influence decisions by other state and federal agencies to increase the efficiency and effectiveness of interagency habitat consultations.

- Work with regional fishery management councils and other partners to integrate habitat protection into fishery management decisions, with an emphasis on protecting Essential Fish Habitat.
- Develop outcome-based targets for habitat protection.

OBJECTIVE 3

Develop new, innovative, and proactive approaches to conserve priority coastal and marine habitats.

Strategies:

- Strengthen legislative authorities and procedures to protect riverine, coastal, and marine habitats.
- Expand the scope of and resources for collaborative habitat protection efforts such as the Cooperative Habitat Protection Partnerships to increase the number and impact of proactive habitat conservation efforts led by local communities and stakeholder organizations.
- Develop a new Habitat Climate Change Adaptation Program to support development and implementation of federal, state, local, and regional climate change adaptation plans.
- Work with partner organizations, including the National Fish Habitat Board and other stakeholder groups, to implement regional, ecosystem, and watershed scale plans that incorporate habitat protection and restoration activities.
- Encourage greater use of pre-consultations, stakeholder education, and incentives to implement collaborative conservation approaches for priority coastal and marine habitats.

OBJECTIVE 4

Evaluate the effectiveness of habitat protection activities and approaches to management.

Strategies:

- Evaluate the effectiveness of NOAA's consultation recommendations to other federal action agencies.
- Develop NOAA and partner capacity to evaluate the economic and ecological value of habitat types and assess the effectiveness of measures to protect important habitats.
- Refine program goals and performance metrics to improve program performance and increase program accountability by developing and comparing annual progress against longer term outcome-based targets for habitat protection.



More than 3,000 permit actions are reviewed annually to minimize adverse impacts on Essential Fish Habitat. One of these reviews supported a decision by the Army Corps of Engineers to deny a permit to mine sand and gravel offshore to re-nourish beaches in Winthrop, Massachusetts. This action protected offshore nursery and spawning ground used by Atlantic cod, a valuable commercial and recreational fish.

GOAL

Restore degraded coastal and marine habitats to enhance ecosystem health, function, and services to communities and the nation.

OBJECTIVE 1

Identify priority habitat types and geographies to maximize the impact of restoration on communities, watersheds, and ecosystems.

Strategies:

- Engage in and represent NOAA restoration interests in local and regional conservation plans.
- Integrate recommendations of fishery management plans and recovery plans into restoration strategies.
- Ensure that restoration is a major component of climate change adaptation strategies.
- Develop outcome-based targets for habitat restoration.
- Develop decision-making frameworks for targeting priority geographies.
- Expand NOAA and partner capacity for evaluating the economic and ecological value as well as technical feasibility of restoration activities.

OBJECTIVE 2

Expand restoration of priority coastal and marine habitats.

Strategies:

- Build on NOAA's leadership in coastal restoration to expand the national capacity for restoration.
- Foster strong national and regional partnerships, including Fish Habitat Partnerships established under the National Fish Habitat Action Plan, to implement restoration activities identified in conservation plans.
- Use the community-based restoration model to address coral recovery, fish passage, and shellfish and wetlands restoration.
- Strengthen legislative authorities for the restoration of coastal and marine habitats.
- Provide engineering and design expertise to partners and funding recipients.
- Provide training and develop tools to build partner and community capacity to restore coastal and marine habitats.



OBJECTIVE 3

Evaluate the effectiveness of NOAA restoration.

Strategies:

- Conduct pre-project monitoring to establish baselines for measuring project success.
- Monitor projects to evaluate overall restoration project success relative to stated goals.
- Evaluate and improve restoration techniques to enhance our ability to accomplish restoration.
- Refine program goals, implementation, and performance metrics to improve program performance and increase program accountability by developing and comparing annual progress against longer term outcome-based targets for habitat restoration.

Since 1996, nearly 2,000 restoration projects supported by the Habitat Program have restored more than 60,000 acres of habitat.



GOAL

Expand science-based knowledge to more effectively assess, protect, and restore important coastal and marine habitats.

OBJECTIVE 1

Characterize and assess the abundance, distribution, and condition of coastal and marine habitats.

Strategy:

- Collaborate with other NOAA programs and partner organizations to:
 - Identify indicators of ecosystem health;
 - Establish baseline conditions and monitor trends in habitat conditions;
 - Improve knowledge of ecosystem processes and services;
 - Quantify habitat utilization by commercially and recreationally important species;
 - Establish socio-economic value of priority habitats; and
 - Communicate science knowledge to fishery management councils and other management agencies.

OBJECTIVE 2

Assess the causes and consequences of threats affecting coastal and marine habitats.

Strategy:

- Collaborate with other NOAA programs and partner organizations to:
- Conduct baseline assessments of current threats;
- Quantify the impacts of threats on coastal and marine habitats;
- Identify and estimate the socio-economic impacts of habitat modifications;
- Predict future vulnerability of coastal and marine habitats to new threats;
- Predict the resiliency of habitats to recover from environmental disturbances;
- Develop capabilities to detect declining habitat health and strategies to mitigate factors that affect the health of coastal and marine habitats; and
- Develop a Habitat Assessment Improvement Plan to incorporate habitat factors into fish stock assessments for improved fishery management.



GOAL

Promote stewardship through outreach and education leading to increased habitat conservation.

OBJECTIVE 1

Increase awareness of the importance of coastal and marine habitats and NOAA's role in their protection and restoration.

Strategies:

- Develop and implement a plan to increase public awareness of ecological services and socio-economic value of habitats.
- Educate students and adults through hands-on training and partnerships with organizations involved in outreach and education.

OBJECTIVE 2

Increase action by government, communities, and individuals to ensure coastal and marine habitats are conserved for future generations.

Strategies:

- Establish partnerships with communities and organizations to incorporate natural habitats into hazard resilience plans, to mitigate human impacts, and to restore coastal and marine ecosystems.
- Transfer habitat protection and restoration technologies to the private sector, landowners, environmental groups, and government agencies.

- Expand environmental literacy programs such as the Chesapeake Network for Education of Municipal Officials (NEMO) that focus on educating local land use decision makers about the links between land use and natural resource protection.
- Strengthen environmental stewardship strategies across federal agencies through actions by interagency committees in which NOAA participates.

OBJECTIVE 3

Evaluate and refine effectiveness of stewardship strategies.

Strategies:

- Evaluate which strategies are most effective at increasing awareness, knowledge, and stewardship of habitat issues by constituents.
- Evaluate the effectiveness of education and partnership initiatives for enhancing habitat stewardship.



Moving Forward

This Strategic Plan is an important step forward in identifying and communicating the priorities of the NMFS component of the NOAA Habitat Program for the next five years. It will guide the development of more specific program priorities and actions to achieve greater results on the ground.

The Program also recognizes the critical importance of performance measures as a tool to determine the success of its efforts, identify priority issues, track trends in habitat protection and restoration, quantify the effectiveness of management activities, and clarify existing and emerging resource needs to improve management. The Program is currently revising its performance measures to produce a comprehensive picture of the progress it is making toward its strategic priorities, following the recommendations contained in the recently completed external review of the Program by the National Academy of Public Administration.

The NOAA Habitat Program is committed to achieving the goals and objectives of this Strategic Plan. To be successful in reaching this ambitious and challenging vision, the program must work collaboratively with its partners, seek innovative solutions to ensure habitat services are maintained, adjust to new threats that are impacting coastal and marine habitats, and be flexible in updating its strategies to respond to emerging national priorities.



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