

“There is a window in time, and that is now, when we could forever lose a priceless ocean heritage, or we could develop the foundation for an enduring legacy – an ocean ethic – an inspired gift from the 20th century to all who follow us.”

— *Dr. Sylvia Earle*



Protecting Marine Resources

Strong protection of our ocean and coastal environment, using a precautionary approach and sound management, is no longer a choice, but a necessity.

Submerged Heritage Resources

Preserve and protect submerged heritage resources for current and future generations.

An estimated 50,000 shipwrecks, including the ironclad civil war vessel, the *U.S.S. Monitor*, are scattered throughout the U.S. territorial sea and the Exclusive Economic Zone. These shipwrecks and other sunken artifacts are time capsules of the world's history. Until the advent of scuba diving equipment and other technological developments in the 1950s, submerged heritage resources were largely undisturbed by humans. Advances in deep-sea technology have created unprecedented opportunities for discovering, researching, accessing, and preserving resources, and for educating the public about the history, people, and cultures associated with these unique and irreplaceable sites.

Unfortunately, new capabilities make these sites highly vulnerable to exploitation and destruction by treasure hunters and souvenir collectors, resulting in their loss and destruction. Even submerged heritage resources in state waters, which were to be protected from treasure hunting under the Abandoned Shipwreck Act, are still subject to commercial exploitation. Special care must be taken to preserve and protect these precious resources for scientific study and public interpretation and appreciation. Special care must also be taken to respect human remains, including tribal sites.

Ongoing Concerns

- Submerged heritage resources are often treated as commodities for private financial gain, rather than managed as public scientific resources in need of protection under laws based on historic preservation and environmental protection.
- In certain situations, submerged heritage resources cannot be removed from the marine environment without risk of harm to natural and cultural resources.
- Submerged heritage resources include diverse prehistoric and historic sites. The interests of tribes in such resources are often overlooked.
- The extent of damage caused to the environment by reckless recovery activities is unknown.

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- While protections exist in many state waters and in federal marine protected areas, submerged heritage resources are exploited and destroyed outside of these areas.
- Certain sunken vessels and aircraft may be dangerous (e.g., contain unexploded ordnance), or should not be disturbed out of respect for the crew members who died on board. There may also be national security reasons why a sunken vessel or aircraft should not be disturbed.
- States do not always preserve submerged heritage resources, and states that want to do so are often unable to because of the historical law of salvage and finds.

Recommendations

- Enact federal legislation that will: prohibit the destruction and loss of submerged heritage resources; punish those who injure or destroy these and associated natural resources; provide for appropriate public access; develop a research and recovery permitting process; require adherence to scientific standards; provide for the conservation and disposition of recovered materials in qualified repositories; ensure sensitive treatment of any human remains; and protect sovereign immune vessels and aircraft that have not been expressly abandoned.



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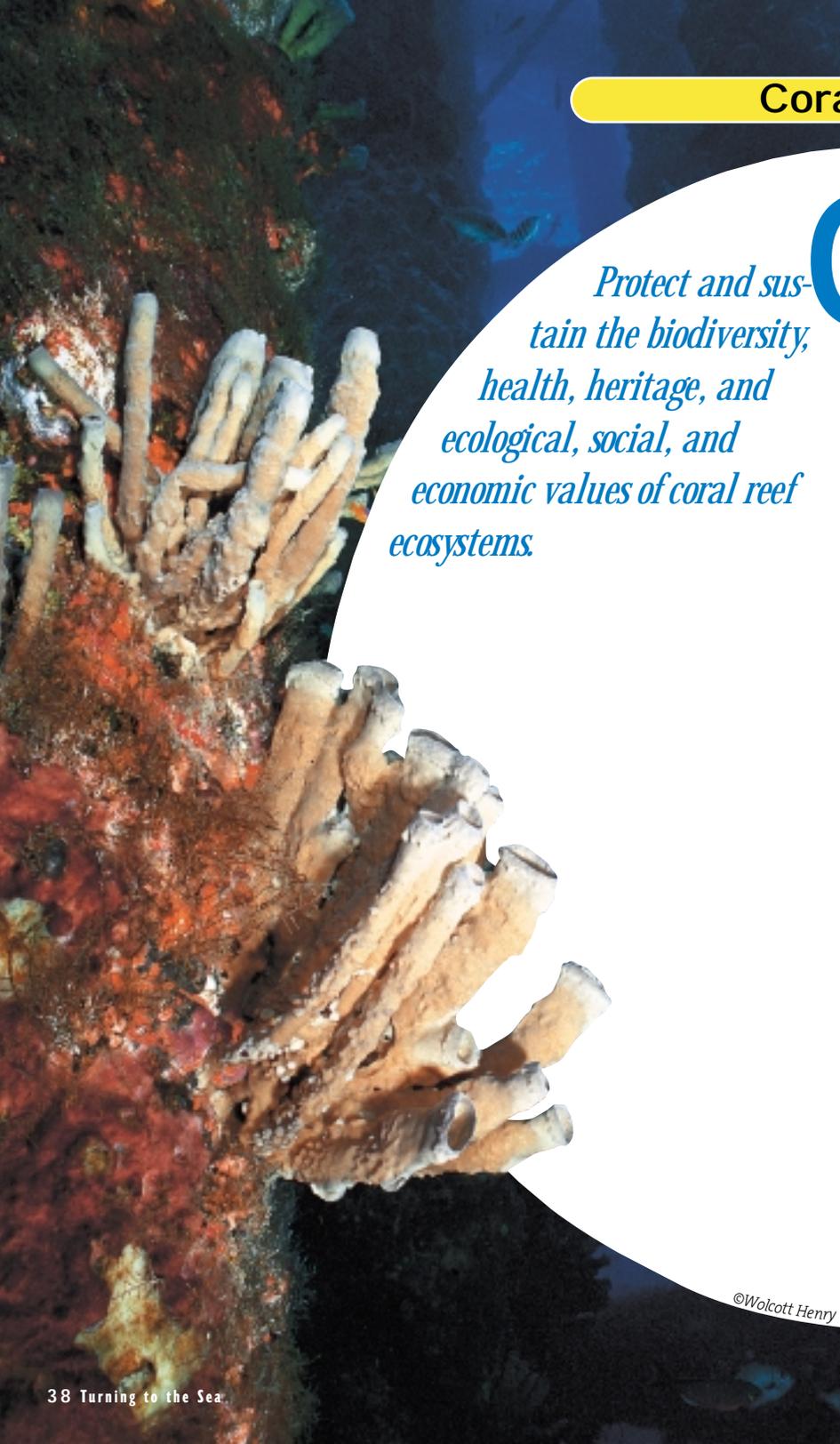
The federal government is proposing to designate **Thunder Bay and surrounding waters on Lake Huron as a National Marine Sanctuary.** The proposed sanctuary area, off the coast of Alpena, Michigan, contains approximately **160 shipwrecks that span more than a century of Great Lakes maritime history.**

<http://glrl.noaa.gov/glsr/thunderbay>

- Clarify, through legislation, the meaning of “abandoned” in the Abandoned Shipwreck Act so that states can better preserve submerged heritage resources.
- Support cooperation and collaboration with tribes, states, and communities on ways to protect submerged heritage resources, including legal regimes, consistent guidelines and procedures for evaluating best preservation and recovery plans, exploration and monitoring programs, and efforts to educate the public about the value and fragility of these resources.

For more information

- <http://monitor.nos.noaa.gov>
- <http://www.nps.gov/scru/home.htm>
- <http://www.nps.gov/usar/>
- <http://www.history.navy.mil>



Coral Reefs

Protect and sustain the biodiversity, health, heritage, and ecological, social, and economic values of coral reef ecosystems.

Our nation's coral reefs cover approximately 17,000 square kilometers. Ninety percent of them are associated with U.S. islands in the Western Pacific (Hawaii, Guam, American Samoa, and the Commonwealth of the Northern Marianas); the remainder are located off Florida, Georgia, Texas, and U.S. islands in the Caribbean. These coral reefs support thousands of jobs and billions of dollars in annual revenues from tourism, recreation, and fishing; are valuable sources of new medicines and biochemicals; help prevent shoreline erosion; and provide life-saving protection from storms.

Despite their unique value, coral reefs in the U.S. and around the world are quickly being destroyed by a powerful combination of stresses, such as polluted runoff, sedimentation, unsustainable fishing practices, collection and trade in reef species, groundings and other damage caused by commercial and recreational vessel traffic, diseases, marine debris, and climate change. During the past two years, unprecedented levels of coral bleaching and mortality associated with abnormally high sea temperatures and other factors have occurred. As a result, approximately 60% of the world's coral reefs are at medium or high risk from human impacts, and many have been degraded beyond recovery.

As part of the National Ocean Conference in June 1998, President Clinton signed the Coral Reef Protection Executive Order (13089) to preserve and protect the biodiversity, health, heritage, and ecological, social, and economic values of U.S. coral reef ecosystems and the marine environment. To fulfill its protection efforts, the Order also created the interagency U.S. Coral Reef Task Force. Additional efforts are now required to effectively protect, restore, and sustainably use valuable U.S. coral reef ecosystems for current and future generations.

Ongoing Concerns

- The U.S. has not yet developed a coordinated national strategy to protect and restore coral reef ecosystems from the effects of human activities and natural stressors.

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- The U.S. lacks a comprehensive mapping or monitoring program to assess or track the condition of U.S. coral reefs.
- Financial and technical resources are inadequate to help states, territories, communities, and other nations sustainably manage their coral reefs.
- As the world's largest importer of coral reef species, the U.S. may be driving the unsustainable use of coral reefs in other nations.

Recommendations

- Implement Executive Order 13089 as quickly as possible through joint efforts of federal, state, and local agencies; nongovernmental partners; and other nations as needed.
- Implement priority actions of the U.S. Coral Reef Task Force, including the commitment to prevent federal agency degradation of reefs consistent with Executive Order 13089.
- Increase research efforts to understand the causality behind the current worldwide decline of coral reefs and how it relates to disease, temperature change, and pollution.
- Assist in the design and implementation of local and regional reef management plans that integrate protected areas and fishery management with coastal zone and marine management planning efforts, and increase support for local actions.
- Increase monitoring, protection, and sustainable use of coral

Every year, thousands of volunteers collect vital information on the health of the nation's coral reefs, helping federal, state, and nongovernmental organizations monitor and manage these valuable resources. For example, the Reef Ecosystem Condition Project (ReCon) is training volunteer divers to collect important data on the temperature, salinity, and visibility of coral reef waters. And, in 1997-98, Reef Check used volunteer divers to survey over 300 reefs in over 30 countries.

<http://www.ReefCheck.org/>
<http://www.cmc-ocean.org/pressrelease.html>

reefs worldwide by supporting international partnerships at

- national, regional, and global scales.
- Increase efforts to stem the problem of trade in nonsustainably harvested corals.
- Work with the International Maritime Organization and other international partners to prevent destructive anchoring of ships on coral reefs and provide safe, alternate anchorage for mariners.
- Seek Congressional support for the Clinton/Gore Lands Legacy Initiative, which proposes \$10.3 million – a 30-fold increase over current funding levels – for coral reef protection.

For more information

- http://state_of_coast.noaa.gov/bulletins/html/crf_o8/crf.html
- <http://coralreef.gov/>
- <http://www.epa.gov/owow/coral>
- <http://www.wri.org/indictors/reef.html/>

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Estuaries

Recognize the value of our nation's estuaries, and protect and restore them for current and future generations.

Estuaries, where fresh water from rivers mixes with salt water from the oceans, are among the most productive environments on Earth. These transition zones from land to sea provide unique habitat for more than 75% of the U.S. commercial and 85% of the U.S. recreational fisheries. Estuaries are also popular places to live, work, and enjoy outdoor activities. More than 28 million jobs in the U.S. are created in association with estuaries, and more than 70% of Americans swim, boat, and fish in them.

Increasing pressures from inland activities and coastal development are causing habitat loss and degradation, fisheries declines, and overall reductions in estuarine health and productivity. Associated physical alterations, such as dredging, damming, and bulkheading, change the natural flow of fresh water to estuaries, affecting water quality, fish spawning, and the survival and distribution of living resources. Removal of vegetation can also affect water quality by causing increased erosion and siltation. Toxic substances and excess nutrients contribute to fish diseases, algal blooms, and low dissolved oxygen and can pose a threat to the health of humans and estuarine wildlife. The introduction of nonindigenous species is also affecting the ecological diversity of many estuarine environments, eradicating naturally occurring species and destroying essential habitat.



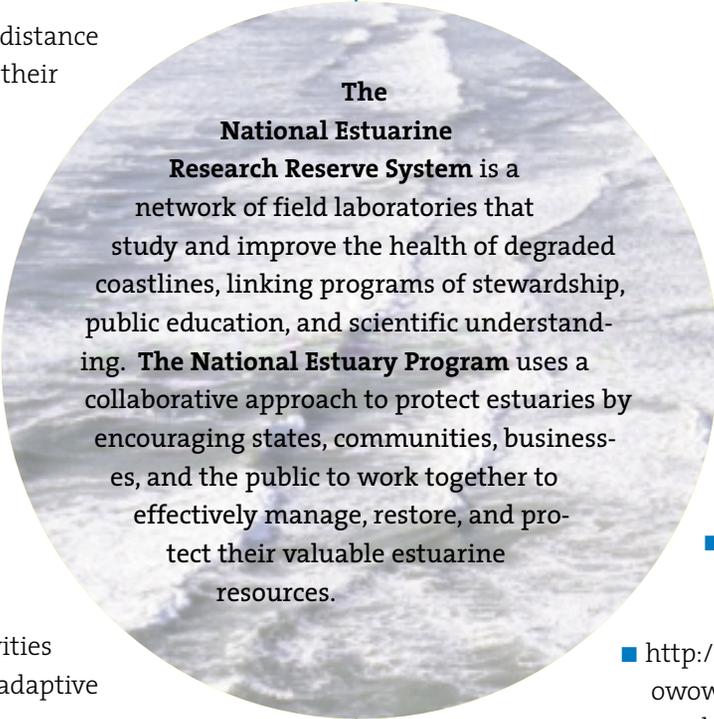
Ongoing Concerns

- Federal activities that affect estuaries are not always well integrated.
- Monitoring efforts in estuaries are often fragmented and not incorporated into overall monitoring data and analysis, hindering the ability of managers to evaluate and modify the effectiveness of their programs.

- Information on estuaries is often collected without reference to overall national research goals, or without the technological means to share and combine the data with other research efforts.
- Many people living inland and at a distance from the coast are unaware of how their actions affect estuaries.

Recommendations

- Improve communication and coordination among the various federal agencies and programs sharing responsibility for estuarine protection.
- Coordinate federal programs with tribal, state, and local “smart growth” initiatives to more efficiently implement on-the-ground solutions.
- Improve estuarine monitoring activities and data reporting to facilitate an “adaptive management” process.
- Create a national framework for estuarine research.
- Increase public understanding of the connections between human activities and estuarine health through improved education and outreach.
- Seek Congressional support for the Clinton/Gore Lands Legacy Initiative, which would provide essential funding for the National Estuarine Research Reserve System and the National Estuary Program.



The National Estuarine Research Reserve System is a network of field laboratories that study and improve the health of degraded coastlines, linking programs of stewardship, public education, and scientific understanding. **The National Estuary Program** uses a collaborative approach to protect estuaries by encouraging states, communities, businesses, and the public to work together to effectively manage, restore, and protect their valuable estuarine resources.

For more information

- <http://www.nos.noaa.gov:80/ocrm/nerr/welcome.html>
- <http://www.epa.gov/owow/estuaries/nep.html>
- <http://www.fws.gov/cep/coastweb.html>
- <http://marine.usgs.gov>
- <http://www.nwrc.usgs.gov>
- http://www.epa.gov/emap/html/pubs/docs/midatl/cond_mae.htm



Marine Protected Species

Reduce the risks of extinction, and recover marine protected species and the ecosystems on which they depend.

During the past century, marine mammals, birds, turtles, fish, invertebrates, and other marine species have been overhunted or overfished, causing extinction or extreme population declines. Today, interactions with commercial fishing operations, overharvest for international trade, and degradation and loss of important feeding and nursery habitats have depleted many marine species. As coastal and marine waters have become increasingly polluted, many species have shown increases in diseases, infections, and tumors. Combined with increased disturbances from ship traffic, noise pollution, and other impacts, the cumulative effects of these stresses have reduced many marine species to extremely low levels and

possible extinction. Specifically, between 1975 and 1999, the number of marine species or stocks listed as threatened or endangered under the Endangered Species Act increased from 20 to 61. Another 42 marine species or stocks are currently considered “candidates” or are proposed for listing under the Act.

Working with representatives from the shipping and fishing industries, the federal government developed an innovative system to protect the 300 remaining highly endangered **North Atlantic right whales**. Large commercial ships entering important right whale feeding and nursing grounds off Cape Cod, Massachusetts and a large area near the Georgia/Florida border must contact a U.S. Coast Guard-operated shore station. The ships provide the station with their course, speed, location, destination, and route, and the station responds with information on local right whale sightings and procedures that may help prevent collisions.

<http://www.wh.who.edu/cgi-bin/rwhale.pl>

There is serious concern for the future of a number of marine species protected under the Marine Mammal Protection Act or the Endangered Species Act, including Steller sea lions, North Atlantic and North Pacific right whales, Hawaiian monk seals, West Indian manatees, southern sea otters, and all six species of sea turtles. Destructive collecting practices and unsustainable collection levels have also severely depleted the populations of a number of species (e.g., seahorses and coral reef species). And habitat destruction is probably leading to the loss of less-studied marine organisms before they are even identified, much less protected.

©Tom Pawlsh-Center for Marine Conservation

Ongoing Concerns

- There is a lack of information on the population sizes and trends of marine wildlife, as well as on the threats to marine wildlife.
- The lack of coordination, especially in the international arena, reduces the effectiveness of recovery and protection actions.
- Delays in addressing population trends can dramatically increase the cost of recovery efforts.

Recommendations

- Increase research and monitoring activities to provide information on populations of marine wildlife, and threats and solutions to their decline.
- Develop and implement national goals and coordinated action plans to recover marine protected species.
- Increase coordination with tribes and states on research, recovery, and management of marine protected species.
- Address key existing and emerging threats, including modification/destruction of coastal and estuarine seafloor ecosystems by fishing gear, coastal habitat destruction resulting from shoreline protection efforts, and watercraft collisions with marine mammals.
- Develop a coordinated policy and action plan for dealing with interactions between the public and expanding seal populations, the growth of marine aquaculture, and the use and effectiveness of marine preserves.
- Develop solutions to safely deter marine mammals, sea turtles, and seabirds from becoming entangled in fishing gear; prevent incidental bycatch in commercial fisheries; and reduce the impacts of ship traffic on marine mammals.

- Consider the impacts of marine noise pollution on marine mammals, and develop solutions as appropriate.
- More effectively implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and improve cooperation with domestic and international partners, including increased training and capacity building for other countries.

For more information

- http://www.nmfs.gov/prot_res/prot_res.html
- <http://state-of-coast.noaa.gov/>
- <http://www.fws.gov/r9endspp/endspp.html>
- <http://www.fws.gov/r9dia/global/cites.html>
- <http://www.heritage.tnc.org/>

©Rick Brown, Monterey Bay Aquarium

Marine Protected Areas

Establish a strongly linked, scientifically based, comprehensive network of protected areas representing diverse U.S. marine ecosystems.

National parks, wilderness areas, wildlife management areas, state forests, and city parks are all examples of land-based “protected areas.” The designation of protected areas on land has a long history and proven track record for providing long-term protection, resource management, recreational opportunities, and other uses. Marine protected areas are defined as any area of intertidal or subtidal terrain, together with overlying waters and associated flora and fauna, and historical and cultural features, that have been reserved by law or other effective means to protect part or all of the enclosed environment. Categories of marine protected areas can range from strictly protected wilderness areas to multiple-use areas.

There are approximately 300 marine protected areas in the U.S. managed by federal agencies, state governments, or nongovernmental organizations. U.S. marine protected areas include National Marine Sanctuaries; selected National Parks, Seashores, Monuments, and Wildlife Refuges; National Estuarine Research Reserves; National Estuary Program areas; and certain areas designated for rebuilding fish stocks in Fishery Management Plans.

Marine protected areas are important management tools with unique potential to help communities protect and sustainably use their valuable marine and coastal resources. They have been used effectively to conserve and manage natural areas, reduce user conflicts and impacts from user activities, provide educational opportunities, enhance commercial and recreational opportunities, and provide undisturbed areas for scientific comparison with nearby degraded habitats. Despite these benefits and the fact that oceans cover over 71% of the Earth’s surface, internationally, less than 1% of the sea is designated as marine protected areas. Domestically, about 1% of the ocean area under U.S. jurisdiction is designated as marine protected areas, and less than 1% of these areas protect marine life from fishing and other impacts. Many natural treasures on land have been given special protections to allow them to remain as undisturbed as possible as part of the National Wilderness Preservation System. No such system exists for U.S. ocean environments.

Channel Islands

National Marine Sanctuary

Ongoing Concerns

- The U.S. does not have an integrated, comprehensive network of sites representing the nation's major ocean and coastal environments.
- There is no comprehensive approach to designating, evaluating, or monitoring marine protected areas at either the state or the federal level.
- Marine protected areas have not been used effectively for the long-term protection and sustainable use of commercial and recreational fisheries.
- Limited funding prevents adequate enforcement and monitoring in existing marine protected areas.
- There are too few areas that preserve marine biodiversity by limiting fishing and other harvest activities.

Recommendations

- Increase linkages among existing marine protected areas within the U.S. and with those in neighboring countries to create a well-coordinated network of sites for long-term monitoring, public education, sustainable use, research and exploration, and protection of natural resources.
- Establish criteria to evaluate the effectiveness of existing marine protected areas, and improve individual site performance and the success of the overall network.
- Identify areas of important ocean biological diversity and productivity, and habitats for endangered species and commercial and recreational fisheries species, including essential fish habitat and coastal and marine areas that provide key

Concern for the future of the Tortugas, an area comprised of islands and rich coral resources in the Florida Keys, led federal and state agencies, local communities, fishermen, divers, and others to form a unique partnership to design and evaluate solutions to help protect this sensitive area. This group, using ecological data, socioeconomic information, and public input, unanimously recommended establishment of a new marine protected area for the Tortugas marine communities.

<http://fpac.fsu.edu/tortugas/index.html>

ecosystem functions or contain significant U.S. historical or cultural resources.

- Examine the concept of marine wilderness areas and its applicability to U.S. marine protected areas.
- Evaluate the ability of existing marine protected areas to protect unique or representative examples of biological, cultural, or historical resources; identify new areas of important ocean diversity and productivity; and add sites and capacities to address specific local, tribal, regional, national, or international issues and needs.
- Leverage public dollars to encourage private donations by corporations and individuals to support national marine sanctuaries and other marine protected areas.
- Seek Congressional support for the Clinton/Gore Lands Legacy Initiative, which proposes to more than double the funding to strengthen our nation's twelve national marine sanctuaries.

For more information

- <http://www.sanctuaries.nos.noaa.gov>
- <http://www.nps.gov/>
- <http://www.iucn.org/themes/wcpa/ppa.html>

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Ocean and Coastal Habitats

*Understand,
protect, restore, and
sustainably use ocean
and coastal habitats.*

Ocean and coastal habitats are very diverse, ranging from coastal streams and sandy beaches to seagrass beds and kelp forests, and from coral reefs and arctic ice shelves to open ocean waters and deep ocean canyons. The nation's ocean and coastal habitats support some of the most valuable and diverse biological resources on the planet, including 66% of all U.S. commercial and recreational fish and shellfish, 45% of all protected species, 50% of nongame migratory birds, 30% of migratory waterfowl, and thousands of other species. These habitats also provide important services, including flood control, water filtration and storage, storm protection, food production, and recreation and tourism. While it

The port of Oakland has until recently been unable to dredge its channels because it could not find an environmentally acceptable site to dispose of the dredged material. An innovative wetlands restoration project in the **Sonoma Baylands** helped find a creative solution by hydraulically pumping clean dredged material onto former marshland that had subsided. Oakland is now more competitive in the deep-draft Pacific container trade, and the future marshland is prime habitat for intertidal plants and animals.

is clear that human activities have degraded or destroyed many ocean and coastal habitats, in some cases, the scope and magnitude of these impacts are largely unknown, and we do not fully understand the complex processes related to ocean and coastal habitats.

Recent scientific examination of the effects of bottom trawling on the seafloor shows evidence of large-scale habitat alteration, particularly within less resilient seafloor communities. Other activities, such as dredging, although necessary to maintain our nation's waterways, can also harm valuable riparian and estuarine habitats and raise ancillary problems associated with contaminated dredge material and its disposal. Human activities, such as residential and commercial development, can alter or destroy valuable coastal wetlands, which are critical habitat for many species of fish, shellfish, birds, and other marine wildlife.



Ongoing Concerns

- There is limited understanding of the causes of recently observed changes in ocean chemistry and their potential impacts on ocean and coastal habitats.
- The nation's ocean and coastal habitats have never been comprehensively mapped or described.
- No coordinated monitoring program exists to track the health and condition of ocean and coastal habitats and integrate federal, state, and local data.
- There is no comprehensive, long-term planning and tracking of permits and use of ocean and coastal habitats, including impacts on essential fish habitat.
- Ocean and coastal habitats have tremendous social and economic values that are not captured in any assessment.
- Technical and financial resources are not available to adequately restore most damaged habitats or respond to emergency situations.
- Contaminated sediment, dredging, and the disposal of dredged material pose a threat to ocean and coastal habitats.

Recommendations

- Implement a coordinated, comprehensive effort to map and monitor the condition of U.S. ocean and coastal habitats, such as the Aquatic Restoration and Conservation Partnership.
- Produce an annual report card on the health of the nation's ocean and coastal habitats.
- Fully implement the essential fish habitat requirements of the Magnuson-Stevens Fishery Conservation and Management Act.
- Work with other federal, tribal, state, and local agencies to encourage the use of existing wetland restoration programs to

effect on-the-ground change in coastal areas.

- Implement coordinated, comprehensive efforts to reduce the impacts of dredging and fishing on coastal habitats.
- Develop cost-effective, environmentally acceptable regional sediment management procedures that speed remediation of contaminated sediments and increase beneficial reuse of both clean and remediated dredged material.
- Assemble and disseminate information on the social and economic values of ocean and coastal habitats.
- Develop and implement new technologies to respond to threats and restore damaged coastal habitats.
- Support community-based partnerships to identify, design, and implement coastal habitat restoration projects.
- Increase research to understand the ongoing changes in ocean chemistry.

For more information

- <http://www.nmfs.gov/habitat>
- <http://www.arcpartners.org>
- <http://www.fws.gov/cep/coastweb.html>
- http://state-of-coast-noaa.gov/bulletins/html/chr_10/chr.html
- <http://www.epa.gov/owow>

Water Quality

Protect and restore coastal and marine waters to safeguard human health, sustain the rich diversity of wildlife, promote a thriving economy, and preserve a recreational and aesthetic resource for safe enjoyment by current and future generations.

Toxic and nutrient pollutants, sedimentation, and disease-causing organisms are degrading ocean and coastal water quality and threatening public health, the environment, and the economic well-being of communities that depend on fishing, tourism, and marine commerce. While “point” sources of pollution, such as discharge pipes, continue to be a problem, the leading cause of water pollution today is “nonpoint” source pollution, which includes runoff from farmland, suburban lawns, and city streets, as well as pollution that is deposited from the air.

Increasingly, excess nutrients in polluted runoff are contributing to harmful algal blooms and robbing coastal and marine ecosystems of life-sustaining oxygen, creating “dead zones” that cover huge areas, such as the 7,700-square-mile dead zone in the Gulf of Mexico. Pollution can also alter the chemistry of the coastal ocean, which scientists fear is happening in the Bering Sea and other areas.

As pollution continues to contaminate our waters, more and more people are faced with the risk of illness from exposure to toxic contaminants and disease-causing microorganisms, either when eating the fish they catch or through direct contact with polluted waters. In 1998, approximately 30% of all beaches surveyed reported an advisory or closing, and 60% of coastal waters were under fish-consumption advisories.

Ongoing Concerns

- Water quality improvement efforts to protect human health and the environment have been focused primarily on inland and coastal waters. As a result, the impacts of pollution on the marine environment are not as well understood.
- While the federal government has developed national guidance on fish-consumption advisories and recreational water quality monitoring, many tribes and states do little or no monitoring, and variation in their methods and standards persists.
- Contaminated sediments along our nation’s coasts are degrading water quality.
- Many former ocean disposal sites are unmonitored, and their impacts on

marine and coastal waters and ecosystems are largely unknown.

Recommendations

- Implement the Administration's Clean Water Action Plan to effectively address polluted runoff and other sources of pollution, as well as improve coordination among federal agencies.
- Increase research on the effects of water quality and ocean discharges on the marine environment, including on marine wildlife, and use this information to improve protection for ocean and coastal resources where necessary.
- Assist tribes, states, and territories in adopting fully protective fish-consumption and beach water quality standards, conducting adequate fish tissue and beach water quality monitoring, and developing effective public notification and education programs. Consider legislation that promotes these goals.
- Improve detection of pathogens in fish, wildlife, and recreational waters through research on new technologies, and reduce the occurrence of contaminants in coastal waters through improved controls on sewer overflows, stormwater runoff, and other sources of pollution.
- Effectively manage and remediate both inland and coastal contaminated sediment sites to reduce their impact on coastal water quality.
- Work with tribes and states to identify and address the health of coastal waters that are not meeting clean water goals.

The President's and Vice President's 1998 **Clean Water Action Plan** uses collaborative watershed strategies to protect and restore water quality. Action items under the plan include developing a multi-agency Coastal Research Strategy, creating a coordinated monitoring plan for coastal waters, and issuing a report to the public on the condition of the nation's coastal waters.

<http://www.cleanwater.gov>

- Assess the impacts of military, industrial, and other coastal and ocean disposal sites, and identify and implement appropriate monitoring, protection, and remedial measures where necessary.
- Work with international partners to reduce the flow of pollutants from land into oceans by implementing the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities.

For more information

- <http://www.epa.gov/water>
- <http://state-of-coast.noaa.gov>
- <http://www.fws.gov/cep/coast/web.html>
- <http://marine.usgs.gov>
- <http://www.nos.noaa.gov/programs/ncos.html>