

Sustain a healthy economy by supporting healthy ecosystems

America's oceans, coasts, and Great Lakes provide critical goods and services, including food, minerals, transportation, medicines, storm protection, tourism, and recreational opportunities. Coastal counties, which [produce almost half of our GDP and one in 50 jobs](#), are directly dependent on the resources of the oceans and the Great Lakes. The important role that healthy oceans play in sustaining coastal communities and economies must be at the forefront of ocean policy decision making going forward. This includes the effects of multiple, compounding stressors including warming ocean temperatures, acidification, and hypoxia, which are threatening ecosystem function. Addressing these challenges and securing the vitality of our coastal economies requires investing in ocean acidification and hypoxia research, developing collaborative management approaches to tackle compound problems, protecting ecologically important areas, and land-based strategies to reduce water pollution.

Invest in ocean acidification and hypoxia science and research and support multi-sectoral collaborative efforts to address the problem

Scientific studies show the oceans are acidifying at an alarming rate with potentially massive consequences to the marine ecosystem and associated economies. For example, it is well documented that acidifying waters interfere with the growth and development of marine organisms, such as oysters, that use calcium carbonate to build their shells or skeletons. As a result, there is increasing concern that oysters, mussels, crabs, and other commercially and recreationally harvested bivalve and crustacean species are being negatively impacted by ocean acidification. Many of the species most likely to be impacted are foundational to the marine food web, and their loss could have massive ripple effects throughout marine ecosystems.

The Trump Administration and Congress should invest in ocean acidification science and research and support efforts at the state and regional level to coordinate research, help affected industries, and mitigate the causes of ocean acidification.

While the problem of ocean acidification is daunting, the [Washington State Blue Ribbon Panel on Ocean Acidification](#) offers one potential model for improving scientific understanding of ocean acidification and developing a policy response. The panel identified gaps in scientific knowledge and recommended coastal ecosystem management strategies to mitigate some immediate threats and improve the resilience of the industry. The Washington State Legislature acted upon these recommendations by supporting increased monitoring and research and creating the [University of Washington's Ocean Acidification Center](#) and the [Washington Marine Resource Advisory Committee](#) to continue to focus on science and mitigation. On a regional level along the West Coast, a similar effort is underway in the form of the [West Coast Ocean Acidification and Hypoxia Science Panel](#).

States are also teaming up on the East Coast to monitor and address the issue, (e.g., in the Mid-Atlantic region). Several states are considering establishing panels of their own to address ocean acidification and hypoxia, including New Hampshire, Rhode Island, Maine, and Maryland, while New York recently passed legislation creating its own ocean acidification task force. While there is still a need for additional resources to study and understand ocean acidification, it is equally important to develop ways to mitigate the impact acidification has on vulnerable marine species, and to address these issues on a regional basis.

Continue progress in protecting ecologically and culturally significant ocean and coastal areas to improve fish stocks, food security, and resilience

As the number of ocean uses expands, so does competition for limited ocean and coastal resources. This expansion offers great opportunities, but it also creates challenges for ocean users trying to do business in a crowded ocean that is undergoing profound ecological change. Protecting ecologically important ocean areas can improve fish stocks, bolster food security, build resilience, and promote marine biodiversity. It can also buffer against the impacts of rapidly changing ocean conditions by providing areas for regeneration of marine species and improve resource management by serving as benchmarks for undisturbed natural ecosystems. Meanwhile, protecting areas of cultural significance preserves America's heritage, and can bolster tourism, recreation, and quality of life for a wide range of Americans.

Important ocean, coastal, and Great Lake ecosystems can be protected through a variety of mechanisms that confer varying levels of protection. These mechanisms can range from executive actions to legislation, and can be enacted at the federal, state, or local levels. Protected areas limit activities that damage ecosystem health, while providing opportunities for recreation, tourism, and other ocean uses. The vast majority of marine protection in the United States allows for multiple uses to occur. Across all national marine sanctuaries, for example, commercial fishing, recreation, tourism, and research generate [about \\$8 billion annually](#) in local coastal and ocean dependent economies. Accordingly, the process for creating protected areas should be flexible and include extensive stakeholder engagement to determine areas suitable for protection and the types of activities permitted therein. **The Trump Administration and Congress should protect ecologically and culturally significant ocean and coastal areas in ways that allow for multiple uses, where appropriate.**

Use existing authority to fund and implement measures to improve water quality

Nonpoint source pollution is a major cause of water quality degradation in coastal and Great Lakes watersheds. It takes many forms, including agricultural runoff, oil from both land-based and marine sources, sewage, storm water overflows from municipalities, and plastic pollution. It often travels vast distances in fluid or atmospheric forms before reaching ocean waters. Because of its diffuse nature, nonpoint source pollution poses a particular challenge for regulators and regulated communities.

The effects of this pollution include human illness due to contaminated beaches and seafood; harmful algal blooms and hypoxia; shellfish bed closures; and degraded or destroyed coral reefs and

seagrass. Nonpoint source pollution may also contribute to ocean acidification. Our failure to properly manage inputs from a variety of land-based and marine activities that contribute nonpoint source pollutants is compromising the ocean's ecological integrity, costing jobs, and threatening human health. For example, harmful algal blooms cost the economy [an average of \\$75 million annually](#) as a result of fisheries closures, tourism revenue losses, adverse public health impacts, and increased monitoring costs. A comprehensive, multi-jurisdictional approach to assess and address the causes of degraded quality in coastal waters will require a significant commitment of resources and the political will to enforce stricter measures and provide incentives to manage these diffuse sources of contamination. **The Trump Administration and Congress should implement and fund measures required under the Clean Water Act and the Coastal Zone Management Act to reduce nonpoint and other sources of pollution.**