

# Conclusion



Ecosystem-based management must balance many uses and impacts on marine and coastal habitats. Images from Communications New Brunswick, except wind farm image from AMEC Border Wind

Currently, much public discussion, scientific research, and resource-management effort centers on the integrity of marine habitats in the Gulf of Maine and the impacts of human activities on these habitats. As coastal and fishery managers work to advance marine habitat conservation, restoration, and protection, a foundation of information regarding habitat types and their ecological relationships is essential.

Intact marine habitats support diverse ecological communities and productive fisheries. The physical structure provided by some plants and animals actually creates habitat for other organisms. Habitats in the Gulf of Maine serve many additional functions such as cycling nutrients, filtering pollution, trapping sediments, buffering upland areas from storm damage, and providing recreational opportunities.

Coastal and fisheries resource managers are frequently tasked with making decisions about projects or uses of the marine environment without sufficient knowledge of the habitat types that may be affected. Projects being proposed at sites around the Gulf of Maine include wind farms, natural gas facilities, aquaculture, sand mining, pipeline and cable

installations, construction of docks and piers, and sewage outfalls. These projects can severely disrupt and degrade the natural functions of marine habitats. Pollutant discharges, nutrient loading, coastal development, fishing practices, dredging, sea-level rise, increasing water temperatures, and invasive species are most often cited as management concerns. The information about habitat characteristics and management concerns provided in the *Gulf of Maine Marine Habitat Primer* can help inform managers decisions about project reviews, special management area designations, restoration targets, and other issues under their jurisdiction.

Managers from around the region are working hard to protect marine habitats in the Gulf of Maine despite limited knowledge of where these habitats are, how sensitive they are to alteration, and the diverse functions they perform. As we learn more about marine habitats through scientific research as well as management experience, we can be more effective at protecting them from harmful human activities. Some examples of marine habitat management projects and organizations are listed on page six of this document. For more ideas about activities and organizations, visit the

Gulf of Maine Council's Web site at [www.gulfofmaine.org](http://www.gulfofmaine.org). The Gulf of Maine Council's Habitat Conservation Subcommittee is working with partners in the region to develop and advance a range of marine habitat conservation strategies. This *Primer* is the first in a series of steps that focus on determining: 1) habitat types and their ecological relationships, 2) activities impacting marine habitats, 3) the state of the science in understanding these impacts, and 4) management options for addressing the impacts. In order

to promote marine habitat management, the project will also seek to understand the current suite of legislative and regulatory tools and their varying effectiveness. Ultimately, the project will culminate in Gulf of Maine marine habitat conservation strategies with findings and recommendations regarding science, policy, and management approaches. The Subcommittee hopes this work will assist and be complementary to related habitat conservation efforts underway throughout the region.



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### Gulf of Maine Council Mission

*“To maintain and enhance environmental quality in the Gulf of Maine and to allow for sustainable resource use by existing and future generations.”*