Marine Protected Areas established by U.S. Fishery Management Councils www.fisherycouncils.org



Marine protected area (MPA) is the modern term for an area of the ocean designated for special protection. MPAs range from an area where a single activity is seasonally prohibited, to a no-access marine reserve where all human activities are prohibited. The U.S. Regional Fishery Management Councils use MPAs as one of many tools to reach specific objectives in the management of our nation's marine resources.

MPAs that provide spatial refugia for fish stocks are particularly effective for non-migratory species. They reduce exploitation rates and protect habitats, spawning aggregations, reproductive females and developing juveniles. By allowing fish to grow to larger sizes and to reproduce before capture, fishermen enjoy increased harvest yields when a closed area reopens. Spillover from a closed area may replenish areas outside the MPA.

Extensive closed areas have been established for New England groundfish, Pacific rockfish and groundfish, Gulf of Mexico reef fish, South Atlantic deepwater grouper and tilefish, and seamount groundfish in the Hawaiian Islands.

In the South Atlantic, deepwater MPAs stretching from North Carolina to Florida prohibit bottom fishing to protect habitat for snapper

Seasonal closures allow Gulf of Mexico brown shrimp and New England scallops to grow, spawn and provide higher yields when the area is opened. No-take MPAs protect several snapper and grouper spawning sites in the Gulf of Mexico. MPAs where trawling and dredging are prohibited protect red and blue king crab nurseries in

Marine mammals and other protected species can be impacted by fisheries through incidental capture, injury by moving vessels, disturbance or prevention of access to their haul out areas, and competition for food where prev is limited. MPAs can prohibit or prevented within 12 miles of Pacific walrus haul outs and an extensive array of fishing area closures protects the critical habitat of endangered Steller sea lions. The Western Pacific Council established a Protected Species Zone in 1991 to prohibit longline fishing within 50 miles of the Northwestern Hawaiian Islands to minimize

Benthic Habitat and Biodiversity

Because sustainable fisheries depend on healthy diverse ecosystems, the U.S. Regional Fishery Management Councils have also established numerous MPAs to protect benthic habitat and maintain biodiversity, including marine reserves where all fishing is

Ocean seamounts in federal waters to protect these unique ecosystems with endemic stocks or species, as well as fragile epifauna such as deep sea corals and sponges

Deep sea coral ecosystems are protected by MPAs throughout the United States, Off New England, the Oceanographer and Lydonia Canyons have been closed to fishing for monkfish. In the Pacific and North Pacific, most areas known to have aggregations of coldwater corals have been closed to bottom trawls and dredges to protect these deep sea coral ecosystems. In the 1.5 million nm2 of the Western Pacific Region, these gear types have been entirely banned

Other deep sea coral ecosystems and tropical coral reef ecosystems have been protected with MPAs established off the South Atlantic, at the Tortugas Ecological reserves and reefs, at the Flower Gardens in the Gulf of Mexico, and off Puerto Rico, the U.S. Virgin Islands and the Hawaiian Islands.

MPAs are not a panacea for all the problems facing the ocean. They may not provide the benefits anticipated when they were estab-lished. In some cases, MPAs have failed due to non-compliance with regulations, unrealistic program goals, poorly chosen size or location, influence of outside factors or activities, or other overriding factors such as environmental conditions. For example, beginn in 1995, all trawling and dredging were prohibited in the Bering Sea and recruitment of blue king crabs. After 15 years, the crab stock has not shown signs of recovery and in fact has worsened possibly due to unfavorable environmental conditions. In many cases there is no monitoring program within a MPA to see if it is indeed providing the expected benefits.

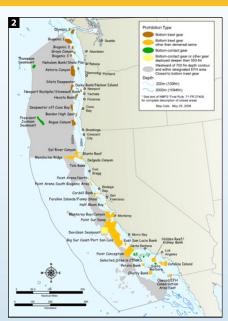
Establishing an MPA changes the location of where, when and what activities can take place. For fishery-related MPAs, this can mean a redistribution of fishing effort to locations outside of an MPA. The redistribution can increase bycatch, habitat impacts and interac tions with protected species or have other undesirable effects. There are also added costs to fishermen who must travel further to fishing grounds that may have potentially lower catch rates. MPAs nities that depend on those areas for food, livelihood or cultural



purposes. MPAs that lead to reduced domestic catches can also increase U.S. dependence on seafood imports. In 2008, imports represented 88.3 percent of the total U.S. seafood supply. Develop nt of MPAs from the bottom-up, using an open public process based on scientific analysis of potential impacts—as provided by the U.S. Regional Fishery Management Council process—allow for all aspects of an MPA to be adequately considered and weighed

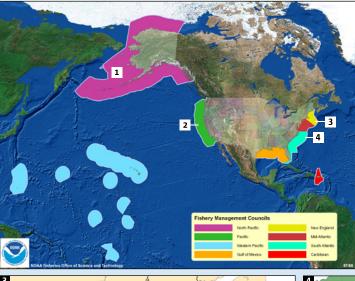
In 2000, President Clinton signed Executive Order 13158, which equired the Departments of Commerce and the Interior to establish an MPA Center and develop a comprehensive national system of MPAs representing diverse marine ecosystems. In 2008, the MPA Center published the Framework for a National System o MPAs that established the process for listing sites to be part of the national system and defined priority conservation objectives for MPAs. Over the next few years, the MPA Center will be reviewing the protection provided by existing MPAs and comparing these with the priority conservation objectives to identify conservation gaps. Results of the gap analysis will be used by federal agencies such as the National Marine Fisheries Service (NMFS) to strengthen existing MPAs or establish new MPAs.

The Executive Order requires that activities conducted, approved or funded by federal agencies avoid harm to the natural and cultural resources that are protected by an MPA to the extenpermitted by law and to the maximum extent practicable. To meet this new mandate, NMFS must ensure that fisheries and othe activities avoid harm to specified resources protected by MPAs that are part of the national system. The Councils may make recom mendations to NMFS about whether MPAs under their authority should be considered and whether they meet the requirements to be included in the national system



being discussed, and implementation of these zones could affect where fisheries are conducted in the future. To reduce user conflicts and minimize impacts, areas of the ocean may be designated for exclusive activities such as fishing, recreation, oil and gas extraction, wind farms and wave energy. As with the establishmen of MPAs for fisheries, the design of these zones will undoubtedly involve a mix of science, human-use values, allocation and politics

Development of MPAs from the bottom-up, using an open public process based on scientific analysis of potential impacts—as provided by the U.S. Regional Fishery Management Council process allows for all aspects of an MPA to be adequately considered and weighed prior to implementation.



MPAs can have major impacts on coastaland indiaenous fishina communities that depend on those areas for food, livelihood or cultural purposes.















