Marine Protected Areas

Marine Protected Areas (MPAs), also known as marine reserves and marine parks, are important tools for protecting marine biodiversity and for assisting the sustainable use of marine resources.

Benefits beyond boundaries

MPAs are usually discrete geographical areas defined by lines on maps. They provide ‘sanctuaries’ for marine species, protection for certain habitat types and zones for managing human activities. MPAs also generate significant benefits beyond their boundaries, including acting as ‘source’ or ‘seed’ areas for the replenishment of fish stocks and other marine life in adjacent areas.

Invasive species spread by ships

Many MPAs around the world are located immediately adjacent to major ports and shipping lanes, and in some cases may actually host ports and shipping within their boundaries. One example is the world’s largest MPA, the Great Barrier Reef. Invasive aquatic species carried in ships’ ballast water and attached to the hulls of vessels may be introduced to and threaten MPAs.

Ballast bugs breach borders

Because the marine environment is a continuous, fluid medium, invasive aquatic species are not ‘stopped’ by MPA boundaries. Invasive species may ‘migrate’ or be carried into MPAs by currents. The small craft that visit MPAs for recreation, tourism and other activities may be vectors for the spread of alien species, which were first introduced at larger ports.

Irreversible impacts

Invasive species are one of the major threats to global biodiversity and examples of severe damage to high value Protected Areas are numerous in terrestrial, freshwater and marine environments. Invasive species have become a major concern for MPAs. Once an invasive species establishes, the impacts may be catastrophic and are often irreversible.

Cross-boundary cooperation

Protecting MPAs from invasive aquatic species in the borderless marine environment is a major challenge. Effective management of MPAs and marine resources in general, requires an holistic, cross-boundary approach.

The Global Ballast Water Management Programme (GloBallast) and the Global Invasive Species Programme (GISP), are working through partnerships to protect the world’s oceans, including MPAs, from invasive aquatic species.

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