

Setting Priorities for Marine Conservation

Regional Marine Conservation Planning

Innovation, planning, partnership, action and science – all of these elements guide The Nature Conservancy's approach to marine conservation. Through ecoregional planning and assessments, the Conservancy is helping governments, resource managers and communities around the world establish tailored regional visions for the conservation and management of their unique nearshore marine resources.



Nearshore marine ecosystems, from estuaries to coral reefs, are some of the most productive, yet fragile natural communities in the world. As people have come to understand the delicacy and complexity of these natural systems, it has become clear that regional ecosystem-based management offers the best chance for successful, long-term conservation of nearshore marine environments.

Regional ecosystem-based management is management that considers the ecosystem as a whole rather than as a series of independent sites. To support this approach, The Nature Conservancy is working with government agencies, marine stakeholders, communities and others to develop marine ecoregional assessments that inform decisions and actions for marine conservation and management. The planning process encourages the participation and support of all local stakeholders, from governments to conservationists, communities and industry, and lays the foundation for a shared vision for regional ecosystem management.

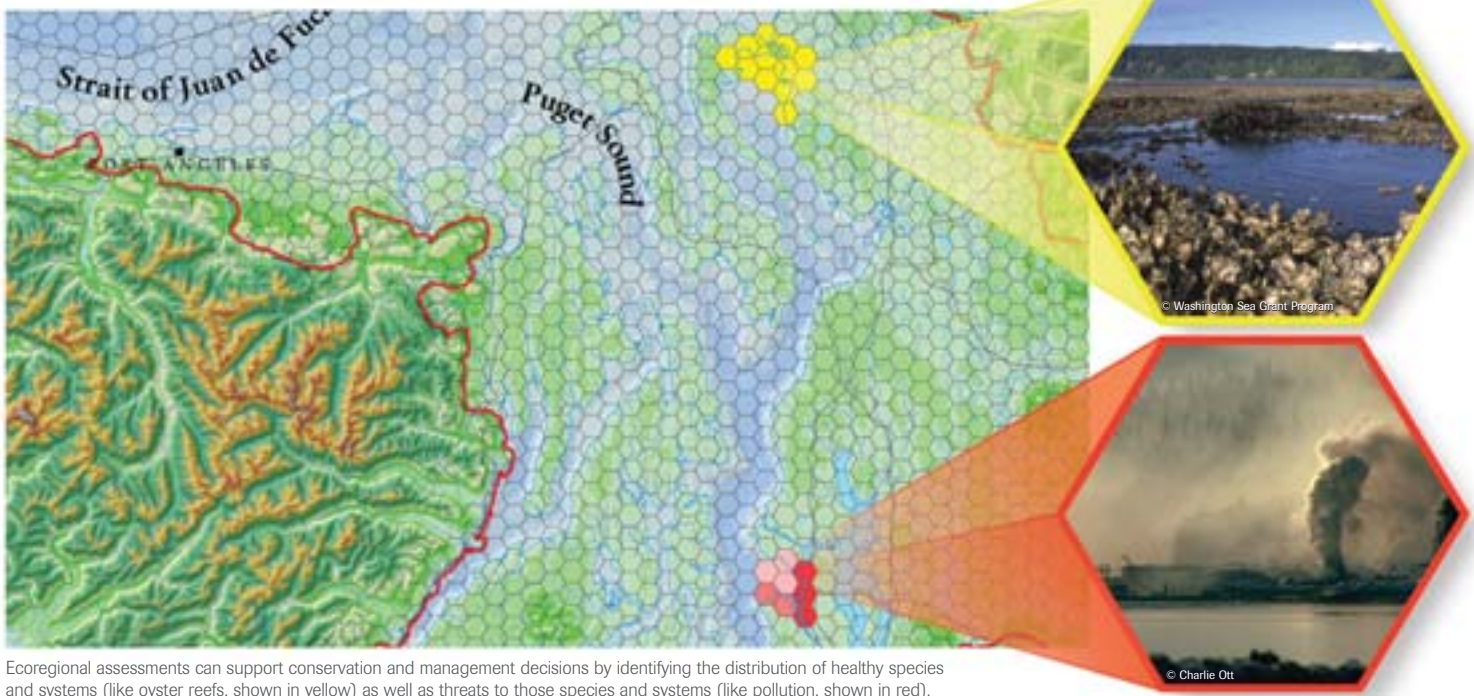
To address the needs of ecosystem-based management, The Nature Conservancy and partners developed a comprehensive ecoregional planning process that is widely used at state, federal and international levels. The process includes a series of clearly defined steps:

IDENTIFYING TARGETS: Using available knowledge and scientific data about an area, ecoregional assessments identify a set of species and ecosystems of conservation concern, called targets. This comprehensive set of targets for an ecological region is designed to represent the biological diversity of the marine environment at multiple scales.

ESTABLISHING GOALS: For each conservation target, an ecologically driven “goal” is set to insure that conservation and management actions protect a full representation of the marine environment.

ANALYZING THREATS: An integrated threats analysis identifies the primary threats to the species and ecosystem targets and the places where these threats can feasibly be minimized.

SETTING PRIORITIES: Marine ecoregional assessments establish a “portfolio of sites,” priority locations where conservation efforts will protect the full marine diversity of the area. Different alternatives for the portfolio can be evaluated to balance concerns from multiple stakeholders and incorporate socio-economic and ecological considerations.



Ecoregional assessments can support conservation and management decisions by identifying the distribution of healthy species and systems (like oyster reefs, shown in yellow) as well as threats to those species and systems (like pollution, shown in red).

Charting a course for the future

Marine conservation and management involves many stakeholders, organizations and agencies, often working independently and at different scales. Building on 50 years of land conservation planning expertise, the Conservancy's approach to marine ecoregional planning aims to unify and coordinate these independent efforts into a region-wide vision for sustainable ecosystem-based management.

In each location from the Caribbean to the Pacific Northwest, the Conservancy's marine ecoregional planning process synthesizes the relevant scientific knowledge about species and natural systems by collecting and reviewing all available data from public agencies, research organizations, experts and other sources. Collaboratively-defined criteria help objectively evaluate this knowledge so all species and ecosystems are represented in the final results.

Once compiled, this integrated information supports a greater understanding of each unique marine environment. Stakeholders have a clearer picture of the state of their natural areas and resources as well as the challenges to their continued survival.

Innovations in planning

Recognizing the value ecoregional assessments provide in advancing marine regional planning, The Nature Conservancy is investing in research and development of innovative techniques, methodologies and applications of this important tool.

In the past, many efforts to plan for the use and management of marine resources have not accounted for land-based activities, such as cutting coastal forests, that can impact the health of nearshore environments. The Conservancy is developing scientific methods for integrating relevant terrestrial habitat and threat information into the marine planning process.

The Conservancy is also looking at marine systems of the ocean floor, where information is often sparse. Conservancy scientists and partners are exploring new approaches for ocean floor habitat modeling to ensure that these ecosystems and their species are included in the planning process.

Tools for decisions and management

Regional, ecosystem-based management is gaining support around the world as an approach for integrated planning and conservation of nearshore marine environments and resources. The report of the U.S. Commission on Ocean Policy clearly recognizes the need for developing this kind of framework. Outside the U.S., the Convention on Biological Diversity has called for nations to identify and fill gaps where marine resource protection and management efforts do not include the full range of ecosystems and species. The ecoregional planning process provides a comprehensive set of data and decision support tools as a foundation for partner coalitions or individual agencies to plan for this type of management framework.

The planning process also identifies an array of priority sites for natural resource planning and management. No premature assumptions are made about the type of actions necessary for conservation and management at these sites. Rather, a full range of conservation strategies, such as habitat restoration, acquisition, protection or management of extractive activities can be considered based on the ecological, social, economic and political needs of each individual place.

A common vision and lasting results

Around the world, partners are using the Conservancy's marine ecoregional assessments to advance their regional planning processes and inform their decision-making. Meaningful, lasting implementation hinges on the continued participation, action and support of partners and stakeholders at many levels. By engaging partners around a common vision, the ecoregional assessments provide a solid foundation for charting a course of action for marine conservation.

For additional information:

Dan Dorfman

Senior Marine Conservation Planner

Marine Initiative
The Nature Conservancy
Center for Ocean Health, Long Marine Lab
100 Shaffer Road
University of California
Santa Cruz, CA 95060 USA
(831) 459-4830
ddorfman@tnc.org

nature.org/initiatives/marine

Members of the media, please call
(703) 841-4220 or write media@tnc.org