

Ecosystem-based Management

"EBM looks at all the links among living and nonliving resources, rather than considering single issues in isolation . . . Instead of developing a management plan for one issue . . ., EBM focuses on the multiple activities occurring within specific areas that are defined by ecosystem, rather than political, boundaries."

— US Ocean Commission Report, 2004

"The goal of EBM is to maintain the health of the whole as well as the parts. It acknowledges the connections among things."

— Pew Oceans Report, 2003

Why Ecosystem-based Management for the Oceans?

Both the Pew Oceans Commission and the U.S. Commission on Ocean Policy called on the U.S. to adopt ecosystem-based management (EBM) as the cornerstone of a new era of ocean policy. Human activities on the land, along the coasts, and in the oceans are changing ecosystems in unprecedented ways. Scientists understand a great deal about these changes and how ecosystems function, but there is a disconnect between this knowledge and current management practices. Ecosystem-based management focuses on addressing the cumulative effects of these actions so that we continue to enjoy healthy seafood, clean beaches, and other ocean benefits

What is Ecosystem-based Management for the Oceans?

From the COMPASS Scientific Consensus Statement on Marine Ecosystem-Based Management

For the full Consensus Statement please visit:

http://www.compassonline.org/pdf_files/EBM_Consensus_Statement_v12.pdf

Ecosystem-based management is an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species, sector, activity or concern; it considers the cumulative impacts of different sectors. Specifically, ecosystem-based management:

- emphasizes the protection of ecosystem structure, functioning, and key processes;
- is place-based in focusing on a specific ecosystem and the range of activities affecting it;
- explicitly accounts for the interconnectedness within systems, recognizing the importance of interactions between many target species or key services and other non-target species;
- acknowledges interconnectedness among systems, such as between air, land and sea; and
- integrates ecological, social, economic, and institutional perspectives, recognizing their strong interdependences.

How to we achieve Ecosystem-based Management?

- Cooperative and dynamic management efforts which incorporate specific needs of an ecosystem as well as specific services that ecosystems provide.
- Long-term outlook in order to address changing human needs as well as changing ecosystem environments.
- Restoration and maintenance of ecosystems such that they can respond to disturbances (otherwise known as resilience)

References:

McLeod, K. L., J. Lubchenco, S. R. Palumbi, and A. A. Rosenberg. 2005. Scientific Consensus Statement on Marine Ecosystem-Based Management. Signed by 221 academic scientist and policy experts with relevant expertise and published by the Communication Partnership for Science and the Sea at <http://compassonline.org/?q=EBM>