

Gulf of Maine Ecosystem-Based Management Toolkit Survey Report

March 2008



**Gulf of Maine
Council on the
Marine Environment**

The Gulf of Maine Council on the Marine Environment was established in 1989 by the Governments of Nova Scotia, New Brunswick, Maine, New Hampshire, and Massachusetts to foster cooperative actions within the Gulf watershed. Its mission is to maintain and enhance environmental quality in the Gulf of Maine to allow for sustainable resource use by existing and future generations.

EBM Toolkit Recommendations



Micah Maziar

1. Focus on addressing the survey's Key Findings

The Gulf of Maine EBM Toolkit Survey provided insight into the on-the-ground realities of how people are trying to advance EBM in the region, challenges they are facing, and potential ways to address the challenges. The topic of EBM is large, complex, and multifaceted. One challenge in developing the Gulf of Maine Ecosystem-Based Management Toolkit is to keep it focused, rather than attempting to address every aspect of EBM. The Key Findings (see page 5) provide areas of focus for Toolkit planning and development.

2. Use data and written responses to refine Toolkit plans

While the Key Findings provide general guidance, the data and written responses in Appendix B contain valuable information and ideas that can be used to develop specific components of the Toolkit. These ideas should be considered within the context of the Key Findings.

3. Provide practical information on EBM and ecosystem

In general, people engaged in ocean and coastal management around the Gulf of Maine appear to accept the broad concept of EBM. However, they are grappling with the specifics of how to advance EBM in their day-to-day work. Survey participants expressed need for two overarching types of information that could be provided in the Toolkit. They said they need

- specific, practical information about how to do EBM in the Gulf of Maine and
- information about the ecosystem context and effects of management actions.

4. Focus on information, not data

The survey showed that EBM practitioners in the Gulf of Maine primarily seek relatively high-level information about EBM and the ecosystem, as opposed to raw data and technical tools for specific tasks. The survey participants indicated that the Toolkit could help address this gap by providing “tools” such as examples of EBM implementation (actual case studies and hypothetical scenarios) and science-based information about linkages among ecosystem functions, ecosystem services, and human impacts. Such information could be provided in many ways ranging from text and maps to interactive scenarios. It seems that over time EBM practitioners might express more need for raw data and task-oriented technical tools after they have dealt with the larger, overarching questions about how to implement EBM.

5. Enhance efficiency

Survey participants overwhelmingly cited lack of money, time, and people as the biggest obstacle to implementing EBM. While the Gulf of Maine EBM Toolkit cannot address this need directly, the Toolkit could enable

organizations to be more efficient and effective within the constraints of available resources.

6. Prioritize tools that address coastal issues

Implementing EBM along the coast, rather than offshore, emerged as the primary interest of survey respondents. This finding seems to reflect the higher diversity of human activities that directly affect coastal waters compared to offshore waters. Therefore, the Toolkit could focus, at least initially, on information and tools useful in nearshore waters and coastal watersheds.

7. Provide tools for visualizing future scenarios

The survey indicated that EBM practitioners need tools that enable them to look ahead and understand potential outcomes and tradeoffs of different management decisions. An example would be interactive maps showing future ecological conditions and human dimensions under different scenarios. Qualitative or conceptual information—rather than precise, quantitative information—may be sufficient in these decision-support tools.

8. Facilitate manager-stakeholder collaboration

The survey indicated that EBM practitioners want tools for communicating with stakeholders about management issues and for engaging stakeholders in devising management solutions. The Toolkit could address this need by providing tools and information that are appropriate not only for managers but for a broader audience of interested citizens. In effect, the Toolkit could serve as a bridge for communication and mutual understanding between managers and stakeholders. For example, information and tools for “understanding how the ecosystem



Bodhisoma

functions” and “visualizing possible development and resource-use scenarios” (see question 10 in Appendix B) could be produced for managers and stakeholders.

9. Facilitate synergy among EBM efforts

Findings of the Gulf of Maine EBM Toolkit Survey could



W. Paul



© Peter H. Taylor

be useful for many initiatives beyond the Toolkit itself. In particular, clear opportunities exist for synergy among all the Gulf of Maine EBM Work Groups addressing Action Items from the 2007 regional workshop (see Introduction and www.gulfofmaine.org/EBMWorkGroups).



Keith Carver

The Toolkit initiative could support all the Work Groups and help them accomplish their goals:

- Materials from the EBM Pilot Projects and Modeling Consortium Work Group (Action Items 1 and 2) could be made available in the Toolkit in the form of case studies, modeling tools, and implementation guidelines.
- The Data Access and Dissemination Work Group (Action Item 3) could use the Toolkit as a vehicle for sharing data sources, perhaps with custom data-discovery tools.

- Outputs of the EBM Vision Work Group (Action Item 5), such as a regional framework for EBM, could be disseminated through the Toolkit.
 - The Toolkit could serve as a key component of a communications infrastructure (Action Item 6).
 - The Toolkit could serve as an online component of the EBM Forum for Young Scientists (Action Item 7).
- Along with the regional EBM Work Groups, the survey results provide useful insights for other organizations and EBM activities in the Gulf of Maine and beyond.

10. Further engage survey participants

Many of the survey participants said that they were interested in being engaged further in the Toolkit planning and development process, such as taking part in discussions or interviews. Some participants also indicated that their organizations potentially could offer support for the Toolkit and other regional EBM activities.

References Cited

- EBM Tools Network. 2007. Needs for Tool Training for Coastal-Marine Ecosystem-Based Management: Results of a Practitioner Needs Assessment. Arlington, Virginia.
- Kaplowitz, MD, TD Hadlock, R Levine. 2004. A Comparison of Web and Mail Survey Response Rates. *Public Opinion Quarterly* 68:94-101.
- Sax, LJ, SK Gilmartin, AN Bryant. 2003. Assessing Response Rates and Nonresponse Bias in Web and Paper Surveys. *Research in Higher Education* 44:409-432.