

Gulf of Maine Documents, Meetings, and Process
From January 2003 through October 2005
A Synthesis of Recommendations

The recommendations listed below are not all intended for the GOMC specifically; some of the recommendations that came out of the workshops were for the region in general. References are numbered and in parentheses; a reference list is included at the end of the document.

Goal 1: Protect and Restore Coastal and Marine Habitats

1. Implement the Rapid Response Protocol for aquatic nuisance species that includes pre-invasion and post-invasion elements in the areas of detection, delineation, quarantine, assessment, and monitoring. (1)
2. The Gulf of Maine Council on the Marine Environment has developed standard methods for regional salt marsh monitoring that offer the potential for a cohesive, comprehensive view of salt marsh conditions. Adoption of these standards by existing monitoring programs around the Gulf of Maine could provide the basis for an extensive regional monitoring network. A regional monitoring program will facilitate effective management of salt marshes, healthier coastal waters, and sustainable economic uses of the Gulf of Maine. (2)
3. Restore the four coastal marine habitat types: 1. riverine, 2. intertidal, 3. subtidal, including nearshore and offshore waters, and 4. beaches, sand dunes, and islands, using a regional strategy to prioritize projects. (3)
4. Improve our ability to identify habitat restoration sites, focus regional efforts, understand regional trends, and develop effective long-range planning. (3)
5. Increase development and management capacity in all jurisdictions in the region to make restoration more efficient and effective. (3)
6. Enhance outreach efforts to federal, state, local governments and the private sector to create a common understanding of the social, economic, and environmental benefits of habitat restoration. (3)
7. Complete and maintain a database of restoration projects in the region to evaluate progress and ensure accordance with the US National Estuary Restoration Inventory (NERI). (3)
8. Refine existing salt marsh monitoring protocols and develop monitoring protocols for other habitats identified in this document. (3)
9. Coastal and fisheries resource managers are frequently tasked with making decisions about projects or uses of the marine environment without sufficient knowledge of the habitat types that may be affected. Projects being proposed at sites around the Gulf of Maine include wind farms, natural gas facilities, aquaculture, sand mining, pipeline and cable installations, construction of docks and piers, and sewage outfalls. These projects can severely disrupt and degrade the natural functions of marine habitats. Pollutant discharges, nutrient loading, coastal development, fishing practices, dredging, sea-level rise, increasing water temperatures, and invasive species are most often cited as management concerns. The information about habitat characteristics and management concerns provided in the *Gulf of Maine Marine Habitat Primer* can help inform managers decisions about project reviews, special management area designations, restoration targets, and other issues under their jurisdiction. (4)
10. Priority areas for seafloor mapping, according to the Gulf of Maine Mapping Initiative, based on a needs assessment survey, are: Bay of Fundy/Passamaquoddy Bay, Penobscot Bay, Jeffreys Bank, Casco Bay, Cape Cod Bay, Nantucket Sound, and Georges Bank. (5)

11. Comprehensive sea floor mapping is an ambitious undertaking. GOMMI's mapping strategy is to simultaneously address the needs of coastal and offshore stakeholders by mapping prioritized areas of the coastal and offshore sea floor each year. With an estimated budgetary requirement of three million dollars (U.S.) per year to fund data acquisition and processing, GOMMI intends to request support from federal, state and provincial governments and the private sector. For GOMMI to succeed, partnerships between government, academia, and the private sector; between researchers and managers; and between state/provincial and federal governments are essential. Maps of sea floor topography, surficial geology, and habitat will help implement ecosystem-based resource management in the Gulf of Maine. (6)
12. The Gulf of Maine Council should think about ocean zoning in the following framework:
- a) Establish Existing Conditions:
 - This includes mapping existing zones, uses and jurisdictions within the Gulf of Maine;
 - Convene U.S. and Canadian federal government interests to discuss transboundary ocean management concerns;
 - Assess the effectiveness of existing management tools (laws, regulations and programs), to ensure they are being used effectively, before embarking on creating a new structure based on zoning.
 - b) Determine What Needs to Change or Be Protected:
 - Set sustainability goals for the Gulf of Maine;
 - Develop ecosystem indicators to track progress in achieving the goals;
 - Determine where spatial management approaches will best serve those goals.
 - c) Start Small:
 - Do pilot projects to experiment with different aspects of ocean zoning;
 - Focus on developing management schemes for areas known to be valuable and threatened.
 - d) Develop a Constituency:
 - Educate the public about risks to the marine environment and opportunities to improve stewardship through ocean zoning;
 - Develop better tools to assess sociological impacts; and
 - Use a zoning approach to bring predictability to infrastructure development in the marine environment (e.g. pipelines, cables). (7)
13. Better spatial data on benthic habitats is required to address critical management needs. The following maps are needed:
- a) Ecological Maps
 - Benthic habitat classification (using substrate type, depth, topography, etc);
 - Sensitivity (show degree of vulnerability and resilience to disturbance); and
 - Biodiversity (associate species level data with habitat classification and sensitivity maps).
 - b) Human Use Maps
 - Commercial and recreational fishing effort (group acknowledged current efforts and that both need and degree of difficulty are high);
 - Non-fishing benthic impacts (use permit records to map location historic and current projects, e.g. dredging, cables, mining, etc);
 - Runoff (models showing pollutant discharges (nutrients, metals, toxics, excess sediment, etc) from coastal rivers, potentially combined with Gulf of Maine circulation models; and
 - Shoreline and Wetland Alterations (use permit records and aerial photograph interpretation to map location of historic and current projects, e.g. rip-rap, sea walls, wetland fills, docks, etc.).
 - c) Suggested strategies to facilitate creation of ecological and human use maps
 - Organize meeting with GIS experts already working on some of these ideas (e.g. Gulf of Maine Mapping Initiative, DFO Habitat Management Group, Ocean Data Partnership, NGOs, etc) and managers to facilitate collaboration between groups and accelerate production of useful maps; and

- Group participants agreed to investigate feasibility of collecting U.S. state and federal permit information needed for mapping non-fishing benthic impacts, to complement existing efforts by DFO. (8)
14. To address over-harvesting and incidental catch:
- a) Accelerate implementation of effective at-sea monitoring for incidental catch and discards (including recreational). Consider best available new technology.
 - b) Select focal species and criteria for special management. Participants noted that critical habitat maps for all species would cover the entire Gulf of Maine and a need to develop criteria for how focal species are selected. The group felt that some of the ecological data maps and human use described above would be helpful for this process.
 - c) For key species, identify measures (e.g. time/area restrictions, Marine Protected Areas) to protect spawning areas and nursery grounds from fishing impacts (disturbance and biomass removal). (8)
15. Build capacity for managers to address polluted runoff and nonpoint sources:
- a) Accelerate implementation of Best Management Practices (BMPs) in select areas using permit attachment and incentive approaches.
 - b) Develop methods to help managers consider cumulative impacts of responses to runoff impacts (e.g. permit decisions, zoning, etc.)
 - c) Obtain funding to implement existing detailed plans for ME, NH and MA to control non point source pollution.
 - d) Provide grants to municipalities for monitoring and storm water treatment facilities.
 - e) Monitor nutrients, sediments and toxins in order to show that we are making progress – or not.
 - f) Link monitoring results to biological indicators and to treatment investments
 - g) Educate public re impacts and connections between watershed and estuaries, storm water treatment and closed clamflats for instance.
 - h) To get adequate funds to accomplish this consider a utility based system to generate funds, i.e. charge fees for storm water generation
 - i) Get additional federal funds to support new facilities and innovations. (8)
16. To address shoreline/wetland alterations:
- a) Accelerate implementation of BMPs in focal areas identified using the maps described above using permit attachment, incentives, and outreach.
 - b) Develop “soft solutions” for hardened shorelines program:
 - Convene key coastal regulatory people in U.S. and Canada to implement this strategy
 - Use maps showing hardened shoreline to date to inform discussion on cumulative impacts
 - Develop strategies based on incentives (e.g. special easements), technological fixes, and building legal fortitude for managers to “just say no.” (8)
17. Invasive Species:
- a) Accelerate distribution of information on identifying invasive species (and why we care) at all practical and relevant points of contact between government and citizens (e.g. boat registration, fishing licenses, etc.).
 - b) Distribute summary information on existing efforts to monitor/control invasive species to managers and scientists. There is also a high level of concern over the potential impacts of Gulf of Maine species in other ecosystems when exported with fishery products or other vectors. (8)
18. Address the following habitat management research questions and issues:
- a) What is the contribution of our estuaries to the life cycle stages of Gulf of Maine fish?
 - b) Where are the juvenile habitats and spawning grounds for all of the species that we care about? Answering this question helps us to determine where and when we catch fish.

- c) In terms of fishing that impacts bottom habitat, is it the habitat destruction or the removal of biomass that creates most of the problem for the re-colonization of the affected community?
- d) How do we quantify habitat impacts when doing cost/benefit analyses?
- e) How do we measure results for efforts to reduce non-point source pollution?
- f) Which organisms are associated with which habitat?
- g) More research is required on baitworm harvesting to assess its impact on the environment.
- h) Research is required to identify a means to assess cumulative impacts.
- i) Clam population estimates are required.
- j) Recruitment data on clam beaches is required.
- k) Clam recovery rates on beaches are required.
- l) Optimum habitat structure for clam production should be identified.
- m) The socio-economics of the clam industry to coastal communities should be researched. (8)

19. Habitat management recommendations:

- a) Build trust from the bottom-up: A regional forum is needed that is outside the New England Fisheries Management Council to discuss and address impacts on marine habitats. Members of these conversations should commit to a minimum term of involvement so that diverse stakeholders can build relationships, the group can retain institutional memory, and a foundation of trust can develop. To allow full participation, the forum may offer incentives, such as travel stipends, to facilitate attendance. The Gulf of Maine Council does not fulfill this role as its members are primarily from government and conservation groups.
- b) Focus on the system, not just fishing: Many diverse groups share mostly common goals and these commonalities should be advanced. Human activities should be considered for their impact on the system, rather than focusing only on impact of and on fishing.
- c) Reform management of marine ecosystems: Both the U.S. Commission on Ocean Policy and the Pew Oceans Commission put forth strong recommendations in their respective reports. These recommendations should be put into action. A coherent way to address all impacts in an integrated way is needed -- enforcement, communication, and accountability all need to be improved for effective management.
- d) Provide bottom-up decision making structures: Habitat protection will be more successful if avenues for local input are created in which diverse stakeholders can participate. The Bay of Fundy Working Group and Northwest Atlantic Marine Alliance may serve as models for alternative structures.
- e) Share data throughout the region: Data should be disseminated in a timely way, and made more accessible by being available in a variety of electronic and non-electronic formats. New data should be collected in a coordinated, applied way.
- f) Set small, achievable goals toward the larger goal of ecosystem-based management: Demonstrated progress, however incremental, will help keep people engaged and make the ultimate goal of ecosystem-based management in the Gulf of Maine more accessible. (8)

20. Management strategies for trawling, defined as bottom tending mobile gear:

- a) For both eel grass beds and cold water corals the most effective "operational strategy" goal is to limit or restrict entirely trawling in the key areas, i.e. set such areas off limits to trawling by regulation.
 - Map and document occurrences (much harder for coral than eel grass)
 - Document and educate re the importance of the habitat and severity of the impact
 - In eel grass promote alternative harvest methods for shellfish by diving and raking
- b) For sand, mud, cobble and rocky bottom with or without kelp the solution is more complex because these are broadly distributed habitats; it is neither necessary nor practical to stop trawling altogether but should instead focus on scale in area and frequency.
 - Consider rotational closures to allow recovery between trawling events;
 - Establish some areas more permanently off limits to trawling and give some incentives by allowing only alternative harvest methods such as long line or gill nets near such reserves;
 - Determine recovery time so as to set reasonable periods for rotational closures; and

- Map benthic habitat in order to make sure the vulnerable bottom types such as cobble are included in some areas reserved from trawling. Prioritize habitats in terms of habitat stability and vulnerability to specific threats and by value to organisms and ecosystem functions. (8)

- 21. Overfishing is hard to stop because there are such powerful economic drivers and our system now has more people dependent on the resources for their livelihoods than can currently be supported sustainably. The following steps should be taken to address over harvesting:
 - Protect spawning and nursery areas to ensure recruitment;
 - Manage take by age, size class, spawning status, and subpopulation goals rather than by biomass or by effort, e.g. days at sea; and
 - Reduce the fishing capacity by buying boats and permits. (8)

- 22. Overall habitat management strategy: "It takes a community to manage an ecosystem." Use cod and perhaps one or two others as iconic, keystone species to show the interrelatedness of human actions and impacts on marine systems and rally support for multiplicity of actions. Use it to broaden the base of interests in bringing back cod from just fisheries managers. Engage others by setting a goal of bringing back large cod in coastal populations and then consider all impacts and resources needed to do that, e.g., prey fish habitat, not just over fishing. (8)

- 23. Recommendations to address habitat degradation and conversion:
 - a) Mobilize local groups to answer questions related to forwarding ecosystem-based management through the development of a structure that oversees the activities of the groups and provides uniform standards for data collection so that the data can be applied.
 - b) All partners of the Gulf of Maine Council should have effective conservation measures which would include the following:
 - More enforcement;
 - Decision support frameworks for local decision-making (planning, utilizing cumulative impacts);
 - Devolution of decision-making;
 - Public education and stewardship (create a story to illustrate cumulative impacts and help people understand how they are part of the ecosystem); and
 - Create regulations where there are gaps in regulations.
 - c) The Habitat Conservation Sub-Committee should take on the challenge of furthering our concept of cumulative impacts. This could be done in the following way:
 - Define cumulative impacts;
 - Identify the components included to determine cumulative impacts; and
 - Develop a pilot project to determine the cumulative impacts of a specific activity (possibly marinas and docks).
 - d) BMPs for shoreline protection should be uniform throughout the Gulf of Maine.
 - Efforts to develop them could be done jointly between the Habitat Restoration and the Habitat Conservation Sub-Committees; and
 - A compelling and interesting power point presentation could be developed by the GOMC science translators to be available to community groups and agencies showing proper methods and the consequence of not using them.
 - e) Expand partnerships with commercial fishermen by:
 - Creating career incentives to encourage research so that information needs related to ecosystem-based fisheries management are filled;
 - Identify the obstacles preventing better collaboration between fishermen and scientists;
 - Utilizing existing fishermen/science research societies; and
 - Convening a panel of fishermen and scientists to brainstorm on research priorities. (8)

- 24. Recommendations on biological resource harvesting:
 - a) The clam industry needs more information for effective management. This information includes:
 - Population estimates;

- Recruitment data;
 - Recovery rates; and
 - Defining optimum habitat structure.
- b) There is a need to focus on on-site sewage, as it is an issue to sustaining clam harvesting.
- In order to target focus on the issue, background information is required that identifies the socio-economic value of the industry to coastal communities.
 - Low cost biological treatment should be promoted. (8)
25. Recommendations to reduce the impact of diesel on marine habitats:
- a) There is a need for rethinking of tourism promotion so that coastal areas are not adversely impacted by increased tourism vessel traffic.
- b) There is a need to promote bio-diesel to reduce impact. This promotion could be done through the marinas and docks that service the recreational/tourist boaters. (8)

Goal 2: Protect Human Health and Ecosystem Integrity

1. To improve sewage management in the Gulf of Maine, the Council should:
- Raise awareness with respect to wastewater management;
 - Establish the link between sewage discharges and ecosystem and human health;
 - Evaluate the socio-economic impacts of sewage discharge; and
 - Demonstrate Innovative approaches to address sewage management issues. (9)
2. Recognizing that each jurisdiction now contributes significant resources on an annual basis to address sewage management issues, the Council recommends the following actions to improve sewage management in the jurisdictions:
- An assessment of the status of sewage management in each jurisdiction, including a measure of performance of the Council's ability to influence and improve jurisdictional practices in sewage management;
 - Reporting on an annual basis on the progress for each jurisdiction;
 - Facilitating cross-jurisdictional sharing of information; and
 - Sponsoring a second sewage workshop in the near future. (9)

Goal 3: Encourage Sustainable Maritime Activities

1. Recommendations concerning aquaculture:
- a) Front end planning including site selection criteria, farm size, operational practices, site-specific mitigation plans, etc. are key to preventing environmental degradation at sites. Exiting policies should be reviewed and overhauled where necessary to ensure they are fulfilling the requirements of regulators, the industry, and the public.
- b) Efforts should continue to develop and implement new approaches to aquaculture development, siting, and management. This should include:
- The application of a precautionary approach when siting aquaculture facilities.
 - The application of performance based production limits or the thorough assessment of site capacity prior to determining a production number.
 - Government taking a more active role in identifying areas where aquaculture development would least impact fisheries activities, habitat and the marine ecosystem generally.
 - Integrated management of bay area could be a tool for maintaining the marine ecosystem.
- c) Monitoring is a necessary component of aquaculture management and more emphasis should be placed on assessing cumulative effects. While at this point, assessing cumulative effects is difficult due to the many influences to the marine ecosystem in a specific location, this is an area where more dedicated research should be initiated. This research should include the development of an assessment methodology.
- d) All available and practical mitigation measures need to be identified so that a complete toolbox is available to all stakeholders.

- e) Physical remediation is not practical on a large scale at this time. It has potential to be a tool but only as a last resort in most cases. Physical remediation research and study (methodologies) should continue within a policy-making framework.
- f) Sites that continue to be degraded should be targeted for abandonment. If abandonment is required, a framework should be developed to provide operators with priority alternative sites.
- g) Greater transparency is needed so that the public is better informed about environmental conditions around aquaculture sites.
- h) It is important that the positive news about industry initiatives be available to the public. (10)

Crosscutting and Other

1. The Gulf of Maine Summit has two primary goals: (1) to renew our collective commitment as we work to protect the Gulf 's vital ecosystems and accommodate sustainable uses; and (2) to act in ways that prevent unwanted change and ensure that the Gulf 's natural resources, living and non-living, including those in the watersheds of the Gulf, are managed wisely into the future. The following are pre-Summit recommendations:
 - a) Each individual, organization, and agency participating in the Summit could commit to taking specific actions over the next 15 years, prioritizing them so as to make steady progress throughout the period.
 - b) Governments and communities could explore ways to enhance educational outreach related to the Gulf of Maine – carrying information from the Summit out to schools, universities, youth groups, adult education programs, and others.
 - c) The Internet allows for greatly increased networking opportunities among those working on Gulf-related issues, and new web sites could be created and linked to foster greater public engagement.
 - d) Holding a Gulf Summit conference every five years would help to keep people informed and motivated, recharging their local efforts. Additional Summit meetings would provide valuable guidance for GOMC and GPAC and could help generate additional reports on Gulf-related issues. Summit conferences also help to keep Gulf-related issues in front of citizens and decision-makers.
 - e) Planning other regional and local events (tied to research reports or tracking indicators, for example) should help ensure that everyone in the region develops “2020 vision” for the Gulf of Maine. (11)

2. Gulf of Maine Summit Recommendations on Cooperation and Interaction:
 - a) *Support local, watershed, and bi-national collaboration.* The single most important ingredient that participants identified as needed to sustain this regional dialogue was increased funding. Participants are currently contributing their time and passion every day to advance the issues discussed at the Summit. To accelerate this work new resources are needed to build capacity and advance the agenda flowing from the Summit.
 - b) *Build effective and sustainable partnerships.* To successfully launch a regional, indicators-based ecosystem health monitoring and reporting initiative, participants recommended that the Council focus specifically on building effective and sustainable partnerships. Participants strongly recommended widening the circle of stakeholders to represent greater diversity, including industry, developers, and realtors; municipal, state and provincial officials; Native American populations; local watershed groups; academia; and others. Participants recognized there are not many venues for these diverse groups to come together to better understand the issues.
 - c) *Use indicators to garner support.* There was a keen sense that the development and communication of a set of regional indicators is a “keystone” activity for the Council to nurture and support. Participants acknowledged that a suite of integrated environmental, economic and social indicators could lead to more progressive management in our watersheds and marine environment.
 - d) *Coalesce indicator efforts.* Participants called on the Council to substantively en-gage groups developing indicators at the sub-regional/watershed scale, regional and national levels in the creation and dissemination of Gulf of Maine ecosystem indicators. These efforts should be

used across the region to trickle both up and down the ladder of decision-making. People repeatedly remarked on the need to think at the regional level, in addition to the state/provincial and federal level.

- e) *Strengthen state/provincial networks.* Summit participants asked for each of the five jurisdictions to develop/strengthen mechanisms within each state and province that would foster networking, innovation and sharing of best practices, and efficiency. Within this approach each jurisdiction should have clearly identified “champions” that are accessible.
 - f) *Ongoing communication.* Participants asked the Council to facilitate a high level of communication amongst the Summit participants after the event. They wanted more information about the structure of the Council and its partners, and asked to become more involved in Council activities. Participants felt the Council needed to develop some widely publicized implementation plans that contained very specific calls to action. Participants wanted to be called to act! (12)
3. Gulf of Maine Summit recommendations on indicators and reporting:
- a) *Clarify scope of indicators initiative.* Participants called for a common framework for documenting and reporting on the health of the coastal environment and the human communities it nourishes. They noted some inherent conflicts between the goals of sustainable fisheries (and the people that depend on them); healthy communities, where people have well-paying jobs and where human culture is sustained; and a healthy ecosystem. Participants called for the Council to define and publicize key terms such as ecosystem integrity. Further, they called on the Council to assess the effectiveness of the *Tides of Change* report before commencing work on the next set of priority issues. Participants noted that the focus of future work needs to consider the impact of watershed activities on coastal and marine environments.
 - b) *Develop and implement indicators management and communication strategy.* Participants understood that a regional indicators and reporting initiative was an ongoing effort requiring a sustained decadal commitment. They welcomed the interest expressed by Environment Canada and the Environmental Protection Agency to co-lead the Gulf of Maine indicators effort. Participants also felt there were many people and institutions that have been working on ecosystem management, in addition to the Great Lakes and Puget Sound/Georgia Basin initiative, who could help us adapt the Great Lakes model to better fit our circumstances within the Gulf of Maine. Participants called on the Council to develop, in partnership with others, an integrated package of indicators and a communication strategy that was segmented by the particular audience/user. This strategy would be founded on a firm understanding of who the users are and what they need.
 - c) *Understanding the connection to the Gulf of Maine ecosystem.* Participants recommended that the Council support initiatives that help people understand the connection between the quality of their lives and the Gulf’s leading issues (e.g., contaminants, fisheries and aquaculture, land use, etc.) Specifically, they need to know what they can do to improve their portion of the Gulf of Maine ecosystem. (12)
4. Recommendations on indicators development:
- a) *Vision for the region:* A sustainable northwest Atlantic ecosystem that ensures environmental integrity and that supports and is supported by economically viable, healthy human communities.
 - b) *Mission for regional indicators:* To track the status and trends in ecosystem integrity throughout the northwest Atlantic region and to provide information for management decisions at regional and local scales.
 - c) *2004 Indicators Workshop Goal:* To achieve consensus on a list of key indicators focusing on six major categories: fisheries, eutrophication, contaminants, coastal development, aquatic habitat, and climate change, for which regional data will be compiled and tracked to indicate changing trends in ecosystem integrity through the northwest Atlantic region (*i.e.* northeast U.S./Maritime Canada). (13)
5. Recommendations on habitat change research:

- a) Link habitat change to local and regional circulation and watershed discharge models;
 - b) Assess baseline and change in the ecological, economic and cultural value of specified habitats subjected to human activity; and
 - c) Identify appropriate thresholds of various stressors on habitats. (14)
 - d) Improve methodologies and data for conducting cumulative impact assessments and better indicators of habitat health. Information is needed for trends analyses, ecological and physical baselines, and inventories.
 - e) Improve rapid ecological assessment and evaluation technology. (15)
6. Recommendations on land use research:
- a) Development of a suite of indicators for land use change and ecosystem response;
 - b) Assessing the environmental effect of concentrated vs. dispersed development; and
 - c) Creating a land use analytical tool for the Gulf of Maine watershed that compliments GoMOOS measurements. (14) (15)
7. Support local, watershed, and bi-national collaboration - The Council concurred there is an ongoing need for government, the foundation community and businesses to build the capacity of nonprofit organizations to assist in advancing the agenda flowing from the Summit. Among the many items requiring support the Council will focus its local and regional capacity building efforts on the development and use of regional indicators and State of the Environment (SoE) reporting. Specifically:
- a) Consider how a technical assistance program, within a Gulf of Maine Indicators Management Strategy, can provide hands-on assistance that enables local efforts to participate in a regional Gulf of Maine SoE reporting. The program should have specified outcomes including enhancing the ability of local groups to secure funds. Funding for this program should be provided through national-level efforts and seek diversified sources to reflect true partnership efforts.
 - b) Develop and increase capacity to use the indicators by providing timely and pertinent information on indicators and SoE reporting to the public, decision-makers, managers, industry, etc. (fact sheets, sharing BMPs, information pamphlets, webpage, etc.). (16)
8. Build effective and sustainable partnerships – The Council concurred with Summit participants that to successfully launch and sustain a regional, indicators-based ecosystem health monitoring and reporting initiative effective partnerships were essential (e.g., industry, developers, and realtors; municipal, state and provincial officials; Native American populations; local watershed groups; academia; and others.) The Council will:
- a) Develop an engagement “lens” or check list for all Council outreach activities to ensure participation and meaningful stakeholder involvement. This “lens” would provide concrete tools and suggestions on how to best engage and work with various stakeholder groups.
 - b) Request the Ecosystem Indicators Partnership (ESIP) develop a working definition of “partnership” and the necessary ingredients for a successful partnership for use in their work as well as in the 2006-2011 Action Plan. (16)
9. Use indicators to garner support – The Council concurred that the development and communication of a set of regional indicators, while a shared task, should be a keystone activity in the next five-year plan. It provided seed funding to ESIP for the development of an *Indicators and Reporting Management Strategy* – due for completion in early 2006. The Council will continue partnering with ESIP and assist in implement the Strategy with other regional stakeholders. It believes effective indicators can be used to improve the management of the gulf’s resources. (16)
10. Coalesce indicator efforts - The Council concurred there is a need to substantively engage groups developing indicators at the sub-regional/watershed scale, regional and national levels in the creation and dissemination of Gulf of Maine ecosystem indicators. The Council will work with ESIP, through the *Indicators and Reporting Management Strategy*, to create a framework for advancing sub-regional to regional indicator reporting. (16)

11. Strengthen state/provincial networks – The Council believes a core role is to develop/strengthen mechanisms within each state and province that foster networking, innovation, and sharing of best practices, and efficiency. The Council will:
 - a) Complete its assessment of jurisdictional/agency coastal and marine priorities and incorporate these into the 2006-2011 Action Plan.
 - b) Support the enhancement of networks that are related to the themes in the Plan. (16)

12. Ongoing communication – The Council will use the Action Plan revision process to broaden Council outreach and participation in shaping a regional agenda. The Council will:
 - a) Place the Council's matrix of Action Plan accomplishments (2001-2004) on website and provide routine updates via the Gulf of Maine Times and other outlets.
 - b) Develop concise and engaging Council annual reports that provide a snapshot of progress, successes, and areas for further emphasis within the 5-year Action Plan, highlighting opportunities for input and participation.
 - c) Apply social-based marketing techniques that are designed to bring about social change using concepts from commercial marketing. Key concepts include: action is the objective; clear target audience and understand their perceptions and differences; address the fundamentals (e.g., product, costs, accessibility, effective outlets, etc.). (16)

Gulf of Maine Documents, Meetings, and Process Reference List

Goal 1

1. *Response to Aquatic Nuisance Species in the Northeast: Eradication Protocol Workshop Proceedings, September 2003* (GOMC Northeast Aquatic Nuisance Species Panel)
2. *Saltmarshes of the Gulf of Maine: Long-term monitoring to assess human impacts and ecological condition* (GOMC Habitat Restoration Sub-committee), 2005
3. *Gulf of Maine Habitat Restoration Strategy, October 2004* (GOMC Habitat Restoration Sub-committee)
4. *Gulf of Maine Marine Habitat Primer* (GOMC Habitat Restoration Sub-committee), 2005
5. *User Needs Assessment for the Gulf of Maine Mapping Initiative, October 2004* (GOMC Gulf of Maine Mapping Initiative)
6. *Gulf of Maine Mapping Initiative, a Framework for Ocean Management, May 2004* (GOMC Gulf of Maine Mapping Initiative)
7. *Ocean Zoning for the Gulf of Maine: A Background Paper* (GOMC), January 2003
8. *Marine Habitats in the Gulf of Maine: Assessing Human Impacts and Developing Management Strategies Workshop Proceedings* (GOMC Habitat Conservation Sub-committee) currently in process/draft, 2005

Goal 2

9. *Sewage Management in the Gulf of Maine: Workshop Proceedings, 2002* (GOMC Sewage Management Task Force)

Goal 3

10. *Aquaculture Physical Remediation Workshop Proceedings September 20-21, 2001, June 2003*

Crosscutting and other

11. *Tides of Change Across the Gulf: an Environmental Report on the Gulf of Maine and the Bay of Fundy, 2004*
12. *Committing to Change* (Post-Gulf of Maine Summit report), 2004
13. *Regional Ecosystem Indicators for the Gulf of Maine: Pre-Summit Draft Fisheries, Contaminants, and Coastal Development* prepared for the Gulf Of Maine Summit, October 2004
14. *Gulf of Maine Science-to-Management Establishing Research Priorities in the Gulf of Maine, November 2004* (Regional Associating for Research in the Gulf of Maine)
15. *A Survey of Coastal Managers' Science and Technology Needs Prompts a Retrospective Look at Science-based Management in the Gulf of Maine, August 2004* (GOMC and Coastal States Organization)
16. *GOMC Response to Summit Recommendations, Exeter, NH, June 2005*