

APPENDIX M
MUSCONGUS BAY STUDY

**FINAL REPORT: BAY MANAGEMENT PILOT PROJECT
MUSCONGUS BAY, MAINE**

SUBMITTED BY
QLF/ATLANTIC CENTER FOR THE ENVIRONMENT
TO THE MAINE COASTAL PROGRAM
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I. Summary

In Muscongus Bay, the Quebec-Labrador Foundation/Atlantic Center for the Environment (QLF) and its Muscongus Bay Project Steering Committee conducted the bay management pilot project with financial support from the State Planning Office as well as additional funds from the Wallis Foundation and the Birch Cove Fund of the Maine Community Foundation.

A. Tasks

Our goal was to develop an informed understanding about the local capacity for and interest in managing Muscongus Bay as a connected marine region. We did not design this pilot to reveal local views on how a new bay level of management would be structured or administered. The Muscongus Bay region was not ready for this second order of inquiry as its residents had never been asked to consider the first set of issues.

To conduct the initial investigation, we designed, organized and conducted four basic elements including: a random mail survey of property owners, roundtables with primary stakeholders and local leaders, GIS mapping of bay uses and habitats, and a final Muscongus Bay Forum for the general public. Each of these components performed very successfully, yielding the information we sought through a strong level of local participation. Each one also resulted in a separate summary report which is appended to this document along with other evidence of project results.

We did not perform, however, two of the proposed tasks as outlined in our original workplan. The first was “Task 5 – Marine Area Characterization”. We originally proposed to describe and document, using GIS maps, present uses of the bay as well as the ways in which these uses are currently managed. Instead, we created GIS maps which depict current uses and habitats of the bay’s marine and coastal environment. Although some of these maps include a management reference (i.e. to Lobster Zone districts, NRPA protected species, etc.) less management information is depicted on the maps than originally anticipated. The time and resources required to simply locate and integrate existing data layers was formidable. Often we found that the layers we were seeking did not exist so we had to use substitute layers to convey certain information. As a result we could do very little original mapping. What time we had, we devoted to documenting aspects of recreational use and making contacts for subsequent mapping work.

We also did not complete “Task 6 – Expand the Muscongus Bay Project Committee”. In short, as the pilot progressed, we came to believe that expansion was premature. First we needed to conduct the pilot to help clarify not only how the overall project would proceed but also whether

it would continue. Given the strong level of public interest and support for the pilot, we now believe that we have identified a course of action which may facilitate bay management. We do not intend to take on the management task ourselves. To proceed into our next stage we need representation from fishing, tourism, local government, and coastal development. Plans to recruit these individuals are current being discussed.

B. Clarification on Approach to Bay Management

Throughout the pilot, we deliberately avoided the term “bay management”. We were concerned that discussion over its precise meaning might detract from more informative exchanges during the pilot process. Instead, when seeking input on bay management, we asked for responses to some of the ideas which appear to be embedded in the bay management concept namely:

1. The State should change its approach to marine and coastal management
2. Certain coastal or marine issues would be better managed at a bay level (rather than a state or municipal level.)
3. Local people and entities (governmental and non-governmental organizations, associations, businesses) identify themselves as part of a particular bay region
4. Local entities want to participate in the management of their bay
5. Local entities within the same bay region would collaborate to resolve shared marine or coastal issues
6. Local entities within the same bay region are sufficiently connected, motivated, staffed, and supported to engage in and sustain collaboration at a bay level.

Again, we did not specifically seek local feedback on what kind of governance approach, methods or structure would be best for a new regional level of marine and coastal management. We decided early on that this question could only be answered after residents had had an opportunity to fully consider the initial issues. On occasion, however, opinions did surface which were related to the governance question. These opinions are reflected in this report as are ideas which emerged during Project Steering Committee discussions.

II. Local Reactions

A. Opportunities

Responses to and discussions within project elements pointed to a number of supportive circumstances and opportunities which would advance bay management in Muscongus Bay. These included:

1. *Local entities in Muscongus Bay are open to the possibility of collaborating on marine and coastal issues.* The roundtables suggested that the bay’s towns face remarkably similar issues and pressures. Collaboration, although challenging, was perceived by stakeholders and survey respondents to be a rationale way to approach specific issues so long as the potential benefits are likely to outweigh the costs. In one roundtable session, a local selectman even suggested that the bay’s towns should form their own county.

2. *Issues exist which would likely benefit from a regional rather than municipal approach to resolution.* Stakeholders recognize that many of their towns and organizations are dealing with the same issues in isolation such as: clam management, tourism development, public access, shoreland zoning, working waterfront, dock development, loss of historic artifacts, freshwater supply, lack of baseline environmental data, or subdivision development. Local entities represented at the Forum and the roundtables agreed that they could benefit from sharing experiences, information, resources and ideas as well as collaborating on the management of specific issues.
3. *Local collaboration has already been shown to benefit the management of specific marine issues in this region.* To support the concept of collaboration, a number of roundtable participants spoke about the positive results of several efforts from this area (initiated by either the State or local interests) to address marine issues at a regional level. These included: the Georges River Clam fishery, the lobster zones, the striped bass fishery, and gear conflicts.
4. *Local residents believe their towns should collaborate to improve or prevent declines in marine and coastal resource “health”.* Survey respondents are dissatisfied with the results of current efforts to manage or redress pollution, habitat loss, coastal development, public access, and commercial fishing. Further, a significant majority of those surveyed believed that towns should cooperate to address a wide range of natural and cultural resource issues, from tourism to habitat health.
5. *Local residents respond positively to the concept of a Muscongus Bay region.* All components of the pilot project confirmed that the Muscongus Bay identity is weak yet local residents and organizations respond enthusiastically to efforts to gather information and share concerns about this marine area. Residents, towns and organizations appear ripe to feel part of a bay region.
6. *Bay management provides a new opportunity for regional action by land-based entities.* Land trusts, towns, and other entities traditionally engaged in the management of terrestrial areas have found it difficult to take a regional approach to land use issues because of the profusion of property and jurisdictional boundaries that separate them. The bay appears to provide them the opportunity to escape these jurisdictional constraints and pioneer cooperative approaches to resource and issue management.
7. *Local residents have remarkably similar perspectives on the qualities that define this bay’s character.* Participants in all four components of the project spoke to the bay’s beauty, its relative isolation and peacefulness, and its rural, working qualities. They proudly described it as a working bay that accommodates pleasure boats (some calling it a “small boat bay”) as opposed to a bay for recreation that allows some commercial fishing.
8. *Local residents clearly recognize connections between the health of the bay and the health of their local economy, businesses, and culture.* Survey respondents clearly

indicated that the link between the bay and their town's economy was strong. A similar connectedness was acknowledged between the bay and local culture. Further, conversations during roundtables and the Forum rarely discussed one of these regional aspects without connecting it to another.

9. *An emergent local group exists to help foster a regional, collaborative approach to bay issues.* QLF's Muscongus Bay Project has begun to establish itself as an impartial and trusted entity. The information it has developed and distributed was accepted and discussed without challenge or controversy. In fact, at the Forum praise and appreciation for the project's efforts and focus were repeatedly given.

B. Challenges

The results of our project suggest that challenges to bay management in Muscongus Bay are as follows:

1. *No informed consensus exists in this bay about the efficacy of the current approach to marine and coastal management.* Neither the public nor local leaders nor decision makers are familiar with the full range of management activities that currently take place within the bay. The general public, as evinced by our property owners survey, appear to rely on their own senses (what they see around them) and the local media to form their opinions about the management and status of marine and coastal resources. Local leaders and stakeholders seem better informed but only about the narrow band of management activities and resources that fall within their specific activities and responsibilities.
2. *Limitations placed on the current system concern residents more than the structure of the system itself.* The most significant complaint about state management was not about how it was structured but rather the low level of funding and resources it has to carry out its assigned responsibilities. Some criticism surfaced about the "cookie cutter" approach to resolving problems which vary significantly in origin, expression, and impact from one municipality to another. Other complaints included: inadequate enforcement of existing environmental laws, insufficient support for emerging industries, insufficient amount of research and monitoring, inadequate support for locally identified needs, too complex and internally competitive to be effective, and it is seen as conflict or crisis driven.
3. *Coastal and marine use sectors are relatively insular.* Although stakeholders from different sectors are aware of one another's general activities and interests there appears to be significant disconnection and lack of communication between sectors, especially between those whose actions primarily occur on land on those whose actions primarily take place on the water. This also can be said for those who reside in the area on a seasonal basis and those who live here year round.
4. *Those who would appear to have the greatest stake in bay management appear to be the least interested in the process of exploring it.* Representation in the pilot's components by the fishing and marine trades industries was minor compared to their presence on the

bay. How to involve these stakeholders in the development of bay management presents a serious challenge. Admittedly the pilot components were not ones which regularly draw the participation of watermen. The costs and time involved in the kinds of approaches that do work, however, far outweighed the resources available to this pilot project. Further, the work of the pilot did not present an immediate threat or opportunity to people who must put the daily operation of their businesses before the exploration of new governance ideas.

5. *Local entities do not currently have the resources to undertake new management responsibilities.* Currently there are no meaningful incentives and insufficient resources to enable local entities to undertake the additional costs and time associated with collaborative approaches to shared issues, including the necessary development of marine area management information, capacity, and skills.
6. *Issues in Muscongus Bay which would benefit from a collaborative approach are multifaceted, cumulative, and complex.* There is no single galvanizing threat, such as finfish aquaculture, port development, dredging or disposal in Muscongus Bay which dominates the landscape of local concern. Instead, environmental and social impacts of coastal development as well as the perceived vulnerability of the fishery are foremost in the minds of bay residents.
7. *Information necessary to support management of this bay is scarce and disbursed.* Basic information on the bay's oceanography, physiography and biology as well as human use patterns both past and present is lacking. Current research and monitoring efforts are disconnected and designed to inform a diversity of objectives and interests. To gather, access and apply environmental, social and economic information requires a significant investment of time and resources as it is kept in a variety of locations, situations, and conditions.

III. Local Governance Recommendations

A. Issues to be included

In Muscongus Bay we discovered several issues that appeared to be ripe for some aspect of management at a bay level. To create a shortlist we looked for concerns which were identified as 1) important in our local roundtables and survey and 2) as a priority by a local entity capable of taking leadership. Five topics rose to the top and one additional one, although out of the scope of this project, deserves consideration. These included:

1. *Coastal Development:* Changes in property ownership and use were among the most common causes for concern raised during the roundtables. The Forum's session on this issue drew the largest crowd. Impacts of development on the marine environment, the local economy, and local culture were clearly identified as significant issues through the survey. The drivers and consequences of new development and use conversions are

complex and difficult to govern. Legal remedies, such as shoreland setbacks and town zoning ordinances were seen as insufficient. Absent an effective alternative, towns are reluctant to cede any of their existing authority although they recognize the need for better bay-wide communication and planning. Stakeholders also pointed to the need for better monitoring and more research on the relationship between coastal development and the bay's health.

2. *Clam harvesting*: Clamming is a significant part of the bay's fishing economy. The Georges River's five town, co-management program has been highly successful. Towns around the rest of the bay could benefit from the lessons of that approach. There is initial interest among towns, clammers, and conservationists in simply sharing management knowledge and methods among the bay's towns in order to ensure the implementation of successful practices around the bay. It is also hoped, however, that this initial communication stage could lead to a shared research, monitoring, administration, regulations and enforcement based on the Georges River model.
3. *Shoreline access*: Demand for access to the bay and its estuaries is increasing, particularly among recreational boaters. At the same time, locally known yet unofficial sites are threatened by changes in property ownership or owner attitudes towards public use of their lands. Access pressures affect every town in the bay. Some towns resist demands for new or additional access fearing the influx of new users. Yet, unsanctioned locations are being used without permission. Municipalities with greater access opportunities are burdened by overflow from neighboring towns. Businesses which rely on access have decided to buy coastal or island properties (e.g. Chewonki Foundation, Maine Sport) rather than rely on public areas. This situation requires not only the addition of new sites but also better management of existing sites and better care of sites by individual users. Local approaches appear to be too limited to effectively resolve this bay-wide problem.
4. *Working Waterfront*: Both the causes of and concerns about the loss of working waterfront are shared region-wide. The significance of this infrastructure to local culture and economy is remarkably similar from one Muscongus Bay town to the next. Further watermen often use waterfront in more than one town as part of their commercial activity. Resolution of this issue at a bay scale would more effectively capture its impacts.
5. *Environmental and Biological Monitoring*: To date no assessment of the state of Muscongus Bay has been conducted. No baseline environmental characterization exists either. The public bases its opinions about the bay's environmental "health" largely on their own experiences and the absence of crisis. Yet there are at least thirty-five different continuous or limited monitoring efforts occurring in Muscongus Bay and its estuaries. Fourteen or more organizations are involved in these activities. The public is largely unaware of these efforts or what they reveal about the state of the bay and its resources. Many of these programs face similar challenges in terms of volunteer recruitment, public education and fundraising. Few are aware about one another's efforts. Some kind of

bay-wide coordination and networking is clearly needed if the results of these efforts are to benefit management of the bay's environment.

6. *Historic preservation/interpretation*: Muscongus Bay is exceeding rich in pre-historic artifacts. Its significance is only just beginning to surface. Its history of European settlement is also undervalued. Inadequate regulations are in place to preserve the archeological record from damage due to coastal development. Few efforts have been made to present a historical account of the bay which assimilates the experiences of its towns. A Muscongus Bay regional identity would likely be strengthened by collaborative local efforts to celebrate the region's past and protect its significant historic and pre-historic resources.

B. Issues to be avoided

No issues were specifically removed from consideration for bay-wide management. Our project indicated, however, that some were simply less important or compelling to residents and stakeholders at this time. As a result, they might not serve as suitable "carrots" to encourage local collaboration at a bay level in Muscongus Bay. Others were seen as "too large" to be managed at a bay scale regardless of the location. The list of issues which may be currently unsuitable includes:

1. *Shellfish aquaculture*: This is not perceived to be a particularly contentious or difficult issue bay-wide. The most significant concern was the need to facilitate industry growth because it provides a viable part-time income for local residents. Given its relatively low profile in this bay, however, it is not likely to catalyze a cooperative management approach by local towns at this time.
2. *Recreation (boating, harvesting, swimming, etc.)*: There were few recreational issues which caused concern. The related issue of public access is discussed above. Although mention was made of conflicts which can arise between lobstermen and recreational boaters in certain towns (buoys impeding waterways, kayakers causing a nuisance to or suffering harassment from commercial fishermen) the need for a bay-wide response was never raised. Similarly, the lack of pump-out stations was noted, but not identified as critical given current boating patterns.
3. *Lobster harvest*: Significant concern was expressed about the vulnerability of the lobster industry and the impact of any declines on the bay's economy and culture. Neither the bay nor its municipalities, however, were suggested as appropriate alternative scales for management of the harvest itself. (The bay may be an appropriate scale, however, for managing the physical infrastructure necessary to support the fishery as well as other related issues.)
4. *Harvest of other species*: Only fish/shellfish populations and habitats, which from a biological perspective, could be meaningfully regulated and monitored at a bay scale were considered candidates for bay management. These were thought to include clams,

worms, elvers, urchins, seaweed, alewives, mussels, and striped bass. By *inference*, stakeholders appeared to exclude groundfish, herring and other pelagics, lobster, crab, scallops, and shrimp.

C. Governance approaches to be included

Based on the ideas, issues and opinions which surfaced during the course of the Muscongus Bay pilot, QLF and the Muscongus Bay Project Steering Committee have concluded that there are several aspects which should be part of a plan to develop and implement bay management in Muscongus Bay. All reflect our preference for a process which would enable a bay scale of management to emerge locally (with state oversight and support) as opposed to a single governance structure and administration mandated by the state for all bays.

1. *Once the legislated Bay Management Study concludes, maintain a connection between local bay management initiatives and Maine's official marine and coastal management policy.* Bay management programs will not emerge from a policy vacuum. The success of the Muscongus Bay Project was due in part to the legitimacy and credibility it gained through its affiliation to a legislated program of the State. Had we attempted to conduct a similar series of components as a stand-alone study, we suspect that we would not have experienced the same level of interest or participation. A close link to state policy is critical to the emergence of efforts involving public trust resources, particularly in parts of the State where there is no major galvanizing threat.
2. *Develop an enabling policy which fosters and guides the emergence of bay management programs.* Provide a means by which bay management programs can emerge and receive official state sanction or recognition. Provide an overarching set of principals to which state sanctioned programs must adhere. Clarify the roles, rights and responsibilities for management that must be agreed upon between sanctioned programs and the state. Include incentives for programs to seek official state recognition.
3. *Communicate any state or federal targets or goals relative to the development of bay management.* Should the State determine that it is necessary to establish qualitative or quantitative measures to evaluate the development of bay management, local programs would benefit from an understanding of these parameters. Any deadlines or expectations which motivate or determine the State's actions or interests need to be thoroughly understood by groups which may be affected by these institutional drivers.
4. *Realign appropriate government services and functions to reinforce the emergence of bay management programs.* Bay management cannot effectively emerge out of a system which is not structured to utilize and serve it. Local collaborations will be undermined by the current structure of state and federal government which is designed to deliver and receive services and functions to and from individual towns and counties. In order to support the emergence of a level of management organized around marine geography, relevant government agencies must make changes over time in their structure and approach.

5. *Develop and manage the basic GIS information that all bay management initiatives will need to operate.* In Muscongus Bay, GIS maps played a critical role in fostering discussion about bay management. They enabled residents to recognize relationships between towns, uses, habitats and issues for the first time. They provoked the idea of a bay region. They will clearly assist in decision making within institutions at both local and regional levels. Developing these maps, however, was an exceptionally time-consuming effort which required a level of expertise that few organizations have available. The emergence and operation of bay management programs would be greatly facilitated by a reliable, centralized and managed system for collecting, managing, and distributing basic GIS data layers relevant to a bay scale.
6. *Enable all bay management programs to generate and manage the basic physiographic, oceanographic, biological and socio-economic information necessary for sound management.* Few if any bay regions have the data needed to make management decisions about bay-wide uses. Baseline environmental data, historical and current use information, and real time monitoring data are all needed, at a bay scale. How to develop, interpret, analyze, communicate, store, distribute, revise, and apply this data are critical aspects of management. The state must determine what role it will play in ensuring that all bay management programs are able to develop and manage this information at some threshold level. This could include stewardship education and training, protocols for research and data management, centralized data storage, state sponsored research programs, incentives for bay research by other institutions, and more.
7. *Allow bay management programs to develop in a manner and pace suitable to their region.* In Muscongus Bay, prior to instituting any new regional level of governance, it is important for local entities to test collaborative approaches to managing shared resources and to assess the drawbacks and benefits to that approach. Further, municipal representatives from Muscongus Bay prefer a cautious approach to collaboration that initially focuses on one locally relevant and engaging bay-wide issue.
8. *Provide a mechanism to foster communication between and about bay management initiatives.* If programs develop in isolation from one embayment to the next, the opportunity to learn from and improve approaches will be lost. The State should actively facilitate communication and networking between programs. Where possible opportunities to cooperate and share resources or methodologies should be encouraged. Programs will also be enhanced through a state effort to communicate to other audiences, including the general public, about the need for and role of a bay-wide approach to marine and coastal management.

D. Governance Approaches to be avoided

1. *Do not establish a single governance structure for all bays until efforts at the local level develop evidence that soundly demonstrates which core components are necessary.* Information on the most appropriate structure will only emerge through experience at the local level. The state must enable bays to test and refine different structures, and to share

the results of their efforts, before determining what aspects should be mandatory for all bay management bodies.

2. *Do not predetermine which issue(s) is(are) most appropriate for bay-wide management.* The State should not pre-select or prioritize the issues or groups of issues which are suitable for bay management (other than to clarify which issues or parts of issues, by law, cannot be managed at the bay level, e.g. tuna fishery). There is likely to be significant variation from one bay to another on which issues will provoke and sustain local collaboration. By creating a short list of state-preferred issues, the State runs the risk of inadvertently discouraging the formation of efforts which could have been critical to the development of bay management.
3. *Do not rely on the ability of local entities to raise the funds necessary to initiate and sustain a bay management effort.* Bay management, although important to the State of Maine, has not been embraced by the private foundation or donor community as a funding priority. If groups have to rely solely on outside support to raise the funds, they will either spend the majority of their time and resources raising that money or they will fail. It is critical that the state become a partner in helping to fund and to develop new sources of support for these initiatives.
4. *Do not strictly mandate the composition or structure of local bay management programs.* Although each bay shares a similar constellation of stakeholders, the significance, power and influence of these sectors vary from one marine area to the next. The representation of stakeholders in one region may not be appropriate for another. In addition, the most appropriate structure for the development of a bay management program depends largely on the culture of the communities and sectors involved. Allow the leadership within each area to determine, through local knowledge and experience, what approach to developing and operating a representative group is most appropriate. Provide support to that leadership as well as principles that shape composition and operation so that it is fair, balanced, inclusive, and democratic.

E. Governance Actions to be included

Few, if any, specific management measures or actions were advocated by residents or stakeholders involved in the pilot. Those that did arise were aired by individuals and not the product of any broader consensus. They included:

1. *Shoreland zoning:* A recommendation in one round table was made that the state establish a greater minimum setback requirement for shoreland areas and not wait, as New Jersey did, until most resources have been lost before the action is taken.
2. *Education:* Individual attitudes which place personal gain over community need were seen as a key part of the problem. On more than one occasion, round table participants expressed concern that not enough resources were dedicated to educating the next

generation about the bay, its resources, and its limits. Some felt that too many resources were spent trying to correct actions by adults who were incorrigible.

3. *Research & monitoring*: Good science is critical to good management. Stakeholders frequently lamented the absence of good baseline data. Bay management must include plans to encourage and support programs of research at the bay level. In particular, bays need good environmental baselines against which to measure the impact of new and changing uses (such as subdivision development). Baselines are also necessary to identify the most appropriate focus for monitoring efforts, as well as to assess the data from those efforts.

F. Actions to be avoided

No specific actions to be avoided were identified during the pilot project. Current state approaches which gave rise to criticism included: the “cookie cutter” approach to resolving problems (which vary significantly in origin, expression, and impact from one municipality to another), inadequate enforcement of existing environmental laws, insufficient support for emerging industries, insufficient amount of research and monitoring, inadequate support for locally identified needs, too complex and internally competitive to be effective, and it is seen as conflict or crisis driven.

In essence, it appears that the State should avoid being perceived as promising more resources or support for bay management than it can actually deliver. Its role and approach not only must address the needs and interests of bay communities but also must be achievable given available resources and funds.

IV. Success of Public Participation Approaches

The local response to the pilot project far exceeded our expectations.

- A. Fifteen percent of the 980 property owners in the bay’s ten towns who received our mail survey (> five percent of the 17,900 property owners) completed and returned it. Their input helped us to clarify what the general public thinks are the key environmental issues for our region. (“Survey Results” attached)
- B. Ten percent of the 380 stakeholders invited to our roundtables actually came to one of our five, two-hour meetings to discuss their concerns and outlooks on resource management in Muscongus Bay. (“Roundtable Results” attached.)
- C. Our summer intern uncovered 130 existing GIS data layers on bay uses and habitats from the systems of state and federal agencies, university researchers, NGO’s, and local businesses. Working with QLF’s Center for Community GIS, we used these layers to create just under 30 new maps of the region which, once locally verified, will be

distributed as a CD-ROM Atlas to area towns, NGO's and businesses. (List of Maps and Maps attached.)

- D. Over seventy residents turned out for our Saturday forum in March, 2006 to learn about the project's results and to participate in further discussions on several bay-wide issues including clam management, public access, coastal development, and research and monitoring. As a result the Muscongus Bay Project has been able to refine its direction and role in the region. ("Forum Summary" attached.)
- E. In addition, the activities of the pilot were well covered by local media. Early on local newspapers printed press releases about the project's components. Towards the end of the project, local papers were writing their own stories about the results of the Forum. In total, at least 20 articles were printed by six local newspapers, one state paper, and two organizational newsletters. (Articles attached.)

V. Project Scale

Muscongus Bay and its estuaries are encircled by nine mainland towns and one island community. It encompasses an estimated 182 square miles of open water (21 mi² of which is within the estuaries) and 10 square miles of islands.

The size of the area did not pose any significant problems to the operation of the pilot project. A few organizational aspects were more time consuming due to the number of towns involved (i.e. obtaining lists of property owners) but these were not serious obstacles. For some aspects, such as the development of GIS maps, the size made the project easier. In a smaller region, the data resolution for many layers would have been too low to be meaningful or there may be no data at all.

VI. Capacity Needs

- A. *Competent and continuous local leadership:* For a bay management program to evolve it needs a local champion that is readily accepted by area residents and institutions. Currently our champion is the Muscongus Bay Project. Staffed by QLF, the Project relies on foundation support for QLF's Marine Program and for the specific activities the MBP undertakes. Without this year to year support the project could not continue. In addition, the group relies on the volunteer time of its Steering Committee members. Groups who have dedicated paid staff to the project tend to be better represented in its decision making than individuals who are volunteering their time.
- B. *Local Trust and Support:* The MBP and QLF have proceeded strategically in order to create an identity and approach that garner support, trust and interest of local residents. We have endeavored not to be a voice for a specific objective or outcome but rather

allowed the interests of the local public to be heard. We believe that the time invested in laying this foundation is critical to the long term success of this effort.

- C. *Support for municipal collaboration:* The resources, leadership and time available to the operation of municipal government are fully utilized. In order for local governments to sustain any meaningful level of participation in a collaborative effort, they will need additional resources and support. They are unlikely to seek funds for this work from the taxpayers, at least not until the collaboration proves its worth. The type and level of support will likely differ based on the nature and structure of the collaboration.
- D. *State policy framework:* As noted above, these efforts cannot emerge in a policy vacuum. Nor will they thrive in a policy vice. The state needs to create an enabling environment that encourages and guides the development of these early programs.
- E. *GIS Services and data:* As noted above, this work is currently handicapped by the absence of bay scale GIS layers which effectively illustrate bay uses and habitats. And even if the data were available, there are very few groups with the capacity to properly interpret the information to create maps which illuminate relationships between uses and habitats. This requires not only mapping expertise but also a working understanding of marine and coastal resources, resource management and uses.
- F. *Science & monitoring:* Again, to be able to manage the impact of human uses on the environment, economy and culture of a bay region, it is critical that groups engaged in any level or part of bay management have access to reliable and accurate information. The research and monitoring data currently available at the bay scale appears to vary significantly from one area to the next. Some of the most important physical data is all but absent for most bays.
- G. *Educational materials:* Resource materials which accurately describe the state's role and interest in bay management, as well as the rationale for the study, were well received and quite helpful to the Muscongus Bay pilot project. The State should continue to provide communication materials that enable groups to establish the management and policy setting to which their programs are responding.
- H. *Internet presence:* Also effective although underused was the state's web page which attempted to bring together local experiences and results with state information. Providing a single site which provides information on all activities would be a valuable resource for programs.
- I. *State coordination:* A website alone is insufficient to help support the emergence of this work. The state needs to dedicate staff to help these projects grow and learn from one another. The most valuable resource the state provided to the Muscongus Bay Pilot Project was Vanessa Levesque.

- J. *Funding*: Just as land trusts benefit from state bonds to help them purchase significant properties, local bay management groups would benefit from pools of money targeted to the accomplishment of specific tasks which benefit the state as a whole. The most likely candidate are funds to support and encourage research about bay environments, particularly the physiographic and oceanographic conditions within them.

VII. Preliminary MBP Steering Committee Workplan for 2006 - 2007

Following the pilot's conclusion, the Muscongus Bay Project Steering Committee has met twice to consider how they want to proceed with this effort.

First, the group has reaffirmed its role as a neutral source of information and a convener. We do not intend to advocate any specific outcome for the region or to take positions on any issues. We want to advance the ability of this region to make sound decisions about how it will use and relate to the bay and its resources. Further, we do not perceive our group to ultimately be the body which manages the bay.

We have clarified that a bay scale of management should be devoted to enabling the bay region to maintain its fundamental qualities (economic, environmental and social) in the face of change. The most important issues poised to change the bay at this time are the decline of the commercial fishing industry and the uncompromising pace of coastal development. The interplay between these two issues is poorly understood. Both are highly complex and difficult to influence, yet at a bay scale, they were the most commonly expressed concern. We agreed that rather than take on a single smaller issue that enables collaboration among our members, we needed to lead the effort to address issues that unite this region around their bay.

The Muscongus Bay Project has decided to sketch out a work plan to address these interwoven concerns head on. We believe that these issues cross all sectors of our region and could, if not addressed, lead to irrevocable and large scale shifts in our bay's environment, economy, and culture. To begin the development of our basic plan, we will look at an effort to address a remarkably similar intersection of issues (the decline of ranching and the acceleration of ex-urban development in the rangelands bordering the U.S. and Mexico) which has been in operation for the last decade. We hope that the process used there, one which emphasizes the ability of science to build community and foster better decision making, will help us to identify a promising approach for our work.

In order to proceed we understand that we will need to expand our Steering Committee to include people active in other use sectors such as development, fishing, local government and tourism. Our first task will be to clarify our mission, approach and past efforts so that they are clear to those who may want to join the Committee. Although we had proposed to expand our Committee during the pilot process it was clear, as our efforts progressed, that the timing was not right. As a group we needed to better understand our role and direction before we involve others in the development and shaping of this new group.

While we develop our plans to address the larger issue of the bay's future, we plan to delve further into the need to reinforce the connections between bay communities and how they use and impact the bay. QLF has received a grant from the Association of U.S. Delegates to the Gulf of Maine Council on the marine Environment begin this work by continuing the GIS mapping component of the pilot project. Working with local stakeholders to revise and ground truth our current suite of maps, we are going to co-create a CD-ROM Atlas of bay uses and habitats. This Atlas will be available to all local entities. Groups and municipalities will also be encouraged to build and use the database illustrated by these maps by working directly with QLF's Center for Community GIS.