Lake Ontario Islands Wildlife Management Area Preliminary Situation Analysis

March 2000

HDRU Series No. 00-2

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LAKE ONTARIO ISLANDS WILDLIFE MANAGEMENT AREA
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EXECUTIVE SUMMARY

A situation analysis for the Lake Ontario Islands Wildlife Management Area (LOI WMA) in New York’s eastern basin of Lake Ontario was begun in May 1999. The LOI WMA provides nesting grounds for several species of colonial waterbirds, including a highly controversial population of double-crested cormorants. Cormorants have been implicated in the decline of the smallmouth bass fishery, which many residents of local tourism-based communities feel is threatening their economic livelihoods and traditional lifestyles.

The purpose of this situation analysis is to: (1) provide information that aids the development of a management plan for the LOI WMA, and (2) assess the potential for future collaborative efforts to develop community benefits from the island resources. This research is a cooperative effort of the New York State Department of Environmental Conservation (DEC) and the Human Dimensions Research Unit (HDRU) at Cornell University’s Department of Natural Resources. The inquiry is focusing primarily on the communities of Henderson Harbor and Sackets Harbor.

As an exploratory stage of inquiry, qualitative methods were used during the summer and fall of 1999 to provide preliminary insight into the study’s objectives and guide development of additional inquiry tools. Methods included a review of documents and interviews. This report does three things: (a) describes these methods, (b) analyzes and discusses emerging themes based on the data collected from qualitative inquiry, and (c) suggests initial implications and recommendations for LOI WMA planning.

A review of documents, primarily newspaper articles, and interviews provided background for the situation analysis and helped to identify stakeholders with an interest in management of the LOI WMA. Semi-structured, open-ended interviews were conducted with 21 stakeholders during August and September 1999. These interviews explored the range of attitudes that stakeholders have about colonial nesting waterbirds, management of the LOI WMA, and collaborative management efforts.

We analyzed interview data inductively and synthesized interviewees’ responses around common themes. We present the results of this analysis in two sections. The “descriptive summary” is directly grounded in interviewees’ responses and attempts to be true to interviewees’ voices, while the “analytical impressions” represent our own interpretations and assertions emerging therefrom. Below is a brief summary of the results.

- Characterization of communities and stakeholders affected by LOI WMA management

Interviewees believed that the geographic communities affected by management of the LOI WMA include the shoreline communities from Henderson Harbor to Cape Vincent – Henderson Harbor, Sackets Harbor, Dexter, Chaumont, and Cape Vincent – as well as inland communities with fishing-related businesses, including Watertown. Interviewees also identified “communities of interest,” or groups of stakeholders involved in common activities, that are affected by management of the LOI WMA. For some, this group was limited to fishermen, birders, local residents, and natural resource agencies. The broadest definition of affected stakeholders included tourists and visitors to the area.
Interviewees residing in Henderson Harbor described it as a waterfront community that relies heavily on the economic contribution of warm season recreational fishing. Interviewees from Sackets Harbor described it as a quaint bedroom community for Watertown and a thriving tourist community playing on its historical background and natural beauty. Interviewees explained that the current vitality of Sackets Harbor is the result of substantial personal investment by residents over the past 25 years. Interviewees generally agreed that economic issues are the most important issues facing the region and their communities.

- **Salience of LOI management**

  The salience of LOI management stems directly from the cormorant issue. When cormorants were separated from consideration of the islands' management, most interviewees were in general agreement that some benefits would be possible (e.g., safe harbor) but that uses of the islands would be limited. The salience of LOI management would also be greater if Big Galloo were in public ownership, because it would offer greater opportunities for recreational benefits to be realized from the island complex. This suggestion is not without related concerns. Some interviewees would not want Galloo to be removed from tax assessments.

- **Attitudes toward cormorants and cormorant control**

  With a few exceptions, most interviewees supported cormorant control. Support for control efforts seemed to decrease with geographic distance from the communities most directly affected (i.e., Henderson and Sackets Harbors). Some interviewees — including agency staff, business owners, charter captains, elected officials, a community resident, sportsmen, and some local bird club members — supported cormorant control to restore the smallmouth bass fishery and/or to maintain and increase the diversity of birds on the islands. These interviewees cited agency studies showing a significant biological impact by cormorants on smallmouth bass, economic impacts on residents' livelihoods, changes in vegetation on Little Galloo Island, and changes in the composition of bird species nesting on the island. Some bird club members strongly believed that control efforts are not necessary. They cited other factors affecting the fishery, such as water quality and zebra mussels, questioned the credibility of agency studies, and expressed concerns over the cost of control efforts that might not be effective.

- **Perceptions of the Lake Ontario Islands and potential community benefits from their management**

  The range of benefits identified by interviewees that could potentially be realized from management of the LOI WMA included: educational, interpretive and historic values; protected area, research area, and existence value; safe harbor; stopover point for boaters to picnic or camp; waterfowl hunting; and wildlife viewing, birding, and ecotourism. Interviewees' perceptions of the value of these benefits to the local communities varied substantially. Many interviewees felt that cormorant control is a necessary prerequisite before any other benefits can be realized.

  Interviewees' perceptions of the Lake Ontario Islands varied. Many interviewees — including agency staff, bird club members, an elected official, a community resident, a sportsman, and tourism professionals — viewed the islands themselves as an asset. However, some interviewees — including business owners, charter captains, and elected officials — believed that cormorants have devastated the islands and greatly reduced their value.

These perceptions of the islands influenced ideas about potential benefits that could be realized from their management. Those who viewed the islands as an asset saw possible benefits including ecotourism and placed greater emphasis on developing educational and interpretive materials. Those who described the islands as devastated felt that cormorant control is needed but did not see many potential benefits other than safe harbor. Virtually all interviewees viewed safe harbor, educational materials, and a stopover point for boaters as valuable benefits. Interviewees' opinions on cormorant control and bird-related tourism varied greatly. Those who could provide services for birding-related tourism (e.g., charter captains and marina owners) appeared uninterested in this potential benefit. Some interviewees emphasized that protection of the islands as nesting habitat for birds should receive highest priority.

- **Sources of information about the Lake Ontario Islands**

  The most common sources of information about the Lake Ontario Islands are the Watertown Daily Times and word of mouth from other people. Yet, newspaper articles emphasized conflict, provided little context for understanding scientific data, and failed to relay the complexity of the ecosystem. Indeed, some interviewees were misinformed (for example, believing that cormorants were introduced from China although they actually spread to Lake Ontario from the interior of North America) and did not recognize the inherent uncertainty in managing a population.

  Interviewees agreed that decisions should be science-based but disagreed in their interpretations of agency-conducted studies. Interviewees also lacked sufficient information to evaluate adequately the desirability and feasibility of possible benefits from LOI management.

- **Stakeholders' perceptions of DEC and U.S. Fish and Wildlife Service (USFWS)**

  Several interviewees regarded DEC as credible and trusted that biologists would make appropriate decisions based on scientific information, but also noted that others have a great distrust of DEC. Indeed, a few interviewees expressed such distrust. A majority of interviewees, although not all, viewed government agencies as unresponsive to community concerns. Several regarded DEC as being slow to respond to a problem that they had been aware of for many years. These interviewees considered the USFWS as even less responsive to local concerns. Since DEC initiated egg oiling and USFWS denied DEC a permit to kill 300 adult cormorants, DEC has been seen as "heading in the right direction," while USFWS has been perceived as an impediment to cormorant management efforts. On the other hand, a few interviewees characterized DEC as bending to pressure from fishing interests.

- **Stakeholders' perceptions of other stakeholders**

  While interviewees' positions on cormorant management varied considerably, they generally showed understanding for others' points of view. A few interviewees described particularly negative experiences in their interactions with stakeholders on the opposite side of the cormorant issue from themselves.

  Interviewees varied in their opinions on how DEC should weigh the interests of local and non-local stakeholders in the development of the LOI WMA plan. Several interviewees believed that local communities should have substantial input into the management of the LOI WMA. They felt that groups external to local communities (e.g., Audubon, animal rights groups) should have little to no voice in management decisions. Interviewees residing in Henderson expressed most strongly that management should be based on the interests of local stakeholders. Others
with less invested in the cormorant issue also agreed that local communities should have substantial say in management of the LOI WMA. However, a few interviewees, primarily bird watchers, emphasized that DEC has a responsibility to manage the LOI WMA for a broader constituency, the citizens of New York State. They felt that the interests of stakeholders across the state, some of which are represented by Audubon and other organized groups, must be included in management planning.

Some local residents viewed outsiders, including national environmental organizations, as powerful groups that are conspiring with government agencies to dictate policy. They expressed sentiments that local communities are unable to compete with powerful outside interests. Interviewees who most strongly supported cormorant control described external stakeholders, such as Audubon, as a powerful minority that significantly influences policy but doesn’t really represent the interests of the public. Interviewees opposed to cormorant control defined fishing interests as the minority and groups like Audubon as representative of public interests.

- Public involvement in management planning

Interviewees were most familiar with the common participation method of public meetings, although some interviewees cited drawbacks including the one-way communication that primarily occurs in such forums. Experience with other forms of public involvement was limited; nevertheless a few interviewees suggested alternative processes for involving the public. These included: transferring the process to an appropriate partner, creating a citizen planning team, utilizing an impartial facilitator, holding focus groups, and developing a survey questionnaire for the area’s residents.

- Current examples of collaborative resource management

Interviewees often had a difficult time identifying existing examples of cooperation in natural resource management. Most frequently mentioned was the Ontario Dune Coalition, which involves The Nature Conservancy (TNC), DEC, Onondaga Audubon, NYS Office of Parks, Recreation and Historic Preservation, and private landowners in the management of a 17.5 mile dune system along the shoreline.

- Potential for collaborative management of the LOI WMA

Interviewees were unsure as to whether or how communities might become involved in management of the LOI WMA. Depending on the goals of a management plan for the LOI WMA, interviewee responses indicated that some entities might be able to play a role in partnership with DEC.

Factors that could facilitate collaborative management include the existence of social capital in local communities and the DEC’s willingness to cooperate with communities. Factors that might impede community-based management include: uncertainty surrounding stakeholders’ willingness to participate; the migratory nature of colonial nesting waterbirds, which requires coordination with federal and Canadian agencies; and a lack of familiarity with cooperative models in natural resource management. A diagnostic tool using eight factors for assessing the potential for collaboration in resource management planning revealed that three are present, three are absent, and two require additional information to assess. A planning process can build upon the factors identified that support collaboration among stakeholders, while working to develop those that are lacking.

ACKNOWLEDGMENTS

This work would not have been possible without the support of the New York State Department of Environmental Conservation (DEC). In particular, we would like to thank Jim Farquhar, Dennis Faulkhn, Steve Litwhiler, John Major, George Mattheld, Russ McCullough, Gary Parsons, and Albert Schiavone.

We are especially grateful to the individuals who took time to share their knowledge with us by participating in interviews.

Members of Cornell University’s Human Dimensions Research Unit in the Department of Natural Resources also provided guidance and assistance with this project. In particular, we would like to thank Tom Brown, Nancy Connelly, and Leen Boon.

Funding for this work was provided by the New York Federal Aid in Wildlife Restoration Grant WE-173-G, Job 146-III-3c and Cornell University Agricultural Experiment Station Project NYC 147403.
INTRODUCTION

Background

Little Galloo Island in the eastern basin of Lake Ontario (Figure 1) is the breeding ground for 53,000 pairs of ring-billed gulls, 5,800 pairs of double-crested cormorants, 1,200 pairs of Caspian terns, 275 pairs of herring gulls, and 11 pairs of greater black-backed gulls (NYS DEC 1999). The island is a 43-acre, tilted limestone shelf located about 9 miles west of Henderson Harbor, New York in Lake Ontario’s eastern basin. A unique wildlife spectacle to some, the growing population of cormorants has been perceived as a threat to local communities that depend economically on the eastern basin’s renowned sport fishery. For over a decade, fishermen have believed that cormorants are depleting populations of game fish. However, evidence from studies conducted by state and federal agencies did not confirm fishermen’s claims until a series of studies conducted in 1998 (NYS DEC 1999) concluded that cormorants are having a significant impact on the smallmouth bass population in the eastern basin. Efforts to prevent cormorants from colonizing additional islands have been conducted for several years, and control efforts in the form of egg oiling were initiated on Little Galloo in the spring of 1999.

The New York State Department of Environmental Conservation (DEC) obtained ownership of Little Galloo Island through a gift transfer from Phillips Petroleum Company in late 1998. With the State’s acquisition of the island, a Wildlife Management Area (WMA) has been designated to include Little Galloo, Gull Island, and two state-owned parcels on Galloo Island (Figure 1). The WMA program is part of a long-term effort to establish permanent access to lands in New York State for the protection and promotion of fish and wildlife resources. DEC policy requires the development of management plans for all state lands, and the Bureau of Wildlife is coordinating a planning process for the Lake Ontario Islands Wildlife Management Area (LOI WMA) with the goal of developing a final plan by the spring of 2001. While all planning efforts include some form of public participation, DEC staff believe that substantial stakeholder involvement in planning for the LOI WMA will be especially crucial given the level of public interest and controversy that has developed around the cormorant issue. In addition, leaders of the DEC’s Bureau of Wildlife have expressed an interest in exploring the potential to engage in collaborative resource management with local communities in the region.
Purpose of Study

A situation analysis for the LOI WMA was initiated in May 1999. The purpose of this analysis is to: (1) provide information that aids the development of a management plan for the LOI WMA, and (2) assess the potential for future collaborative efforts to develop community benefits from the island resources. This research is a cooperative effort of DEC and the Human Dimensions Research Unit (HDRU) at Cornell University’s Department of Natural Resources. The inquiry is focusing on the communities of Hendersons Harbor and Sackets Harbor (Figure 1).

Objectives for the situation analysis include:

1. Identify individuals or organizations with a stake in the management of the Lake Ontario Islands.

2. Characterize stakeholders (primary or secondary, internal or external to local communities, history, organization, leadership, influence, relationships with other stakeholders, etc.).

3. Examine stakeholder beliefs and attitudes toward the Lake Ontario Islands, including perceptions of potential benefits and liabilities and preferences for management outcomes.

4. Assess the interest and capacity of stakeholders to participate in cooperative management of coastal wildlife resources. Examine stakeholder perceptions of appropriate structures and processes in collaborative management arrangements.

Purpose of Phase I Inquiry

As an exploratory stage of inquiry, qualitative methods were used during the summer of 1999 to provide preliminary insight into the study’s objectives and guide development of additional inquiry. Methods included a review of documents and interviews with key informants and members of various stakeholder groups. This report does three things: (a) describes these methods; (b) analyzes and discusses emerging themes based on the data collected from qualitative inquiry; and (c) suggests initial implications and recommendations for LOI WMA planning. This first phase of inquiry provides initial insights that can be useful for management planning and help generate hypotheses for more extensive inquiry.

We have organized this report by the methods of inquiry employed: document review, interviews with key informants, and interviews with selected stakeholders. In each section, we describe the purpose, explain methods, and discuss preliminary results. The largest portion of the exploratory inquiry involved interviews with selected stakeholders. Thus, the bulk of results and our analytical impressions were based upon these interviews. Although the results have limitations, an intriguing characterization of the core communities of interest is emerging and may have important implications for management planning.
Presence of the Researchers

Because DEC had heard from both proponents and opponents of cormorant control and was familiar with the extreme positions on the issue, our effort focused on understanding attitudes of stakeholders whose views may fall between the extremes. As a result, the observations reported herein may downplay the degree of conflict present. Our interest during interviews was to encourage interviewees to think beyond cormorants to the full suite of wildlife species found on the Lake Ontario Islands. To this end, we discouraged people from focusing solely on cormorants and tried to steer conversation toward overall management of the islands. We also attempted to encourage discussion about cooperative management and its feasibility in this context.

In regard to management of the LOI WMA, our personal biases tended toward (1) a “balanced” perspective of the cormorant-fishery controversy and (2) the belief that many creative possibilities may exist as potential community benefits that could be realized from this resource. We could identify with both the desire to protect cormorants as well as the cry for cormorant control on the part of those whose livelihoods are affected by the decline in smallmouth bass. While we did not have personal stakes in the cormorant issue, we recognized that scientifically monitored cormorant control might be necessary.

DOCUMENT REVIEW

Purpose

We conducted a review of documents to familiarize ourselves with the history and evolution of the cormorant issue and develop contextual background for the situation analysis. Documents also served as a source from which to initially identify some stakeholders and their positions on management of the LOI WMA. (One purpose of interviews was to identify additional stakeholders and to gain an understanding of their attitudes articulated in their own words.)

Methods

The main sources of documents included national and regional newspapers (New York Times, Buffalo News, TimesUnion - Albany, Post Standard and Herald American - Syracuse), the Watertown Daily Times, and AP wire stories. Because management planning for the LOI WMA is occurring within the context of the cormorant-fishery issue and it has been a primary focus of media coverage, it naturally followed that articles reviewed focused on the controversy over cormorants.

An internet-based Lexis-Nexis search was conducted for articles appearing in major national and northeastern regional newspapers (New York Times, Buffalo, Albany, AP wire) during the past ten years with the keywords of “cormorant” and “Lake Ontario.” The resulting articles were reviewed. (Searches were also conducted for each of the following keywords: “cormorant,” “cormorant” and “New York State,” “Lake Ontario,” “caspian tern,” “tourism” and “Lake Ontario,” as well as “Little Galloo.” Some of these searches were too broad, yielding over 1,000 articles, or identified irrelevant articles. Others duplicated results already found in the initial search.)

A database search was conducted for the Syracuse newspapers from June 1987 to June 1999 based on the keyword “cormorant.” Of the resulting articles, those with a frequency of 10 or higher for the term “cormorant” were selected for review. A database search was also conducted for the Watertown Daily Times from March 1988 to June 1999 based on the keywords “cormorant” and “Little Galloo.” Articles thought to be richest in additional information to those already gathered were reviewed. In addition, John Major provided DEC press clippings from several regional newspapers from April 1997 to May 1999. Again, those articles thought to be richest in additional information beyond that already gathered in prior searches were reviewed.

In total, 176 articles were systematically reviewed (Appendix A). Of these, 79 were from the Watertown Daily Times and 47 were from the Syracuse newspapers. Various reports and educational materials published by the DEC, Sea Grant, and U.S. Fish and Wildlife Service (USFWS) provided additional background information.

The document review focused on identifying:

- **Stakeholders** – Any individual or organization with a potential stake in management of the resource.
- **Positions** – A specific stakeholder’s expressed position regarding management of the resource.
- **Key events** – Important events that have occurred during the evolution of the cormorant-fishery issue.
- **Evidence** – Information cited by stakeholders to support their positions.
- **Management options** – Any management alternative suggested or proposed by stakeholders.
- **General themes** – Other overarching themes that help characterize the nature of the issue.

An index of all articles reviewed was created using Excel. Spreadsheets were created for each of the above categories and relevant content was recorded accordingly.

Results

The document review provided an understanding of the evolution of the cormorant-fishery issue as it has been portrayed in the press. For example, it illustrated the changing focus over time of Fisherman’s concerns about cormorants from initial concerns about their direct impact through predation on stocked fish, to their possible role as host for a fish-afflicting parasite, to their perceived impacts on forage fish and smallmouth bass. It also highlighted
various public involvement efforts, including an agency-sponsored educational workshop, a citizen task force, legislator-sponsored public meetings, a DEC-sponsored open house and public forums, and a DEC public input survey. Such contextual background contributed to our general understanding of the situation, as well as our ability to converse knowledgeably with stakeholders during interviews.

In addition to providing context through a chronology of issues, events, and actors, the document review left us with the following analytical impressions:

- **Attitudes toward cormorants have become increasingly negative as cormorant numbers have grown.**

  An article from 1988 described a rescue crew's attempt to save an individual cormorant on the Oswego River that people believed was stuck in ice. (As it turned out, the bird wasn't really stuck and gave rescuers "the slip." ) While attitudes toward cormorants have grown increasingly negative through the 1990s, some have disliked them from the start. For example, a fisherman from Buffalo was ticketed for shooting a handful of cormorants from his boat in 1991.

- **The issue has been framed by the media as polarized conflict.**

  Articles have presented the issue as a conflict between fishermen and DEC, between fishermen and bird and animal rights organizations, and most recently between DEC and the USFWS.

- **The scientific basis of facts cited in articles has increased over time, but scientific data has often been presented without adequate explanation.**

  Earlier articles cited rough estimates of cormorants' impact on the fishery by fishermen and agency staff. These were the kind of calculations that someone might do on the back of an envelope. More recently, data from agency studies has been cited, but often without providing a context for interpretation. Many articles stated that cormorants ate 1.3 million bass in 1998, leaving it to the reader to determine what that number actually means in terms of the cormorants' impact on the fishery. While a few articles included references to other changes in the Lake, such as the introduction of zebra mussels and changes in water quality, most focused solely on cormorants and ignored the complexity of the ecosystem.

- **Newspaper articles have described a series of studies conducted by agencies.**

  While numerous research questions about the biology and ecology of cormorants remain to be answered, one gets the impression from the newspaper coverage that study after study has been conducted and the agencies should have the answers.

- **Some articles have noted the irony of the DEC applying for a permit to control cormorants just months after fishermen illegally shot birds.**

  These articles implied that agencies had finally learned what fishermen had been saying all along, but they did not imply that agency actions were politically motivated.

- **Support for cormorant control appears to vary with one's distance from the eastern basin.**

  Following the illegal shooting of cormorants in July 1998, some letters to the editor expressed support for the shooters' actions, describing it as an act of civil disobedience. Many others did not condone the shooting, but expressed understanding of the frustration with government inaction that led the shooters to take matters into their own hands. Extreme outrage at the illegal shooting came from sources in Albany, New York City, California, and Texas. In addition, a local poll by DEC found that most interviewees favored the most aggressive option for cormorant control, including lethal removal of adult birds. Public comments received by the USFWS, however, opposed the proposal to permit cormorant control on Little Gallo Island. These suggest that attitudes toward cormorants may vary greatly between local and non-local stakeholders.

- **Changes in portrayal of agencies.**

  In earlier articles, staff of the DEC Bureaus of Fisheries and Wildlife sometimes appeared at odds in their comments about cormorants. More recently, DEC has appeared as a unified entity, and the press has portrayed the DEC and the USFWS at odds with one another over the permitting of control efforts.

- **Legislators at the county, state and national level have demonstrated support for cormorant control.**

  Through the organization of public meetings on cormorants and public statements, legislators have voiced support for cormorant control. Congressman McHugh unsuccessfully proposed the inclusion of a hunting season on cormorants in national legislation.

- **Cormorant management requires regional coordination.**

  Some articles cited the need to coordinate management actions with Canada and Vermont.

- **The problem is not isolated to Lake Ontario.**

  Articles also referenced problems that people are having with cormorants on Lake Champlain, Lake Erie, Cape Cod, Maine, the Midwest, and southern aquaculture ponds.

Document review, combined with information from conversations with key informants, also helped us to identify candidates for stakeholder interviews. We describe this process further in the following sections.
INTERVIEWS WITH KEY INFORMANTS

Purpose

Interviews were conducted with agency "key informants" to gain contextual background, identify potential stakeholders in the management of the LOI WMA, and seek suggestions of topics and questions that would be useful to include in an interview guide. These initial interviews provided a useful orientation to guide the subsequent interviewing effort.

Methods

Key informants included agency staff members who, through their formal responsibilities with their respective organizations, are familiar with the situation and local communities and also have some familiarity with the IDRU. Conversations with these individuals provided a logical place to begin gathering information in preparation for interviews with a broader set of stakeholders. In reality, each of the key informants interviewed could also be defined as a stakeholder in LOI WMA management, and many of the stakeholders interviewed in the preceding stage could have been considered "key informants." The distinction was made merely to enable information gathering in preparation for more systematic data collection.

Those interviewed included 4 DEC staff (Watertown), 3 staff of NYS Sea Grant (Oswego and Brockport), and 1 staff member of Jefferson County Extension. Two interviews were conducted as group meetings with agency staff, and two interviews were conducted by phone with individuals. Extensive notes were taken during each interview.

Results

These interviews contributed to a more comprehensive picture of the context in which management planning is occurring. Informants described the unique habitat and fishery of the eastern basin, environmental changes in the Lake, and the evolution of the cormorant issue. Informants depicted the cormorant issue as extremely volatile and polarized. They believed that virtually the entire community of Henderson Harbor favors cormorant control; no polarization is apparent within the community. Attitudes change as one moves further away from Henderson Harbor. Informants suggested that stakeholders' positions on cormorants might not be as extreme in Sackets Harbor, where the tourism economy is more diversified. Informants also suggested topics that they felt would be of interest to ask about in interviews. Questions addressing some of the suggested topics that were relevant to the study objectives were incorporated into the interview guide (Appendix B). In addition, informants explained the roles that their respective organizations might possibly fill in relation to cooperative planning and management of the LOI WMA with DEC. We present these with the results of stakeholder interviews under the sub-heading "Potential partners in 'co-management' of the LOI WMA."

Finally, informants provided suggestions of groups of stakeholders that should be represented in the interview sample, as well as specific individuals to interview who may be rich sources of information. Using this information and the results of document review, we developed an initial categorization of potential stakeholders with an interest in LOI WMA management and a list of candidates for interviews. We shared those with the DEC contact team in August 1999. Incorporating input from the contact team, we revised the stakeholder categorization (Figure 2). Figure 2 represents an initial effort at identifying and categorizing stakeholders to help guide sample selection for interviews. As such, it should not be interpreted as an ideal or conclusive grouping of stakeholders. Additional inquiry will help confirm whether or not this categorization accurately represents stakeholders' interests and positions on LOI WMA management.

INTERVIEWS WITH SELECTED STAKEHOLDERS

Purpose

In-depth, semi-structured, open-ended interviews were conducted during August and September 1999. The purpose of these interviews was to explore the range of attitudes that stakeholders have about colonial nesting waterbirds, management of the LOI WMA, and collaborative management efforts. Interviews were also intended to verify the stakeholder set identified from document review and possibly provide some initial characterization of stakeholders. During interviews, we attempted to understand management-related issues of importance to stakeholders, as stakeholders articulated them in their own words. Interviews were not intended to provide conclusive understanding and their results cannot be generalized to a broader public. Rather, the results of these interviews expand the base of information, providing preliminary insights for management planning and guiding the development of further inquiry tools.

Specific objectives for interviews included:

- Gather descriptive information to begin characterizing stakeholders.
- Examine the range in stakeholder beliefs and attitudes toward colonial-nesting waterbirds and the Lake Ontario Islands.
- Examine the range in stakeholder perceptions of potential community benefits that may be realized from management of the LOI WMA.
- Examine stakeholder preferences for public involvement during the planning process.
- Begin investigating stakeholder willingness and capacity to participate in a collaborative management effort.

Methods

Sampling Rationale

In consultation with the DEC contact team, we used purposeful sampling to select stakeholders to interview by the criterion of maximum variation (Patton 1990). The rationale for this sampling was to identify information-rich cases that would reflect the multiple perspectives and breadth of opinion that exist among stakeholders. One to four representatives from various categories of stakeholders included in Figure 2 were interviewed for a total of 21 interviewees. Other considerations in the selection of interviewees included how frequently and recently they
were cited in the newspaper articles reviewed. Stakeholders suggested by key informants received greater weight than those identified by document review alone. "Snowballing," or identifying additional stakeholders to interview by asking interviewees for suggestions, helped verify and expand the stakeholder set identified earlier.

We also bound our sample by maintaining primarily a local community focus in our selection of interviewees. For example, in selecting stakeholders with an interest in birds, we chose to interview members of local bird clubs rather than staff or representatives of state and national organizations. Table 1 provides a summary of the sample of stakeholders interviewed. Many stakeholders would easily fall into more than one category. For example, a marina owner could be included as a stakeholder with a business interest or a fishing interest. Or, an elected official might also be a sportsman. The table identifies the stake that we had in mind when originally contacting the individual. Our sample included 16 men and 5 women. Table 2 provides the locations where interviews were conducted, generally at the interviewee's place of work or residence. The location of interviews offers an indication of interviewees' geographic distribution. It should be noted, however, that some interviewees work in one location, such as Watertown or Syracuse, while living in another, such as Sackets Harbor or Oswego. While a few interviewees, primarily agency staff, provided information about the roles and positions of their respective organizations on cormorants and LOI WMMA management, interviewees generally spoke as individuals rather than representatives of any organized stakeholder group.

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Table 2. Locations of Interviews

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Interviewees</th>
</tr>
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<tbody>
<tr>
<td>Alexandria Bay</td>
<td>2</td>
</tr>
<tr>
<td>Henderson</td>
<td>2</td>
</tr>
<tr>
<td>Henderson Harbor</td>
<td>2</td>
</tr>
<tr>
<td>Sackets Harbor</td>
<td>3</td>
</tr>
<tr>
<td>Watertown</td>
<td>6</td>
</tr>
<tr>
<td>Other (Cape Vincent, Oswego, etc.)</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
</tr>
</tbody>
</table>
Data Collection

An interview guide (Appendix B) helped direct the interviews and ensure that the objectives of the situation analysis were addressed. However, because interviews were semi-structured and open-ended, flexibility was essential to enable interviewees to discuss those issues of greatest interest to them. As a result, no two interviews were identical in the specific questions or order that they were asked. However, questions on the interview guide were generally covered in most interviews. Interviews ranged in length from 30 to 90 minutes, with most taking about an hour. Most interviews were conducted in person at the interviewee’s work place or home. Notes were taken during each interview. Within 24 hours of each interview, notes were transcribed as a field log to ensure that details and depth of the conversation were not lost.

Data Analysis

Inductive analysis led to a category system of emergent themes (Greene 1999) evident in the interview data. Analytic insights that occurred during data collection were recorded in the field logs. Insights from earlier interviews helped focus additional data collection during subsequent interviews. Upon completion of all interviews, we conducted a cross-interview analysis (Patton 1999) by grouping together different interviewees’ answers to common questions. We literally cut each field log into “chunks” of data and then grouped these around common themes. The study objectives and interview guide provided a framework for this descriptive analysis. Additional themes that had emerged during the course of interviews were also incorporated to develop the category system of themes in Table 3. We describe interviewees’ attitudes related to each theme in the results section. We also formulated some hypotheses based on our analytical impressions during collection and analysis of interview data. We assert these following the descriptive summary in the results section. Because the first phase of inquiry was exploratory, the goal of analysis was not to provide a conclusive understanding of the situation but rather to enhance understanding for management planning and guide the development of further inquiry tools.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Related study objectives</th>
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<tr>
<td>Interviewee’s description of his community</td>
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</tr>
<tr>
<td>Important issues to community or region</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>Stakeholders and/or communities affected by LOI WMA management</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>Interviewee’s perceptions of agencies</td>
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<tr>
<td>Interviewee’s perceptions of other stakeholders</td>
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<td>Local and non-local stakeholders</td>
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<tr>
<td>Information sources</td>
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<tr>
<td>Attitudes toward cormorants</td>
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<tr>
<td>Cormorant control</td>
<td></td>
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<tr>
<td>Potential benefits from LOI WMA management</td>
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</tr>
<tr>
<td>Safe harbor</td>
<td></td>
</tr>
<tr>
<td>Educational, interpretive, and historical values</td>
<td></td>
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<tr>
<td>Stopover point for boaters</td>
<td></td>
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<tr>
<td>Protected area, research area, and existence value</td>
<td></td>
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<tr>
<td>Waterfowl hunting</td>
<td></td>
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<tr>
<td>Wildlife viewing, birding, and ecotourism</td>
<td></td>
</tr>
<tr>
<td>Interviewee’s suggestions for public involvement in management planning</td>
<td>3 &amp; 4</td>
</tr>
<tr>
<td>Examples of collaborative resource management</td>
<td>4</td>
</tr>
<tr>
<td>Potential partners in “co-management” of LOI WMA</td>
<td>4</td>
</tr>
</tbody>
</table>

Data Quality

Nearly all interviewees were willing to participate in an interview with little or no hesitation and provided thoughtful, consistent responses. We attempted to enhance the authenticity of interviews by establishing good rapport with interviewees, maintaining an impartial presence, and ensuring that interviewees had the opportunity to elaborate on themes of importance to them. To some extent, member checks (i.e., telling an interviewee our understanding of his response to confirm that we interpreted it as he intended) during interviews helped ensure that we interpreted interviewee’s responses with the meaning that they intended.

Results – A Descriptive Summary

We have divided the results from stakeholder interviews into two segments: a descriptive summary and analytical impressions. The descriptive summary provides a compilation of interviewees’ attitudes around each of the themes identified in Table 3. For each of the study’s objectives, the relevant themes are identified and a discussion of interviewees’ attitudes provided. Each discussion is really a composite of interviewees’ responses. Our intent is to depict the range and breadth of perspectives held by stakeholders. Thus, each theme-related discussion could be considered somewhat like a brainstorming session intended to get as many ideas as possible “out on the table.” While interviewees would not agree with the entirety of the discussion, all interviewees’ views are represented at some point in the discussion.
The second segment of results, our analytical impressions, includes assertions developed during the course of data collection and analysis. While the descriptive summary is directly grounded in interviewees' responses and attempts to "be true" to interviewees' voices, the analytical impressions represent our own interpretations and assertions emerging therefrom.

Objective 1: Identify individuals or organizations with a stake in the management of the Lake Ontario Islands.

Communities and stakeholders affected by LOI WMA management

Interviewees believed that the geographic communities affected by management of the LOI WMA include the shoreline communities from Henderson Harbor to Cape Vincent—Henderson Harbor, Sackets Harbor, Dexter, Chaumont, and Cape Vincent—as well as inland communities with fishing-related businesses, including Watertown. The islands fall within the town boundaries of Hounsfield.

Interviewees identified what we might regard as “communities of interest,” or groups of stakeholders involved in common activities, that are affected by management of the LOI WMA. For some, this group was limited to fishermen, birders, local residents, and agencies. The broadest definition of affected stakeholders included tourists and visitors to the area from across the country, whose opportunities for “things to do” may be influenced by LOI WMA management. Interviewees also provided suggestions of specific individuals who may have an interest in management or be able to provide useful information in an interview. In general, however, the categories or groups of stakeholders with an interest in LOI WMA management that interviewees identified included (in alphabetical order):

- Bird-related groups
- Charter captains and anglers
- DEC
- Environmentalists, people who enjoy nature
- Hunters
- Local businesses (bait shops, hotels, restaurants, etc.)
- Local government
- Local residents
- Owners of Galloo and Stony Islands
- Recreational boaters
- USFWS
- Visitors to area

Objective 2: Characterize stakeholders (primary or secondary, internal or external to local communities, history, organization, leadership, influence, relationships with other stakeholders, etc.).

Interviewees’ descriptions of their communities

Interviewees generally described the region as rural, politically conservative, economically depressed, and ecologically rich. People have rural values; they are supportive and willing to help one another. One interviewee said that people live near the Lake because they "love" it, although the reasons (e.g., utilitarian, aesthetic) for their affinity to the Lake differ. He added that people are trying to live a modern life and also retain "a romantic notion of what life used to be."

Henderson Harbor

Interviewees who are residents of Henderson Harbor described it as a waterfront community that relies heavily on the economic contribution of warm season recreational fishing. Protected from wind, open water and big waves, the harbor is also great for sailing. In the winter, ice fishing and snowmobile races occur when the harbor freezes. There are many cottages and homes, some restaurants, and just a few bars. It’s a “quiet, nice community.” Many families residing in Henderson Harbor “go back six or seven generations” -- although there have been some newcomers over the last decade -- and there’s a lot of “old money” in some families. People are provincial and don’t want to see major changes, especially changes coming from outside the community. While they’re not anti-progress, they would like to see many qualities of the community stay as they have been for the last 100 years.

“It’s definitely a fishing community” – marina owner

Henderson Harbor is “one of the loveliest areas going.” – charter captain

Henderson also relies heavily on recreation and tourism associated with fishing and hunting, in addition to some agriculture. The Town of Henderson has 1,552 total housing units. Of these, 1,017 are considered seasonal.

Sackets Harbor

Interviewees who reside in Sackets Harbor described it as a quaint bedroom community for Watertown and a thriving tourist community playing on its historical background and natural beauty. Sackets Harbor has changed dramatically over the past 25 years from a community with the highest welfare in the county to the highest per capita income. And it has been done by the personal investments of interested people more so than by government or a formal organization. After the U.S. Army left the Madison Barracks in the mid-1940s, the community began to decline. By the mid-1970s, Main Street and village infrastructure was “a mess.” A good portion of Sackets residents also lost their jobs when a date packaging operation, located in what is now the Ontario Place Hotel, moved from Sackets to California during the embargo against Iran. The reversal of Sackets’ decline began when a group of friends decided to buy, rehabilitate and then
sell some of the dilapidated buildings. As word of mouth spread and press covered the revitalization, others also made investments and things began to happen in a positive way.

Today, with one of the few safe harbors in eastern Lake Ontario, Sackets Harbor’s restaurants, hotel, bed and breakfasts, and marinas are kept busy by tourists attracted to its boating opportunities (Sackets may be the finest sailing port on the Lake), historical sites, fishing, waterfront parks, restaurants and brew pub, and scuba diving. Visitors also come for weekend getaways, to visit relatives, to research their genealogy, and for weddings. Sackets is becoming “the wedding capital of Northern New York.” Sackets hosts Elderhostel groups in the fall and attracts many Canadians when the Canadian dollar is stronger. However, Sackets Harbor does not want to be like Alexandria Bay. At 11:00 p.m. in Sackets Harbor, it’s pretty quiet while things are just firing up in the bars of Alexandria Bay. The community strives hard for controlled growth. Sackets Harbor is very quiet in the winter. The village has 708 total housing units, of which 109 are considered seasonal.

**Important issues to the region**

While interviewees’ attitudes toward the Lake Ontario Islands and cormorants varied, they generally agreed that the most important issues facing the region and their communities are economic ones. Jefferson and St. Lawrence counties have some of the highest unemployment rates in the state. Employment in both manufacturing and agriculture are declining. While tourism supports many people during the summer months, it doesn’t provide stable year-round income. One interviewee explained that she and her husband moved to their community because they love the area. They would like to see their children return to the area after they finish college, but there is nothing to come back for. Another interviewee explained that in upstate New York, “prosperity has passed us by.” The pro is that “we haven’t sold our soul” for big tourism or manufacturing, but the con is that it’s hard to make a good living.

While people want “to make the next notch” in economic well-being, they also want to protect their lifestyles. They desire economic development that is compatible with preserving their quality of life and the environment. The area is rich in natural and scenic resources, and the success of many local businesses (hotels, restaurants, charters, gas stations, equipment shops, etc.) is linked with the fish and wildlife resources of the region.

“[The challenge is in] … balancing a respect for and protection of what we still have in environment and unique natural resources but bringing us up to speed with the rest of the economy in terms of re-developing the region.” – tourism professional

“[The question is] … how to achieve reasonable economic growth and opportunity without losing natural and cultural benefits that are here now.” – environmentalist

Many communities are looking to recreation and tourism for “economic salvation.” Some interviewees suggested that improving the economic well-being of the region will require preserving the existing tourism industry (e.g., fishing and sailing) and expanding on other opportunities (e.g., paddling sports and wintertime activities like snowmobiling), as well as retaining current industries and attracting new, clean industries.

The other important issue generally cited was improving education.

In Henderson, important issues specific to that community include controlling cormorants and providing water and sewer services. Some of the important issues to residents of Sackets Harbor include maintaining tax assessments; encouraging steady, controlled growth; and preserving the community’s historic character.

**Stakeholders’ perceptions of DEC and USFWS**

We did not directly ask interviewees to talk about their perceptions of DEC and other agencies involved in cormorant management. However, interviewees’ perceptions of these agencies often became evident in their responses to other questions. Several interviewees felt that DEC has been unresponsive and slow to react to a problem that they have been aware of for many years. A town board member expressed disbelief that DEC has ignored something so “blatantly wrong” by “studying it to death.” Some interviewees felt that DEC should have been timelier in their handling of the citizen task force’s recommendations. They observed that people are frustrated by the bureaucratic hoops that DEC must jump through to manage the cormorant population. These interviewees felt that the USFWS has been even less responsive to local concerns and has been unwilling to cooperate with DEC. They viewed the USFWS as an impediment to DEC’s cormorant management efforts.

“The Fish and Wildlife Service shouldn’t be there because they can’t perform the jobs they’re educated to do. DEC’s job is to protect our environment. They shouldn’t be stopped from doing it. How could they have allowed the situation to get so bad? ‘You really start to lose faith.’” – marina owner

“I used to think that the only thing DEC couldn’t screw up was the bass fishing, but they screwed that up by doing nothing.” – charter captain

On the other hand, a few interviewees felt that DEC is bending to pressure from fishermen. A bird club member described DEC as a “mixed bag.” He explained that some staff are really working hard—often like “salmon trying to swim up stream”—to do a good job given bureaucratic constraints. Others, he felt, are conduits for the fishing interests and “would probably go out and shoot cormorants themselves if they could.”

A few interviewees, from both sides of the cormorant issue, felt that DEC sways too much to public opinion. An environmentalist explained that DEC staff are able to use factual information that is not apparent to the public, so it is important that they educate people as part of any process. A bird club member explained that, while it is good that DEC listens at public meetings, sometimes they need to be more forceful and proactive in their responses. Rather than listen and then say “okay we’ll think about this,” they should do some thinking on their feet and offer responses there. A charter captain said that DEC places too much emphasis on, “How are we going to schmooze this for the public?” He continued, “They’re biologists with masters and PhDs,” and explained that they’re hired to make hard decisions. If the decision is good for the public, that’s good. But if it’s not good for the public, it’s needed for wildlife, then they need
to do that. He said that DEC should look at “What do we need to do to manage and use the resource correctly?” In this interviewee’s opinion, “correct handling” of the cormorant issue—i.e., earlier control efforts—would have avoided the illegal shooting and lawsuits. The bird club member echoed similar sentiments, although he is not a proponent of cormorant control. He said that he generally trusts DEC to do the studies and make appropriate decisions.

Several interviewees saw challenges to DEC in addressing the cormorant issue. They described resolution of the cormorant issue as a long-term process, especially since control efforts are unlikely to reduce the population substantially for a number of years. One interviewee commented that DEC is really “stuck in the middle,” and another said that DEC has appeared to be “very nervous” about the cormorant issue. Some interviewees felt that DEC does a fairly good job of listening to the public through public meetings, the opinion poll on cormorant management options, and interviews such as those conducted for this project.

For some, state and federal government are “out of touch” with local communities. They felt that decisions made in Albany do not reflect local concerns. One said that it all comes down to a lack of communication. Another noted that the federal government doesn’t understand local people for the cormorant isn’t endangered, but rather has become a “pestilence.”

Several interviewees trusted DEC biologists to make decisions appropriate for the resource. However, they knew other people with a strong distrust of DEC. A bird club member said that DEC definitely has a problem with its image. He explained that a lot of people, on both sides of the cormorant issue, assume the worst about anything that is presented by DEC simply because it is coming from DEC. “There is a real lack of trust.” A business owner said that in waterfront communities, DEC’s presence is primarily known as a regulatory and enforcement agency. “When you live on the water and you boat, you have to deal with DEC and they’re not usually viewed favorably.” Some interviewees admitted that they are unfamiliar with DEC’s mission, and they suspected that the public may view DEC only in a regulatory role.

Stakeholders’ perceptions of other stakeholders

For the most part, while interviewees’ positions on cormorant management differed, they showed understanding for others’ points of view. For example, a bird club member said of a charter captain involved in the illegal shooting of cormorants that “he seems like a reasonable person but he took the wrong action and he probably recognizes that.” Several interviewees explained that while they did not condone the illegal shooting of cormorants and felt that the men involved overreacted, they could sympathize with why they did so. While their own sentiments about cormorant control were not particularly strong, they could understand the strong opinions of people whose livelihoods have been affected. An elected official said, “People whose livelihoods depend on charter fishing are just like farmers who depend on corn or dairy.”

However, this is not to imply that stakeholders respect one another or could engage in constructive dialogue. Some interviewees described particularly negative experiences in their interactions with stakeholders on the opposite side of the cormorant issue from themselves. An environmentalist commented that “being a friend of the double-crested cormorant in this area is like supporting the wrong ethnic group in the Balkans.” Some interviewees also felt that the fishing interests have created “hysteria” by providing highly questionable information early on. They felt that this misinformation has made intelligent discourse on the issue difficult.

Interviewees varied in their opinions on how DEC should weigh the interests of local and non-local stakeholders. Of those interviewed, residents of Henderson felt most strongly that management should be based on local stakes. These interviewees viewed the local communities as less powerful and unable to influence government in the way that the powerful environmental groups, like Audubon, do. Their responses implied a sense of conspiracy between national environmental groups and government agencies that entirely ignores the interests of local communities. A charter captain said that in his opinion the government is infiltrated by a minority group that favors birds and animals over people and that this handful of people dictate agency policies.

“Our politicians should have been beating down doors to help this county. But so many groups are more powerful than the people that politicians represent.” —marina owner

Others with less invested in the cormorant issue also agreed that local communities should have substantial say in management of the Lake Ontario Islands.

“The local role should weigh heavily in decisions made in Albany. Decisions are probably based on science, but that is never disseminated to the locals.” —town board member

However, a few interviewees, primarily bird watchers, emphasized that DEC has a responsibility to manage the resource for the interests of the broader public of New York State. An environmentalist and bird club member explained that DEC and the USFWS are responsible to a broader constituency and need to include organizations outside of the local area in management planning.

Another sentiment among some interviewees was that those who are “footing the bill” should have the greatest say. In reference to animal rights groups, one interviewee said, “Those groups shouldn’t have any say. They’re not the ones footing the bill. They should let the biologists do their job.” Another suggested that bird watchers pay to “adopt” a portion of the island and that DEC use that money to fund its management.

Sources of information about the Lake Ontario Islands

According to interviewees, the most common sources of information about the Lake Ontario Islands are the Watertown Daily Times and word of mouth from other people. Other sources include the media on television and radio, the Syracuse newspapers, and charter captain Ronald Ditch and other fishing guides.

Some interviewees noted that information in the media may be incorrect or biased, since the media is driven by dramatic headlines more than solid information. Some birders felt strongly that the Watertown Daily Times has an anti-cormorant bias and that local media have
reflected "misinformation" provided by fishing interests. Some interviewees favoring cormorant control also noted that information in the media might not always be accurate.

Although interviewees specifically interested in the cormorant issue had read scientific studies and agency reports or spoken directly with DEC staff, most did not believe that the general public would take the time to seek information from DEC or other organizations like Audubon.

Objective 3: Examine stakeholder beliefs and attitudes toward the Lake Ontario Islands, including perceptions of potential benefits and liabilities and preferences for management outcomes.

Attitudes toward the Lake Ontario Islands

Interviewees' attitudes toward the Lake Ontario Islands varied with their attitudes toward the impact of cormorants on the islands. Many interviewees — including agency staff, bird club members, an elected official, a general citizen, a sportsman, and tourism professionals — viewed the islands themselves as an asset. A resident of Sackets Harbor explained that the islands are assets because of the fisheries and wildlife and their natural beauty. In addition, the islands in private ownership contribute to the tax assessments. And Lake Ontario doesn’t have many islands, so they’re unique. However, some interviewees — including business owners, charter captains, and elected officials — felt that cormorants have devastated the islands and greatly reduced their value. These interviewees described Little Galloo Island with phrases such as:

"Little Galloo is gone." — business owner

"Now it looks like Omaha Beach." — charter captain

"It’s devastated." — elected official

"During the summer, you can smell the birds six miles away if you’re downwind."

— charter captain

"It’s not a very pleasant place... But it is unique." — bird club member

Attitudes toward cormorants and cormorant control

Some interviewees — including agency staff, business owners, charter captains, elected officials, a general citizen, sportsmen, and some local bird club members — supported cormorant control to restore the smallmouth bass fishery and/or to maintain and increase the diversity of birds on the islands. These interviewees cited the DEC studies released in February 1999 that showed a significant impact by cormorants on bass. Some felt that the scientific studies backed what fishermen had been saying all along. Conversations with interviewees directly dependent on the fishery made clear that the decline in bass has had a severely serious impact on their livelihoods and associated consequences for their families. A few interviewees estimated that the charter boat industry is 50-55% of what it used to be. Interviewees also cited changes in the islands’ vegetation and appearance as evidence that cormorants have devastated and ruined Little Galloo. Those most strongly favoring control suggested that a hunting season on cormorants would be a simple and effective control method, but they recognized that this would require changes in legislation. Interviewees favoring aggressive control efforts recognized that it would still take 5-8 years for the fishery to recover.

Some interviewees felt that DEC should do management planning for desired bird species. Some species, like the Caspian tern and black-crowned night heron, are in short supply, while others are in excess. A charter captain said that the numbers of ring-billed gulls and cormorants should be reduced to make room for more desired species.

Some interviewees felt that controlling cormorants is just common sense. A DEC advisory board member said, "The biologists know what they’re doing.” He explained that the biologists don’t want to see the birds eliminated, but they recognize that some control is needed because the cormorants are impacting the fish and other bird species. A charter captain echoed this sentiment, saying that sometimes common sense dictates that some species need to be controlled. Several interviewees likened the need for cormorant control to the need for deer control.

"No one, not a single resident, is saying eliminate cormorants, just control them.”

— marina owner

Some bird club members were accepting of control efforts, although certainly not proponents of control. One said that oiling is a cost-effective way of managing the population. However, other bird club members believed that control efforts are unnecessary. They described other factors affecting the fishery, including zebra mussels and improved water quality. They argued that the decline could not be attributed solely to cormorants. One said of control efforts, “It’s garbage.” These interviewees also questioned the credibility of agency studies and said that the science is not convincing. Another concern is the commitment of resources to a long-term, labor-intensive control effort. Some interviewees questioned how effective control efforts could be and expressed a desire to see resources applied to other programs.

Local bird club members and environmentalists who opposed cormorant control did not feel that control efforts are necessary or justified. However, they were not opposed on the basis of animal rights arguments. Some interviewees did hold more preservationist views than others. For example, a bird club member said that he is not against management of a population if it needs to be managed, but that his general philosophy toward nature is to leave it alone. He added, "It seems that when humans manage nature, we create even greater management needs.” However, no interviewees expressed opposition to the concept of managing a population.

Perceptions of the effectiveness of the egg oiling program initiated in the spring of 1999 varied. A charter captain said that the bass fishery has had a big turnaround this year, although it still has a long way to go. He attributed this to two factors. One was the illegal shooting, which reduced the number of cormorants a bit. The other, and more important factor, was the harassment that occurs during egg oiling. As a result, cormorants were displaced to other areas like Wolf Island and all along the St. Lawrence River. For this interviewee, the dramatic improvement in the bass fishery in one year’s time was definite evidence of cause and effect. On the other hand, a bird club member said that bass fishing has been good this year but not because there are any more bass this year than last. He said that fishing conditions for bass have just
been better this year. He argued that it will take 5-10 years to see any effects from cormorant control, and he did not believe that there would be much noticeable effect even then. Thus, stakeholders hold different interpretations of the same phenomenon (i.e., explanations for improved bass fishing).

Several interviewees—some citing their own experiences growing up in the area and never seeing cormorants—believed that the presence of cormorants on Lake Ontario has occurred rather recently (i.e., second half of this century). And some of these interviewees believed that cormorants had been introduced from China. However, one interviewee argued that cormorants may have been present in the 19th century but persecuted so that their numbers diminished. He asked, “What was the natural population level? How much was the population unnaturally suppressed?”

While some interviewees felt that DEC has studied the issue to an extreme, others felt that research is needed to better understand the fishery and the interaction of cormorants with other bird species.

Explaining the attitudes that he has heard from people passing through his business, a business owner said that:

DEC has done a terrible job of managing cormorants. They’ve studied it for much too long. People who have served on DEC’s advisory boards are frustrated that nothing has been done with their recommendations. DEC says that it can’t act because of federal laws. Now it seems that DEC has recognized that the locals have it about right. Hence, they’ve begun egg oiling efforts. The lack of cormorant control has had a devastating effect on the fishery and charter captains. What’s the overall effect on the economy? It’s not good. It’s serious but it’s not devastating like the decline of the salmon fishery in Pulaski. If I was a charter captain, then I would feel it was a disaster. What’s the solution? Control cormorants is the attitude of people. When you take the bread off their table, people want answers.

Many interviewees felt that cormorant control is a necessary prerequisite before any other benefits can be realized from LOI WMA management. They suggested that some action related to cormorants is necessary before negative attitudes toward cormorants might change. Several spoke of a need to reach a “balance” or “equilibrium” in the eastern basin ecosystem. Even then, it may be difficult to change attitudes. One interviewee commented that people, particularly those who have lost their livelihoods, would still harbor grudges.

Potential community benefits from LOI WMA management

The question “What possible community or public benefits could be realized from management of the Lake Ontario Islands?” elicited three general types of responses. Agency staff, bird club members, and tourism professionals suggested a variety of potential benefits and discussed their feasibility. Other interviewees did not initially perceive any benefits but, when asked their opinion of specific benefits that had been suggested by others, felt that some may be of value. Still others felt that the islands could only provide habitat for colonial-nesting waterbirds. Of this group, some felt that protection of the islands as nesting habitat for birds should receive highest priority in management, while others felt that the birds have taken over and devastated the islands so that no other possible uses exist.

“It’s an absolutely spectacular breeding bird island and it should be maintained that way forever.” — bird club member

“It’s a wonderful, almost magic scene of life and death and what most species go through on a daily basis.” — environmentalist

“It’s really a bunch of useless land. Little Galloo will never be anything but a bird rookery.” — charter captain

Aside from the issue of cormorant control, the range of benefits that interviewees identified that could potentially be realized from management of the LOI WMA included the following:

- Educational, interpretive and historic values
- Protected area, research area, and existence value
- Safe harbor
- Stopover point for boaters to picnic or camp
- Waterfowl hunting
- Wildlife viewing, birding, and ecotourism

Interviewees’ perceptions of the value of these benefits and their feasibility varied substantially. Below, we provide a discussion of each potential benefit, illustrating interviewees’ varying attitudes.

Educational, interpretive and historic values

Unless they are active in fishing or boating, many people may not even know about the islands. Promoting them through educational and interpretive materials would be a valuable way for people to experience the birds, fish and history of the islands without visiting them directly. Tools for doing this could include

- exhibits at state park nature centers, the Sackets Harbor Visitors Center, or the Seaway Trail Discovery Center when it is completed;
- a film or video that could be shown at nature and visitor centers, in schools, or at meetings of various groups;
- live cam images that could be viewed from an interactive exhibit at a nature center or on the internet;
- segments on programs like Empire Outdoors; and
- print materials.

Some materials, including fact sheets and a video, have already been produced about cormorants.
Interviewees would recommend emphasizing different messages in education about the islands. Some would highlight an understanding and appreciation of the ecosystem, the islands’ natural history, the variety of bird and fish species, and their interactions. These interviewees felt that the islands involve much more than what the media portrays. Others would focus educational efforts specifically on cormorants and emphasize their impacts on the fishery and island vegetation. These interviewees felt that it is important for others to understand the need for cormorant control.

**Protected area, research area, and existence value**

Some interviewees felt that the protection of nesting grounds for colonial waterbirds is the primary benefit of the islands. They placed value on knowing that the islands exist and believed they should be managed as a bird sanctuary. One interviewee suggested that the islands would be more appropriately designated as a Unique Area on the Natural Heritage Inventory (which they are) than a Wildlife Management Area. This same interviewee would also encourage biological research by university faculty and students to study the flow of energy in the ecosystem, for instance.

**Safe harbor**

Galloo Island provides a natural harbor for fishermen and boaters during storms. Developing a dock on the Coast Guard parcel to provide refuge for boaters would be a valued benefit. However, some interviewees noted that deed restrictions or resistance from the owners of Galloo might prohibit public use of the state-owned parcels.

**Stopover point for boaters**

In the past, charter captains leased land on Big Galloo for shore dinners with their clients. A few fishing guides may still be interested in this use. Recreational boaters may also stop on the island for cookouts if a picnic area and fire pit were developed at the old Coast Guard station. Some interviewees, referring to the smell of guano on Little Galloo, commented that people’s desire to do so may depend on the direction of the wind.

If more of Big Galloo were in public ownership, a state campground would provide an overnight destination for boaters. Facilities could range from undeveloped camping sites to rustic cabins to a full-service hotel, possibly run by a private operator. Currently, however, the size of the parcels on Galloo may be too small to permit overnight use. Deed restrictions or resistance from the owners of Galloo might also prohibit camping.

Viewing the islands also adds value to the experiences of people who are sailing, power boating, and kayaking (although the distance may be too far for many kayakers). The LOI WMA could be promoted as a viewing stop along a boating trail.

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**Waterfowl hunting**

The Galloo area has long been of interest from a waterfowl standpoint. However, the distance from shore is a significant safety concern. Guides would not consider taking clients that far out into the Lake. Because the islands fall under the open water policy, hunters who would go that far out are likely to have larger boats and could hunt the area floating. Perhaps hunters would use permanent blinds on the Galloos, but they are not really necessary.

**Wildlife viewing, birding, and ecotourism**

Wildlife viewing may attract tourists interested in birding opportunities. The concentration of thousands of birds in one place creates a “spectacle of wildlife” and provides an opportunity for people to learn about the dynamic ecology of colonial-nesting waterbirds. The popularity of birding is growing dramatically. People bird at the WMAs, dunes, and state parks all along the shore from Ellisburg to Mexico. Bird festivals intended to create interest and community support around birds are popular. At least two charter captains on the St. Lawrence River (Long Legg Charters and Linda-Vue Adventures) are already doing ecotours focusing on birds, geologic formations, and mammals. But how feasible is birding-related tourism for the Lake Ontario Islands? Interviewees discussed several factors that might affect its feasibility.

A primary question is whether sufficient demand exists for such opportunities. Some interviewees believed that the sheer number of birds and the presence of Caspian terns would attract birders, while others believed that the species present are too few and too common (since gulls and cormorants are frequently seen from shore) to interest many people in viewing them.

An agency staff member suggested that it would be useful to get an indication of people’s awareness, interest, and demand for such opportunities by surveying a cross-section of potential visitors, who are likely to be vacationers from large cities (e.g., New York City, Montreal, Toronto) and neighboring states. If demand does exist, he suggested promoting birding opportunities through regional tourism publications as well as national wildlife viewing catalogs and guides.

"People would love seeing it... it’s spectacular for those who are interested in birds.”
- local bird club member

"I could see that if there were say fifteen species to see there, but once you’ve seen the cormorants, that’s that.”
- fishing and hunting guide

Two additional and related factors are the cost to birders and income to charter captains. Audubon organized a trip in the spring of 1999 for which participants paid $50 a piece. Some members of local bird clubs felt that the price was too high and explained that in order to make the experience worth the fee, tours would need to include other activities, such as visits to additional natural areas or a shore lunch or dinner. They did feel that a trip to Little Galloo would be worth a smaller fee. However, because charter captains generally carry up to only six passengers, they need to charge $50 a person to match the income that they would receive from a fishing charter and make the trip worthwhile for them. Unlike fishermen, birders may also be less likely to return for consecutive trips once they have seen the islands. Captains would also
need to have a “different set of credentials,” focusing on describing the birds, natural history and ecology of the Lake. Larger boats could carry more people out to view the birds at a smaller fee. However, tour boats carrying 30-40 passengers do not seem congruent with the type of tourism that Henderson Harbor and Sackets Harbor want to encourage. While the enthusiasm for birding-related tourism opportunities varies, most interviewees recognized that it could be a possibility. However, many questioned its feasibility and what economic impact, if any, it would have.

Logistical factors, such as the islands’ distance from shore and timing tours for when the birds are most abundant, may also affect the feasibility of birding charters. Some possible explanations why such trips are not already occurring included the following:

- interest or demand for birding tours may be lacking;
- entrepreneurs to provide tours may be few;
- getting people out to the islands can be difficult; and
- negative perceptions of the islands created by the cormorant controversy may reduce people’s desire to visit them.

In reference to the second objective of DEC’s five-year experimental management plan for smallmouth bass and cormorants, a marina owner warned, “That’s a sore spot,” and asked if DEC can plan ahead to enhance viewing opportunities, why couldn’t they have had the foresight to prevent the cormorants from “getting out of control”? Others said that successful ecotourism efforts would require a change of attitudes locally and would be a “hard sell.” Resolution of the cormorant-bass issue may be a necessary prerequisite to developing opportunities for birding.

Public involvement in management planning

The most common response to the question “How should DEC involve the public in planning?” was to hold public meetings. However, some interviewees cited drawbacks of public meetings. Public meetings often serve as “bully pulpits” for people holding extreme points of view on an issue, and it becomes a challenge to draw people with moderate views into the existing “fray.” It may be difficult to avoid focusing solely on cormorants and meetings may easily erupt into volatile screaming matches.

One interviewee commented that public input differs from public support, and the two require different approaches. He said that DEC will not only want to gather input but also seek public support for LOI WMA management. Interviewees suggested some alternative processes for involving the public that may avoid some of the pitfalls of public meetings. These are described below.

- Transfer the process to an appropriate partner.

A tourism professional suggested that DEC identify and partner with an organization in southern Jefferson County that could play a role similar to that of Save the River. A “neutral” organization that has the respect of various stakeholders may be better suited to lead a public involvement effort than a government agency. DEC might also reach out to specific organizations, such as town and village planning boards or chambers of commerce, for input.

- Continue providing accurate information.

Several interviewees said that DEC should continue to hold public information sessions and seminars, as well as use the local media (e.g., radio talk shows, newspaper) to relay accurate information about cormorants, their impacts on the fishery, and management of the islands. In its communication efforts, DEC can emphasize that LOI WMA management is not solely about cormorant management, although as one interviewee notes, “for some people it is just about cormorants.”

- Create a citizen planning team.

An agency staff member suggested that DEC select 5 to 15 people to serve on a citizen planning team that meets on a regular basis. The team would begin by developing a vision statement to provide direction. One example might be “The Lake Ontario Islands will be a nationally important wildlife viewing area known for its colonial-nesting waterbirds, legally protected, and benefiting local communities.” The planning team would then determine how to make the vision happen by conducting a needs analysis and forming groups to work on fulfilling specific needs.

- Utilize a non-partial facilitator.

A tourism professional relayed a successful planning process that his organization engaged in using an outside facilitator. A consultant facilitated a two-day planning session involving about 16 participants, who represented different interest groups. With the right facilitator and the right group of people, such a process is very effective. Since the initial session, committees have been formed that are responsible for specific projects, as well as additional planning.

- Hold focus groups.

A tourism professional, as well as a DEC advisory board member, suggested that a focus group could be conducted to provide specific input into the planning process. This input could then be used to create alternatives that the general public could comment on. According to one interviewee, a process of this sort involving representatives of different stakeholder groups worked well during the development of DEC’s Deer Management Assistance Program (DMAP). Another interviewee suggested that interviews with individuals could help identify the range of ideas that exist. Then a focus group could be used to prioritize those.

- Develop a questionnaire.

A waterfowl hunter suggested that DEC utilize a questionnaire to assess public response to five or six suggested management options.
In addition to suggestions for specific processes, some interviewees also described general principles that they felt would be important to any effort to involve the public in planning. These included:

- **Be sincere.**
  
  "If you’re going to involve the public, you better mean it." — general citizen

- **Be prepared to invest time and energy.**
  
  It takes a long time to familiarize people with what is known and what is not known, so that they can make sound judgements.

- **Hold public forums locally (e.g., in town halls of affected communities rather than in Watertown) and at times that are convenient for people to attend.**

- **Avoid top-down approaches.**
  
  DEC should involve the principal players but should also work to involve the whole community. Agencies cannot dictate management programs. Rather, they need to find out from the people what is needed. The attempt to establish a National Wildlife Refuge on the St. Lawrence River was cited as an example of how not to involve the public.

- **If creating a committee or task force, ensure that the interests its participants represent are well balanced.**

Some interviewees felt that DEC needs to involve more people without direct fishing-related interests in the planning process.

Several interviewees felt that DEC has done a good job of involving the public in various issues through public meetings, informational sessions, and polls. Although they don’t always like DEC’s decisions, they believe that DEC has shown a willingness to listen to people.

Interviewees also sensed that the cormorant issue must be addressed to stakeholders’ satisfaction before people are likely to get involved in other aspects of LOI WMA management. A member of a DEC advisory board explained that there has to be some political give and take. People feel that “you have to do something for me before I’ll do something for you.” He believed that something has to be done about cormorants before people would be willing to get involved in other aspects of wildlife management. Otherwise, the public may feel co-opted.

**Objective 4: Assess the interest and capacity of stakeholders to participate in cooperative management of coastal wildlife resources.** Examine stakeholder perceptions of appropriate structures and processes in collaborative management arrangements.

**Current examples of collaborative resource management**

Interviewees often had a difficult time answering the question “What examples are you aware of that involve cooperation in natural resource management?” Interviewees often took a minute or two to think and then suggested one or two projects and inquired, “Is that the kind of thing you’re looking for?” (We could offer several possible explanations for why this was the case. There may actually be few examples of cooperative resource management in the region, or such projects may exist but interviewees may not be aware of them. The focus on natural resources may have limited interviewees’ responses, since the question did not seek examples of collaboration in other areas, such as community development or social services. Or, possibly we did not explain well enough what we meant by ‘collaborative management,’ contributing to interviewees’ difficulty in identifying such projects.)

The Ontario Dune Coalition, which involves The Nature Conservancy, DEC, Onondaga Audubon, NYS Office of Parks, Recreation and Historic Preservation, and private landowners in the management of a 17x1 mile dune system along the shoreline, was most frequently mentioned. Other processes and projects identified by interviewees that may be examples of collaboration in resource management included:

- Citizen advisory committees have participated in planning for the state land acquisition plan, “Conserving Open Space in New York State.”

- DEC regional fisheries congresses, which include fishermen, environmentalists, and town officials, have provided input on salmon stocking practices.

- The River Otter Project.

- Stakeholder input has been sought regarding the restoration of wolves, moose, and river otters.

- Citizen task forces for deer management.


- DEC has worked with the communities of Pulaski and Altmar on management issues on the Salmon River.

**Potential partners in “co-management” of the LOI WMA**

Interviewees were unsure as to whether or how communities might become involved in management of the LOI WMA. Unlike other state lands where communities could feasibly take responsibility for some of the ongoing management or stewardship activities, opportunities for involvement in on-the-ground management activities would be extremely limited by the characteristics of the resource. If communities perceived benefits that they could realize from the islands, they may be more likely to get involved in their management. Educational and promotional roles may exist for some stakeholders if ecotourism were a management goal. One interviewee explained that partnerships really develop from the day-to-day working together of
people from different organizations. It is not clear whether such relationships are likely to develop in this context or not.

An agency representative stated that to make the Lake Ontario Islands a community asset would require a community structure to do so. He explained that just as infrastructure has been developed and interest promoted for fishing opportunities, there’s nothing to say that the same couldn’t be done for other potential benefits, such as birding opportunities.

Based on our conversations with interviewees, it seems that (depending on the goals of a management plan for the LOI WMA) the following entities may be able to play some role in partnership with DEC:

- Sea Grant has already been involved to some extent in the cormorant issue through co-sponsorship of a workshop and recent production of a video. Sea Grant may be able to help in the development of interpretive materials related to tourism around the LOI WMA. One of Sea Grant’s strengths is that they work with various audiences and can sometimes help bring polarized groups together.

- In addition to its obvious role in the permitting process for cormorant management, the USFWS has produced educational materials on cormorants and could continue to play a role in education and communication. The USFWS may also be able to assist in promotion of the islands for wildlife watching.

- The Thousand Islands Council may be able to provide promotional assistance for birding-related tourism or other recreational activities. The Seaway Trail may be able to provide similar assistance in promotion of and education about the islands. Their new Discovery Center in Sackets Harbor may provide one potential outlet for interpretive materials on the islands.

- The Hounsfield Town Board may be able to play a role in improving communication and the flow of information between local community members and DEC. While the islands have never been an issue considered by the board in the past, a board member says that it would be worthwhile to define what the town board’s role is and how they work with DEC. The board could serve as a resource or assist in dispensing or gathering information.

- Cornell Cooperative Extension of Jefferson County could be involved from an educational standpoint. However, they are currently short of staff in the area of environmental education.

- Representatives of fishing interests should continue to be involved in any cooperative management effort.

While some of the above potential partnerships could prove fruitful, efforts certainly should not be limited to working with the above entities. One interviewee said, “You have to look at the total community. You have to make sure that you don’t miss any one niche, but involve the total community.” This could include businesses, local governments, guides associations, educational institutions, sportsmen clubs, bird clubs, and many others.

Results – Analytical Impressions

The following are the analytical impressions that we developed during the course of interviews. Each might be considered as a potential hypothesis for further inquiry. For the purpose of discussion, we also suggest initial recommendations for management planning that we have developed from these insights.

Salience of LOI WMA management

- The salience of LOI WMA management stems directly from the cormorant issue. When cormorants were separated from consideration of the islands’ management, most interviewees were in general agreement that some benefits would be good (e.g., safe harbor, educational materials) but that uses of the islands would be limited. Ecotourism as a potential community benefit seems directly connected with the cormorant issue. Proponents of ecotourism hoped that it would provide economic benefit to local communities and thereby change perceptions of cormorants and other colonial-nesting waterbirds from a liability to a benefit. In other words, ecotourism is a means of justifying the protection of the waterbirds. If cormorants were not problematic for some stakeholders, the waterbirds could exist more or less undisturbed and the question of ecotourism may be moot. It is unclear whether LOI WMA management planning that does not include cormorants in the discussion would generate sufficient public interest.

"A wildlife management area may not be relevant to me." – marina owner

- The salience of LOI WMA management would also be greater if Big Gallo were in public ownership, because it would offer greater opportunities for recreational benefits to be realized from the islands. However, some interviewees would not want Gallo to be removed from tax assessments.

"The real issues are places like Big Gallo, which people could really enjoy if it were publicly owned.” – bird club member

- The most important issue to interviewees was the economy. People are concerned about maintaining and improving the economic well-being of their communities while preserving their quality of life.

RECOMMENDATION: These insights suggest that it may not be useful to separate cormorants from the discussion of management planning for the LOI WMA. However, it is helpful to focus the discussion on overall management of the WMA rather than solely on cormorants. If cormorant management is addressed separately from LOI WMA management, then it will be important that processes for stakeholder involvement in cormorant management and LOI WMA management planning complement one another. Mediation of the cormorant controversy could
set the stage for LOI WMA management planning, which should occur within the context of regional ecosystem management.

**Attitudes toward the Lake Ontario Islands and potential community benefits from LOI management**

- Attitudes toward the islands composing the LOI WMA varied. Some interviewees viewed the islands as an asset; others viewed them as devastated chunks of rock with little value. Interviewees’ attitudes toward the islands seemed to influence their perceptions of potential benefits that could be realized from their management. Those who viewed the islands as an asset saw possible benefits including ecotourism and placed greater emphasis on developing educational and interpretive materials. Those who described the islands as devastated felt that cormorant control is needed but did not see many potential benefits other than safe harbor. They acknowledged that other benefits are possible but did not feel that ecotourism is particularly feasible.

- With a few exceptions, most interviewees supported cormorant control. Support for control efforts seems to decrease with geographic distance from the communities most directly affected (i.e., Henderson and Sackets Harbors).

- The community of Henderson Harbor appears to depend almost entirely on the fishery. The community of Sackets Harbor has a much more diversified economy.

- Virtually all interviewees viewed safe harbor, educational materials, and a stopover point for boaters as valuable benefits. Interviewees’ opinions toward cormorant control and bird-related tourism varied greatly.

- Those who could provide services for birding-related tourism (e.g., charter captains and marina owners) appeared uninterested in this potential benefit.

**RECOMMENDATION:** In addition to biological research needs, research is needed to quantify the economic impact of the fishery decline on local communities. Research is also needed to determine the demand and potential economic benefits of birding-related tourism. An analysis of other opportunities for environmentally compatible economic development may also be useful.

**Perceptions of DEC**

- Several interviewees felt that DEC is credible and trusted that biologists would make appropriate decisions based on scientific information. However, these interviewees noted that they are aware of others who have a great distrust of DEC. Indeed, a few interviewees expressed such distrust.

- A majority of interviewees, although not all, viewed government agencies as unresponsive to community concerns. Since initiation of egg oiling efforts and denial of the permit to lethally remove 300 adult cormorants, DEC has been seen as “heading in the right direction,” while USFWS has been perceived as unresponsive and unwilling to cooperate.

**Sources of information**

- The media are people’s primary source of information about the Lake Ontario Islands. While some interviewees sought information from DEC or other organizations directly—and some were quite knowledgeable about the complexity of the cormorant issue (biologically, legally, etc.)—they doubted that most of the general public would seek additional information to what they learn from the media. Yet, newspaper articles emphasized conflict, providing little context for understanding scientific data, and failed to relay the complexity of the ecosystem. Indeed, some interviewees were misinformed, believing that cormorants were introduced to Lake Ontario from China, for example, and did not recognize the inherent uncertainty in managing a population.

- Interviewees agreed that decisions should be science-based but disagreed in their interpretations of agency-conducted studies. For example, in reference to studies released by DEC in February 1999 finding that cormorants have an impact on smallmouth bass, a marina owner said “the data is showing it in black and white,” while an environmentalist questioned the credibility of the studies and said that the science doesn’t convince him that control is necessary. In a similar vein, some interviewees— from both sides of the cormorant issue—said that DEC should sway less to public opinion and take a more proactive stance by making decisions “based on biology” and “sticking with” those decisions. However, those saying this believed that the biology would justify their own views toward cormorant control. A charter captain said that DEC should rely on its biological expertise because he thinks DEC should take a stronger stance in favor of control. A bird club member said the same because he thinks control efforts are unsubstantiated and DEC is bending to pressure from fishing interests.

- Interviewees also lacked sufficient information to evaluate adequately the desirability and feasibility of possible benefits from LOI management.

**RECOMMENDATION:** These insights suggest the need for processes that create shared understanding among stakeholders. Involving stakeholders in the construction of knowledge about the human and biological systems in which they live could increase the legitimacy of information to stakeholders and enhance their understanding of scientific data. It might also help foster collaboration among local communities and resource management agencies.
Local and non-local stakeholders

- Several interviewees felt that local communities should have substantial input into the management of the LOI WMA. They felt that groups external to these local communities (e.g., Audubon, animal rights groups) should have little to no voice in management decisions. However, a few interviewees felt strongly that DEC has a responsibility to manage the LOI WMA for a broader constituency, the public of New York State. They felt that the interests of stakeholders across the state, some of which are represented by Audubon and other organized groups, must be included in management planning.

- Some local residents viewed outsiders, including national environmental organizations, as powerful groups that are conspiring with government agencies to dictate policy. There is a sense that local communities are unable to compete with powerful outside interests (i.e., a lack of local efficacy).

- Interviewees who most strongly supported cormorant control described external stakeholders, such as Audubon, as a powerful minority that significantly influences policy but doesn’t really represent the interests of the public. Interviewees opposed to cormorant control viewed fishing interests as the minority and groups like Audubon as representative of public interests.

- Some interviewees on Lake Ontario expressed a sentiment that residents on the St. Lawrence River are wealthier and more powerful than are residents on the Lake. Comments to this effect were made primarily around cormorants. These interviewees suggested that as cormorants become a larger problem on the River, it is more likely that action will be taken to control them.

RECOMMENDATION: These insights have important implications for the selection of stakeholders that might participate in a planning process. It is generally preferable to make participation processes as inclusive as possible by including those who have the authority to make a decision, those who are affected or potentially affected by a decision, and those who have the power to obstruct an agreement or its implementation. Careful consideration will be needed to determine how to weigh the stakes of local and non-local stakeholders and understand the consequences of different approaches to this question.

Public input into management planning

- People are used to the common participation method of public meetings and the one-way communication that primarily occurs in such forums. While many interviewees noted that public meetings do not seem a particularly effective means of public involvement, only a few had any experience with alternative models.

RECOMMENDATION: It could be useful to consider alternative models to stakeholder involvement in management planning and identify one that would appeal to people across the spectrum of attitudes toward LOI WMA management and would engage stakeholders in genuine, informed dialogue about LOI management.

Potential for community-based co-management

- Factors that may facilitate community-based co-management:
  — Social capital appears to exist. These are small, rural communities where people help each other out. Sackets Harbor has made a 180-degree turn around in its economy. Fishing interests have formed several grassroots groups over time. While stakeholders disagree on cormorant management, some recognize each other as reasonable people. However, greater trust would need to be built among DEC and communities, as well as among all stakeholders.
  — DEC has expressed a willingness to cooperate with local communities.

- Factors that might impede community-based co-management:
  — Salience of LOI WMA planning would be lower if cormorants were excluded from the discussion, which might lessen stakeholders’ willingness to participate in management.
  — Characteristics of the resource may inhibit co-management. While the islands are stationary, colonial waterbirds are migratory and may not be particularly suitable for co-management with local communities, since various agencies from state, national and international levels must inevitably be involved. However, this could be overcome with DEC playing a role of liaison between local communities and other levels of government. The distance of the islands from shore and difficulty of access means that most people in local communities are unlikely to visit them and that opportunities for involvement in actual on-the-ground management are limited.
  — Lack of familiarity with cooperative models in natural resource management may also limit the potential for co-management.

RECOMMENDATION: The design of a process for stakeholder involvement in management planning should consider the factors that may contribute to or inhibit collaboration among stakeholders. A diagnostic tool (Table 4) for assessing the potential for collaboration in resource management planning (Cordova 1997) can offer a preliminary assessment of the feasibility of a community-based planning process, if not the potential for co-management. Appendix C provides a description of each factor included in the diagnostic framework in Table 4. A "+" indicates that this first phase of inquiry suggested the factor is present and would contribute to collaboration, while a "—" indicates the opposite. This framework also suggests factors for which additional information is needed to adequately assess their contribution to potential collaboration in LOI WMA management planning. A planning process can build upon the factors identified that support collaboration among stakeholders, while working to develop those that are lacking.
Table 4. Diagnostics for assessing the potential for collaboration in resource management planning and their presence/absence based on phase I of the LOI WMA situation analysis. (Diagnostic tool adopted from Cordova 1997.)

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<th>Diagnostics for Assessing Collaboration Potential</th>
<th>Presence/Absence in LOI WMA Situation Analysis</th>
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<td>There are multiple issues, multiple approaches to addressing those issues and multiple stakeholder groups involved. No one stakeholder group can solve the issue on its own.</td>
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<tr>
<td>It is in the parties’ self-interest to collaborate by virtue of shared interests, shared fears, and interdependence.</td>
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<td>Stakeholder groups are willing to collaborate with others.</td>
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<td>There is a general institutional and policy context conducive to stakeholder involvement.</td>
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<td>The timing is appropriate</td>
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<td>There is capacity for collaborative decision-making – information and experience exist</td>
<td>-</td>
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<tr>
<td>There is capacity for collaborative decision-making – intrinsic features of stakeholder groups</td>
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<td>Power is balanced at the negotiation table. There is a level playing field.</td>
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CONCLUSION

Based on qualitative inquiry conducted during the summer and fall of 1999, this report was intended to provide preliminary insights into the objectives of the LOI WMA situation analysis. We believe that phase 1 inquiry provided rich, contextual information for the situation analysis and several intriguing insights that can inform management planning and identify hypotheses to guide additional inquiry. We hope that it contributes to dialogue that promotes the realization of benefits to communities along Lake Ontario’s eastern basin and the conservation of their fishery and wildlife resources.

REFERENCES CITED


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**Notes:**
- Adj 1: Indicates a note or additional information.
- Adj 2: Provides further details or qualifications.
- Adj 3: Highlights key points or conclusions.
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APPENDIX B:
LOI WMA Situation Analysis Interview Guide

Introduction
- Explain purpose, context (show map), and intended use of interview
- Confidentiality
- Questions?

General descriptive information
- Occupation? How long resided in community? Involvement in community?

Description of community
- Thumb-nail sketch describing community (as though to someone that has never been there)?
- Important issues to community? How is community dealing with them? Vision for community future?

Attitudes about colonial-nesting waterbirds
- Familiarity with LOI? Characterization of folks’ attitudes toward LOI?

Preferences for LOI WMA management
- Which communities are affected by LOI WMA management?
- What possible public/community benefits could be included in a management plan?
- Response to benefits suggested by others (safe harbor, picnic area, bird-related tourism, educational information via internet, etc.)?

Co-management
- How should the DEC involve the public in its planning process?
- What groups in community might want to be involved in ongoing management processes?
- Examples of cooperative projects?

Relationships with other stakeholders and communication networks
- Where do people get information about issues related to Lake Ontario?
- Who else may have an interest in LOI management?

Wrap-Up
- Anything else?
- Others I should talk to?
- Thank you

APPENDIX C:
Description of Factors Included in Diagnostics for Assessing Collaboration Potential


Diagnostics for Assessing Collaboration Potential

Stakeholder analysis is an important diagnostic tool in the design of projects and policies, including consensus-building and collaboration processes (Grimble and Chan 1995; Williams and Ellefson 1996). Using stakeholder and situation analysis, the purpose of this study was to identify to what extent prerequisites 2 for successful collaborative processes were present in the emerging CCR context. This type of diagnostic study can serve as an example to decision makers involved in similar, complex land-use planning

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2 We are using a broad definition of stakeholder as any group or individual that uses the resource, has an interest or claim on it, or will be affected by its management (Decker et al. 1995). The stake may "originate from institutional mandate, geographic proximity, historical association, dependence for livelihood, economic interest and a variety of other capacity and concerns" (Borini 1996, p.8), or may arise from "standing to claim legal protection; ... political clout to draw elected and appointed officials into the dispute; ... power to block implementation of a negotiated agreement; ... sufficient moral claim to generate public sympathy." (Susskind and Cruikshank 1987, p.103).

3 Conditions that need to be met before a collaborative process can take place and without which it would be futile to promote such a process.
issues and can help guide them toward potentially effective planning processes.

The prerequisites for collaboration presented below were developed based on natural resource/protected area management and conflict resolution literature. Some of these conditions refer to stakeholder group features; others to conditions in the environment or context. This list provides a diagnostic tool that can be used to assess the extent to which conditions for collaborative planning are met for a particular site or issue.

1. There are multiple issues, multiple approaches to addressing those issues and multiple stakeholder groups involved. No one SHG can solve the issues on its own (Raiffa 1982; Susskind and Cruikshank 1987; Harter 1989; Borrini-Feyerabend 1996; Ellsworth 1997).

   Multiplicity of issues, SHG’s and approaches is typical of land-use planning efforts. In many cases, this multiplicity implies that no one SHG can solve the issues on its own. Thus, collaboration is required. Collaborative relations become more important when there is no simple or universally agreed upon solution due to varying ways in which the issues can be addressed. Furthermore, multiplicity of issues provides the space for “inventing, packaging, trading and redefining issues” (Susskind and Cruikshank 1987), the possibility to set out actions at different levels, and the raw material for creating joint gains (Raiffa 1982).

2. It is in the parties’ self-interest to collaborate by virtue of shared interests, shared fears, and interdependence (Susskind and Cruikshank 1987; Harter 1989; Grimble and Chan 1995; Borrini-Feyerabend 1996).

Shared interests means that SHG’s express interest in the same issues. This does not imply that SHG’s give the same priority to the interests’, that SHG’s understand the issue in the same way, or that all SHG’s feel the issues should be addressed in the same way. Shared interests, however, establish a common ground from which consensus can be built. Shared fears may also motivate collaboration at various levels. Fear or worry is a different way of expressing an interest, and sometimes more effective at generating action.

By identifying specific common goals toward which the SHG’s would jointly work, shared interests and fears can create the “team” atmosphere characteristic of collaboration. Identifying specific common interests can simplify complex issues around which SHG’s may have formed “locked” positions. These complex issues can be broken into more flexible individual decision elements, upon which specific decisions can be made. This shift focus away from positions (actions) and toward interests (underlying causes) - a recommendation of principled negotiation (Fisher et al. 1991). The simplification of complex issues into smaller decision-making elements helps “separate the people from the problem” (Fisher et al. 1991) and, by unlocking positions, aids in the effacement of stereotypes SHG’s have of one another – another recommendation of principled negotiation.

Interdependence implies one SHG depends on support from another for the successful realization of the activity it intends to pursue; it means that parties “must satisfy the needs of those other parties to achieve their own goals” (Susskind and Cruikshank 1987, p.238) and thus cannot take unilateral

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4 It is precisely the fact that interests are valued differently by SHG’s that allows for exchange.
action. Interdependence is one of the most compelling forces to bring parties to collaboration.


Many authors note the importance that “voluntary” participation has for the success of a collaborative process (Susskind and Cruikshank 1987; Harter 1989; Borrini-Feyerabend 1996; Williams and Ellefson 1996). Parties need to be persuaded “that it is in their interest to sit down and talk” (Susskind and Cruikshank 1987, p.189). The willingness of SHG’s to collaborate may depend on several factors, including:

- a) The degree to which they realize the interests they share with others, and the interdependence of the satisfaction of their own needs with the satisfaction of other groups’ needs. The fact that shared interests and interdependence exist is favorable for recommending a collaborative process. However, unless the SHG’s realize the presence of these two factors and thus see collaboration in their own self-interest, it will be difficult, in practice, to attract them to a collaborative process;

- b) The quality of their Best Alternative to a Negotiated Agreement (BATNA) or what they can achieve without collaborating;

- c) What there is to gain if they do collaborate (possibilities for joint gains); and

- d) The confidence they have that they can make a difference as a group.

At the onset of a collaborative process, all parties must be willing to participate. However, unlike other prerequisites, willingness is one that can relatively easily be altered: people can be made aware of shared interests and interdependence; their perceptions and understanding of their BATNA’s can be changed; incentives for participation can be created, etc. In a diagnostic study, current willingness of SHG’s to collaborate must be assessed in order to determine how to address these variables if a collaborative process is begun.

4. There is a general institutional and policy context conducive to stakeholder involvement (Harter 1989; Popovic 1993; Little 1994; Wright 1994; Grimble and Chan 1995; Pimbert and Pretty 1995; Borrini-Feyerabend 1996).

Supportive institutions, policy, and legislation are critical in ensuring the success of collaboration in natural resource management (Wright 1994; Pimbert and Pretty 1995; Borrini-Feyerabend 1996). Policy and legislation guarantee continuity, enable public administrators (agency officials) to adopt the outcoming plans of collaboration, allow information to be shared, justify budgetary expenses, and legitimate authority devolved. Legal mandate (e.g. of agencies), legal entitlement (e.g. depending on resource ownership) and availability of resources to participate in decision-making can greatly facilitate parties’ involvement in collaboration.

5. The timing is appropriate (Susskind and Cruikshank 1987; Harter 1989; Borrini-Feyerabend 1996).

Timing has two aspects crucial for the feasibility assessment of a collaborative process:

5.1. Issues are defined well enough for purposes of discussion and decision. It is the right time to involve a broader audience in decision-making
when issues are known and ripe for decision and stakeholders are ready to collaborate (Harter 1989; Borrini-Feyerabend 1996). For parties to engage in collaboration, issues must be sufficiently defined to focus discussion and imminent for decision. “Ripeness” of issues can be a delicate balance. If a policy initiative is still too far in its initial stages and goals are not clear to its proponents, it will not be easy to know what is being negotiated and “defended”. Alternatively, if the initiative is already designed to the smallest detail, few specifics are left open to negotiation, and the proponents are more ‘tied’ to the details, then the potential for generating new options for mutual gain and the genuineness with which other SHG’s feel they are being invited to participate will be quite limited.

5.2. Enough time exists for a collaborative decision to be reached. Collaborative processes are appropriate for situations in which there is enough time to deliberate in a multiparty setting (Susskind and Cruikshank 1987; Borrini-Feyerabend 1996) — i.e. there is not an emergency situation requiring immediate solution— yet there is a deadline which motivates collaborative effort (Susskind and Cruikshank 1987; Harter 1989).

An important prerequisite for collaboration is the capacity to participate in collaborative decision-making. Capacity is itself composed of a complex set of features and circumstances. To facilitate the analysis of ‘capacity to participate’, we have divided this condition into two categories: a) context-related circumstances —prerequisite 6— and b) intrinsic features of the parties themselves and the sectors to which they belong —prerequisite 7. The

latter category includes concepts also referred to as “organization of the parties”. Both categories are further subdivided, as explained below.

6. There is capacity for collaborative decision-making: Information and Experience exist (Raiffa 1982; Susskind and Cruikshank 1987; Popovic 1993; Grimble and Chan 1995).

6.1 Information. To be effective, land-use planning requires the existence and availability of information on demographic, socio-economic, cultural, biological and market issues, among others. These data do not always exist at the outset of policy design but are necessary for decision-making. In many cases, information exists but is dispersed or unavailable. Information needs are constantly evolving in a collaborative process, and joint fact-finding during the process has many advantages (Raiffa 1982; Susskind and Cruikshank 1987).

6.2 Previous collaborative experience. Previous experience in collaboration can affect parties’ willingness to cooperate. According to Grimble and Chan (1995, p.122), cooperative action between parties is “more likely to occur over a new issue if there has been a history of cooperation over other issues in the past. Conversely, if there is a history of conflict between two stakeholder groups, the emergence of shared interests over a particular issue may not be enough to overcome the conflict.” Furthermore, previous collaborative experience is likely to provide participants with skills that will facilitate consensus-building in new collaborative processes.
7. There is capacity for collaborative decision-making: intrinsic features of SHG’s and sectors. (Susskind and Cruikshank 1987; Harter 1989; Grimble and Chan 1995; Boriri-Feyerabend 1996)

We have divided Grimble and Chan’s (1995) concept of ‘Cohesiveness’ into two components:

7.1 Homogeneity — referring to the degree of agreement among the members of a group on interests and how they perceive things— and

7.2 Internal Cohesion — referring to how well the members of a group coalesce around decisions and or actions.

Somewhat related to group ‘cohesiveness’ is:

7.3 Capability to identify a representative (Susskind and Cruikshank 1987; Harter 1989; Boriri-Feyerabend 1996). Collaboration is more successful if SHG’s can identify a spokesperson who is legitimate, truly representative and can make decisions or commit.

Decision-making capacity was divided into:

7.4 Functional decision-making mechanisms. Does the SHG have periodic meetings and mechanisms to communicate ideas, opinions and come to decisions? and

7.5 Experience in decision-making. Has the SHG traditionally made decisions about its present and future? Have they interacted with other groups to make decisions? Would they feel at ease doing so?

8. Power is balanced at the negotiation table. There is a level playing field (Susskind and Cruikshank 1987).

Power of SHG’s can be measured in terms of access to economic and human/technical resources among other indicators. Rarely is power balanced among land-use related SHG’s, but mechanisms to redress the balance — such as access to negotiation training, travel funds for groups who cannot pay their journey to planning meetings, provision of equivalent information to all parties, etc.—should be utilized for effective negotiation to take place (Forester 1994).