

WETLANDS OF INTERNATIONAL IMPORTANCE (RAMSAR SITES) IN CANADA

SURVEY OF RAMSAR SITE MANAGERS 2007

FINAL REPORT
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EXECUTIVE SUMMARY

In March 2007, managers of the 37 Ramsar sites in Canada were surveyed to gather information crucial to decisions concerning the national Ramsar program and to fulfilling international treaty obligations under the Ramsar Convention, including development of Canada's Report for the Conference of the Parties to the Convention in 2008.

Entitled the "Survey of Ramsar Site Managers 2007," a total of 37 surveys were completed between March 13 and April 18, 2007, representing a 100% response rate. The survey enabled a profile of Ramsar sites and associated wetlands, an update on Ramsar site management, a characterization of public identification of the sites with the Ramsar Convention, and a review of the effects of designating wetlands in Canada as Ramsar sites. This initiative builds on the Survey of U.S. Sites Listed as Wetlands of International Importance, conducted between 2005 and 2007 by the U.S. National Ramsar Committee (Gardner and Connolly 2007).

Important results of the survey are as follows:

- Managers of fifteen (54.1%) of Canada's 37 Ramsar sites report that there has been a change in the ecological character of the wetland since designation as a Ramsar site.
 - Factors include invasive species, change in water regimes, climatic variability, on-site land use and activity, and increased waterfowl populations.
- Managers of 25 (67.6%) of the Ramsar sites think that the designation helps to maintain the ecological character of the site.
 - Of the 15 Ramsar site managers who report change in the ecological character of the wetland, 12 indicated that the Ramsar designation had helped to maintain the ecological character of the site, implying that change in the ecological character of these important wetlands may have been greater in the absence of the Ramsar designation.
- Ramsar site managers report that the Ramsar designation helps to maintain ecological character in three ways: 1) communicates a higher level of importance, 2) influences land use planning, development decisions and environmental assessment, and 3) improves management through greater attention and a long-term focus on ecological health.
 - Comments from managers who thought that the Ramsar designation did not help to maintain ecological character related primarily to the relative strength or effectiveness of other legal designations of the site.
- Managers of 21 (56.8%) of the Ramsar sites think that the Ramsar designation helps to promote wise use of the site.

- Comments reflect that the designation helps in two major ways: 1) by conveying a sense of pride, awareness and moral obligation among managing organizations and the general public, and 2) by influencing land use decisions, land acquisitions and environmental assessments.
- Managers of 11 (29.7%) of the Ramsar sites responded that the designation did not help to promote wise use of the site. Major reasons included: 1) protection afforded by other legal instruments such as the Canada Wildlife Act or the National Parks Act, 2) lack of awareness or understanding among Canadians of the designations, the Ramsar Convention or its authority, and 3) lack of resources to help manage the site.
- The two most valuable benefits of site designation are "protection of the site and surrounding area" and "public awareness of the wetland."
 - Two managers pointed out the potential for Ramsar recognition as a focus for building community. The theme of pride and awareness of the local community was reiterated, as was the influence of the designation on land use planning and development decisions.
- Ramsar site managers identify several problems associated with the Ramsar designation, including lack of funding, lack of site-based Ramsar activities to promote recognition and acceptance by the land managers and community, and lack of information sharing or communications with the Ramsar program.
- Twenty (54.9%) of Canada's 37 Ramsar sites feature signs or displays at or near the site that note the wetlands designation as a Ramsar Site or Wetland of International Importance.
 - Managers of fifteen (40.5%) of the Ramsar sites indicate there are brochures or other publications available to the public that identify the designation. Other tools used to identify the wetland as a Ramsar site include websites, tours, management plans, teaching resources and workshops or clinics.
- About one-third or 12 Ramsar sites do not publicly identify with the Ramsar Convention in any way: they have no signs or displays at or near the site, nor brochures or publications available to the public, nor any other tools that feature the Ramsar logo or information.
- Ramsar site managers think that the Ramsar designation of the site should be better promoted.
 - Of the 34 who responded to this question on the survey, 31 (91.2%) of the managers responded positively. Of the 12 managers who responded that they do not publicly identify with Ramsar in any way, 11 said that the designation should be better promoted.
 - Managers indicate some concern in their comments related to promoting the site. For example, one cautioned that "an increase in promotion without

commitment to resources to manage the area would result in degradation of the site." Lack of resources was cited as a barrier in better promoting the Ramsar designation.

- Management plans are complete for 16 (43.2%) of the 37 Ramsar sites in Canada.
 - Managers of six of the 16 Ramsar sites with a completed management plan indicate that it was written before 1996 and requires revising or re-writing. Seven managers plan to complete or revise their plans before 2009. Managers for 13 (35.1%) of the Ramsar sites report that management plans have not been initiated.
- Managers of 16 Ramsar sites report that they know the Ramsar Information Sheet (RIS) for their site is not currently accurate or did not know if it was accurate. Managers for 28 (75.6%) of the Ramsar sites indicated that they would be willing to update the RIS in the next year if required.
- Many Ramsar site managers have limited interaction with existing information resources for Ramsar site management.
 - Managers for 40% or more of the Ramsar sites report that they do not know the value of specific resources such as the Ramsar Convention website (www.ramsar.org), Canada's Ramsar website (www.wetkit.net/ramsar) and Environment Canada headquarters and regional office support. The Ramsar site managers who rated the resources indicate that the Ramsar Convention website is of most value.
- There is no consensus among Ramsar site managers about the type of management support—such as coordinated exchange of information, guidance and training, or coordinated fundraising effort—that could help them in the future. However, associated comments call for financial and human resources and point out the absence of an active Ramsar program on the ground or the lack of management activity on Ramsar sites (some of which is related to lack of resources).
- The top management challenge on Ramsar sites is identified as "Effects of land uses, activities or practices (on-site or surrounding)."
 - Invasive species and visitor pressure and impacts are the next most pressing challenges on a national basis.

INTRODUCTION

A global network of Wetlands of International Importance (Ramsar sites) is one of the cornerstones of the Convention on Wetlands (also known as the Ramsar Convention). Wetlands are selected, by Contracting Parties to the Convention, for the List of Wetlands of International Importance on the basis of ecological, botanical, zoological, hydrological, fisheries and human use criteria. Contracting parties are obliged to maintain the ecological character of Ramsar sites.

Since acceding to the Ramsar Convention in 1981, Canada has designated 37 wetlands as Ramsar sites, totaling more than 13 million hectares and representing 8% of the total wetland area in Canada. The sites recognize international ecological treasures such as the recently designated Columbia Wetlands, providing nesting and rearing habitat for over 180 species of birds; the vast tundra plains of the Queen Maud Gulf Migratory Bird Sanctuary in Nunavut; and the extraordinary Cap Tourmente National Wildlife Area, where coastal marshes and snow geese are enjoyed by about 100,000 visitors every year.

In March 2007, managers of the 37 Ramsar sites were surveyed to gather information on the wetlands within the boundaries of their sites, the management of the Ramsar sites and the value of the Ramsar designation. The purpose of the Survey of Ramsar Site Managers 2007 is to provide the Canadian Wildlife Service of Environment Canada with current data to assist in the implementation of the Ramsar Convention in Canada. Specifically, the survey covered the following topics:

- GENERAL INFORMATION: A profile of Ramsar sites and the associated wetlands, including visitors, conservation designations, ownership, proportion of wetland designated, benefits (functions and values) of the wetland and change in ecological character (complements existing data about the sites such as size, region, and year designated).
- 2. RAMSAR SITE MANAGEMENT: An update on contact details for Ramsar site managers and the status of management plans and other key documents, and the value of existing and potential types of support for Ramsar site management.
- 3. PUBLIC IDENTIFICATION WITH RAMSAR: A characterization of the means by which these important wetlands are associated with the Ramsar Convention on Wetlands (e.g. signs, interpretive displays, brochures).
- 4. EFFECTS OF RAMSAR DESIGNATION: A perspective on any benefits and problems associated with the designation of wetlands as Ramsar sites.

A copy of the survey questions is provided in Appendix 1.

The Survey of Ramsar Site Managers 2007 is crucial to decisions concerning the Ramsar program in Canada, and to fulfilling Canada's international treaty obligations under the Ramsar Convention. It provides essential information to enable Environment Canada to better support Ramsar managers. It will also assist with the development of Canada's National Report for the 10th Conference of the Parties to the Ramsar Convention in 2008.

Canada's Survey of Ramsar Site Managers builds on the Survey of U.S. Sites Listed as Wetlands of International Importance (referred to in this document as the Survey of U.S. Ramsar Sites or the U.S. survey) that was conducted by the U.S. National Ramsar Committee from September 2005 to February 2007, and included 22 sites in the United States designated as Ramsar sites. The U.S. survey focused on public identification of the sites with the Ramsar Convention, possible benefits and problems associated with the designation, and ways and means by which the U.S. National Ramsar Committee could assist the sites. Canada's Survey of Ramsar Site Managers 2007 was designed so as to allow comparison with the results of the U.S. survey.

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¹ Royal C. Gardner (Chair of the U.S. National Ramsar Committee and Professor of Law at Stetson University College of Law) and Kim Diana Connolly (member of the U.S. National Ramsar Committee and Associate Professor of Law at the University of South Carolina) reported on the response to that survey in an article entitled *The Ramsar Convention on Wetlands:*Assessment of International Designations within the United States published in ELR News and Analysis, February 2007.

APPROACH AND METHOD

Information required by Environment Canada was gathered by means of an Internet-based bilingual survey of the managers of Canada's 37 Ramsar sites, conducted between March 13 and April 18, 2007.

SURVEY DESIGN AND FORMAT

In addition to meeting Environment Canada's information requirements, the survey was designed to maximize feedback from Ramsar site managers within a limited timeframe, and to enable comparison with the recent Survey of U.S. Ramsar Sites.

Canada's Survey of Ramsar Site Managers included 43 questions, primarily multiple-choice, rank order (e.g. "identify the top three...") or matrix evaluation (e.g. "rate the value of...") question types.

Respondents were provided the option of including comments with most questions. (Appendix 1.)

The survey was built within a Web environment, using Vovici online survey software (www.vovici.com). The Web survey was a convenient and efficient instrument for Ramsar site managers to communicate their views, and offered a number of advantages for design, analysis and reporting of the results, which are reviewed in the text box to the right.

A gateway was constructed on the electronic survey to deliver a personalized survey link and UserID to each manager of the Ramsar site managers, enabling:

 ACCESS TO A CUSTOMIZED SURVEY FOR THEIR RAMSAR SITE. This was particularly important since some managers are responsible for more than one site, so each survey specified the Ramsar site for which the responses were sought.

Main advantages of a Web-based survey application for the Survey of Ramsar Site Managers 2007

The Web-based survey application enabled the following:

- Access to survey experts to optimize results
- Quick structuring of survey questions based on standard question types
- Tracking of survey progress
- Creation of personalized email campaigns
- Programmed results analysis, including filtering based on specific responses and cross tabulation of results
- Export of reports to Microsoft Word, PowerPoint, or PDF
- Export of data to Excel, and
- Post-survey sharing of survey results with respondents.

- 2. COMPLETION OF THE SURVEY OVER MORE THAN ONE SESSION. Ramsar site managers could open the survey, complete some of the questions, save their work and close the survey to resume later in the survey period.
- 3. COLLABORATION WITH COLLEAGUES ON SURVEY RESPONSES. Some managers immediately indicated their desire to involve other staff members or specialists in the survey as well. The gateway provided the capacity to forward the survey link to colleagues and specify the parts of the survey for which they required input.

Microsoft Word versions of the customized surveys were also sent by email as requested to the manager of five northern Ramsar sites, who is based in Iqualuit, Nunavut, due to the slow and unreliable Internet connections in northern Canada. Managers in Prince Edward Island and Newfoundland completed their surveys using Word versions due to technical difficulties in receiving the survey link or accessing the Web survey. The survey for Old Crow Flats was completed using the Word version to enable contributions by the Management Committee. The consultant then input these survey results to the Web survey database.

A communications strategy was designed with the goal of maximizing participation of Ramsar site managers during a relatively short survey period. The strategy promoted the initiative in advance of the survey period, provided support to survey participants, and followed-up with them during the survey period to urge them to provide their input to the project.

ANALYSIS

Hidden fields were used to pass data into the surveys without requiring respondents to re-enter data already known by Environment Canada about the Ramsar sites (e.g. location, size, year designated).

Results were analyzed using the programmed functionality of the Web application to enable graphical display of results, filtering of data by the answers to one question, or cross-tabulation of the answers of two questions. The survey was also exported to Excel to generate additional tables for the report.

Results of the survey of Canadian Ramsar site managers were also compared with results of the U.S. survey as reported by Gardner and Connolly (2007).

RESULTS

The survey was automatically distributed to the managers of the 37 Canadian Ramsar sites on March 13, 2007. One hundred percent of these surveys were completed and returned: a total of 37 surveys were submitted between March 13 and April 18, 2007.

GENERAL INFORMATION

PROFILE OF THE RESPONDENTS

Most survey respondents identified themselves as the manager of the Ramsar Site or the primary contact for information concerning the site.² Seventy percent or 26 respondents report that they are the "site manager" or the manager of the protected area that is designated as a Ramsar site. Most of the remaining respondents supervise the site manager or are the site manager's designate. Several respondents commented that there is no manager formally designated specifically for the Ramsar site.

Four (10.8%) of the 37 respondents report that they are responding to the survey on behalf of a management committee, representing Hay Zama Lakes, Lac Saint-Pierre, Matchadash Bay and Old Crow Flats. Another manager reports that there is a committee associated with the Ramsar Site, mainly for funding purposes. Comments from two of the sites indicate that while they do not have formal management committees, they have developed partnerships for managing the site. Comments associated with several Ramsar sites that are also National Wildlife Areas indicate there is a management committee for the NWA.

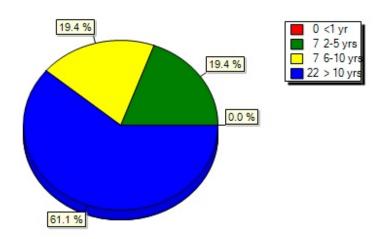
Respondents represent substantial experience in managing the Ramsar sites. More than half (61.1%) or 22 respondents report that they have been associated for more than 10 years with the Ramsar Site.³ Seven (21.2%) have been associated with the sites for 6-10 years; and an equal number for 2-5 years. No respondents report having been associated with the site for one year or less. (Figure 1.)

² Respondents are referred to in this report as "Ramsar site managers."

³ One of the respondents notes that their organization has been associated with the site for this amount of time.

FIGURE 1: RESPONDENTS' EXPERIENCE IN MANAGEMENT OF RAMSAR SITES

(Q. 4: How long have you been associated with (the Ramsar Site)?)



PROFILE OF THE RAMSAR SITES

Table 1 provides a detailed profile of each of the 37 Ramsar sites included in this report. Ramsar sites are located in all provinces and territories. Sites range in size from 244 ha (St. Clair Ramsar Site in Ontario) to 6,278,200 ha (Queen Maud Gulf Ramsar site in Nunavut). The majority of sites (30 or 81.1%) were designated as Wetlands of International Importance between 1981 and 1990, six sites were designated between 1991 and 2000, and one site was added to the list in the last seven years. Visitor numbers range from less than 50 at six of the seven Ramsar sites in Nunavut, Yukon Territory and Northwest Territories, to more than 200,000 visitors per year at Oak Hammock Marsh (Manitoba) and Point Pelee (Ontario) Ramsar Sites. One in five sites (21.6%) reported that visitor numbers are not known. (Table 1 and Figure 2.)

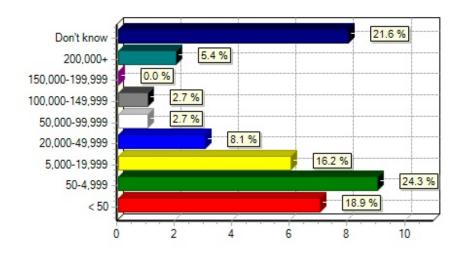
Table 1: Profile of Ramsar Sites

RamsarSite	Region	Province or Territory	Year Designated	Area (ha)	Visitors (per year)	Types of additional protective designations
Alaksen	PYR	ВС	81-90	586	50-4,999	4
Baie de l'Isle-Verte	QUE	QC	81-90	2215	50-4,999	5
Beaverhill Lake	PNR	AB	81-90	18050	50-4,999	4
Cap Tourmente	QUE	QC	81-90	2398	50,000-99,999	4
Chignecto	ATL	NS	81-90	1020	5,000-19,999	5
Columbia Wetlands	PYR	BC	01_07	15070	5,000-19,999	1
Creston Valley	PYR	BC	91-00	6970	20,000-49,999	3
Delta Marsh	PNR	МВ	81-90	23000	50-4,999	7
Dewey Soper	PNR	NU	81-90	815900	< 50	4

Grand Codroy Estuary	ATL	NL	81-90	925	50-4,999	6
Hay-Zama Lakes	PNR	AB	81-90	50000	Don't know	4
Lac Saint-Francois	QUE	QC	81-90	2310	5,000-19,999	3
Lac Saint-Pierre	QUE	QC	91-00	11952	20,000-49,999	5
Last Mountain Lake	PNR	SK	81-90	15602	5,000-19,999	6
Long Point	ONT	ON	81-90	13730	20,000-49,999	8
Malpeque Bay	ATL	PE	81-90	24440	Don't know	3
Mary's Point	ATL	NB	81-90	1200	5,000-19,999	4
Matchedash Bay	ONT	ON	91-00	1840	Don't know	6
McConnell River	PNR	NU	81-90	32800	< 50	3
Mer Bleue Conservation Area	ONT	ON	91-00	3343	100,000-149,999	3
Minesing Wetlands	ONT	ON	91-00	6000	50-4,999	4
Musquodoboit Harbour	ATL	NS	81-90	1925	Don't know	3
Oak Hammock Marsh	PNR	MB	81-90	3600	200,000+	5
Old Crow Flats	PYR	YK	81-90	617000	< 50	5
Peace-Athabasca Delta	PNR	AB	81-90	321300	50-4,999	2
Point Pelee	ONT	ON	81-90	1564	200,000+	3
Polar Bear Pass	PNR	NU	81-90	262400	< 50	2
Polar Bear Provincial Park	ONT	ON	81-90	2408700	50-4,999	2
Queen Maud Gulf	PNR	NU	81-90	6278200	< 50	3
Quill Lakes	PNR	SK	81-90	63500	Don't know	3
Rasmussen Lowlands	PNR	NU	81-90	300000	< 50	2
Shepody Bay	ATL	NB	81-90	12200	5,000-19,999	5
Southern Bight-Minas Basin	ATL	NS	81-90	26800	Don't know	3
Southern James Bay	PNR	NU	81-90	25290	Don't know	1
St. Clair	ONT	ON	81-90	244	50-4,999	3
Tabusintac Lagoon and Estuary	ATL	NB	91-00	4997	Don't know	2
Whooping Crane Summer Range	PNR	AB/NWT	81-90	1689500	< 50	2

FIGURE 2: VISITORS TO RAMSAR SITES (PER ANNUM)

(Q. 6: How many visitors come to the Ramsar Site every year?)



The survey collected a number of comments relating to the number of visitors. Some of the managers noted that the Ramsar site was not the destination per se, but rather that visitors were attracted by other features at the site, such as shorebirds, camping facility within a park or an interpretation centre. A number of managers indicated that they did not know the number of visitors because the site was open to the public without admission, no formal statistics were kept, or the remote nature of the site attracted just a few scientific projects or tourist groups, in addition to some use by nearby aboriginal communities.

Managers identified the other conservation designations associated with their Ramsar site, selecting from the following list (Note that acronyms and short forms used in Figure 3 are also identified here):

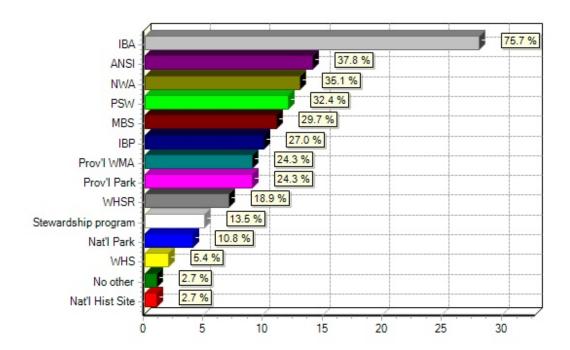
- Area of Natural and Scientific Interest (ANSI)
- Important Bird Area (IBA)
- International Biological Program (IBP) site
- Migratory Bird Sanctuary (MBS)
- National Wildlife Area (NWA)
- National Park (Nat'l Park)
- National Historic Site (Nat'l Historic Site)
- Provincial Park (Prov'l Park)
- Provincial Wildlife Management Area (Prov'l WMA)
- Provincially Significant Wetland (PSW)
- Stewardship program
- Western Hemisphere Shorebird Reserve (WHSR)
- World Heritage Site (WHS)

Long Point and Delta Marsh Ramsar Sites have the most other conservation designations (with eight and seven respectively) (Table 1). Understandably, three-quarters (75.7%) of Ramsar sites are also recognized as Important Bird Areas by Birds Studies Canada, Nature Canada and BirdLife

International. About one-third of Ramsar sites are also Provincially Significant Wetlands, National Wildlife Areas or Areas of Natural and Scientific Interest (Figure 3).

FIGURE 3: TYPES OF OTHER CONSERVATION DESIGNATIONS

(Q. 9: Please identify any other types of conservation status associated with the wetland...)



Managers also identified the following additional conservation designations:

- World Biosphere Reserve
- Monarch Butterfly Reserve
- Wildlife Sanctuary
- Important Area for Reptile and Amphibian in Canada, Canadian Amphibian and Reptile Conservation Network
- Heritage Rangeland Natural Area
- Manitoba Heritage Marsh
- Manitoba Protected Areas Initiative
- National Capital Commission conservation area as per the Plan for Canada's Capital
- Nature Conservancy of Canada Interpretation Centre and land acquisition initiatives (land bordering sections the Ramsar site), and
- Area acquired by North American Waterfowl Management Plan Joint Venture.

PROFILE OF THE WETLANDS

Managers for 18 of the Ramsar sites report that their sites encompass all of the wetland or wetland complex, while an additional 11 managers report that almost all (75-99%) of the wetland or

wetland complex falls within the boundaries of the Ramsar site. Managers for two of the sites (St. Clair and Southern James Bay) indicate that the Ramsar boundaries capture only 1-25% of the wetland or wetland complex. (Figure 4.)

FIGURE 4: PROPORTION OF WETLAND AREA ENCOMPASSED BY RAMSAR SITE

(Q. 5: What proportion of the wetland or wetland complex is encompassed by the Ramsar Site?)

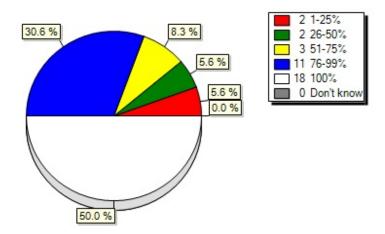
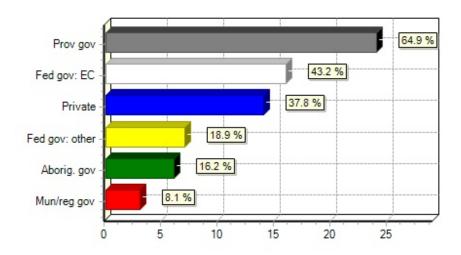


Figure 5 (next page) shows that 24 (64.9%) of the 37 Ramsar sites in Canada include provincial crown land, while 16 (43.2%) include federal crown land. More than one third of Ramsar sites (37.8%) report some private ownership (Figure 5).

FIGURE 5: OWNERSHIP OF RAMSAR SITES

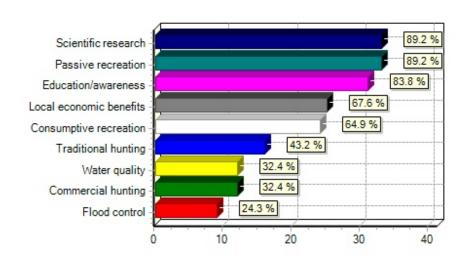
(Q. 18: Please identify the landowner(s) of the Ramsar Site...)



The top benefits associated with designated wetlands are scientific research and passive recreation (described as "birdwatching, photography, hiking, skiing, etc." in the survey), both reported by 33 (89.2%) of Canada's Ramsar sites. Education and awareness was reported by 31 (83.8%) of the sites. A total of 25 (67.6%) of the sites reported local economic benefits associated with the wetland. (Figure 6.)

FIGURE 6: BENEFITS OF DESIGNATED WETLANDS

(Q. 7: Please identify the benefit(s) that are associated with the wetland...)



Managers specified "other" benefits as follows:

- Waterfowl production and conservation
- Fish spawning and feeding habitat
- Guided waterfowl hunting
- Community enhancement associated with quality of life, and
- Current oil and gas extraction.

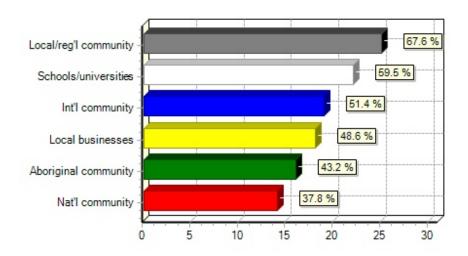
When asked if the wetland benefited any groups in a particular way, managers of 27 (73%) of the Ramsar sites responded "yes." These managers thought that the top three beneficiaries are the local or regional community (67.6% of respondents), schools and universities (59.5%), and the international community (51.4%) (Figure 7).

Comments from managers concerning beneficiaries explain to some degree the involvement of the international community:

- International crane foundation tours
- Renowned birding site...many international birding visitors, and
- We get visitors from around the world.

FIGURE 7: BENEFICIARIES ASSOCIATED WITH RAMSAR SITES

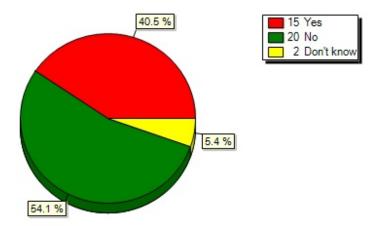
(Q. 8b: Please identify the beneficiary (or beneficiaries)...)



Managers of 15 (54.1%) of the Ramsar sites report that there has been a change in the ecological character of the wetland since designation as a Ramsar site. Two managers report that they "don't know," one commenting that there are "No ongoing surveys to determine change." (Figure 8.)

FIGURE 8: CHANGE IN ECOLOGICAL CHARACTER OF THE WETLAND

(Q. 17a: Has there been any change in ecological character of the wetland in the Ramsar Site since designation?)



Those managers who responded positively to the question regarding change in ecological character were asked to describe the change. Their comments point to a variety of human-induced and natural factors affecting the Ramsar sites: invasive species, change in water regimes, climatic variability, on-site land use and activity, and increased waterfowl populations. Their comments about the ecological change are as follows:

- Huge. As noted, very low water levels almost to the point of having no lake left.
- Significant vegetation encroachment in many areas.
- The ecological capacity and diversity has declined since designation.
- Although moderate at this time, habitat degradation is occurring due to an increase in the Snow Goose population.
- We have been working to eliminate petroleum production from the complex...(and) increased offhighway vehicle use...during dry years.
- Invasive and exotic species have increased in area affected and numbers.
- Like other estuaries, (this one) is likely becoming warmer and suffering oxygen depletion from algal blooms caused by nutrient enrichment from the farming industry. Sea level rise and land subsidence combined with early winter storms...are causing major erosion of the dunes protecting the (wetland). A number of aquatic invasives threaten ecological relationships...
- Extensive habitat degradation is occurring due to an increase in the Snow Goose population.
- Flow regulation and climate variability have combined to reduce the frequency and intensity of flooding which recharges the delta and surrounding perched basins.

- There has been a general decline in the marsh. Two recent developments will hopefully benefit the ecological capacity of the marsh. Lake water levels were previously managed within a very narrow range...the lake will now be allowed to fluctuate in a 60 cm range. Additionally...a technical committee (will investigate) options for excluding common carp from the marsh...
- Stress related to lack of connectivity to historical watershed; continuing loss of herptile species, including species at risk; impacts to barrier heach separating (the lake) from marsh due to accelerated erosion events; others.
- Although moderate at this time, habitat degradation is occurring due to an increase in the Snow Goose population. For now, damage is mostly limited to the vicinity of goose nesting colonies and along the edge of water bodies.
- Waterfowl migration patterns have changed and water levels have changed the character of the tidal and near shore habitats.
- Increase in invasive and exotic species in terms of area affected and numbers of species.
- Expansion of green crab (Carcinus maenus), an invasive, in 2000 -2002 coincided with the loss of eel grass flats.
- There may have been some changes in the vegetation and hydrology. Local people feel there has been a general decline in lake levels and increased numbers of dried up lakes. Several scientific studies suggest a slight overall decrease in water surface area due mostly to the drainage of several large lakes.

RAMSAR SITE MANAGEMENT

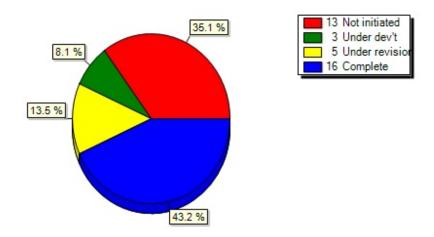
STATUS OF KEY DOCUMENTS

Management plans are complete for 16 (43.2%) of the 37 Ramsar sites; managers for about one-third (35.1%) or 13 of the Ramsar sites report that management plans have not been initiated for their sites. The remaining eight sites have plans under development or in revision. (Figure 12.)

Comments regarding the management plans indicate that rarely is a management plan completed for the Ramsar Site per se, but rather for a National Wildlife Area, Provincial Wildlife Management Area, National Park or Provincial Park within which the Ramsar Site is located. Management plans for northern Ramsar sites will be developed through Area Co-management Committees to be established through Inuit Impact Benefit Agreements.

FIGURE 9: STATUS OF MANAGEMENT PLANS

(Q. 10a: What is the status of the management plan for the Ramsar Site?)



Managers of 16 Ramsar sites reported a completed management plan. Six of these managers indicated that it was written before 1996 and required revising or re-writing. Seven managers plan to complete or revise their plans before 2009, nine others in 2011 or beyond. Fifteen managers do not know when this can be accomplished, due to other priorities, lack of threats to the area, or resource constraints.

Managers of 36 Ramsar sites reported on the availability of a large scale map showing the boundaries of their Ramsar site: 22 of those managers reported that a map is available; 16 of which indicated the map was in digital format.

Managers of 31 Ramsar sites are aware of the Ramsar Information Sheet (RIS) for their site. Managers of 29 of those sites responded to a question concerning the status of the RIS: managers for 13 Ramsar sites indicated that it was currently accurate; managers for nine sites said it was not

currently accurate; and managers for seven sites did not know. Managers of 28 Ramsar sites indicated that they would be willing to update the RIS in the next year if required.

VALUE OF RESOURCES FOR RAMSAR SITE MANAGEMENT

Managers for 40% or more of the Ramsar sites who rated each of the three existing resources reported that they did not know the value of the Ramsar Convention website (ramsar.org), Canada's Ramsar website (wetkit.net/ramsar) and Environment Canada headquarters and regional office support, for Ramsar site management. Almost 60 per cent did not know the value of Canada's Ramsar website, implying they were not aware of the website, had not used it in the context of managing the Ramsar Site, or did not have an opinion on the matter. (Figure 10.)

The Ramsar site managers who rated the value of key resources, rated the Ramsar Convention website as having most value (with a weighted value of 34 points), followed by Environment Canada support (29 points), and Canada's Ramsar website as having the least value (24 points).⁴

Comments on existing resources indicate limited involvement and interest in them for Ramsar site management, for example:

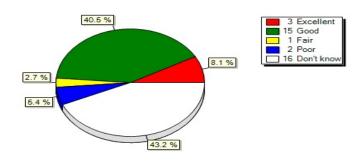
- Have had no recent contact with any of the above (resources)
- Managed as a Canadian national park under the Canada National Parks Act
- Little active management of site required at this time, due to limited human access and activity, and
- Environment Canada is not very present in our area, certainly not in terms of wetlands.

⁴ Total score was calculated for each resource, using a score of 3 for an excellent rating, 2 for a good rating, 1 for a fair rating and -1 for a poor rating.

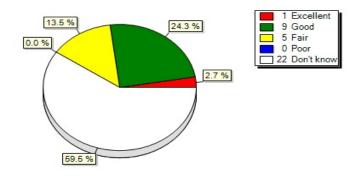
FIGURE 10: VALUE OF EXISTING RESOURCES

(Q. 15: Please rate the value of the following resources for Ramsar Site management...)

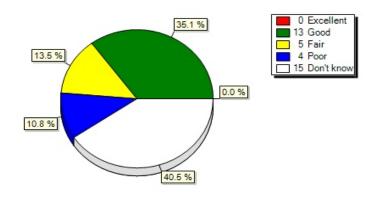
a) Ramsar Convention Website: Ramsar.org



b) Canada's Ramsar Website: wetkit.net/Ramsar



c) Environment Canada Headquarters and Regional Offices



Managers were also asked to rate a number of potential resources for Ramsar site management:

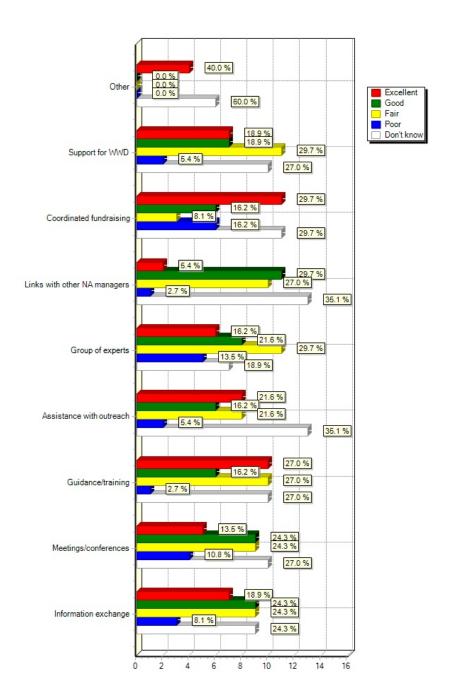
- Coordinated exchange of information by email or newslink among Ramsar site managers
- National meetings or conferences of Ramsar site managers
- National guidance or training programs for Ramsar site Managers
- Assistance with education, outreach and public awareness (e.g., providing speakers for events at the sites)
- National group of experts to consult regarding implementation of the Convention
- Links with Ramsar site managers in the United States or Mexico
- Coordinated fundraising effort for wetland management
- Organization of and support for World Wetland Day events

There was no consensus among Ramsar site managers about the type of activity that could help them in the future. When asked to rate the above list of eight options, responses indicated no preference at the national level between options, and an average of 10 or more than one-quarter of respondents answered that they did not know what the value of suggested options would be to Ramsar Site management. (Figure 11.)

A review of responses to this question by region showed no consensus for one type of support over another in most regions. The exceptions were Pacific and Yukon Region, which indicated a clear preference for guidance and training, assistance with outreach, and coordinated fundraising; Ontario Region, which showed a preference for guidance and training, information exchange, and assistance with outreach; and Prairie and Northern Region, which showed a preference for guidance and training, support for World Wetland Day, and a national group of experts.

FIGURE 11: PERCEIVED VALUE OF OTHER RESOURCES

(Q. 16: Please rate how valuable the following types of support would be for Ramsar Site management...)



Comments on potential resources to support Ramsar site management make two major points:

1) REQUIREMENT FOR FINANCIAL AND HUMAN RESOURCES

- Support is simple. More local resources (staff) required.
- Answer would be different with staff resources. At present essential health and safety issues on lands we actually own or administer take priority.
- Tools and expertise are (present) at regional level...no staff!!
- Travel budget is limiting for national workshops etc. Also, resource limitations are an everyday fact of life and why we do not do more on (the Ramsar Site).

2) A LACK OF MANAGEMENT ACTIVITY ON THE RAMSAR SITE (SOME OF WHICH IS RELATED TO LACK OF RESOURCES)

- Ramsar sites are generally not managed, unless they fall within an existing protected area.
- There is no real Ramsar program on the ground at any of my sites. It was a designation process with little follow-up so it is hard to (rate) how effective it might be.
- Make this an active program at the site level, passive designations are soon devalued.
- This is an isolated site in a relatively natural landscape, with minimal opportunity for human access, the latter primarily by local Inuit community and occasionally by scientists.

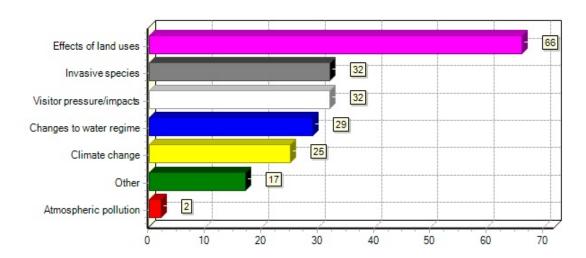
One manager noted that the designation has provided significant benefits in minimizing impacts and conflicts with alternate land uses. Another indicated that they are currently twinning the Ramsar site with one in Inner Mongolia, China.

MANAGEMENT CHALLENGES

Ramsar site managers identified "Effects of land uses, activities or practices (on-site or surrounding)" as the top management challenge, with a weighted score of 66 points. Invasive species and visitor pressure and impacts are the next most pressing challenges. (Figure 12.)

FIGURE 12: MANAGEMENT CHALLENGES

(Q. 20a: Please rank the top three management challenges in the Ramsar site...)



Respondents who selected "other" identified funding as one of their top three management challenges:

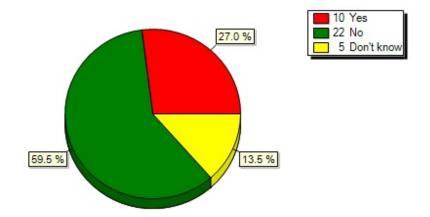
- Funding is the most significant challenge facing the (Ramsar site).
- The biggest challenge is to acquire financial resources to management the property. Currently done by volunteer organization; (funding) for infrastructure non-existent.
- Enough resources to manage this site. Natural grasslands and wetlands require active management because the natural ecosystem processes of flooding, prairie fires, and infrequent, intense grazing, have been removed by European settlement.

Other challenges identified were off-highway or ATV vehicle use, surveillance, habitat degradation by snow geese, and "political pressure to reduce size of sanctuary to reduce limitations on mineral development."

Earlier in the survey, Ramsar site managers were asked if land ownership was an issue in managing the site. Managers for more than a half or 22 of the Ramsar sites said "no" while those for about one-quarter or 10 indicated that land ownership is an issue (Figure 13). Their comments refer to the positive influence of management committees or collaborative partnerships in resolving issues, but also express concern about activities on adjacent private lands.

FIGURE 13: LAND OWNERSHIP AN ISSUE

(Q. 19a: Is land ownership an issue in managing the Ramsar Site?)

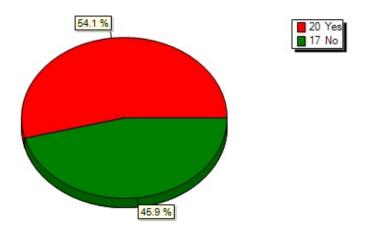


PUBLIC IDENTIFICATION WITH RAMSAR

Ramsar site managers report that 20, or a little more than half, of the sites in Canada feature signs or displays (at or near the site) that note the wetland's designation as a Ramsar site or Wetland of International Importance (Figure 14). Two other site managers commented that they have plans for signs or displays in the near future. About one-third of managers report that a sign is posted at or near the entrance to the site (Table 3). The manager responsible for five northern sites pointed out, "Those sites are remote and not often visited. The expense and logistical challenge of erecting and maintaining physical structures (signs etc.) are prohibitive. However, there are outreach and education (programs) to increase local community awareness of the Ramsar designation."

FIGURE 14: SIGNS OR DISPLAYS

(Q. 21a: Are there signs or displays (at or near the site) that note the wetland's designation as a Ramsar Site or a Wetland of International Importance?)



Managers of 15 (40.5%) of the Ramsar sites indicate there are brochures or other publications available to the public that note the wetland's designation as a Ramsar Site or a Wetland of International Importance. A number of the managers commented that brochures for the legal protected area mention the Ramsar designation. Managers of nine sites indicated that other tools are used to identify the wetland as a Ramsar site, including websites, tours, management plans, teaching resources and workshops or clinics.

About one-third or 12 Ramsar sites do not have signs or displays at or near the site, nor brochures or publications available to the public, nor any other tools that feature the Ramsar logo or information.

On the whole, Ramsar site managers think that the Ramsar designation of the site should be better promoted. Of the 34 who responded to this question on the survey, 31 managers (91.2%) responded positively (Figure 15). Of the 12 managers who responded that they do not publicly identify the site with Ramsar in any way, 11 said that the designation should be better promoted.

Managers indicated some concern in their comments related to promoting the site. One cautioned that "an increase in promotion without commitment to resources to manage the area would result in degradation of the site." Another manager commented that this was "a tough call that requires some significant discussion and research before investing." The manager of a site with numerous conservation designations pointed out that "The problem is that (the Ramsar designation) is perceived as giving little value added to the numerous other designations for the site and the relatively little apparent support for the designation as compared to others like the (UNESCO Man and the Biosphere (MAB) Programme)." Once again, lack of human resources was cited as the

In the U.S., almost all the Ramsar sites report that they publicly identify their affiliation with the Ramsar Convention or their designation as a wetland of international importance in some way, but they do so by different means.

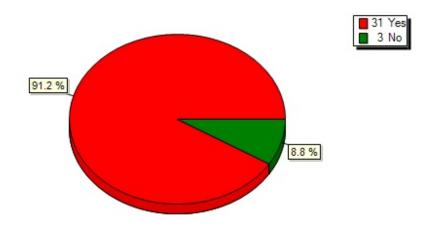
In terms of signs, some sites display in a visitors center or office the certificate or plaque that the site received upon designation. Some sites have signage noting the designation. Other sites have encouraged signage about the Ramsar connection beyond the site's borders.

Likewise, in terms of brochures and other documents, many sites (but not all) have brochures that identify the area as a Ramsar site or wetland of international importance. Several sites reported that they included Ramsar designation in their comprehensive conservation plans or other management documents. Other sites have decided to reinforce the notion of the international designation by including a standard reference in press releases, by using the Ramsar logo on a quarterly newsletter, or by using the Ramsar logo on the site's letterhead. Finally, a number of sites include a Ramsar reference on their websites.

(Gardner and Connelly 2007)

FIGURE 15: BETTER PROMOTION OF THE RAMSAR DESIGNATION

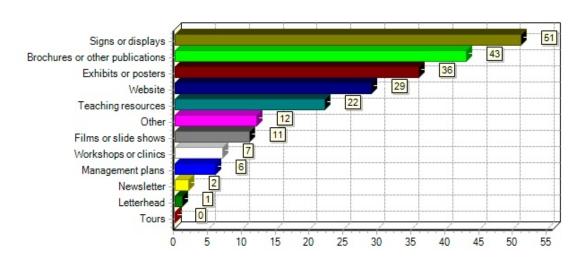
(Q. 24: Do you think the Ramsar designation of the site should be better promoted?)



Managers report that the three most effective tools for promoting the Ramsar designation include signs or displays, brochures or other publications, and exhibits or posters. Additional resources thought to be effective include websites and teaching resources. (See Figure 16.)

FIGURE 16: MOST EFFECTIVE TOOLS FOR PROMOTING RAMSAR DESIGNATION

25a) Please rank the three most effective tools for promoting the Ramsar designation:



Other tools were suggested for promoting the Ramsar designation, such as local media and television (i.e. Discovery Channel, National Geographic): "to reach out to a wider audience about Ramsar and what it is and means for the world." One manager recommended local community education on how the Ramsar designation may assist in future co-operative conservation efforts, as well as on how to meet ongoing requirements of the Ramsar Convention, "which is not evident to

the land managers or stakeholders." The same manager contrasts Ramsar with the MAB program that promotes local community stewardship and leads to a heightened awareness of impacts of human activity on the lands and waters. The suggestion was that perhaps the Ramsar program could support the MAB program "rather than compete." Another manager encouraged "active programs" related to the Ramsar Convention: "passive designations are soon deemed unimportant if there is little or no action related to it."

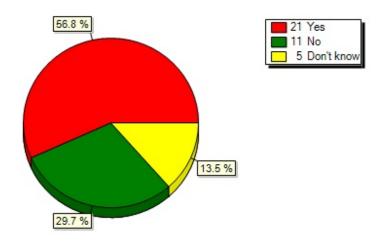
EFFECTS OF THE RAMSAR DESIGNATION

This section of the survey asked Ramsar site managers two key questions related to commitments under the Ramsar Convention on Wetlands. They were asked "Do you think that the Ramsar designation helps to promote wise use of the site?" and "Do you think that the Ramsar designation helps to maintain the ecological character of the site?"⁵

Managers of 21 (56.8%) of the Ramsar sites think that the Ramsar designation helps to promote wise use of the site (Figure 17).

FIGURE 17: VALUE IN PROMOTING WISE USE OF THE SITE

(O. 26a: Do you think that the Ramsar designation helps to promote wise use of the site?)



Comments reflect two major reasons for thinking that the Ramsar designation promotes wise use of the site:

- 1) PRIDE, AWARENESS AND MORAL OBLIGATION AMONG MANAGING ORGANIZATION(S) AND GENERAL PUBLIC
 - Major impact on raising awareness of importance and conservation value, both within the managing organization and with the general public.

-

⁵ Under the Convention there is a commitment to promote, as far as possible, "the wise use of wetlands in their territory" (Article 3.1 of the treaty). The Conference of the Contracting Parties has approved guidelines on how to achieve "wise use", which has been interpreted as being synonymous with "sustainable use" (§4.2). With respect to Wetlands of International Importance (Ramsar Sites), the Parties have committed themselves "to arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the Ramsar Secretariat. (Article 3.2 (§4.3.7))

- Adds to the understanding of how special the place is.
- International recognition enhances value.
- Engages non-government organizations in pro-active participation, raises awareness of general public
- Awareness of wetlands and their contribution to the ecosystem of the park and the survival of the cranes.
- I believe that the community is very proud of the designation and wish to see the wetlands maintained.
- The "moral" concept of wise use in Ramsar sites use is appreciated by the public.
- 2) INFLUENCE ON LAND USE DECISIONS, LAND ACQUISITIONS AND ENVIRONMENTAL ASSESSMENTS
 - Valuable in responding to information needs for environmental assessment and land use planning.
 - (Raised) during environmental impact assessments. It works to give better protection to the (Ramsar site). Also, when purchasing additional lands...the designation supports the acquisitions.
 - Supports the conservation goal in land use review and environmental assessments.
 - Increases focus of agencies on the need to manage appropriately as the world is watching.
 - Helps us to move petroleum and natural gas activities off the site in a timely manner.
 - Influences surrounding land uses particularly during environmental assessments. A cottage development adjoining the site has used the Ramsar designation in its promotion.
 - Highlighted the site's importance during establishment of the Special Management Area and developing the two management plans.

Managers of 11 (29.7%) of the Ramsar sites think that the Ramsar designation does not help to promote wise use of the site. They provided reasons for this opinion that can be grouped into three main points as follows:

- 1) OTHER (LEGAL OR MORE EFFECTIVE) DESIGNATIONS/ARRANGEMENTS PROTECT THE AREA
 - The site is managed under the strict Wildlife Area Regulations pursuant to the Canada Wildlife Act which strongly protects the conservation value of the habitats.
 - Use of site is essentially governed by the National Parks Act and various Parks Canada Agency policies.
 - The site is a National Wildlife Area and is managed accordingly.

■ MAB committee...is an effective tool to maintain public interest and participation in managing common resources and protected areas. We would use that rather than try to establish another mechanism to engage the community here.

2) LACK OF AWARENESS OR UNDERSTANDING

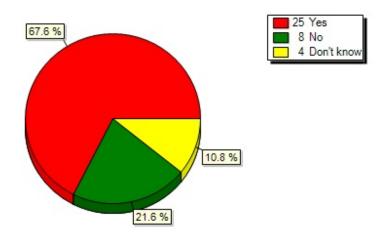
- Most persons (including the site manager) are not aware of the (Ramsar) Convention and its potential to help them.
- There are insufficient means to bring visibility to the designation.
- Wise use is a term we do not necessarily all understand in the same way that other cultures do. As the local community is living on the land they may, or may not support other interpretations of wise use.
- It has not been a high profile designation and I doubt much of the public understand its meaning and significance. Wise use of the area is likely more driven by other factors but there is an overall respect for the importance of protecting wetlands and (this site) in particular. I don't see the designation as a principal driver.
- Ramsar means little to many due to the little or no communication.

3) LACK OF RESOURCES

- The site is managed for migratory birds, species at risk, and wildlife. The Ramsar designation doesn't really affect how we use or manage the site, or how much money and staffing we receive to help manage it.
- Some resources to (raise awareness) are paramount. We have a sign on-site that occasionally produces questions that we have (minimal) answers for.

Managers of 25 (67.6%) of the Ramsar sites think that the Ramsar designation helps to maintain the ecological character of the site. Recall an earlier question in the survey that asked whether the Ramsar site had experienced change in the ecological character of the wetland. Of the 15 Ramsar site managers who report change in the ecological character of the wetland, 12 indicated that the Ramsar designation had helped to maintain the ecological character of the site, implying that change in the ecological character of these important wetlands may have been greater in the absence of the Ramsar designation.

FIGURE 18: VALUE FOR MAINTAINING ECOLOGICAL CHARACTER OF THE SITE (Q. 27a: Do you think that the Ramsar designation helps to maintain the ecological character of the site?)



Managers identified, in their comments associated with this question, three ways that the Ramsar designation helped to maintain ecological character:

1) COMMUNICATES A HIGHER LEVEL OF IMPORTANCE

- Another level of recognition. People realize that an "international" designation must mean something (even if they do not always understand the science or details).
- It does help us to communicate its importance or significance.
- Probably helps in an incremental manner but its influence is very subtle and hard to discern.

2) INFLUENCES LAND PLANNING AND DEVELOPMENT DECISIONS AND ENVIRONMENTAL ASSESSMENT

- We have considered this designation when dealing with environmental assessments associated with development proposals.
- Ramsar designation helped to develop guidelines for oil and gas extraction, production and abandonment.
- Important when dealing with non-government organizations and local government.
- Awareness of value translates directly into willingness to make efforts to protect.
- It is mentioned when discussing impacts of land use decisions on surrounding lands and is included in applications for funding for research proposals.
- Ramsar designation is important factor in assessing any potential human activities that may affect the site.
- Designation is identified in the Interdepartmental Land Use Classification and would be considered
 if any development activities are proposed.

3) IMPROVES MANAGEMENT

- Improved management, greater attention paid to the area.
- Requires a long term focus on how to keep the area ecologically healthy.
- The international importance of the site has encouraged management plans that aim to preserve the virtually pristine nature of the area.

One manager commented that overall, the Ramsar designation helped to maintain ecological character but pointed out that "there are instances where it works against our organization. Some In the U.S., Gardner and Connelly (2007) concluded that some of the benefits of Ramsar designation are difficult to quantify. Nevertheless, they noted that it was clear from the responses to the survey and in their follow-up discussions that there is a great deal of pride in being associated with a wetland of international importance.

They also found that Ramsar designation can and does provide discrete benefits within the United States, particularly in the area of grants and land acquisition, support for protection of the site and surrounding areas, and to a lesser extent, scientific research and ecotourism.

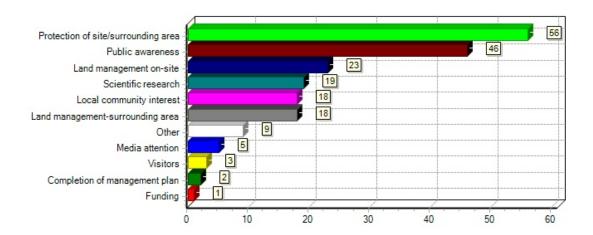
people cite and use the Convention inappropriately to prevent us from conducting certain management activities that would improve the overall ecological character of the site and its intended purpose."

Managers for eight (21.6%) of the Ramsar sites think that the Ramsar designation does not help to maintain the ecological character of the site. Comments relate primarily to the relative strength or effectiveness of other protective designations such as the *Canada Wildlife Act* or the *National Parks Act*.

Ramsar site managers identified the two most valuable benefits of site designation as being "Protection of the site and surrounding area" and "Public awareness of the wetland."

FIGURE 19: BENEFITS OF RAMSAR DESIGNATION TO SITE MANAGEMENT

(Q. 29a: Please rank the three most valuable benefits of Ramsar designation to site management...)



"Other" valuable benefits of the Ramsar designation were specified as:

- Acquisition (of additional property for the associated protected area).
- The implied "political pressure" (from the international community on Canada).
- Stronger backing when we are justifying why the (protected area designation) exists in the first place, and why the area is important in the grand scheme of things.

Ramsar site managers identified and described other benefits associated with Ramsar designation. Two managers raised a new theme: that of the potential for Ramsar recognition as a focus for building community. One manager commented that the designation "Has brought all First Nations, land managers and stakeholders together in the (Ramsar Site) committee to provide advice, ensure sound management practices, mesh environmental, economic and cultural issues." Another credited the Ramsar designation with "Building community through the new management model we are working on establishing for the wetlands."

The theme of pride and awareness of the local community was reiterated, as was the influence of the designation on land use planning and decisions.

One manager commented "It is a question of pride...the local community appreciates the international recognition and has a heightened awareness of habitat conservation." Taking it one step further, another manager commented "Local economic development has used the Ramsar designation as a wetland of international importance as the theme on which they are building their development plan for the area."

Other managers observed that benefits of the Ramsar designation are "Related to awareness of value . . . ability to influence outside organization and land use planning or decisions," and "In

discussions with non-government organizations and other government departments and agencies, the fact that it has a Ramsar designation has focused the discussions."

Ramsar site managers were asked to identify and describe any problems associated with Ramsar designation. Managers associated with five sites again raised the issue of lack of funding, commenting that "There is no evidence of financial support or local engagement," "Additional resources required to improve management activities," "Obtaining funds to further management objectives is always difficult" and "not enough resources, needs more

The US survey also expressly asked whether Ramsar designation had caused any problems for the sites. The responses almost uniformly indicated that affiliation with the Ramsar Convention did not create any difficulties for sites.

A few respondents did note the burden of having to update the RIS and other paperwork requirements.

(Gardner and Connelly 2007)

understanding by governments." Another commented that "Without committed resources, management of Ramsar sites must be compatible with other programs and projects. Ramsar sites are not stand-alone programs." Managers associated with two other sites went further to point out the problematic implications of lack of funds: "If there were some local, site-based programs or projects tied to Ramsar it would be more accepted or recognized by the land managers and community" and "Without an active component this is a passive designation, which soon fades from the public (and management) view as a valuable tool. If there were opportunities for support of (Ramsar) activities at or around the site...it would become more visible." Two additional managers noted that the designation is "Not well known in the general public," and that "Ramsar sites need higher profile."

In an interesting twist on the financial support issue, one manager complained that a problem with Ramsar is that "It is widely believed that Ramsar provides funding to Ramsar sites." Another common misperception was characterized as follows: "To a very minor extent, it creates a false sense of protection in that some people assume it has a higher degree of protection then the Ramsar Site designation actually provides."

Three managers also identified a communications issue. One pointed out that "(There is) very little information sharing - I am the responsible manager but do not have any contact with Environment Canada or associated organizations regarding Ramsar. There may be some linkage to our research group but I am not aware of anything." Another observed "We have had minimum communication with the Ramsar program. The only contact I have ever had is usually out of the country. An annual communication line would be useful." Yet another suggested that "Stronger collaboration within Canada would be a good idea."

Finally, one manager made the observation that "If pressed, we would have a hard time defending any benefits associated with the designation."

FINAL COMMENTS

At the end of the survey, Ramsar managers were given an opportunity to provide any additional comments that they would like to make concerning the Ramsar Site. Most of the managers used the opportunity to re-iterate: 1) the need for more resources and support for site management and to raise the profile of the Ramsar designation and 2) the influence of the designation on decisions.

- 1) NEED FOR MORE RESOURCES AND SUPPORT, AND AN ELEVATED PROFILE FOR RAMSAR
- Human resources are the limiting factor. Insufficient staff versus priorities such as health and safety
 on federal lands. Very limited resources to devote to Ramsar issues.
- Increased funding would be appreciated!
- It is an excellent idea, but low level of management support at the present time.
- It would be nice if (the Ramsar program) was more present and helped in leveraging funds. It would also be nice if Ramsar partnered with federal and provincial governments to conduct awareness workshops or information sessions (close to Ramsar sites) to increase people's knowledge about the Convention and the importance of wetland...there is an urgent need to educate people about the importance of wetlands and the role they play in controlling disease vectors...The economic benefits of wetlands are more present in the media today, but not nearly as much as they should. Your attention to enhanced communications will benefit the program in many ways especially in the way we promote it.
- The promotion of the sites as well as the ties between them should be improved.
- It would be necessary to strengthen the ties between recognized sites. By so doing, managers, local communities and non-government organizations could benefit.
- Most of (the Environment Canada Canadian Wildlife Service) involvement with Ramsar comes from our National Capital Region staff. (Staff in this) National Wildlife Area don't really see an effect (positive or negative) at the local level.
- Ramsar is not a well-publicized Convention and therefore not in the front-of-mind awareness of average citizens. The park does what it can with its small number of visitors but there needs to be a more national and international awareness that elevates the profile of Ramsar to that of World Heritage Site or the Kyoto (Protocol).

2) INFLUENCE OF THE DESIGNATION	
■ I was involved in negotiating the acquisition of adjacent upland. The landowner stated that he would rather sell to (the wetland manager) with the understanding that it would be conserved than to hold out for the big dollars that would be associated with what he could probably negotiate with a developer. This was a person that was not well-off financially.	

REFERENCES

Gardner, Royal C. and Kim Diana Connolly. 2007. The Ramsar Convention on Wetlands: Assessment of International Designations within the United States. Environmental Law Reporter (ELR) News and Analysis (February 2007). Washington, D.C.

APPENDIX 1: SURVEY OF RAMSAR SITE MANAGERS 2007

Environment Canada – Canadian Wildlife Service March 2007

Please take 40 minutes to complete this 43-question survey between March 12 and 23, 2007. We will be tracking your completion of the survey along with the other 36 respondents, and will provide reminders as required. During the weeks of March 12 and March 19, Pauline Lynch-Stewart will be available Tuesday, Wednesday and Thursday afternoon from 12:00 – 4:00 pm EDT to answer your questions. Contact her by email at pauline@lynchstewart.com or by telephone at (613) 567-1116.

Why is this important?

This survey is crucial to decisions concerning the Ramsar program in Canada, and to fulfilling Canada's international treaty obligations under the Ramsar Convention on Wetlands.

The survey will gather information on two main topics:

- 1. **Ramsar Site management**: Designed to update contact details for the Canadian Ramsar managers, establish a database of information about the Ramsar Site network, and update the status of management plans and other resources.
- 2. **Ramsar designation benefits**: The survey will answer a key question for Government of Canada program evaluation: "What benefits have resulted from the designation of wetlands in Canada as Ramsar Sites?"

Survey results will prepare Environment Canada to respond to the audit of Environment Canada's protected area initiatives by the Office of the Auditor General, and to develop *Canada's National Report* for the 10th Conference of the Parties to the Ramsar Convention in 2008. The core questions of this survey are based on a survey administered in 2006 by the U.S. National Ramsar Committee, enabling comparison of the results.

What's in it for you?

This initiative will provide essential information to enable Environment Canada to better support you in your role as a Ramsar manager. Also, this web-based survey format offers you an efficient, flexible way to update information on Ramsar Site management required for Canada's National Report to the Ramsar Convention (due Spring 2008) – saving you time and effort in the long run.

We will send you a copy of the results of this survey when they become available this Spring. Please note that survey results will be used for statistical purposes only.

Ramsar Site

GENERAL INFORMATION

About you

1) Please provide your personal contact information:
Name:
Title:
Organization:
E-mail:
Telephone number:
2) Are you the designated site manager for (insert name) Ramsar Site?
Yes No
Additional comments:
3a) Are you responding to this survey on behalf of a management committee?
Yes No
Additional comments:
3b) If yes, please identify the committee:
4) How long have you been associated with (insert name) Ramsar Site?
1 year or less 2-5 years 6-10 years more than 10 years
Additional comments:

About the Ramsar Site

5) What proportion of the wetland or wetland complex is encompassed by the Ramsar Site?

1-25% 26-50%

51-75%

76-99%

100%

Don't know

Additional comments:

6) How many visitors come to the Ramsar Site every year? (Select One)

Less than 50 50-4,999 5,000-19,999 20,000-49,999 50,000-99,999 100,000-149,999 200,000+ Don't know

Additional comments:

About the wetland

7) Please identify the benefit(s) that are associated with the wetland? (Please mark all that apply)

Education or awareness regarding wetland ecology

Scientific research

Passive recreation: birdwatching, photography, hiking, skiing, etc.

Consumptive recreation: hunting or fishing Traditional or subsistence hunting or fishing Commercial hunting, trapping, or fishing

Local economic benefits

Flood control Water quality

Other (please specify)

If you selected other, please specify:

Additional comments:

8a) Does the wetland benefit any group(s) in a particular way?

Yes No Don't know

Additional comments:

8b) Please identify the beneficiary (or beneficiaries): (Please mark all that apply)

Local or regional community National community International community Local businesses First Nation community Schools or universities Other (please specify)

If you selected other, please specify:

Additional comments:

9) Please identify any other types of conservation status associated with the wetland:

(Please mark all that apply)

Area of Natural and Scientific Interest
Important Bird Area (IBA)
International Biological Program (IBP) site
Migratory Bird Sanctuary
National Wildlife Area
National Park
National Historic Site
Provincial Park
Provincial Wildlife Management Area
Provincially Significant Wetland
Stewardship program
Western Hemisphere Shorebird Reserve
World Heritage Site
Not applicable - no other designations
Other (please specify)

If you selected other, please specify:

Additional comments:

RAMSAR SITE MANAGEMENT

10a) What is the status of the management plan for the Ramsar Site? (Select One)

Not initiated Under development Under revision Complete

Additional comments:

10b) If the management plan is complete, and was written in 1996 or before, do you think that the management plan requires revising or rewriting?

Yes No Don't know Not applicable

Additional comments:

10c) If the management plan is not complete or requires revision or rewriting, please identify the year that it will be completed: (Select One)

2007

2008

2009

2010

2011

2012 or beyond

Don't know

Additional comments:

11) Who is the individual and organization responsible for the management plan?

12a) Are you aware of the Ramsar Information Sheet for your Ramsar Site (posted at http://www.wetlands.org/RSDB in the Ramsar Sites Database)? Yes No
Additional comments:
12b) Is it accurate today?
Yes No Don't know
Additional comments:
13) If necessary, would your organization be willing to update the Ramsar Information Sheet within the next year?
Yes No Don't know
Additional comments:
14a) Is there a large-scale map available that shows the boundaries of the Ramsar Site?
Yes No
Additional comments:
14b) Is the map available in a scanned or digital format? Yes No
Additional comments:
14c) Is the map on a web site?
Yes No

- 14d) If so, please provide the URL for the map:
- 15) Please rate the value of the following resources for Ramsar Site management:

	Excellent	Good	Fair	Poor	Don't know
Ramsar Convention on Wetlands website (www.ramsar.org)	C				C
Canada's Ramsar website (www.wetkit.net/ramsar)	C				C
Environment Canada headquarters or regional support					C

16) Please rate how valuable the following types of support would be for Ramsar Site management:

	Excellent	Good	Fair	Poor	Don't Know
Coordinated exchange of information by email or newslink among Ramsar Site managers	C		С		C
National meetings or conferences of Ramsar Site managers	C		С	C	C
National guidance or training programs for Ramsar Site Managers	C		С		C
Assistance with education, outreach and public awareness (e.g., providing speakers for events at the sites)	C	C	C		C
National group of experts to consult regarding implementation of the Convention	C		С		
Links with Ramsar Site managers in the United States or Mexico	C		С		
Coordinated fundraising effort for wetland management	C				C
Organization of and support for World Wetland Day events	C		С		C
Other (please describe and rate)	C	C	C		C

17a) Has there been any change in ecological character of the wetland in the Ramsar Site since designation?

Yes No Don't know

17b) If yes, please describe:

18) Please identify the landowner(s) of the Ramsar Site: (Please mark all that apply)

Federal government: Environment Canada Federal government: other Provincial or territorial government Aboriginal government Municipal or regional government Private Other (please specify)

If you selected other, please specify:

Additional comments:

19a) Is land ownership an issue in managing the Ramsar Site?

Yes No Don't know

Additional comments:

- 19b) If yes, please describe:
- 20a) Please rank the top three management challenges in the Ramsar Site:

1) Select One

Visitor pressure/impacts
Effects of land uses, activities or practices (on-site or surrounding)
Invasive species
Changes to water regime
Atmospheric pollution
Climate change
Other (please specify)

2) Select One

Visitor pressure/impacts
Effects of land uses, activities or practices (on-site or surrounding)
Invasive species
Changes to water regime
Atmospheric pollution
Climate change
Other (please specify)

3) Select One

Visitor pressure/impacts
Effects of land uses, activities or practices (on-site or surrounding)
Invasive species
Changes to water regime
Atmospheric pollution
Climate change
Other (please specify)

20b) If you selected other for any of the ranks above, please identify the rank and specify:

IDENTIFICATION OF THE WETLAND AS A RAMSAR SITE

21a) Are there signs or displays (at or near the site) that note the wetland's designation as a Ramsar Site or a Wetland of International Importance?

Yes No

Additional comments:

21b) If yes, please identify: (Please mark all that apply)

Signs at or near entrance note Ramsar designation Ramsar logo or information on outdoor interpretive signs Sign or certificate in office or visitor centre Exhibit or poster in office or visitor centre Other (please specify)

If you selected other, please specify:

Additional comments:

- 22a) Are there brochures or other publications available to the public that note the wetland's designation as a Ramsar Site or a Wetland of International Importance?
- Yes No
- 22b) If yes, please describe:
- 23a) Is the site identified with Ramsar in any other way?
- Yes No
- 23b) Please identify other tools that include the Ramsar logo or information:

(Please mark all that apply)

Letterhead

Website

Management plans

Newsletter

Workshops or clinics

Films or slide shows

Teaching resources

Tours

Other (please specify)

If you selected other, please specify:

Additional comments:

24) Do you think the Ramsar designation of the site should be better promoted?

Yes No

25a) Please rank the three most effective tools for promoting the Ramsar designation:

1) Select One

Signs or displays

Exhibits or posters

Brochures or other publications

Letterhead

Website

Management plans

Newsletter

Workshops or clinics

Films or slide shows

Teaching resources

Tours

Other

2) Select One

Signs or displays

Exhibits or posters

Brochures or other publications

Letterhead

Website

Management plans

Newsletter

Workshops or clinics

Films or slide shows

Teaching resources

Tours

Other

3) Select One

Signs or displays

Exhibits or posters

Brochures or other publications

Letterhead

Website

Management plans

Newsletter

Workshops or clinics

Films or slide shows

Teaching resources

Tours

Other

25b) If you selected other for any of the ranks above, please identify the rank and specify:

EFFECTS OF RAMSAR SITE DESIGNATION

- 26a) Do you think that the Ramsar designation helps to promote wise use of the site?
- Yes No Don't know
- 26b) If yes, please comment on how:
- 26c) If no, please comment on why not:
- 27a) Do you think that the Ramsar designation helps to maintain the ecological character of the site?
- Yes No Don't know
- 27b) If yes, please comment on how:
- 27c) If no, please comment on why not:
- 28) Has the Ramsar designation benefited any of the following: (Please mark all that apply)

Level of public awareness of the wetland

Number of visitors to the wetland

Level of scientific research on the wetland

Level of local community interest in conservation of the wetland

Level of support for protection of the site and surrounding area

Land management decisions or practices on the site

Land management decisions or practices in the surrounding area

Completion of a management plan

Level of funding for site management or operations

Level of media attention

Other (please specify)

29a) Please rank the three most valuable benefits of Ramsar designation to site management:

1) Select One

Public awareness of the wetland
Visitors to the wetland
Scientific research
Local community interest
Protection of the site and surrounding area
Land management on the site
Land management in the surrounding area
Completion of management plan
Funding for site management or operations
Media attention
Other

2) Select One

Public awareness of the wetland
Visitors to the wetland
Scientific research
Local community interest
Protection of the site and surrounding area
Land management on the site
Land management in the surrounding area
Completion of management plan
Funding for site management or operations
Media attention
Other

3) Select One

Public awareness of the wetland
Visitors to the wetland
Scientific research
Local community interest
Protection of the site and surrounding area
Land management on the site
Land management in the surrounding area
Completion of management plan
Funding for site management or operations
Media attention
Other

- 29b) If you selected other for any of the ranks above, please identify the rank and specify:
- 30) Please identify and describe any other benefits associated with Ramsar designation:
- 31) Please identify and describe any problems associated with Ramsar designation:
- 32) Please provide us with any additional comments that you would like to make concerning the Ramsar Site:

Thank you very much for your time and effort on this!