

**The Grand Codroy Ramsar Site
Newfoundland**

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III.1 The Context

What is the ecological profile of the area?

The Grand Codroy estuary is located on the west coast of the Island of Newfoundland, approximately 30 km. North of Port Aux Basques, Newfoundland. The wetland itself is 7 km long varying in width from 1 to 1.5 km and narrows to a 100 m channel at the outlet to the ocean. The tidal amplitude is approximately 1 m. Specifically, the site is principally a broad, intertidal river estuary with depths from 0 to 2 m. with deeper areas in the meandering river channel. The mouth of the estuary is separated from the waters of Searston Bay by a 1 km-long sandspit vegetated by dune grass *Ammophila* sp. The meandering river channel of the Grand Codroy occupies 15% of the area, while the remainder is a shallow, brackish wetland with flats and sandbars exposed at low tide. Portions of the intertidal area are heavily vegetated with eel grass *Zostera marina*. Thirteen small islands occur within the wetland, and the surrounding rolling upland is largely farm and open fields. (Taken from Ramsar Sites of Atlantic Canada Nov. 1994 ISBN CW 66 - 130/1994E)

What is the major value of the wetland from an environmental perspective?

The major ecosystem products are sportfishing, a local eel fishery and tourism. The main function of this wetland is as a key staging area for waterfowl in the province (could exceed 20,000 Canada Geese and Black Ducks per year) in the Atlantic Flyway of North America. It and surrounding uplands also serve as wildlife habitat for moose, muskrats and beavers. It is also renowned for its diversity of bird life relative to other parts of the island of Newfoundland. This ecosystem needs to be maintained to protect this relatively most lush and diverse estuarine wetland on the island which is fortunately in the best geographic location on the island to give its greatest benefit as a staging area and to capture vagrants lost through winds and weather systems. Some of the most important species include (in summer) the Great Blue Heron, the largest population of American Wigeon on the island, the relatively rare Northern Shoveller, the endangered Piping Plover, etc.

What is the human-environment relationship?

There has been extensive influence by the communities on this environment. The swift flowing rivers have carved deep steep sloped riversides in the fine rich soils. These river banks were originally heavily wooded, but have been harvested to make way for agriculture.

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The area was settled in the early 1800's by Scottish settlers and farmed to present day. Road construction around the total area of the wetland has caused alteration of streambeds, bridging and culvert installation which has altered the hydraulics of most of these contributing waters causing siltation to the estuary. Extensive farming up stream of the estuary has contributed most of the siltation to date. The result has been largely positive for the formation of the rich sandbars and islands which are important to the RAMSAR site.

It would be difficult to say that there has been unsustainable use of wetland resources in this area. The vegetation does not have any commercial value, per se. Nevertheless, there is potential for threats from tourism and recreational uses. The area is a regional favourite for cabin development along the shores of the estuary. Recreational boating and boating associated with the eel fishery cause a nuisance to waterfowl staging activities.

On the other hand, the wetland itself has not caused any harm to the local people. The flooding caused by spring runoff, presents some siltation problems to farmers who used the islands and deltaic areas for sheep and cattle grazing, but in total can be seen as a symbiotic relationship with a net benefit overall. Depredation by waterfowl of farming areas has not been noted as a severe issue. The future threats have to do with insensitive development of tourism and recreation. Farming activities have declined rapidly with the inability of local farmers to compete on a regional scale. The most promising of these is the dairy industry which will furnish the existing area with much needed nutrient and grazing fields for wildlife and the estuarine system.

What is the socio-economic profile of the area?

The area is predominantly rural with five communities surrounding the estuary. The total population of the area is approximately 650 people (O'Regan's/Great Codroy/Millville 200, Searston/Upper Ferry 300 and Doyles 150). A regional school has been built in the 1960s at the head of the estuary overlooking it. There is a road system around the estuary with bridges, etc. to a provincial standard which links into the Trans Canada highway only 1 mile away. The major livelihood for residents is employment outside the area by commuting each day. This is followed by farming and the ocean fishery adjacent to the site. The local people can be considered to have an average standard of living for the region. The local people are generally descended from Scottish, Irish and aboriginal stock (Micmac). There is no recognizable disparity by any parameter. The local demographic picture is one of decreasing populations. Due to the closure of the Atlantic cod fishery, many fisher people have left the area for mainland Canada temporarily or on a permanent basis.

What is the history of land ownership and management practices in the area?

Since the RAMSAR site is composed of estuarine area, islands, sandbars and freshwater wetlands with surrounding farmed and unfarmed upland sites, there are a number of land owners involved. The breakdown of land types is as follows (areas are approximate): total area 2,134 ha. including 1,109 ha of estuarine waters and marshes, 1,025 ha of uplands. The landownerships are 895 ha private ownership committed to signed conservation stewardship agreements, 134 ha NAWMP protected islands and marshes, 30 ha residential and the

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remaining 1,075 ha. is undeeded under the jurisdiction of the Province. The lands of this area are in a unique situation since it is the only areas in the province where in the 1800s the land underwater in the estuary to a depth of 1 meter (generally) has been granted to individual landowners. In other parts of the province, the land was not granted beyond the high water mark. The current RAMSAR site was originally designated as a no hunting area in 1973 under the provincial wildlife legislation at the request of local people. Their concerns were that hunting of waterfowl in the estuary was so close to the homes in the area to pose a threat to public safety. This was a tremendous measure for the re-establishment of this estuary as a sanctuary for waterfowl. Subsequently, the occurrences of vagrant and exotic species brought great attention to this area as a tourist site. In 1978 the federal government were successful in having the area declared as a RAMSAR site. The ensuing increase of cabin development caused the federal government to attempt to establish a federal bird sanctuary. Meetings were held with the local people, but the proposal was rejected by the people since they perceived that this measure would be too restrictive to the people and take control of the estuary out of their hands.

With the establishment of the Eastern Habitat Joint Venture by the North American Waterfowl Management Plan, another approach was taken. In 1991, local meetings were held to explain the interests of the partners for the conservation of the estuary and particularly the RAMSAR site. The people were asked for support and stewardship commitments for their properties. They were hesitant to participate, but reserved a decision until we could prepare a plan for their review which would demonstrate our intentions and how their commitments could contribute to the overall conservation of the site. The plan was prepared with public input and presented in draft to each household. The final document was sent to each home showing a plan and the importance of their potential contributions. Since that time, stewardship agreements have been signed with most landowners around the estuary. Key islands and wetlands have been purchased by the EHJV as they were offered by the public.

Substantive management decisions are made today by individual landowners in the interests of wetland management. The *no hunting area* still exists as it is supported by the people. Since inception of the plan various activities which may be contrary to the plan have been reported to various government agencies with regulatory responsibility such as the provincial Department of Environment for water quality and quantity problems, Department of Forest Resources for harvesting too close to streambeds, siltation etc.

The wetlands were not traditionally managed by the people of the area in any formal manner. Individual landowners abide by a local code of land ethic which has by and large over the years coincided with the provincial legislation. This management scheme worked very well for the communities and the environment. There was, however, no real test of conservation commitment since there was no industrial opportunities in the area which could threaten these habitats.

What is the political/governance context?

The provincial government is a representative parliamentary system. The Province of Newfoundland was a colony of Britain until 1949 when it joined the confederation of Canada

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by a free public vote. The local area was strongly independent throughout its history of settlement and has remained that way to a certain degree. The strongest influence is derived from community traditions. The people are very outspoken and their opinions valued by the various levels of government. To the degree that wetland management is defined here, the people are cognizant of the beauty and spiritual value of these wetlands not particularly from the international recognition rather in its part of their rural quality of life. There are no local government institutions per se, however, the provincial government has encouraged a rural development association, a regional economic board, a regional chamber of commerce and partnerships with various non-government organizations for conservation and economic development initiatives which facilitate public participation.

III.2 Involvement of stakeholders

Who has a stake in the management of these wetlands?

The management of these wetlands is important to the people of the province based on the estuaries unique lushness and diversity of bird life . To the people of the North American eastern seaboard, it is important as a geographically strategic wildbird staging (spring and fall) area for migrant species, as a relatively lush estuarine wetland on the island of Newfoundland and therefore important internationally for its singularity.

Specific entitlement to these wetlands is held by the Province, individual landowners (resident and non-resident for farming and recreational cottages, residences etc.) and the partners of the North American Waterfowl Management Plan.

The major value of the wetlands to the local people is for tourism (potential and existing), recreational boating, sportfishing and a commercial eel fishery. The value of the wetlands for the cultural heritage of the locals cannot be discounted, however, the current unemployment situation in the area may have a large influence on the people's motivation toward development opportunities. It is the feeling of the local public that the best potential for the area will be found in the promotion of the unique natural landscape of the Codroy Valley with particular emphasis on the estuary and the birds that are found there. The local Codroy Valley Area Development Association is actively seeking tourism related enterprises for the area. They see tourism as having the potential of being the major employment opportunity for the future. It is very difficult at this time to provide a figure as to how many jobs could be created. Numbers could range from 50 to 150.

The stakeholders do not meet regularly on wetland management issues. This is being addressed in recent years by the partners of the North American Waterfowl Management Plan which sponsors meetings and information exchanges among these stakeholders. The interests of these people, obviously differ and the conflicts are clearly about land use. There is great pressure for job creation to ward off the significant population decline from emigration to other provinces in search of work. As stated earlier, the differences lay in visions of conservation- minded development. The value of the wetland is recognized. The question is how to exploit it without degrading it and the traditional way of life in th area.

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Who has an active role in management?

The management of these wetlands is a provincial government responsibility under various legislations. Permits are required for any development activities in and around the estuary including sport and commercial fishing, hunting and other resource use, construction of roads, houses and other facilities, farms, businesses, clearing of land for any purposes, construction of trails, roads and operation of facilities including tourism. Recreational activities such as boating is unregulated as well as farming activities including burning of brush, disposal of waste, etc. Permitting of these activities is issued on an individual basis.

Currently, the partners of the Eastern Habitat Joint Venture (Canadian Wildlife Service, Ducks Unlimited Canada, Wildlife Habitat Canada, Province of Newfoundland and Labrador, United States Fish and Wildlife Service and United States State of Delaware have recognized the importance of instituting a management strategy for this RAMSAR site. They have caused the Grand Codroy Estuary Conservation Plan to be prepared in 1992 with the agreement and participation of local communities. This plan gives direction and expert help to the people especially the local organizations to make choices on the conservation-minded development in the area. This plan allows for a five year review and the understanding that wetland conservation will continue their cultural and rural quality of life. Agreements have been made with the EHJV partners and various landowners for 'Good Steward' conservation stewardship agreements on most of the shorelines and wetlands of the estuary. Landowners have volunteered their wetlands and islands for sale at reasonable rates to the EHJV for permanent sanctuaries.

The implementation and monitoring of the plan is the responsibility of each landowner. The ecological monitoring of the site is the responsibility of the various regulatory agencies.

As a whole the benefits are enjoyed by all stakeholders. There are no legitimate losers in this effort.

What are the crucial factors that promoted the involvement of local and indigenous communities and/or directly promoted sound wetland management (please explain)?

The crucial factors include the winning of the trust of the local people by an effective communication and coordination effort among the stakeholders. The most effective approach seemed to be a non-judgemental assessment carried on by a field crew who spent an entire summer season in the local area in the first year of the current approach. This select group headed by a person with world wide experience in conservation stewardship with the Canadian University Service Overseas (CUSO) conducted a low key door- to -door contact program, gathering local opinions and knowledge. This effort developed trust. These people spoke to the local school and community groups on the value of the wetlands and wildlife of the estuary. They offered to lead birdwatching groups and spent the time to listen to the experiences and observations of bird sightings among those amateur naturalists. A critical factor was a knowledge of local culture and traditions which was tested and proven every day in contacts with the people.

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The confidence of the people was gained by the successful demonstration of our honourable intentions. An example, landowners who offered to sell their land to this cause for below prices previously paid by us were told that we would rather pay the average price paid to others.

The most significant factor is our consistent approach to follow-up with the people. The next year we prepared a conservation plan in consultation with the people. This plan was then circulated to each household for comments with a covering letter from the local provincial government member who endorsed it- in principle- and encouraged the people to read and comment on the document.

A final document was prepared which is very readable, circulated to each household and up for public review each five years.

Of course, this work requires patience and dedication by financial supporters. We were fortunate to have this essential ingredient. The partners of the EHJV were and are behind this project 100% since the first year.

The people of the area including the local NGOs have been convinced since before the efforts of the EHJV that economic benefits should be possible from the beauty and bounty of this estuary and its wetlands. They sincerely believe that they should be able to remain in the area and make a living if these riches can be exploited sensitively and sustainably.

III.3 Results

What are the main results (costs and benefits) of local participation for the wetland ecosystem?

In the first four years of this local participation, it has become evident to local people, government officials and NGO partners that there is a stop or slow down of undesirable activities around the estuary. A proposed forest harvesting operation on the shoreline of some of these wetlands was modified through local meetings instigated by the local people in view of the conservation plan and use of EHJV advise. Key islands and sandbars have been purchased as offered by and endorsed by the people. Funding has been secured to restore island habitats during November and December 1997 for waterfowl nesting and staging. Some wetlands and surrounding wetlands have been sown this past summer with forage crops for wildlife species. This participation is furthering wise use principles under the RAMSAR convention. There have been only two known costs to the ecosystem; agreement to allow construction of a wetland trail system by locals which did not take the most advisable routes in some cases, and, the construction of a home on the shoreline which detracted from one viewscape.

What are the main results (costs and benefits) of local participation for the people involved and for management?

These efforts have caused the local people to have to work together on goals for the estuary.

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This has resulted in a reluctant effort to acknowledge the leadership of some individuals. Overall, these activities are beneficial for the future, but the cost is the loss of the traditional autonomy characteristic of the people of the five local communities.

A benefit is that various government agencies now have a platform to address wetland management issues with the local people collectively.

The resource use in the area will be sustainable by the efforts.

The public support of these wetlands has increased dramatically over the last ten years.

The management costs have increased in the area of public awareness and securement. However, costs should be manageable and will level off as local initiative increases.

As stated before, the management plan (Grand Codroy Conservation Plan) has been generated with the people and is being respected by all indications.

What are the steps proposed for the future, by the community itself and by outsiders?

Wetland management for this case will be strengthened as the surrounding communities become more aware of the uniqueness and value of this estuary for its own sake. If the people of these communities can build on their 'pride of place' as their wetland takes the public limelight in ecotourism and artistic circles, they will work on its care.

This management effort to date could be replicated in similar circumstances, but not without the financial support, selflessness and patience of interested organizations. I doubt that it could be scaled up geographically due to the negative influence which I speculate could come from the relatively disenfranchised goodwill of urbanites who would likely be taken in by a larger geographically area. Scale-up, meaning replicate in other areas through the efforts of the funding partners is definitely possible in the Newfoundland environment.

The local institutions are capable for scale-up of this effort, however, the sites for this approach have to be carefully selected since the social, cultural and economic fabric of the people in and around the wetland(s) site must be adequately understood before the first move is made, no matter how well intended the proponent.

III.4 Recommendations

These recommendations are based and confined to the experiences with respect to the Grand Codroy Estuary RAMSAR site.

1. **Local people should be involved in wetlands management.** It is necessary to have people recognize the value of the wetland for its own sake and take 'pride of place'. A management scheme so devised will intuitively elicit ownership by the people, the key ingredient to sustained wetland management.

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2. **Local people must be able to realize that non-local (regional, provincial and national) governments recognize the value of wetlands management .** The people must realize that a laissez-faire approach by locals will only result in local loss of control.
3. **Local people must be given support from interested agencies to facilitate meetings and interaction in which locals can be assured of the ‘buy-in’ of other stakeholders including landowners, residents and interested wetlands agencies.** The people must be comfortable that their openness to wetland values will not be taken as a way to take advantage of them. The building of trust requires patience.
4. **Key process steps for RAMSAR guidelines include;**
 - 4.1 Careful selection of working groups (field and office)
 - 4.2 Familiarization with social, cultural and economic parameters of local people
 - 4.3 Familiarization with the wetlands themselves
 - 4.4 Use an informal approach
 - 4.5 Commit to a plan for management based on non-judgemental assessment of past activities
 - 4.6 Commit to a plan for management based on a ‘bottom up’ construction rather than the traditional ‘top down’ approach
 - 4.7 Keep in mind that the goal is the sustained conservation of the integrity and potential of the wetlands
 - 4.8 Accept that sustained results come from slow processes
5. **Negotiation procedures**
 - 5.1 Use an approach which is locally familiar to the culture and sensitive to their politics.
 - 5.2 Take time to build trust
 - 5.3 Always demonstrate the good intentions of wetlands management
 - 5.4 Be willing to compromise
6. **Agreements**
 - 6.1 Formal and informal agreements are beneficial, but should only be introduced

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after a convincing demonstration of the benefits which will be derived by such agreements.

7. Procedures to enforce such agreements

7.1 The best enforcement is community social pressure to live up to commitments.

7.2 Legislative requirements should be strongly defended and enforced.

8. Management Institutions

8.1 Existing organizations should compliment wetlands management efforts. If they do not or are indifferent, their participation should be minimal.

8.2 The creation of such organizations should be as a result of a need identified in the planning process.

9. Monitoring and evaluation

9.1 The criteria for these measures should be based on the need to allow for growth of the consciousness of this ethic among the people of the area without compromising the goal of sustainable conservation of the RAMSAR site.