Mud Lake/Mud Creek (Proposed) Conservation Reserve

Statement of Conservation Interest

August 10, 2001

Approval Statement

We are pleased to approve this Statement of Conservation Interest for the proposed Mud Lake/Mud Creek Conservation Reserve.

The proposed Mud Lake/Mud Creek Conservation Reserve is 158 hectares in size and situated approximately 10 kilometres south of the City of Pembroke. The site provides representation of life science values and protects the Crown land portion of a provincially significant wetland.

This proposed conservation reserve is one of the 378 new protected areas approved through *Ontario's Living Legacy*, a land use strategy aimed in part, at completing Ontario's system of parks and protected areas.

This proposed conservation reserve is situated within an area of eastern Ontario encompassed by the land claim by the Algonquin Nation. The Ministry of Natural Resources and the Algonquin Nation are developing a protocol to guide discussions on a number of land use matters, including implementation of *Ontario's Living Legacy Land Use Strategy*.

The Mud Lake/Mud Creek site has unique values that would benefit from protection at this time. The values at this site may be expanded in the future with the identification of other unique values through the protocol consultation process with the Algonquins. This SCI will protect the values of this site during the consultation process.

The proposed conservation reserve will be managed under the jurisdiction of the Madawaska Area Supervisor, Pembroke District, Ministry of Natural Resources.

Ray Bonenberg District Manager Pembroke District Date

George Ross Regional Director South Central Region Date

Table of Contents

1.0 Introduction	1
1.1 Background Information	3
1.2 Targets	3 3
1.3 Survey Information	4
2.0 Values to be Protected	4
2.1 Life Science	4
2.2 Earth Science	6
2.3 Cultural	6
2.4 Recreational	6
3.0 Management Guidelines	7
3.1 Land Tenure	7
3.2 Existing/Proposed Development	8
3.3 Recreation Activities	8
3.4 Commercial Activities	9
3.5 Aboriginal Interests	10
3.6 Natural Resource Stewardship	10
3.7 Cultural Resources Stewardship	12
3.8 Client Services	13
3.9 Research	13
4.0 Implementation	13
5.0 Review and Revisions	14
	15
6.0 References	15

Figures:

1. Map of Proposed Mud Lake/Mud Creek Conservation Reserve 2

Appendices:

Appendix 1: Procedural Guideline B – Land Uses-Test of	
Compatibility	16
Appendix 2 Procedural Guideline C - Research Activities	in
Conservation Reserves	22

1.0 Introduction

The purpose of this Statement of Conservation Interest (SCI) is to identify and describe the values of the proposed Mud Lake/Mud Creek Conservation Reserve. The SCI also outlines the activities that occur within the proposed reserve and provides guidelines for the management of current and future activities, in order to protect the natural features of the site.

The proposed Mud Lake/Mud Creek Conservation Reserve is located west of Highway 17, in Stafford and Westmeath Townships, Renfrew County, approximately 10 kilometres south of Pembroke (Figure 1). The 158 hectare proposed reserve consists entirely of Crown land, made up of one parcel of land (18 hectares) in Westmeath Township and two parcels of land (21 and 119 hectares) in Stafford Township.

Conservation reserves are established by regulation under the Public Lands Act. SCI's are prepared under authority of MNR Procedural Guideline A – Resource Management Planning (PL Procedure 3.03.05).

Past Consultation

Mud Lake/Mud Creek was identified by the Great Lakes - St. Lawrence Round Table as a candidate conservation reserve during the Lands for Life planning process, February 1997 to May 1999. This conservation reserve was one of 378 new provincial parks and conservation reserves which the government of Ontario announced its intention to regulate with the July, 1999 release of *Ontario's Living Legacy Land Use Strategy (LUS)*. The *LUS*, in addition to identifying the proposed new parks and conservation reserves, identifies permitted uses and sets out land use intent for the sites. The three provincial Round Tables heard from a total of 15,000 citizens during the Lands for Life process. Discussions also occurred between the forestry industry, the Partnership for Public Lands (an environmental coalition) and MNR resulting in the "1999 Ontario Forest Accord". *The Proposed Land Use Strategy*, March 1999 generated 8,200 submissions and resulted in a number of revisions. A notice was placed on the Environmental Bill of Rights Registry on four separate occasions during the planning process.

Prior to the finalization of the boundaries of proposed Mud Lake/Mud Creek Conservation Reserve, Pembroke District staff sent out boundary consultation packages on November 12, 1999 to potentially affected stakeholders (such as adjacent landowners, resource users, municipalities and interest groups and organizations), inviting comment on the proposed boundaries. Boundary consultation packages were sent out to provincial interest groups and organizations by Regional staff. Additionally public notices were placed in local newspapers during this period.

1.1 Background Information

Name	Mud Lake/Mud Creek Proposed Conservation	
	Reserve	
Site Region / Site District	5E 12/6E 16	
Ecosite class	SWD-6, MAS-3, FOM	
OMNR Administration Region/District/Area	South Central / Pembroke / Madawaska Area	
Total Area (ha)	158 ha	
Regulation Date	pending	
First Nations with Interest in Area	Algonquins	
OBM	10 18 3400 50600	
	10 18 3400 50650	
Lat./Long.	77°02'/44°	
Basemap	456771	
FRI Stands	Stand No. 54, 55, 56, 57, 58, 102,104,109,111 and	
	112	
General Location Description	Part of Mud Lake/Mud Creek Provincially	
	Significant Wetland, west of highway 17, in	
	Stafford and Westmeath Townships, Renfrew	
	County, approximately 10 kilometres south of	
	Pembroke.	
Access	Portions of the proposed Conservation Reserve on	
	Muskrat River as well as the water of the portion	
	where Mud Creek joins Mud Lake are accessible by	
	boat or canoe.	

1.2 Targets

This section summarizes earth, life, cultural and recreational values.

Life Science Representation	While the site contributes to the life science representation of Site Region/District 6E 16 (formerly 5E 12), it primarily serves to provide protection of a provincially significant wetland, with numerous special features.
Earth Science Representation	Does not contribute to provincial earth science representation targets.
Cultural Resource Representation	No known cultural resources on site. Records indicate that a wide range of Aboriginal cultures have utilized the surrounding area in the past. Additionally, there is evidence of early European settlement in the surrounding area. Mud Lake is presently utilized by Natives for wild rice harvesting.
Recreational Opportunities	Opportunities e xist for day use activities, wildlife viewing, wild rice harvesting, hunting and fishing.

1.3 Survey Information

Survey Level	Life Science	Earth Science	Cultural	Recreational	Other
Reconnaissance	Field inventory, autumn 2000 (Hiscock et all, 2000; Davis and Jessup, 2000 and Davis et al. 2000)	Frey and Duba, 2000	no	Jessup and Davis, 2000	Wetland evaluation Buckland and Beaudette, 1985
Detailed	no	no	no	no	no
Requirement	no	no	no	no	no

This section provides an overview of the inventories completed, their level of detail and any further inventories required.

2.0 Values to be Protected

This section provides a description of the key natural heritage values on the site and their condition relative to past resource use and management activities. It also addresses the site's sensitivity to future land use and management activities.

2.1 Life Science

Wetland Values

The proposed conservation reserve protects approximately 15% of the provincially significant Mud Lake/Mud Creek Wetland. Nine of the 14 swamp vegetation communities and two of the five marsh vegetation communities identified in the wetland evaluation (Bucklands and Beaudette, 1985) are represented in this site.

Forest Values

The 1999 Forest Resource Inventory indicates that the portion of the site along the Muskrat River has two stands which are predominately soft maple (it has not been determined if this is red, silver or a hybrid) with a smaller component of black ash, tamarack, and white birch. Also found in this area is a site which is predominately poplar with a smaller soft maple and black ash component. The portion of the site which is found at the south of Mud Lake where Mud Creek enters, is predominately soft maple with black ash and poplar.

In the portion of the site which runs from Ross Road to the intersection of Ross Road and 3^{rd} Line, there are some areas which are outside the wetland boundary. These include developed agricultural land, pasture land, alder, and three forested portions. On the east side of the site, there is a cedar/black ash stand, while on the west there are two mixed stands consisting of white spruce, black ash, balsam, poplar, and cedar.

Wildlife

The Mud Lake wetland complex is one of the most important breeding and staging areas for waterfowl in this part of the Ottawa Valley (OMNR 1990), and is also excellent roosting habitat for ducks (Boos et. al. 1997).

During the 2000 Airboat Duck Banding project, Mud Lake was one of the most successful banding locations, with 196 ducks banded in a single night. Species that have been banded at Mud lake since the project began in 1996 include: mallard duck (*Anas platyrhynchos*), wood duck (*Aix sponsa*), blue-winged teal (*Anas discors*), American black duck (*Anas rubripes*), green-winged teal (*Anas conservation reserveecca*), northern shovellor (*Anas clypeata*), ring-necked duck (*Aythya collaris*), northern pintail (*Anas acuta*), and hooded merganser (*Lophodytes cucullatus*).

Other animal species present in the area include deer, grouse, hare, woodcock, snipe, porcupine, raccoon, red squirrel, beaver, and muskrat, as well as numerous species of birds, reptiles and amphibians.

The Mud Lake area is utilized for the MNR Pembroke District Bullfrog Monitoring Project because it has one of the largest bullfrog (*Rana catesbeiana*) populations in the District. The area is also an excellent location for viewing species of dragonflies and many other insects.

Fisheries

Given that Mud Lake has a maximum depth of 1.5 metres, the entire lake is a littoral zone providing fish with important spawning areas, rearing habitat, food and shelter.

Although no fish inventory projects have been undertaken on Mud Lake, they have been conducted 4 kilometres upstream at Muskrat Lake, and it can be assumed that fish which are present in Muskrat Lake will be present in the Muskrat River and Mud Lake (with the exception of coldwater species). At least 17 species of fish are presumed to exist in Mud Lake/Creek, including smallmouth bass, largemouth bass, rock bass, pumpkinseed, walleye, common white sucker, silver redhorse, yellow perch, longnose gar, channel catfish, shorthead redhorse, black conservation reserveappie (Borne, 2000), muskellunge, bluntnose minnow, spottail shiner, logperch, johnny darter, Iowa darter, banded killifish, and golden shiner (Van Es 1996).

Special Features

Provincially significant species known to breed at Mud Lake include river otter (Gorman in Buckland and Beaudette 1985) and black tern (S5) (Bouvier in Buckland and Beaudette 1985). Regionally significant species for Site Region 5 known to occur in Mud Lake/Mud Creek wetland include northern pintail (Levoy in Buckland and Beaudette 1985), marsh wren (Gorman in Buckland and Beaudette 1985), willow flycatcher and northern shoveller (Rosien 2000).

There are no known provincially significant plant species in the Mud Lake/Mud Creek wetland. The only known regionally significant plant species is Clinton's woodfern, *Dryopteris clintoniana* (Hiscock et al 2000).

2.2 Earth Science

Frey and Duba (2000) detail that the proposed Mud Lake/Creek Conservation Reserve is a flat wetland, devoid of bedrock exposure. Its underlying bedrock is probably Paleozoic limestone, regionally surrounded by older metamorphic rocks of the Grenville Province.

The Grenville Province is the product of thrusting and imbrication of the crust to the northwest as it collided with a continental landmass to the southeast. The Grenville Orogeny, circa 1140 to 1070 million years ago, culminated more than 500 million years of crustal evolution. The eroded roots of the products of these events are displayed in the complexly metamorphosed and deformed rocks of the region.

Because of the absence of exposed bedrock in the proposed Mud Lake/Creek Conservation Reserve, the reserve has no geological significance to Ontario's protected area system.

2.3 Cultural

None identified on site, although known to be present in surrounding area.

2.4 Recreational

Seventeen species of fish are believed to occur in Mud Lake and Muskrat River. It is known that of these northern pike, brown bullhead and bass are heavily fished.

Mud Lake is a popular waterfowl hunting location, accounting for 500 to1000 hunter days each fall (OMNR 1990). Small game hunting occurs in the area including grouse, hare, woodcock and snipe. Deer hunting occurs in the surrounding area and likely occurs on the proposed conservation reserve property in the southern portion of the site.

Bullfrog harvests for personal use, occur in Mud Lake. While a commercial bullfrog harvester historically operated in Renfrew County, commercial harvests are no longer permitted provincially owing to concern over the viability of bullfrog populations throughout Ontario.

This is also an area that naturalists, specifically the Pembroke and Area Field Naturalists, regularly visit in the spring and fall to observe migratory aquatic birds.

3.0 Management Guidelines

The following topics briefly describe the existing situation followed by the management guidelines to be implemented or continued.

3.1 Land Tenure

Background

The proposed Mud Lake/Mud Creek Conservation reserve consists entirely of Crown land.

An existing Land Use Permit for "animal rearing" in Part 3 of the proposed conservation reserve is due to expire at the end of 2001 and it will not be renewed.

An easement for a hydro line transmission right of way runs parallel to Stafford 3rd line (Part 3). A Bell Telephone right of way easement exists along the east boundary of Part 2 of the proposed conservation reserve.

A number of land owners have approached MNR with offers to sell properties adjacent to the proposed conservation reserve.

Guideline

Land within the conservation reserve will not be sold or leased. Lands which would enhance the proposed conservation reserve by adding to the area of provincially significant wetland, or by providing buffers to the proposed conservation reserve, may be purchased if funding and/or contributing partners become available.

The existing agricultural land use permit is due to expire at the end of 2001 and will not be renewed.

MNR staff will review agricultural use of that portion of the proposed conservation reserve along the western boundary of Part 3 and take necessary action to protect natural heritage values.

The two utility easements will be permitted to continue. Expansion of utility line rights of way may be permitted to meet essential public service needs. New transmission lines, pipelines, highways, and road corridors will be discouraged. Before disposing of proposed conservation lands for these purposes, the Ministry of Natural Resources will work closely with proponents to ensure that all reasonable alternatives have been considered and impacts on heritage values are minimized.

3.2 Existing and Proposed Development

Background

No development currently exists on site, nor is any planned. Access to the proposed Mud Lake/Mud Creek Conservation Reserve is limited. Portions of the site can only be accessed by boat, canoe or by foot across private land. A considerable amount of garbage has been dumped on the site in Part 3 adjacent to Ross Road.

Guideline

There is no intention at this time to improve site development (e.g. facilities, trails) or access. No new roads will be permitted.

Any new uses in the conservation reserve will be subject to Procedural Guideline B – Test of Compatibility (Appendix 1).

Household garbage along Ross Road should be picked up and disposed of properly. The posting of signs to discourage this use of the area will be considered if funding is available.

3.3 Recreational Activities

Background

Mud Lake is a popular waterfowl hunting location, accounting for 500 to1000 hunter days each fall (OMNR 1990). Small game hunting occurs in the area including grouse, hare, woodcock and snipe. Deer hunting occurs in the surrounding area and is likely occurring within the proposed conservation reserve property in the southern portion of the site. Bullfrog harvests for personal use, occur in Mud Lake.

Both Mud Lake and the Muskrat River are heavily fished for northern pike, brown bullhead and bass (smallmouth, largemouth, rock).

There is no access road to the proposed Mud Lake/Mud Creek Conservation Reserve. Portions of the site can only be accessed by boat, canoe, or by foot across private land. Boats work well for accessing the northern part of the proposed conservation reserve (Part 1) and when water levels are high, boats can also be used for accessing Mud Lake. Mud Lake's maximum depth is only 1.5 metres and is very weedy, so a canoe works better, although eve n with a canoe it would probably not be possible to access the land portion of Part 2 from the lake due to very shallow water and very mucky bottoms in this area. Air boats are utilized in Mud Lake, during the wild rice harvest

Canoeing up Mud Creek to Part 2, by launching at the Stafford 2nd Line crossing, is the only access which does not involve crossing private land. Part 3 of the proposed conservation reserve is accessible by canoe from the Stafford 3rd line for a short distance

but is not easily accessible from the Ross Road by canoe. However, in Part 3 the site can be accessed along the edges of the wetland by foot.

Mud Lake/Mud Creek is utilized for both wildlife viewing and general nature appreciation by local naturalists. The area has also been used by the Pembroke and Area Field Naturalists Club for various outings.

The Algonquin Native community harvests wild rice on Mud Lake. While the area has been commercially harvested within the past 20 years, it is unknown if any non Natives harvest wild rice.

There are no snowmobile trails on the site, although a Trans-Ontario Provincial Trail System (TOPS) trail passes very close to the western boundary on Ross Road. The area is utilized for off-trail snowmobiling, although there is no information on the extent of this use.

The Mud Lake/Mud Creek area is utilized for cross country skiing and snowshoeing, although there is no information on the extent of this use.

Guideline

Traditional recreational uses of Mud Lake/Mud Creek are permitted to continue provided these uses do not negatively impact upon the ecological values and features of the proposed conservation reserve. Permitted activities include wildlife viewing, hunting, fishing, walking, snowshoeing, cross country skiing and boating.

Conservation Reserve Policy provides that off-trail snowmobiling is only permitted for direct retrieval of game. This activity will be monitored in the proposed conservation reserve to determine if there are any impacts to natural heritage values.

Any new uses will be subject to Procedural Guideline B – Test of Compatibility (Appendix1).

3.4 Commercial Activities

Background

The proposed conservation reserve is part of both a registered fur harvesting trapline and a commercial baitfish block.

Guideline

Fur harvesting and commercial bait fishing will be permitted to continue, provided they do not an adverse impact upon the values being protected in this area. New licences or transfers of these licences will be considered on a case by case basis and subject to Procedural Guideline B – Test of Compatibility (Appendix 1).

Conservation reserves do not permit commercial forestry, hydro development, the extraction of aggregate and peat or other industrial uses (Public Lands Act, Ontario Regulation 805/94). Other new commercial activities must meet the requirements of the *Land Uses Test of Compatibility* (Appendix A).

The *Ontario's Living Legacy Land Use Strategy* provides that controlled mineral exploration is permitted in specific new conservation reserves that have been identified as having provincially significant mineral potential. This mineral resource assessment has not yet been undertake and it is uncertain what is the mineral potential of the Mud Lake/Mud Creek area. If mineral values are such that a site is to be developed for a mine, that area would be deregulated from the conservation reserve and an appropriate replacement area would be added.

3.5 Aboriginal Interests

Background

The proposed conservation reserve is located within the land claim area of the Algonquin Nation. Wild rice is harvested from Mud Lake by local Algonquins. Algonquins also utilize the area for hunting and fishing.

Guideline

The Mud Lake/Mud Creek site has unique values that would benefit from protection at this time. The values at this site may be expanded in the future with the identification of other unique values through the protocol consultation process with the Algonquins.

Wild rice harvest will be permitted to continue providing that it is carried out in a sustainable manner and does not negatively impact the resource. Hunting and fishing are also permitted uses in proposed conservation reserves.

3.6 Natural Resources Stewardship

3.6.1 Vegetation Management

Guideline

The proposed conservation reserve will be managed by allowing natural ecosystems, processes and features to operate normally, with minimal human interference.

Conservation reserve policy states that forest fire protection will be carried out as on surrounding public lands, unless it is determined through management planning that another approach should be undertaken. It is unlikely that fire will occur in this wetland,

but if it does, Pembroke District MNR has a policy of aggressively suppressing all fires. MNR would appropriately respond to any fire as per policy or municipal agreements at any such time.

Programs may be developed to control forest insects and diseases in the proposed conservation reserve where these threaten significant heritage, aesthetic, or economic values. Where control is desirable, it will be directed as narrowly as possible to the specific insect or disease. The methods selected will be subject to Procedural Guideline B - Test of Compatibility (Appendix 1)

Vegetation control will be permitted where necessary for maintenance of public utilities and rights of way.

3.6.2 Fish and Wildlife Management

Background

The proposed conservation reserve is situated within Wildlife Management Unit 59 where deer hunting is permitted, as well as small game and waterfowl. The area is popular for angling. The area is part of a registered fur harvesting trapline and part of a commercial baitfish block.

Ontario's Living Legacy Land Use Strategy (LUS) identifies Mud Lake/Mud Creek as an area that may be appropriate for habitat improvements by such partners as Ducks Unlimited.

The LUS also indicates that MNR will work with the municipality and private landowners on protection of the private land portion of the wetland.

Guideline

Hunting and fishing within the proposed conservation reserve will be guided by the relevant Ontario hunting and fishing regulations. Fur harvesting and baitfishing will be managed through the current licencing system.

Any wetland habitat alterations would be reviewed on a case by case basis, with consideration given to protection of natural heritage values, MNR's environmental assessment responsibilities and provincial conservation reserve policy

MNR will work with municipalities and private landowners to protect private land portions of the provincially significant wetland, through land tax incentives, costewardship opportunities and through municipal land use planning. Landowners with property in the provincially significant wetland are eligible for the Conservation Land Tax Incentive Program, providing they agree to protect the natural heritage values of their property. Protection of the wetland can also be promoted by municipal consideration of the Planning Act's Provincial Policy Statements within planning documents and through development review.

Invasive species which are deemed to threaten the natural heritage values of the proposed conservation reserve will be managed using acceptable and approved controls which protect natural heritage values and subject to Procedural Guideline B – Test of Compatibility (Appendix 1)

3.6.3 Landscape

Background

Mud Lake/Mud Creek proposed Conservation Reserve is part of a provincially significant wetland (Mud Lake/Mud Creek Wetland) completely surrounded by farmland. Run-off from surrounding farms can result in dramatic changes in the nutrient content of the water, especially when runoff contains high levels of nitrogen. This can accelerate the eutrophication process resulting in increased aquatic plant growth, reduction in dissolved oxygen loss of habitat for plant, animal and fish species.

Guideline

On the proposed conservation reserve, property activities that alter the natural function of the wetland will be restricted. MNR will work with the municipal land use planning system, the Conservation Land Tax Incentive Program and through cooperative co-stewardship and education initiatives to encourage protection of private land portions of the wetland and protection of Crown land portions from adjacent impacts.

3.7 Cultural Resources Stewardship

Background

The protection and conservation of cultural heritage resources is governed by the Ontario Heritage Act and administered by the Ministry of Citizenship, Culture and Recreation. There are no cultural/historic features and archeological features identified on site although Aboriginal and historical values have been identified near the site.

Guideline

Interested partners with the appropriate qualifications will be encouraged to undertake inventories and studies of the area, consistent with Procedural Guideline C Research Activities in Conservation Reserves (Appendix B). The specific location of cultural heritage sites will be kept confidential to protect the resources.

3.8 Client Services

Background

Client services (such as interpretation, access and signage) have been non-existent to date. A background information fact sheet has been developed for the site.

Guideline

The focus will be on low key management and self interpretation of area values and features. Signs which identify the proposed conservation reserve will be considered. Partners may be sought to co-develop a brochure highlighting this and other conservation reserves in the area, if funds become available. Educational uses which do not impact on the values of the site will be encouraged. There are no plans at this time to develop additional client services or facilities (e.g. access point, trails).

3.9 Research

Background

The Ministry has ongoing bullfrog monitoring and duck banding research projects in Mud Lake. There are no other known research projects.

Guideline

MNR's ongoing bullfrog monitoring duck banding research programs are expected to continue.

All research will be conducted consistent with Procedural Guideline C – Research Activities in Conservation reserves (PL Procedure 3.03.05) (Appendix 2). Research will be encouraged by a qualified individual or group to provide a better understanding of Mud Lake/Mud Creek's natural values and which advances the protection, planning and management of Mud Lake/Mud Creek. The researcher will submit copies of reports, publications and theses following the results of the project to the MNR Area Supervisor.

4.0 Implementation

Administrative responsibility for this proposed conservation reserve belongs to the Madawaska Area of Pembroke District, Ministry of Natural Resources. The Area Office will continue to be the custodian for the area and as appropriate will seek partnerships to assist with the care of the site.

Implementation priorities include:

• working with adjacent property owners and municipalities to encourage the protection of natural heritage values of the Provincially Significant Wetlands;

- low key monitoring of the impacts of human activities upon the values within the conservation reserve;
- consideration of the posting of conservation reserve boundaries signs, including information about any restricted activities;
- encouraging research and co-stewardship opportunities through cooperative partnerships; and,
- taking advantage of opportunities to expand the protected area of the proposed Conservation Reserve by considering purchase of neighboring wetland properties by MNR and/or partners.

5.0 Review and Revisions

The Mud Lake/Mud Creek proposed Conservation Reserve Statement of Conservation Interest will be reviewed on an ongoing basis.

If changes are required to this SCI, they will occur through a standard process of minor and major amendments. Minor amendments will be processed in a relatively informal manner and will require the approval of the Area Supervisor. These amendments will deal with uses and activities that do not affect any of the policies in this SCI, such as new uses and/or activities that are consistent with existing uses.

Uses and/or activities which were not anticipated in the approved SCI and which have the potential to adversely impact the values of the conservation reserve, will require a major amendment. Such an amendment will include an opportunity for public consultation and will require the approval of the District Manager and Regional Director.

6.0 References

- Boos, John. Borne, Greg. Wilson, Barrie. and Davies, J. Chris. 1997 <u>Ontario Airboat</u> <u>Duck Banding Project, 1997</u> Ontario Ministry of Natural Resources, Pembroke District.
- Borne, Greg. 2000 <u>Nearshore Community Index Netting of Muskrat Lake in the Late</u> <u>Summer of 1999</u>, Ontario Ministry of Natural Resources, Pembroke District.
- Buckland, L. and Beaudette, S. 1985 <u>Mud Lake/ Mud Creek Wetland Evaluation</u>, Ontario Ministry of Natural Resources, Pembroke District.
- Frey, Edward and Duba, Daria. 2000 <u>Earth Science Report C59 Mud Lake/Creek</u> <u>Conservation Reserve</u>, Ontario Ministry of Natural Resources, Southcentral Region, Peterborough.

Haxton, Tim 1999 <u>A Progress Report on Bullfrog Monitoring in Pembroke District for</u> <u>1998.</u> Ontario Ministry of Natural Resources, Pembroke District.

Ontario Ministry of Natural Resources 1990 <u>Review and Recommendations for the</u> <u>County Dam on the Muskrat River</u>, Pembroke District.

Ontario Ministry of Natural Resources 1999 Ontario's Living Legacy Land Use Strategy

- Ontario Ministry of Natural Resources, <u>Conservation Reserve Policy PL 3.03.05</u>, Lands and Natural Heritage Branch, Peterborough.
- Rosien, Darwin. 2000 Species and ages of ducks banded at each location during the Ontario Airboat Duck Banding Program, Ontario Ministry of Natural Resources, Pembroke District.
- Van Es, Corey. 1996 <u>Muskrat Lake Roving Creel Survey Report Summer 1996</u>, Ontario Ministry of Natural Resources, Pembroke District.

APPENDICES

Appendix 1: PROCEDURAL GUIDELINE B - LAND USES - TEST OF COMPATIBILITY

The Conservation Reserve policy provides broad direction with regard to the permitted uses. The policy provides <u>only an indication</u> of the variety of uses that will be considered acceptable in conservation reserves. The only caution is that **"any new uses, and commercial activities associated with them, will be considered on a case by case basis, and, they must pass a <u>test</u> <u>of compatibility</u> to be acceptable." What does a 'test of compatibility' mean?**

An examination of this must start from the premise of why an area is set aside - specifically, its representative natural heritage values. Criteria are then identified to guide compatibility considerations. These criteria apply to the long term acceptability of both existing uses and new uses.

1. Conformity to SCI/RMP: SCI describe values for which an area has been set aside and the range of appropriate uses that will be permitted in the area. SCI may also speak to the acceptability of other 'new' uses currently not occurring in the area.

The first 'test' is: "do proposed new land uses and/or commercial activities conform to the direction of the SCI/RMP for the conservation reserve? Would the new use(s) depart from the spirit of appropriate indicator land uses in the SCI/RMP?"

- **2. Impact Assessment**: If the proposed use(s) pass test one it is important to determine their impact on the area before they are approved. This should include the following:
 - impact on **natural heritage values**: "will the new use(s) impact any natural values in the area? If so how and to what degree? Is it tolerable?"
 - impact on **cultural values**: "will the new use(s) impact any historical or archaeological values in the area?"
 - impact on **research activities**: "will the new use(s) affect any research activities in the area?"
 - impact on **current uses**: "will the new use(s) have any negative impact on the array of current uses?"
 - impact on **area administration**: "will the new use(s) increase administrative costs and/or complexity?" (For example, the cost of area monitoring, security and enforcement).
 - impact of **accommodating the use outside** the conservation reserve: "Could the use(s) be accommodated as well or better outside the conservation reserve?"

- impact on **socio-economics of the area**: "will the new use(s) affect the community(ies) surrounding the area in a positive or negative way?" (For example, will the new use make the area less remote thereby affecting a local tourism industry that is dependent on the area's remoteness for its appeal)?
- impact on **area accessibility**: "does the new use(s) give someone exclusive rights to the area or a portion of the area to the exclusion of other existing uses?"

The following table provides a guide of **indicator uses** for the consideration of uses that may be permitted within conservation reserves. For any specific conservation reserve the test of compatibility should be applied to determine which specific uses are acceptable.

ACTIVITY	Permitted? Y = Yes, N = No, M=Maybe			
	Existing	New		
RECREATION	RECREATION			
Sport fishing	Y	Y		
Sport hunting	Y	Y		
Food Gathering	Y	Y		
Facility infrastructure	М	М		
Non-trail Snowmobiling	M^1	M^1		
Non-trail ATV use	M ¹	M^1		
Rock climbing/caving	М	М		
Canoeing/kayaking	Y	Y		
Motorized boating	Y	Y		
Picnicking	Y	Y		
Camping	М	М		
Trails: Hiking	Y	М		
X country ski	Y	М		
Cycling	Y	М		
Horse riding	Y	М		
Snowmobiling	Y	М		

INDICATOR USES FOR CONSERVATION RESERVES

¹ for retrieval of game only

ACTIVITY	Permitted? Y = Yes, N = No, M = Maybe				
	Existing	New			
SCIENCE, EDUCATION & HERITAGE APPRECIATION					
Research	Y	Y			
General Walking	Y	Y			
Photography & Painting	Y	Y			
Wildlife Viewing	Y	Y			
Outdoor Education/Interpretation	Y	Y			
Collecting	Ν	Ν			
COMMERCIAL ACTIVITIES					
Food harvesting	М	М			
Fishing	М	М			
Baitfish harvesting	Y^2	М			
Trapping	Y^2	М			
Trap cabins	Y	Ν			
Resort - outpost camp	Y ²	Ν			
Outfitting - bear management	Y ²	Ν			
Wild rice harvesting	Y	М			

INDICATOR USES FOR CONSERVATION RESERVES

² Transfer requests will be considered in the context of the Statement of Conservation Interest or Resource Management Plan for each Conservation Reserve.

ACTIVITY	Permitted? Y = Yes, N = No, M = Maybe				
	Existing	New			
RESOURCE MANAGEMENT	RESOURCE MANAGEMENT				
Inventory Monitoring	Y	Y			
Featured Species Management	М	М			
Natural Systems Management	М	М			
INDUSTRIAL ACTIVITIES					
Timber harvesting	N	Ν			
Prospecting	N	Ν			
Mining	N	Ν			
Hydro generation	N	Ν			
Energy transmission corridors	Y	Ν			
Communication corridors	Y	Ν			
Transport corridors	Y	Ν			
Resource roads (MNR) OTHER ACTIVITIES	Y	Ν			
Land disposition	*	Ν			
Hunt camps	Y ³	Ν			

³ Transfer requests will be considered in the context of the Statement of Conservation Interest or Resource Management Plan for each Conservation Reserve.

^{*} Existing dispositions will continue, however, as opportunities arise the Ministry will acquire and/or remove them outside the Conservation Reserve.

Appendix 2: **PROCEDURAL GUIDELINE C - RESEARCH ACTIVITIES IN CONSERVATION RESERVES**

Purpose

To encourage contributions to the goal of conservation reserves by:

- . providing direction for research activities associated with conservation reserves; and
- . establishing a process for the review and approval of proposals by researchers, which could have an impact on the values protected by the conservation reserve.

Definition

<u>Research</u> means any investigation or study of the natural, cultural, social, economic, management or other features or characteristics of conservation reserves.

Guidelines

Research will be encouraged to provide a better understanding of the natural values protected by a conservation reserve and to advance their protection, planning and management.

The Statement of Conservation Interest will define, for each conservation reserve, the key research issues, set out the parameters within which research may occur and identify research needs.

Applications and Approvals

Researchers must apply in writing to the Area Supervisor for permission to conduct research. The request letter must contain a statement explaining why the proposed research should be undertaken in the particular conservation reserve in preference to another location.

Proposals will be reviewed and approved by the Area Supervisor, guided by the Statement of Conservation Interest prepared for each reserve (see GUIDELINE 1 - RESOURCE MANAGEMENT PLANNING) and using GUIDELINE 2 - LAND USES - TEST OF COMPATIBILITY. Permission must be granted in writing, including any conditions to be met in conducting the research, prior to the undertaking of any research project.

Terms and Conditions

Permission to conduct research under this policy will be valid for a period of 12 consecutive months from date of issue. Permission to continue a research project for additional periods of 12 months or less may be granted upon submission of a written request and progress report. The Ministry may require the posting of collateral to assure that the terms and conditions of granting permission are met.

The Area Supervisor may suspend or revoke permission at any time for failure on the part of the researcher to meet:

- 1. The intent or conditions of this policy.
- 2. The requirements under the Public Lands Act, including all amendments, where applicable.
- 3. The requirements under any other Act or Regulations of Ontario or Canada, including those governing the taking, handling, storing, confining, trapping, excavating and marketing any specimen, artifact, information or action (for example, scientific collector's permit).
- 4. The conditions and agreements specified in granting permission.

Final Report

The researcher will submit copies of reports, publications and theses following from the results of the project to the Area Supervisor.