Clear Lake Conservation Reserve

Statement of Conservation Interest

(Revised June 14, 1999)

Prepared By Moroz Consulting Limited

For

Ministry of Natural Resources Lands and Natural Heritage Branch Peterborough, Ontario

Approval Statement

I am pleased to approve this Statement of Conservation Interest for the Clear Lake Conservation Reserve. The Reserve is important because of its extensive old growth Hemlock forests, small watersheds with cold water fish species, reference lake for acid rain research, a suspected meromictic lake and as a base for an array of ongoing forest ecosystem research.

This Statement of Conservation Interest will provide guidance for the management of the conservation reserve and the basis for the ongoing monitoring of activities. More detailed direction is not anticipated at this time.

Prior to the preparation of this statement the public was widely consulted and very supportive of the protection of this area. This input has been most useful in the preparation of this statement and its direction for the area.

However, should significant facility development or other uses be considered or complex issues arise, requiring additional studies, more defined management direction, or special protection measures, then a detailed Conservation Reserve Management Plan will be prepared with full public consultation.

Reviewed by District Manager Bancroft District

Approved by Regional Director Southcentral Region

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Introduction

The purpose of this Statement of Conservation Interest (SCI) is to identify and describe the values of the Clear Lake Conservation Reserve. The SCI also outlines the activities that occur within the reserve and provides guidelines for the management of current and future activities while protecting the natural and cultural values of the reserve.

The Clear Lake Conservation Reserve is located within the Leslie M. Frost Resource Management Centre (LMFRMC) lands in the Townships of Sherborne and Stanhope and in the County of Haliburton. The reserve consists entirely of crown lands with isolated pockets of private cottage lands along the shores of Clear Lake and the boundary lakes being excluded. Lands to the north, west and south are crown owned and lands to the east are privately owned (Figure 1).

Conservation Reserves are established by regulation under the Public Lands Act. SCI are prepared under the authority of Procedural Guideline A – Resource Management Planning (PL Procedure 3.30.05)

1.1 Background Information

The Clear Lake Conservation Reserve has a long history of support for its protection. Various researchers have documented the area's natural values since 1965. This has included forest ecology, limnology, forest growth, forest old growth and paleoecology. Cottagers on Clear Lake have also been concerned about the long-term protection of the area and have supported its designation. In 1990 Loucks, on behalf of scientists that had worked in the area, approached the Ministry with a request that the area be set aside for the continuation of natural area research activities (Loucks, 1990).

In 1990 the ministry undertook studies to identify natural heritage representation requirements within the whole of Site District 5E-9 and the Clear Lake area was identified as containing a significant, representative old growth hemlock forest. More detailed inventory work between 1990 – 1995 confirmed the old growth and other values and delineated firm boundaries for the area.

The reserve area was proposed for protection in 1994 and public meetings were held through the local Forest Management Planning process in September 1994 and August 1995. Public input through this process generally supported the protection of the area provided that existing uses were permitted to continue. The government accepted these conditions and the area was regulated a conservation reserve in June 1997.

Name	Clear Lake Conservation Reserve
Site Region/District	Georgian Bay 5E-9
OMNR Administrative Region/District/Area	Southcentral Region/Bancroft District/Minden Area
Total Area (ha.)	1308.0
Regulation Date	June 25, 1997 Ontario/Reg. 259/97, Schedule 9
First nations	Williams Treaty First Nations and Curve Lake First Nation
OBM map sheets	1017675050000, 1017675050050, 1017680050000 1017680050050
UTM coordinates	

1.2 Representation

Earth science representation:

Bedrock

Grenville Province - Central Metasedimentary Belt Boundary Zone (CMBBZ)

- Clastic siliceous metasediments

- Calcareous metasediments (marble)

features

- fault scarp

- marble outcrops

- skree slopes

Surficial

glacial features - ground moraine, glaciofluvial sediments

Possible meromietic lake - Blackcat

five small watersheds

Life science representation:

Situated on landform Ia-37 (moderately broken shallow sandy till uplands with bare bedrock exposures) the area includes an array of mature ('old') forest vegetation associations – hemlock, hard maple, hard maple/hemlock/yellow birch, white pine, red oak/hemlock, other species and wetlands.

'old growth' (121+ yr.) hemlock stands (34.6%) - provincially significant in site district 5E-9 areas of white pine and sugar maple old growth (5.4%) further enhance values.

These forests provide habital for species such as red-shouldered hawk, pine martin and pileated woodpecker

Other features: five natural, undisturbed watersheds, a possible meromictic lake, a possible 'pure' population

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of Northern Redhelly Dace, a cold-water population of fish and an area of long-term ecological research emphasis.

Cultural Resources Representation:

Archaeological site Nunikani falls (Ross, 1980); potential native encampment site at the start of the portage to Cat Lake (Ballantine, 1999); artifacts (clay pottery and arrowheads) suggest site is Algonkian (400 –500) years old); site contains the remains of an logging camp (MacDonald, 1999); other remnants of the logging era on nearby lakes (Stevens, 1974).

Recreational Opportunities:

No specific studies have been undertaken to date. The area can accommodate upland and waterfowl game hunting, hiking, wildlife viewing, canoeing, backcountry camping, cross-country skiing, snowshoeing, snowshoeing, snowshoeing, fishing (summer and winter) and nature education.

1.3 Survey Work

Survey Level	Earth Science	Life Science	Cultural	Recreational	Other
Reconnaissance	LMFRMC, Cordiner, 1974	LMFRMC, Simpson & Simpson, 1974	LMFRMC, historic study, 1974	None	None
Detailed	Geology map of LMFRMC, 1984	Forest vegetation, Pella-Keen, 1994; Limmology, 1970; Forest growth, 1969+	None	None	None
Requirement	Revised reconnaissance inventory	Detailed vegetation inventory	Detailed historic & archaeological inventory	Study of use/impacts	Consolidation of research work

3. Values to be protected

The values include earth science, life science, cultural resources and recreational resources. The life sciences are the key values to be protected within the reserve. Recreational values encourage use and pose management challenges in the long run.

2.1 Earth science:

Earth science values are focussed on features (bedrock and surficial) that represent the chronology of earth history in the province (Cordiner, 1974; Easton, 1992).

a) Bedrock: The reserve is located within the Fishog Domain, Algonquin

Terrane, Grenville Province, Central Metasedimentary Belt Boundary Zone (CMBBZ).

The CMBBZ represents a narrow zone of thrusting during the collision of two continental masses over 1.0 million years ago. Two bedrock types underlie the area:

- Irregularly layered gneisses of mixed composition.
- Calcareous metasediments (minor component) consisting of thin bands of marble crossing the reserve from Big Hawk Lake through the south bay of Clear Lake and along the northeast shore of Big Hawk Lake where prominent cliffs are found. This type of mineralization is known to attract plants with affinities to calcareous rocks (calciphiles).
- Features include simple jointing, faults, fault scarps, linear valleys (NE SW), cliffs and significant skree slopes.
- The possible meromictic nature of Blackcat Lake may originate from the chemical traits of the bedrock in the reserve.
- b) Surficial: The topography of the reserve consists of NE SW trending ridges and valleys. Surface materials relate to late Wisconsinan glaciation including:
 - the effects of ice movement on bedrock (e.g. striations, chattermarks, grooving, crescentic gouges and scratches),
 - glacial till.
 - glaciofluvial deposition (e.g. outwash materials).
 - mechanical weathering (e.g. exfoliation and rock slides)

These features are well represented in other parts of the natural heritage system (parks and protected areas), in particular in Algonquin Provincial Park. The bedrock features of this reserve complement those in Algonquin Park, and together with the extensive marble occurrences, are considered regionally significant. Features of surficial geology are locally significant.

2.2 Life science:

Life science values assessment is primarily focussed on landform type and the vegetation communities that occur on those landforms. The reserve is dominated by landform type Ia-37 (moderately broken relief, shallow sandy till soils and bare bedrock exposures) (Noble, 1981). An array of mature to 'old' forest vegetation associations are found on this landform (Pella-Keen, 1994). Life science significance is determined on the basis of the

following criteria: representation, condition, diversity, ecological considerations and special features.

 Representation: the reserve represents an array of medium-aged to mature conifer, deciduous and mixed forest upland vegetation communities on landform fa-37 within Site District 5E-9 including:

	% of land area
Hemlock - He/Pw/Be - He/Or/Pw - He/Mh/By - He/Ms/By Hard Maple - Mh/Pw - Mh/Ms/By - Mh/Or/He/Ms - Mh/Bw/A/Ms -	58.0
MIVHe/By - Mh/Ab/He - Mh/By/Bc	23.0
White Pine – Pw/He/Or	8.0
Red Oak/He - Or/Mh - Or/Ms/Mh	4.5
Other (Ms/Bf/Bw/Ce/By) Wetlands	6.0
w changs	0.5

The area of old growth (121+ yr.) hemlock stands (34.6%) makes the reserve provincially significant. Indeed, this is the best representation of these communities within Site District 5E-9, better than similar but smaller stands within Algonquin Park (Crins, 1994). In addition, areas of old growth white pine and sugar maple (5.4%) further enhance these values. These relatively inaccessible forests provide a habitat for species such as red-shouldered hawk, pine martin and pileated woodpecker, which seek seclusion from civilization.

The reserve also includes smaller areas of wetland and lakeland vegetation communities. The inclusion of a possible miromictic lake and a 'pure' undisturbed population of fish - Northern Redbelly Dace - in two lakes, enhance representation.

- Condition: the area has only seen minor disturbance in the late 1800's when some white pine were removed along the northern waterways. The extensive aging of the hemlock stands shows an all-aged structure from sustained natural recruitment in the absence of disturbance. Dominant and co-dominant hemlock ranged in age from 48 to 346 years with average stands ranging from 96 to 197 years. White pine, for the most part, was established prior to the turn of the century with very little recruitment after the removal of the overstory pine in the late 1880's. Sugar maple range from 79 to 153 years. The area's significant size, relatively undisturbed nature, relative inaccessibility makes the reserve very important to the natural heritage system within its site district.
- Diversity: the reserve has a diversity of older forest types from hemlock to sugar
 maple to white pine. These forests attract a number of species that prefer old,
 undisturbed forest conditions (e.g. pileated woodpecker, pine martin, red-shouldered
 hawk). In addition, the reserve contains 5 small watersheds and lakes dominated by
 cold water species. The northwest cliffs on Big Hawk Lake are could contain unusual
 cliff communities (1973, Brunton, 1991). Clear Lake is interesting limnologically for
 its clarity and with BlackCat for a 'pure' population of Northern Redbelly Dace.

Blackeat is possibly a meromictic lake (Dillon, 1999) providing opportunities for palaeocological research. A meromictic lake is

a lake where some or all of the water remains unmixed with the main water mass during the normal circulation periods. These takes contain three layers. The deep stagnant layer is called the monimolimnion, the part where circulation can occur is called the mixolimnion and the boundary between the two is called the chemocline (Veatch and Humphreys, 1966).

Ecological considerations: The size of this area and its ability to be linked to other
members of the natural heritage areas system is extremely important. This includes
other areas that have similar characteristics within Algonquin Park to the north and
Plastic Lake to the west. The reserve also encompasses five small, natural watersheds
with cold water fish communities within its boundaries; important for maintaining
long-term ecosystem viability.

This reserve is also within the Clear Lake Remote Access Area (E64a) as proposed under Ontario's Living Legacy, Land Use Strategy. This area has been designed to maintain its remote access characteristics, while managing for forest resources and backcountry recreation opportunities. And, the proposed Dawson Ponds/Plastic Lake Conservation Reserve is approximately 6 kilometers west of the Clear Lake Conservation Reserve

- Special Features: species are identified with varying importance at the regional(R), provincial (P) and national (N) level. Some have been classified as Vulnerable, Threatened and Endangered (VTE) in Ontario.
 - Known species include the red-shouldered hawk (vulnerable) and others may be identified through further inventory.
 - Inventory work in 1974 (Simpson and Simpson) on the LMFRMC lands identified five significant flora of Atlantic Coastal Plain (ACP) affinity to the north, west and south of the conservation reserve. This suggests that further inventory work may locate similar occurrences within the reserve itself.
 Noted species included:
 - . Shore Weed (littorella uniflora)
 - . Pond Weed (Potamogeton capillaceous) (*)
 - . Pond Weed (P. conferxiodes) (*)
 - . Water Awlwort (Subularia aquatica)
 - . Virginia Chain Fern (Woodwardia virginica) (*)
 - * (ACP indicator species (after Keddy & Sharpe 1989)
 - West facing cliffs with marble outcrops on Big Hawk Lake (within the reserve) and on Clear Lake suggest potential habitats for unusual lime loving flora (calciphiles).
 - Clear Lake is used as an acid rain reference lake and has with Blackcat Lake the pure Dace population.

- Old growth hemlock, white pine and sugar maple dominate the land area of the reserve.
- Blackcat Lake is possibly a meromictic lake providing a base for palaeocological studies of past forest and climatic conditions through sediment core analysis.
- The reserve has been and continues as a site for long-term ecological research in forest structure and dynamics, nutrient cycling and limnology.

In summary, Clear Lake is a provincially significant site representing Eastern Hemlock forests, tolerant hardwood forests and relatively intact aquatic systems within the provincial natural heritage areas system. Care will have to be taken to ensure that the uses that currently occur or may be considered in future do not affect these natural values.

2.3 Cultural

Archeological studies undertaken in the late 1970's did not identify any sites or values within the reserve proper; however, a potential site has been identified surrounding the Nunikani falls to Big Hawk Lake (Ross, 1980). In the mid-1990's a potential native encampment site was identified at the start of the Little Hawk Lake portage to Cat Lake (Ballantine, 1999). On the basis of artifacts found (clay pottery and arrowheads) the site is believed to be Algonkian (400 –500 years old). This site also contains the remains of an old logging camp (MacDonald, 1999) on top of the prehistoric remains. There are other remnants of the logging era on nearby lakes (Stevens, 1974):

- . log slide and dam Nunikani Lake to Big Hawk Lake
- . log flume Red Pine Lake to Nunikani Lake
- . log slide and dam outlet Big Hawk Lake

The known historic and prehistoric values need to be fully documented and carefully managed.

2.4 Recreational/Aesthetic

Although no specific studies have been undertaken to date Clear Lake Conservation Reserve currently offers an array of excellent recreational opportunities including hunting (small and large upland and waterfowl game), hiking, fishing (summer and winter), canoeing, backcountry camping, educational tours and interpretive hikes. All these recreational uses are dependent on the area's natural, undeveloped state, rare habitats/species being protected and accessible to residents and visitors.

3.0 Management Guidelines

3.1 Land Tenure

<u>Background:</u> Clear Lake Conservation Reserve is located on crown lands, within parts of the Townships of Sherborne and Stanhope, in the County of Haliburton. All patented private lands, abutting and within the reserve, are excluded from the boundaries. These lands include three (3) private recreation camps (under Land Use Permits) along the perimeter boundary, and eight (8) cottages and 6 lots on Clear Lake.

The three recreation camps were inadvertently included within the boundaries of the conservation reserve when it was regulated under the Public Lands Act. Five reserve lakes' unopened lake-shoreline road allowances, and regular road allowances are excluded from the regulated area because the reserve is located within organized municipalities. This may complicate future resource management and enforcement in the reserve (e.g. unauthorized occupancy - campsites are probably located on the shoreline road allowance, garbage, etc.).

The reserve also includes a small part of a black bear management license and a registered trap line and a canoe route with campsites.

<u>Guideline:</u> Licenses will be continued for trapping and bear management. If the bear management license lapses it will not be renewed and if it is proposed for transfer it will not be transferred. Licenses will not be considered for similar new uses.

The three recreational properties included within the boundaries of the reserve will be excluded by revising the boundary regulations under the Public Lands Act.

In addition, discussions should be held with the two local municipalities (Sherborne, McClintock and Livingstone, and Stanhope) to obtain their support and agreement for the closure of road allowances within the reserve boundaries and their transfer to the Ministry. This would permit unopened interior and lake-shoreline road allowances to be included within the boundaries of the reserve enabling proper resource management and the enforcement of reserve regulations.

3.2 Development

3.2.1 General

<u>Background:</u> The reserve is only accessible by aircraft, boat, snowmoble and skis or on foot. Current development includes thirteen (13) portages and seventeen (17) backcountry campsites (on various lakes). The main canoe route crosses the reserve through Clear Lake via three portages. There are also a number of side routes to other lakes.

<u>Guideline:</u> These developments will be permitted to continue. Improvements or changes to these activities will be carefully monitored to ensure that reserve values are

not being adversely impacted. Land development, on the perimeter of the reserve will also be monitored to ensure that reserve values are protected and local (municipal) planning authorities will be contacted as needed.

Canoe-in campsites are showing signs of overuse and may require closure, rehabilitation and/or replacement. Care will have to be taken to reduce social conflicts with other users (e.g. cottages) in the siting of these facilities. Trail, portage and campsite development will require proper approval before being undertaken. This should be closely coordinated with the maintenance of the entire canoe network in and around the reserve. All proposals for new development must meet the requirements of Procedural Guideline B - Land Uses - Test of Compatibility (Appendix 1).

3.2.2 Cottages

<u>Background:</u> There are currently 8 cottages and six vacant lots on Clear Lake. The owners access their properties by boat in the summer and by ski or snowmobile in the winter. In the summer there is a sizeable cache of watercraft at both ends of the portage into Clear Lake from Big Hawk Lake. This could increase if the six vacant lots are developed. These caches need to be properly managed to ensure the continuation of easy public access to and through Clear Lake.

Guideline: Access to private properties will be permitted. The location of boat caches and public access areas should be clearly identified. This will require discussion with the Clear Lake Cottage Association and other interest groups. The development and/or upgrading of properties will be monitored to ensure that conservation reserve values on crown lands are not being impacted. In addition, all proposals must meet the requirements of Procedural Guideline B (Appendix 1).

3.3 Recreational Activities

Background: Existing recreational uses include fishing, ice fishing, snowmobiling, hunting, snowshoeing, cross-country skiing, canoeing, camping, nature education and interpretation. There is believed to be heavy use of the lakes, especially Clear, by youth camps and others. Guided adult groups use the area well into the fall. However, the area appears to be used most heavily during the winter season for ice fishing and touring by snowmobile (MacDonald, 1999).

Guideline: The current range of recreational activities will be permitted and new activities will be considered on a case by case basis provided they are consistent with maintaining the natural values of the reserve and must comply with **Procedural** Guideline B (Appendix 1).

The appropriateness of continued use of live bait in the coldwater lakes of the reserve will be studied.

3.4 Commercial Activities

<u>Background:</u> The current commercial activities include parts of a black bear management area license and a registered trapping license, children's camp use and lodge day use. Canoe traffic through Clear Lake is heavy in the summer months. The ministry has maintained these canoe routes (portages and campsites) through the Ontario Ranger program.

Guideline: The trapping will be continued provided it does not impact reserve values. The diversity of wildlife will be maintained through trapping quotas, habitat modeling, and aerial surveys for larger game.

The bear management license which covers a small part of the reserve (an area north of Clear Lake) will be continued.

Public camping, youth camp camping and day use may be monitored to determine use pressures. There may be a need to place controls (e.g. volumes and direction of traffic flows) on use if impacts on reserve values become evident. This may necessitate MNR facilitating a cooperative partnership of MNR, lodges, cottage associations, youth camps and local residents (A 'Friends of Association). Increases in use may also require the issuance of use permits.

Conservation reserves do not permit mining, commercial forest harvesting, hydroelectric power 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 Procedural Guideline B (Appendix 1).

3.5 Aboriginal Interests

<u>Background:</u> The conservation reserve is located within the area of the Williams Treaty and the Curve Lake First Nation specifically. All First Nations under this treaty are currently negotiating a land claim settlement (Lee, 1999).

In addition, a potential native encampment site has been located on the portage from Little Hawk Lake to Cat Lake. This site needs to be studied further to confirm the extent and significance of the site values.

Guideline: Await direction from the government and the conclusion of land claim negotiations.

3.6 Natural Resource Stewardship

3.6.5. General

<u>Background:</u> There are minimal commercial values to the resources of the reserve. However, the representative natural values require attention including vegetation, wildlife, landforms/landscape and waters.

Guideline: The emphasis will be on ensuring that the natural values of the reserve are not affected by current and future uses/activities. Therefore, existing uses will be continually reviewed and applications for specific new uses will be carefully studied. Such studies will be undertaken either by the ministry, partner organizations and/or proponents

3.6.6. Vegetation:

<u>Background:</u> White tail deer prefer the extensive hemlock forests for both winter shelter and food. However, the reserve does not contain any winter deeryards at present. Deeryards to the southeast and moose 'yards' to the northwest will ensure that these wildlife species remain in the area into the foreseeable future. There is a need to continue to monitor deer numbers and their distribution to ensure that over-browsing is not retarding hemlock regeneration.

Care will also have to be taken with possible VTE species that may be located through further inventories (e.g. ACP species are known around the periphery of the reserve). The old growth forests will require the development of appropriate management guidelines for their protection and regeneration.

Guideline: Wildlife (e.g. deer) harvesting may be important for hemlock regeneration protection. Old growth management guidelines should be developed to maintain these values.

3.6.7. Fisheries:

<u>Background:</u> The major lakes support trout fisheries. Clear Lake has been stocked historically: with Brook Trout 1932 – 62; Rainbow Trout 1953, 64 – 70 and Lake Trout 1934 – 79 and is now a self-sustaining trout fishery with identified spawning beds. Clear Lake is closed to winter fishing from October 1 to the third Saturday in May to protect this fish species.

In addition, Rabbit, Blackcat and Cat Lakes have been stocked with Brook Trout; and Sampson Pond and Buckskin Lake have been stocked with Splake on a put and take

basis. These lakes (Buckskin, Cat. Blackcat and Rabbit) appear to be heavily fished in the winter with access facilitated by snowmobile (MacDonald, 1999).

Guideline: Clear Lake will continue to be managed as a self-reproducing fishery with appropriate catch regulations. The use of live bait in all the cold water lakes of the reserve will be reviewed. Any changes will be consistent with Southcentral Region's lake trout strategy.

3.6.8. Wildlife:

Background: Big game hunting activities include bear, moose and deer. The part of the reserve north of Clear Lake is part of a bear management license. **Guideline:** These activities support wildlife management objectives and will continue.

3.6.5. Fire Management

<u>Background:</u> The most significant feature of the reserve is the old growth hemlock forests. Hemlock is not a fire origin species and therefore does not require fire for regeneration.

Guideline: The reserve is in the East Fire Region Zone 4 (Haliburton Highlands – Georgian Bay). This is classified as an intensive fire management zone where the objectives are to minimize hectares burned, values destroyed and social impact, and to extinguish fires as soon as possible.

A 'light on the land' approach to fire suppression will be desirable in order to protect natural values. Alternative means of suppression will be used where feasible (e.g. the use of root soakers as hemlock is sensitive to root damage).

3.7 Cultural Resource Stewardship

<u>Background:</u> Some values (native encampment and logging camp) have been identified within the reserve (portage from Little Hawk Lake to Cat Lake) and around the periphery of the reserve (Nunikani falls).

Guidelines: The site within the reserve should be inventoried and other potential sites (portages and campsites) should be investigated for possible values. Either the ministry and/or partners should be encouraged to undertake these studies within the reserve.

3.8 Client Services

Background: Existing services include a map of the reserve available from the Minden District Office. There are no signs at or around the site.

Guideline: The services will focus on low-key information (e.g. educational) and self-interpretation of area values and features. Priority will be placed on an information brochure to highlight reserve values and appropriate uses to ensure the protection of those values. The brochure should also profile the research activities that have and are still taking place in the reserve.

The ministry may seek interested partners to prepare this brochure. An information presence should be maintained at the LMFRMC since it is still a window on the Ministry and the reserve is used for old growth workshops annually.

Site identification should be considered at the major portage crossing(s) into Clear Lake and along the boundary of the reserve. This should include a 'name' (Clear Lake Conservation Reserve) sign and CR symbol signs.

3.9 Research

Background: The reserve has an extensive research history going back over 30 years including:

- forest ecology studies of hemlock ongoing since 1965 (Loucks et al)
- limnology since 1968 (Nighswander and Schindler), Clear Lake unusual aquatics, Northern Redbelly Dace, watershed studies.
- palaeoecology Blackcat Lake is believed to be meromictic and ideal for pollen dating (Dillon, 1999).
- acid precipitation studies Clear Lake is a reference lake (MOE).
- old growth forests studies (hemlock, white pine and maple) (Loucks and MNR).

Much of this research continues. From 1990 to 1995 a detailed inventory was completed (MNR) of the forest vegetation specifically the old growth communities. This has confirmed the distribution and importance of these forests.

Future studies should focus on completing earth and life science inventories of the reserve (including VTE values), monitor the impact of use on natural values and identify cultural and aboriginal values within the reserve.

Guideline: The ministry will encourage further research, inventory and documentation of natural and cultural values, and the assessment of use/activity impacts. The ministry will work with partners, research organizations and others to establish research priorities that further reserve management objectives and coordinate field activities.

All studies and research activities shall conform to existing policy within conservation reserves including proper approval and authorization by the Ministry as noted in **Procedural Guideline C – Research Activities in Conservation Reserves (Appendix 2)**.

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3.10 Marketing

Background: There has been no direct marketing to date. Any promotion has been by word of mouth or through local tourism centres and the academic community.

Guideline: The future should see a shift to providing information on the natural heritage values and their role in the provincial and regional natural heritage areas system. This would include relationships with Algonquin Provincial Park and other natural areas in site district 5E-9. This should be coordinated by the Ministry and include the LMFRMC, local tourist interests and the academic community.

4.0 Implementation

Administrative responsibility for this Conservation Reserve is located with Bancroft District, Minden Area Offices. The Area Office will continue with the custodial care of the Reserve and will also seek partnerships with local interests (youth camps, lodges, marinas, universities, etc.), wherever appropriate.

Emphasis will be placed on awareness information highlighting appropriate uses. This may be undertaken with the assistance of local groups. Priorities will include:

- · An up-to-date information brochure and map
- Work towards the establishment of a 'cooperating association' to assist in the management of the reserve.
- Establishment of a site sign and appropriate border reference signs.
- The preparation of a plan to guide research, inventory and monitoring activities with clear procedures for work authorization.
- Completion of earth and life science inventories including VTE
- Further archaeological inventory of the native site on the portage to Cat Lake and other potential sites within the conservation reserve.
- A program for the maintenance of portages, campsites and trails in the reserve.
- The study of the appropriateness of using live bait in the cold water lakes in the reserve.
- Undertaking a recreation use-survey during the summer and winter months in the reserve.
- Development of silvicultural guidelines for the management of old growth forests (hemlock, white pine and hard maple) within the reserve.

5.0 Review and Revision of the Statement of Conservation Interest

Statements of Conservation Interest will be amended through a standard process of minor and major amendments. Minor amendments will be processed in a relatively informal manner and will only 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 (e.g. new uses and/or activities that are consistent with existing use impacts).

Uses and/or activities that were not anticipated in the approved SCI and which may have an impact on the values of the Reserve (e.g. a building) will require a major amendment. This will include an opportunity for public comment and input, will require the approval of the Regional Director and public posting on the Ministry of Environment Environmental Registry.

Appendix 1 Procedural Guideline B – Land Uses – Test of Compatibility (PL Procedure 3.03.05)

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 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 are 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.

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?"

- Impact Assessment: If the proposed use(s) pass test 1 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 ant historical or archaeological values in the area?"
 - Impact on research activities: "will the new use(s) affect 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 usefs) increase administrative costs and/or complexity?" (For example, the cost of area monitoring, security and enforcement).
- Impact on 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(is) surrounding the area in a positive or negative way?" (For example, will the new use make an 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) five 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 that test of compatibility should be applied to determine which specific uses are acceptable.

Indicator Uses for Conservation Reserves - Generic and Specific

Activities	Generic Policy		Specific Application
	Permitted? Y = yes, N = no, M = maybe		In Clear Lake CR
93.5.141	Existing	New	
Recreation		100	
Sport fishing	Y	Y	· 注: 图 · · · · · · · · · · · · · · · · · ·
Sport hunting	Y	Y	A STATE OF THE STA
Food gathering	Y	Y	(A)
Facility infrastructure	М	М	N N
Non-trail snowmobiling	Ml	MI	THE WAY
Non-trail ATV use	MI	M1	WAN SHARE
Rock climbing/caving	M	М	AND IS ST
Canoeing/kayaking	Y	Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Motorized boating	Y	Y	197 9 9
Picnicking	Y	Y	TAY
Camping	M	М	****Y
Trails: Hiking	Y	М	- 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2
X country skiing	Y	М	Y
Cycling	Y	М	6.49 /Y - 10.00
Horse riding	Y	M	30 N 1 1 1 1
Snowmobiling	Y	М	Y

Science, Education & Heritage Apprec Research		T - c -	
General walking	Y	 	<u>Y</u>
Photography & Painting	$\frac{1}{Y}$	<u> </u>	<u> </u>
Wildlife viewing	$\frac{1}{Y}$	<u>Y</u>	Y
Outdoor Education/Interpretation		<u> </u>	Y
Collecting	Y	Y N	Y
Food harvesting			
Food harvesting			
	M	M	N
Fishing	M	<u>M</u> 	
Fishing Baitfish harvesting		M	N
Fishing Baitfish harvesting Trapping	M	M M	N N
Fishing Baitfish harvesting Trapping Trap cabins	M Y2	M M M	N N
Fishing Baitfish harvesting Trapping Trap cabins Resort – outpost camp	M Y2 Y2 Y2 Y	M M M N	N N Y N(a)
Fishing Baitfish harvesting Trapping Trap cabins	M Y2 Y2	M M M	N N

Activities	Generic	c Policy	Specific Application
	Permitted? Y N = no, M = n	= yes, naybe	O. T. Lake
	Existing	New	
Resource Management			
Inventory monitoring	Υ.	Y	2 A 2 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Featured species management	M	M	
Natural systems management	M	M	
Industrial Activities		300,00 87-80 7.500	
Timber harvesting	N	N.T.	The Complete September of
Prospecting	N	N	E EN
Mining	N	<u> </u>	THE PARTY
Hydro generation		N	THE PERSON NAMED IN
Energy transmission corridors	N	<u>N</u>	CARRY SERVER
Communications corridors	<u> </u>	N	在機構 以2.2000
fransport corridors	<u>Y</u>	N	TOWN SEAR
Resource roads (MNR)	<u>Y</u>	N	STATE A STATE OF
sesource roads (MIAK)	Y	N	N AND WAR

Other Activities	250 A 180 909 972_14	18 m	
Land Disposition	*	N	N(b)
Hunt Camps	Y2	N	N

Notes:

On generic policy application in conservation reserves:

For retrieval of game only

- 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 CR.

On specific policy application in Clear Lake Conservation Reserve:

- (a) The current trapper does not have any cabins in the reserve and there does not appear to be a need to permit future cabins.
- (b) Any dispositions will take place outside the reserve (e.g. tile field expansions for cottages).

Appendix 2 Procedural Guideline C - Research Activities in Conservation Reserves (PL Procedure 3.03.05)

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

Research means any investigation or study of the natural, cultural, 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 SCI prepared for each reserve (see Guideline A - Resource Management Planning) and using Guideline B - 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.

Term and Conditions

Permission to conduct research under this policy will be valid for a period of 12 consecutive months from the date of issue. Permission to continue a research project for an additional periods of 12 months or less may be granted upon submission of a written request and a 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:

- The intent of this policy.
- The requirements under the Public Lands Act, including all amendments, where applicable.
- 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).
- The conditions and agreements specified in granting permission.

Final Report

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

Appendix 3 A Summary of Public Comment

Public consultation on the protection of this area was completed through the Bancroft Forest Management Planning open houses for 'Values' in September 1994 and for 'Draft Forest Management Plan' review from August to October 1995. The response was positive and generally supportive for area protection. Primary concerns were raised in support of the continuation of traditional activities including hunting of large and small game, trapping, fishing, canoeing and camping.

The following groups submitted comments:

Clear Lake Cottage Association

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Notes:

On June 14, 1999 I had a telephone discussion with Dr. Peter Dillon of the
Dorset Research Centre. He confirmed that Black Cat Lake is likely a meromictic
lake. It has the characteristic size and shape of a meromictic lake (high hills and
deep basin). He has taken a core sample from the lake and the core was
laminated. However, he had no luck in analyzing the core because it collapsed
once it was taken out of the water.

He believes more work needs to be done and samples need to be taken using a 'dry ice technique', that freezes the core for subsequent analysis. He would like to see this done, so a good opportunity exists for further research.