

**Crotch Lake
(Proposed)
Conservation
Reserve**

**Statement of
Conservation Interest**

Jan 16, 2003

Approval Statement

We are pleased to approve this Statement of Conservation Interest (SCI) for the proposed Crotch Lake Conservation Reserve. It is one of 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.

The proposed Crotch Lake Conservation Reserve is 374 hectares and is located in the geographic Township of Palmerston. It consists of two Crown land parcels near the area locally know as 'The Narrows'. There are also several islands included in the site.

The proposed Crotch Lake Conservation Reserve is a stand of relatively undisturbed medium aged to mature conifer forest on a dry rocky portion of the northern shoreline of Crotch Lake in Site District 5E-11. The proposed reserve was first identified as unique when it was described by Brunton (1990) as a regionally significant Area of Natural and Scientific Interest (ANSI) due to the provincially significant upland conifer forest which is located on the silty to gravelly till, rather than on granite which is more common. During the Ministry's Lands for Life land use planning and public consultation process the forest was considered to be a provincially significant conifer forest.

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 Crotch Lake 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.

This Statement of Conservation Interest provides guidance for the management of the proposed Crotch Lake Conservation Reserve and provides the basis for the ongoing monitoring of activities. More detailed direction is not anticipated at this time.

The proposed Crotch Lake Conservation Reserve would be managed under the jurisdiction of the Mazinaw Area Supervisor, Bancroft District, Ministry of Natural Resources.

Approved by:
Doug Unsworth
A/District Manager
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Date

Approved by:
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Date

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Figure 1 Site Map: Crotch Lake (Proposed) Conservation Reserve
- see separate attachment

1.0 Introduction

The proposed Crotch Lake Conservation Reserve is located in Southeastern Ontario in Frontenac County, twenty kilometres east of Bon Echo Provincial Park. It is in Site District 5E-11.

The proposed Crotch Lake Conservation Reserve includes an area locally known as 'The Narrows', as well as several islands scattered within Crotch Lake. The 'narrows' are created by two peninsulas jutting from opposite shores dividing the northern and the southern portions of Crotch Lake (see Figure 1).

The bedrock shoreline of the proposed conservation reserve has gentle to steep slopes. In general, the terrain is undulating. The proposed reserve was first identified as unique when it was described by Brunton (1990) as a regionally significant Area of Natural and Scientific Interest (ANSI) due to the provincially significant upland conifer forest which is located on the silty to gravelly till, rather than on granite which is more common to the area.

The site has a history of recreation and resource management prior to being recommended as a conservation reserve through Ontario's Living Legacy. The Township of North Frontenac has been managing the Crown land surrounding Crotch Lake (including the proposed conservation reserve) as a camping and recreation area, in an agreement with the Crown since 2000.

The purpose of this Statement of Conservation Interest (SCI) is to identify and describe the values of the proposed Crotch Lake 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 the context of protecting the natural and cultural values.

Conservation Reserves are established by Regulation under the Public Lands Act. Statements of Conservation Interest are prepared under the authority of Procedural Guideline A – Resource Management Planning (PL Procedure 3.03.05).

1.1 Background Information

Name	Crotch Lake (Proposed) Conservation Reserve
Ecological Site Region / Site District	5E/5E-11
OMNR Administrative Region/District/Area	Southcentral Region / Bancroft District / Mazinaw Area
Total Area (hectares)	374 hectares
Regulation Date	Pending
First Nations Interests	Algonquins
OBM map sheets	10 18 3550 49700
UTM Coordinates	18 497400 358000 (NAD 83)

1.2 Representation/Targets

This section provides a summary of the earth science, life science and cultural values represented in the site. It also outlines existing and potential recreational opportunities available.

Earth Science Representation:

The proposed conservation reserve contributes the following earth science representation to Ontario's system of protected areas:

Bedrock

- Within the provincial protected areas system, the bedrock geology of the proposed Crotch Lake Conservation Reserve has regional significance in its representation of mafic metavolcanic and felsic plutonic components of the Mazinaw Terrane (Duba and Frey, 2002).
- The representation of the Mazinaw Terrane contributes to the conservation of the Grenville continental accretion theme outlined by Davidson (1981, p.107-111).

Surficial Geology

- The surficial geology of thin silty to gravelly till is locally significant (Duba and Frey, 2002).

Life Science Representation:

- The site contains a provincially significant upland conifer forest on shallow sandy till (OMNR, 1999).
- The exposed bedrock areas at the edge of many inlets and islands support xerophytic vegetation.
- Wetlands include marsh, fen and swamp.

Recreational Resource Representation

- Recreational opportunities are considered to be locally significant. Activities include fishing, camping, picnicking, nature viewing, watersports (boating), snowmobiling and hunting.
- Crotch Lake is part of the Mazinaw – Mississippi canoe route (Callan 1996, Mississippi Valley Conservation Authority). This route connects the proposed conservation reserve to nearby Bon Echo Provincial Park and the proposed Hungry Lake Conservation Reserve and other local canoe routes. It is considered locally significant.
- Snowmobile routes through the proposed conservation reserve and on Crotch Lake are locally significant and link up with regional and provincial snow trails.
- Although not part of the proposed conservation reserve, the fisheries values of the adjacent Crotch Lake greatly enhance the recreational value of the proposed conservation reserve.

Cultural Resources Representation:

Cultural resources inventories have not been completed for this proposed conservation reserve. The Algonquins have identified value areas in the vicinity of Crotch Lake although none of these sites is located within the proposed conservation reserve. The Ministry of Natural Resources, through the Mazinaw Lanark Forest Management Plan for Crown lands beyond the proposed

conservation reserve is monitoring these locations for the protection of these value areas from forest management activities (Mikkelsen, 2002).

1.3 Survey Information

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

Survey Level	Earth Sciences	Life Sciences	Cultural	Recreational	Other
Reconnaissance	Report. Duba, D. and E.D. Frey. 2002.	Checksheet. Merchant, B. 2002.		Report. Dore M. and L.Tomasini, 2002	
Detailed					
Requirement	None	Monitor values	Is encouraged	Monitor use and impacts of use	Monitor LUP/agreement with Municipality

*Note: all survey work requires permission to be granted prior to commencing.

2.0 Values to be Protected

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

2.1 Earth Science

Earth science values are focused on features (bedrock and surficial) that represent the chronology of earth history in the province (Davidson 1981).

The bedrock of the proposed Crotch Lake Conservation Reserve is within the Mazinaw Terrane of the Central Metasedimentary Belt in the eastern part of the Proterozoic Grenville Province (Easton, 1992a, p.720, 843 in Duba and Frey, 2002).

Bedrock exposure is abundant along the shorelines of both peninsulas of Crotch Lake. The dominant rock types are mafic metaplutonic rocks and the Cross Lake Pluton granodiorite of the Mazinaw Terrane. The mafic metavolcanic and felsic plutonic components of the Mazinaw Terrane are considered regional significant representation in the Ontario Parks Protected Area System.

The Mazinaw Terrane is one of five lithotectonic terranes of the Central Metasedimentary Belt, as such, its representation in the proposed Crotch Lake Conservation Reserve contributes to the conservation of the Grenville continental accretion theme outlined by Davidson (1981, p.107-111).

The dominant glacial deposit in the Crotch Lake Proposed Conservation Reserve is a thin and discontinuous cover of silty to gravelly till deposited as a ground moraine. Thicker accumulations are found only in the valley bottoms. Recent deposits are represented by swamp and bog in the central and northeastern parts of the reserve. The surficial geology is considered locally significant. (Duba and Frey, 2002)

2.2 Life Science

The proposed Crotch Lake Conservation Reserve is located within Hills' (1959) ecological Site District 5E-11. It is surrounded by undeveloped Crown land. The proposed reserve encompasses the undulating landforms of 'The Narrows' which are essentially two peninsulas that nearly meet

and divide Crotch Lake into upper and lower halves. The proposed reserve is terrestrial and does not include the lake bed (which remains Crown land), although the lake contributes to life science and recreational values of the proposed reserve.

The landscape is similar throughout, with gentle to moderately steep slopes covered in thin till supporting forests dominated by mature White Pine.

Representation:

The forest cover of the proposed Crotch Lake Conservation Reserve is composed of white pine mixed with a variety of other tree species, notably red pine and hemlock. This site is known for its provincially significant upland conifer forest on shallow sandy till (OMNR, 1999).

The skyline is dominated by white pine and poplar, but many hardwood species occur either mixed with the pine and hemlock, or as small hardwood stands. The most common hardwood species observed were sugar maple, red oak, basswood, poplar, beech and ironwood. White ash, yellow birch and red maple are also present.

Using the Forest Ecosystem Classification of Central Ontario (Chambers, et al, 1997), the very-shallow-to-bedrock areas are classified as Ecosite 14 (White Pine-Largetooth Aspen-Red Oak), typified by open canopies and blueberry and bracken fern in the understorey. However, many of the pine stands are Ecosite 25 (Sugar Maple-Beech-Red Oak), a type with higher Crown closure, diversity, and productivity.

A fairly large beaver pond at the northeast end of the reserve has developed marsh and fen ecosites. Swampy areas south of the marsh and fen include very moist to wet areas which are Ecosite 33 (White Cedar-Other Conifer) and Ecosite 34 (White Cedar-Lowland Hardwood). These sites grade south into moist Ecosite 30 (Hemlock-Yellow Birch). (Merchant, 2002)

At the edge of the lake, the bedrock is often bare or covered with very thin soil. These areas support xerophytic vegetation.

Wildlife at the site is discussed below under **Diversity**.

Condition:

Many of the stands along the lakeshore have a high level of mortality, particularly in the hemlock, which appears to have occurred about ten years ago. However, areas with good hemlock regeneration are common. (Merchant, 2002) A case of hemlock looper was likely the cause of the hemlock mortality (Mikkelsen, 2002).

Recreational use of the area is high, and has resulted in trampling in a few susceptible areas along the lakeshore.

The forests and lowlands are undisturbed, except for a snowmobile trail connecting the north and south halves of the lake via the lowland areas.

Wood duck boxes have been placed in the beaver pond. (Merchant, 2002)

Diversity:

The value of this proposed reserve lies more in the extent of its ecosites rather than in its diversity.

Although landscape is similar throughout, with gentle to moderately steep slopes covered in thin till supporting forests dominated by mature white pine, there is considerable variation in overstorey composition. The white pine is mixed with hardwoods in places, and hardwood-dominated patches are interspersed. Species include sugar maple, basswood, beech, red oak, white ash, poplar, yellow birch and ironwood. Hardwood patches often have ironwood and hemlock in the subcanopy. These stands are on siltier soils, reflected in the understorey vegetation which is common in areas of hardwood regeneration, including partridgeberry, fragrant bedstraw, and wood fern.

The xerophytic vegetation at the edge of the lake includes juniper clumps, sweetfern, reindeer lichen, grey-green lichen, pin cushion moss, polypody, bearberry, sumac, and bracken fern. (Merchant, 2002)

Sport fish present in Crotch Lake include walleye, northern pike, smallmouth bass, yellow perch, largemouth bass. Rock bass, white sucker and brown bullhead are also present.

Deer, bear, moose, wolf, grouse, waterfowl, beaver, river otter and hare are some of the general wildlife present (Dore and Tomasini, 2002). Bald eagles have also been known to nest in the general vicinity (Ewing in Dore and Tomasini, 2002). In addition to the bald eagle, other species at risk recorded to have been in the area (NHIC, NRVIS, 2002).

Ecological Considerations:

Water levels in the lake are manipulated by Mississippi Valley Conservation (under contract to Ontario Power Generation Inc.) to supply hydro requirements downstream. It has been suggested that the drawdowns (late summer/early autumn and late winter) have both positive and negative effects on the fisheries (Dore and Tomasini, 2002).

Fisheries values in Crotch Lake support recreational value of the proposed reserve. In 1992, in response to recreational fishing pressure on the walleye population, a slot size limit on Crotch Lake walleye was instituted and a fish sanctuary was created at the north end of the lake. Both are still in place today. The slot size limit and fish sanctuary relieve some of the pressure on the walleye population, but due to the existing angling pressure and the increasing ability of anglers to locate fish, the walleye population is considered a sensitive feature worthy of monitoring (Dore and Tomasini, 2002).

Recreational use has led to limited trampling within the proposed conservation reserve, in very shallow areas along the lakeshore. (Merchant, 2002)

Sensitive Areas of Concern are on file at the Ministry's Mazinaw Area office.

Special Features:

The area is particularly scenic and has the esthetics of a more northern lake although is located in southcentral Ontario.

The diversity of fish and wildlife in the area (listed above under **Diversity**) provide excellent hunting and fishing opportunities.

The extensive, mature, undisturbed white and red pine on shallow ground moraine provide both core forest and edges for wildlife (Merchant, 2002).

The proposed reserve provides habitat for significant wildlife (NHIC, NRVIS).

Significance:

The upland conifer forest on shallow sandy till is provincially significant (OMNR, 1999).

The proposed reserve provides habitat for species that are nationally and provincially rare (NRVIS, NHIC 2002).

2.3 Recreational Values

The area is particularly scenic. It has the esthetics of a more northern lake but is located in southcentral Ontario. The limited access to the site (no road access) perhaps enhances this appeal.

The proposed reserve provides excellent opportunity for fishing, camping, picnicking, canoeing, nature viewing, watersports, snowmobiling and hunting.

Use of the proposed conservation reserve is most often associated with boating or snowmobiling across Crotch Lake, given that the site is not accessible by road. The peninsulas of the proposed conservation reserve form 'The Narrows', which is a key navigational feature for boaters and snowmobilers.

Crotch Lake with its abundant and picturesque shoreline is an appealing location for canoeing (Callan, 2001). Crotch Lake is also part of the 200 km long Mazinaw – Mississippi canoe route (Mississippi Valley Conservation Authority, County of Lennox and Addington, 2002), a locally popular canoe route that connects this proposed conservation reserve to nearby Bon Echo Provincial Park and the proposed Hungry Lake Conservation Reserve. A brochure detailing this route is available through the Mississippi Valley Conservation Authority. Another locally popular and shorter canoe route is the Big Gull Lake Loop (90km). It begins and ends at Mazinaw Lake and overlaps portions of the Mazinaw-Mississippi route. It loops though Kashawakamak, Crotch and Big Gull Lakes with portages between Big Gull Lake and Kashawakamak Lake completing the loop. (Callan, 1996. County of Lennox and Addington, 2002).

The proposed conservation reserve is linked to a well-developed snow trail system. Local trails on and to the lake and through the eastern peninsula of the proposed conservation reserve link up to provincial trails (OFSC Top Trail network) north, south and east of the lake (OFSC, 2000). The trail which passes through the proposed conservation reserve provides safe passage between the south and north portions of the lake without traversing the Narrows where the ice is unreliable due to fast water currents

The fisheries values of the adjacent Crotch Lake contribute to the recreation value of the proposed conservation reserve. It is a coolwater fishery particularly popular for walleye, smallmouth bass and northern pike, which attracts both local and international (American) anglers. (Dore and Tomasini, 2002)

There are approximately nineteen low-impact camping sites, accessible by water, which are available to visitors. Service of the campsites is limited to maintenance. The Township of North Frontenac operates them under a Land Use Permit (see **3.1 Land Tenure** and **3.8 Client Services**).

There are three commercial lodges on Crotch Lake yet outside of the proposed conservation reserve. The presence of these commercial lodges may directly affect visitor rates to the proposed conservation reserve, by providing increased boat access (through private launches), increased visitor services and by the promotion of Crotch Lake as a tourist attraction.

This site provides excellent opportunity for the recreational activities listed above, but because most of the recreational activities at the site are also available in other areas of Eastern Ontario, these recreational opportunities are considered to be locally significant.

It is anticipated that all of the above activities will remain locally important and that the site may become increasingly popular in the future due to its proximity to southern populations seeking wilderness-like recreational settings.

3.0 Management Guidelines

3.1 Land Tenure

Background:

The proposed Crotch Lake Conservation Reserve consists entirely of Crown land. The site is composed of two large parcels on either side of the 'narrows' and thirteen small islands. The eastern parcel is 75 hectares (ha). The western parcel is 292 ha. Three islands are located in the Narrows, and the majority of the islands are located below the Narrows (south portion of lake). All of the islands are one hectare or less.

The proposed conservation reserve does not include the Crown lakebed.

There are four municipal road allowances that pass through the site; which are not part of the proposed conservation reserve.

A regional snowmobile trail (14A Kingston and Pembroke Association Trail) traverses through the eastern peninsula of the proposed conservation reserve in a north-south direction. Other trails to the lake and across the lake (which this trail links up to) do not cross through the proposed conservation reserve.

The Township of North Frontenac has a Land Use Permit for the Crown land surrounding Crotch Lake, including all of the land of the proposed conservation reserve, which enables them to restrict uses and charge fees on all of the campsites. A municipal by-law is in place designating the Township of North Frontenac responsible for the maintenance, enforcement including campfire and resource management around the lake.

There is one private hunt camp, authorized by a land use permit, within the proposed reserve.

There is one fur harvesting agreement within the proposed reserve, which includes all of the proposed reserve and adjacent land.

Other than the above mentioned, there are no land use permits, licenses or easements that apply to Crown land within the proposed conservation reserve.

The Crown lands surrounding the proposed conservation reserve are designated as the Crotch Lake Remote Access Enhanced Management Area (E1a) in the Ministry's Ontario's Living Legacy Land Use Strategy (OMNR 1999). The land use intent for Enhanced Management Area E1a is to:

Maintain the remote access characteristics of this area, while also managing for the forest management, other resource uses and high quality backcountry recreation, including allowing for management of the campsites and portages along the Mazinaw-Mississippi

canoe route. Remote access management of this Crown land block will not preclude existing /future private road or water access to landlocked patent land parcels.

Outside the proposed conservation reserve, Ontario Power Generation Inc. (OPG) owns the dam at King's Falls located at the outlet of Crotch Lake (northeastern portion of the lake). Mississippi Valley Conservation, under contract to OPG, conducts routine dam operations as directed by OPG. Management of the dam affects the water level and resource values of Crotch Lake, which in turn affect the recreational value of the proposed conservation reserve.

Baitfish block BAM 71 includes Crotch Lake which intervenes and surrounds portions of, but does not include, the proposed conservation reserve.

Guideline:

Sale of Crown lands within the proposed conservation reserve is not permitted.

The proposed conservation reserve will continue to be managed under a Public Lands Act Land Use Permit and agreement between the Ministry of Natural Resources and the Township of North Frontenac as long as the agreement remains suitable and does not impact the resources the proposed reserve is intended to protect. Notwithstanding this municipal agreement to manage these Crown lands, all activities within the proposed conservation reserve shall be consistent with the Ministry's conservation reserve policies and procedures and the Ontario's Living Legacy Land Use Strategy (OMNR 1999).

Existing private recreation camps are eligible for enhanced tenure but not for the purchase of lands. A decision to grant enhanced tenure, or to transfer recreational camps will be addressed through a screening process. Should the private recreation camp be voluntarily surrendered to the Ministry by the permittee, the Ministry will consider the long term benefit to this protected area of either removing the improvements or removing the improvements and re-issuing the permit for a new recreation camp outside of the proposed conservation reserve boundary.

Renewals of existing leases, land use permits or agreements are permitted.

New trails, or the relocation of trails, may be considered through planning exercises where no significant conflicts can be demonstrated (see **3.2 Existing/Proposed Development**).

Guideline:

Ministry of Natural Resources staff is participating in the development of a Water Management Plan for the Mississippi River. Responsibility for preparing the Mississippi River Water Management Plan is shared between the waterpower producers, MNR and Mississippi Valley Conservation. This plan will guide the management of water levels on Crotch Lake in the Mississippi River watershed.

Bait Block (BAM-71) in Crotch Lake will continue to be authorized through existing Crown land management.

3.2 Existing/Proposed Development

Background:

The majority of the land surrounding the proposed conservation reserve is Crown land. The Crown lands surrounding the proposed conservation reserve are designated as the Crotch Lake Remote

Access Enhanced Management Area (E1a) in the Ministry's Ontario's Living Legacy Land Use Strategy (OMNR 1999). The land use intent for this Enhanced Management Area and the management agreement with the Township of North Frontenac is described in **3.1 Land Tenure**.

There is very little development on Crotch Lake other than commercial lodges at the north and south end of the lake (three in total), several private cottages at the north and south ends, and the campsites managed by the Township of North Frontenac (on Crown lands).

As described in **3.1 Land Tenure**, Ontario Power Generation Inc. (OPG) owns the dam at King's Falls located at the outlet of Crotch Lake (northeastern portion of the lake), outside the proposed conservation reserve.

There are no roads leading to the proposed conservation reserve. The proposed conservation reserve is accessible by boat or snowmobile. There are two well-developed public boat launches on Crotch Lake: one the south and one at the north end of the lake. Parking space is provided. These boat launches are maintained by the Township of North Frontenac. There are no formal landing points for boats at the proposed conservation reserve.

There is one hunt camp building within the proposed conservation reserve (see **3.1 Land Tenure**).

There is an unmarked 60 metre portage route on the south-west side of the Narrows which is an alternative to paddling through the Narrows (Callan, 1996).

There are two trails within the proposed conservation reserve, both on the eastern peninsula. The 14A Kingston and Pembroke Association snowmobile trail runs north and south providing safe passage between the lower and upper portions of the lake and consequently access to the interior of the peninsula. In summer the trail is not fully accessible due to the wetlands intercepting portions of the trail. The second trail exists to provide access to the hunt camp; it runs north from Big Black Bay to the camp.

There are approximately nineteen campsites managed for low impact use. At some of the campsites privies have been provided and fire pits are established. The camping areas of the proposed conservation reserve are maintained by The Township of North Frontenac who operate under a Land Use Permit. Outside of the proposed conservation reserve, there are other campsites along the shoreline of Crotch Lake, which are also managed by the Township of North Frontenac.

Three of the islands included in the proposed conservation reserve have 'No Camping' signs posted due to the sites being too small and unsuitable for camping.

Guideline:

Values intended to be protected by the proposed conservation reserve, and the prevention of any impact on them, will be considered in the context of crown land management in the adjacent Remote Access Enhanced Management Area (EM1a).

As described in **3.1 Land Tenure**, Ministry of Natural Resources staff will contribute to developing a water management plan for the Mississippi River watershed.

The existing snowmobile trails through, and in the vicinity of, the proposed conservation reserve is maintained by the Ompah Snowmobile Club.

Development or the relocation of trails for a variety of activities (e.g. hiking, cross-country skiing, cycling, horseback riding, snowmobiling), may be considered through planning exercises

where no significant conflicts can be demonstrated. Snowmobile and ATV use off of trails is not permitted, except for the direct retrieval of game.

Development that protects the natural values of the site (such as privies or signage) or enhances recreational value or safety without detrimental impact on the natural values of the proposed conservation reserve or adjacent waters is permissible. **Procedural Guideline B–Land Uses-Test of Compatibility** (PL Procedure 3.03.05) (Appendix 1) can assist in assessing this.

3.3 Recreational Activities

Background:

The proposed conservation reserve is accessible by water only during the summer months and by snowmobile during the winter months, hence boating and snowmobiling is an integral part of all recreational activities.

Existing known recreational activities include fishing, camping, picnicking, canoeing, nature viewing, watersports (i.e. motorboat, canoeing, kayaking), snowmobiling and hunting. Fishing and camping are ranked as the two most popular activities in the proposed conservation reserve (Dore and Tomasini, 2002).

Crotch Lake is part of the 90 kilometre Mazinaw -Mississippi Canoe Route, and other local routes, which increase its popularity for canoeing and possibly kayaking. Motorized and non-motorized boats can be rented from lodges on the south end of the lake.

Snowmobile routes at Crotch Lake include land and ice-crossings. There are several routes cross the lake and a land trail which crosses through the proposed conservation reserve, east of the Narrows. These trails connect to the OFSC TOP Trail network and other regional trails (Dore and Tomasini, 2002).

Fishing is a popular activity for those visiting Crotch Lake.

In general, the Crotch Lake shoreline is hunted extensively (Dore and Tomasini, 2002). There is one hunt camp within the proposed conservation reserve and several on the surrounding Crown land.

As discussed in **3.2 Existing/Proposed Development**, there are approximately sixteen existing campsites in the proposed reserve, accessible by water only, that are intended for low-impact camping.

Guideline:

Existing recreational uses will be permitted to continue as long as they do not negatively impact the natural features needing protection.

Existing snow trails are maintained by the Ompah Snomobile Club.

New trails, or the relocation of trails, may be considered through planning exercises where no significant conflicts can be demonstrated (see **3.2 Existing/Proposed Development**).

Sport hunting and fishing will continue to be permitted, as outlined in **3.6 Natural Resource Stewardship**.

The existing hunt camp, authorized by a Land Use Permit, and the use of the site for camping, under management of the Township of North Frontenac may continue as described in **3.1 Land Tenure**.

3.4 Commercial Activities

Background:

There are three commercial lodges located on Crotch Lake; one at the south end and two at the north end of the lake. None of the lodges are located within the proposed conservation reserve. The lodges are described further in **2.3 Recreational Values** and **3.8 Client Services**.

The Township of North Frontenac has a Land Use Permit for the Crown land surrounding Crotch Lake and including the proposed conservation reserve, which enables them to manage uses and charge fees on all of the campsites.

There is one fur harvesting agreement, which includes the area of the proposed conservation reserve.

Crotch Lake, which intervenes and surrounds portions of the proposed conservation reserve, includes Bait Block BAM-71.

Mining activities are not known to have occurred within the proposed reserve.

Guideline:

It is anticipated that the agreement with the Township of North Frontenac will continue.

Existing land use permits may be renewed.

Fur harvest will be authorized to continue within the proposed conservation reserve.

Bait Block (BAM-71) in Crotch Lake will continue to be authorized through existing Crown land management.

Conservation reserves do not permit mining, commercial forest harvesting, hydroelectric power development, the extraction of aggregate, peat, soils, or other industrial uses. (Public Lands Act, Ontario Regulation 805/94). Other new commercial activities must meet the requirements of **Procedural Guideline B – Test of Compatibility** (PL Procedure 3.03.05) (Appendix 1).

3.5 Aboriginal Interests

Background:

The proposed conservation reserve is located within the land claim area of the Algonquin Nation.

Cultural resources inventories have not been completed for this proposed conservation reserve. The Algonquins have identified value areas in the vicinity of Crotch Lake although none of these sites is located within the proposed conservation reserve. The Ministry of Natural Resources, through the Mazinaw Lanark Forest Management Plan for Crown lands beyond the proposed conservation reserve is monitoring these locations for the protection of these sites from forest management activities (Mikkelsen, 2002).

Guideline:

The Ministry of Natural Resources and the Algonquin Nation of Pikwakanagan are developing a protocol to guide discussions on a number of land use matters, including implementation of the *Ontario's Living Legacy Land Use Strategy*. The Crotch Lake 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. Hunting and fishing are permitted uses in proposed conservation reserves.

Where appropriate, interested partners will be encouraged to undertake inventories and studies of the area. Any research in the proposed conservation reserve must be approved prior to commencement (see **3.9 Research**).

3.6 Natural Resource Stewardship

3.6.1 General

This proposed conservation reserve will be managed with an emphasis on ensuring that the natural ecosystems and processes of the proposed reserve are not negatively affected by current and future activities. Therefore, applications for specific uses will be carefully studied and reviewed. The Ministry, partner organizations, and/or the proponents may undertake such studies.

A municipal by-law (#17-01) is in place designating the Township of North Frontenac responsible for the resource management around Crotch Lake, including the proposed conservation reserve.

3.6.2 Vegetation Management and Fire Management

Background:

Vegetation at the site is dominantly forested, and contains a provincially significant component of upland conifer on shallow sandy till (OMNR, 1999).

It is recognised that fire is a natural component of ecosystems.

Guideline:

The proposed Crotch Lake Conservation Reserve is in MNR's East Fire Region Sector 1 (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.

Until a more detailed local natural resource plan or fire management plan provides alternate direction, fire protection for the proposed Crotch Lake Conservation Reserve will be carried out in accordance with the approved Fire Management Strategy that applies to surrounding Crown lands. A 'light on the land' approach to fire suppression will be desirable in order to protect natural values; for example, minimal use of heavy equipment, trenching, tree cutting, camp construction, etc.

If habitat regeneration becomes an issue in future, prescribed burning may be considered on a per-site basis. This would entail preparing a detailed implementation plan. The need for a prescribed burn is not anticipated in the near future, as the hemlock regeneration is abundant at the site (Merchant, 2002).

Programs may be developed to control forest insects and diseases in the proposed conservation reserve where these threaten significant values in or adjacent to the site. Where insects or disease threaten significant values, in or adjacent to the site, control will be directed as narrowly as possible to the specific insect or disease. Biological control will be used wherever possible.

3.6.2 Fish and Wildlife Management

Background:

Fish and wildlife species are listed under in the **2.2 Life Science – Diversity** section.

Commercial and recreational activities related to wildlife are listed in **3.3 Recreational Activities** and **3.4 Commercial Activities**.

As the proposed conservation reserve does not include the Crown lakebed, the fisheries values are not part of the proposed reserve. Yet as described under **2.3 Recreational Values**, the fisheries values of Crotch Lake affect activities of and the number of visitors to the proposed conservation reserve. The lake is particularly popular for walleye, smallmouth bass and northern pike. In order ensure the long-term sustainability of this popular fishery, a year-round slot size limit for walleye is in effect. As well, the north end of the lake is a spring fish sanctuary from March 1st to the first Monday in June each year (see **2.2 Life Science - Ecological Considerations** for further detail).

The proposed reserve provides habitat for species that are nationally and provincially rare (NRVIS, NHIC, 2002).

Guideline:

The management of game and fur species in the proposed Crotch Lake Conservation Reserve will continue consistent with the Wildlife Management Unit (63A) within which it lies.

The management of fisheries values in Crotch Lake will continue consistent with the Fishing Division (29) within which it lies. In addition, the Tweed District Fisheries Management Plan, and updates to this plan, will guide the management of the fisheries resource in Crotch Lake.

Significant or rare species and their habitat will be protected through appropriate planning and management of the proposed conservation reserve, including but not limited to the monitoring of impacts on the site and review of development proposals as per **Procedural Guideline B – Test of Compatibility** (PL Procedure 3.03.05) (Appendix 1).

3.7 Cultural Resource Stewardship

Background:

No cultural resource values have been identified within the proposed Crotch Lake Conservation Reserve to date.

Guideline:

Where appropriate, interested partners will be encouraged to undertake inventories and studies of the area. Any research in the proposed conservation reserve must be approved prior to commencement (see **3.9 Research**).

3.8 Client Services

Background:

Services presently available at the proposed Crotch Lake Conservation Reserve are provided as an agreement between the Ministry of Natural Resources and the Township of North Frontenac. This agreement is upheld by a land use permit and municipal bylaw. Services include provision of privies (at some campsites), campsite maintenance and posting of signage. There are approximately nineteen campsites within the proposed conservation reserve.

The proposed conservation reserve is accessible by water only during the summer, and by snowmobile during the winter. There are two well-developed public boat launches on the lake, one at the south end and one at the north end. The Township maintains these access points and parking lots as part of the same above-mentioned agreement.

An Ontario Living Legacy fact sheet on Crotch Lake is provided at several nearby Ministry of Natural Resources offices.

Two of the three commercial tourism lodges located on the lake, (but outside the proposed conservation reserve) have areas for private boat launches. They also offer boat rentals including canoes, kayaks, motorboats, pedal boats, and other recreational watercraft. Other services offered include: accommodation, gas, groceries, dining facilities and rental of fishing gear.

The snowmobile trails within and in the vicinity of the proposed conservation reserve are maintained by the Ompah Snowmobile Club.

Guideline:

The partnership with the Corporation of the Township of North Frontenac will continue.

Although there are no proposals to build facilities or expand services from the current level of service at this time, development which enhances resource protection or recreational value/safety may be considered (see **3.2 Development**).

At present, the focus of client services will remain on the provision of low key information and self-guided interpretation of proposed conservation reserve values.

3.9 Research

Background:

Since the Ontario's Living Legacy Land Use Strategy (OMNR 1999) designation of the site a proposed conservation reserve, several surveys and checklists have been completed by the Ministry.

A reconnaissance Earth Science Report (Duba and Frey, 2002), a reconnaissance Life Science Checksheet (Merchant, 2002) and a reconnaissance Recreation Checklist and Report (Dore and Tomasini, 2002) were completed based on 2001 field surveys.

Guideline:

Continued research should be geared to develop further knowledge of the natural values at the site and to monitor any impacts from recreational use of the site. Some of this research may be conducted through partnerships with the municipality, naturalists, anglers and researchers.

Authorized inventory of cultural/historic and archeological values may be encouraged so that these values can be appropriately protected.

All research proposals and activities must follow **Procedural Guideline C – Research Activities in Conservation Reserves** (PL. Procedure 3.03.05) (Appendix 2).

3.10 Marketing

Background:

There has been no direct marketing of the proposed Crotch Lake Conservation Reserve to date. Promotion and information about this site has been primarily through the *Ontario's Living Legacy* land use planning process, and recent MNR public consultation (2000) regarding proposed regulation and boundary refinement of this site.

Previous to its designation as a proposed conservation reserve, the Township of North Frontenac provided information about Crotch Lake to the public through public consultation, the production of a site map and locally distributed brochure, and promotion through the Township of North Frontenac website (Buck, 2002). The Township continues to provide this information as part of its management of these Crown lands.

Guideline:

Fact sheets about this proposed conservation reserve will continue to be available to inform the public about the special values of this area and the role of this proposed conservation reserve in Ontario's protected area system. The Township of North Frontenac may continue to provide information about the services they offer. If regulation of the site as a conservation reserve is approved, any future marketing of the site will identify it as an Ontario's Living Legacy Conservation Reserve.

4.0 Implementation

Administrative responsibility for the proposed Crotch Lake Conservation Reserve lies with the Ministry of Natural Resources through its Mazinaw Area office in Bancroft District.

The Area Office will continue its custodial partnership of the proposed conservation reserve, with the Corporation of the Township of North Frontenac. Implementation of this Statement of Conservation Interest will primarily involve monitoring activities to ensure adherence to the management guidelines.

Implementation priorities include:

- prepare to consult with Algonquin First Nation representatives and communities, as a basis of proceeding with final boundary refinement and regulation of this proposed conservation reserve;
- update this SCI upon final regulation as a conservation reserve;
- provision of client services (e.g. brochure or fact sheet) at nearby MNR Offices;
- monitor and assess management agreement with municipality and continue agreement as appropriate;
- monitor site use and impacts of use (i.e. campsites, fisheries, vegetation);
- survey for additional natural heritage values (i.e. species at risk), preferably in partnership with reserve users, the municipality, or researchers;
- encourage appropriate survey of cultural values; and
- continue recreation assessment and documentation: map snowmobile trails; assess winter usage; monitor if trail development at south end of lake affects visitation.

5.0 Review and Revision of the Statement of Conservation Interest

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

If changes are required in the Statement of Conservation Interest, 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 Mazinaw 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 policies.

Uses and/or activities that were not anticipated in the approved SCI and which have the potential to have a negative impact on the values of this proposed conservation reserve will require a major amendment. This will include an opportunity for public comment and input, will require the approval of the Bancroft District Manager and Regional Director, Southcentral Region, MNR.

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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 **only an indication** 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 test of compatibility 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 describes 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 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 an 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 use(s) 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 (ies) 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) give someone exclusive rights to the area or a portion of the area to the exclusion of other existing uses?”

Indicator Uses for Conservation Reserves

ACTIVITY	GENERIC OLL POLICY		SPECIFIC APPLICATION	
	Permitted? (Y = Yes, N = No, M =Maybe)		In Proposed Crotch Lake Conservation Reserve	
	Existing	New	Existing	New
INDUSTRIAL ACTIVITIES				
Commercial timber harvest	N	N	N	N
Cutting of trees by leaseholders and property owners for fuelwood and small-scale uses	M	M	M	M
Timber salvage/sunken log retrieval	M	M	M	M
Mineral exploration	N	N	N	N
Mining	N	N	N	N
Extraction of peat, soil, aggregate, other materials	N	N	N	N
Forest renewal	M ¹	M ¹	M ¹	M ¹
Hydro power generation	N	N	N	N
Communications corridors	Y	N ²	Y	N ²
Energy transmission corridors	Y	N ²	Y	N ²
Transportation corridors	Y	N ²	Y	N ²
Resource access roads	M ²	M ²	M ²	M ²
Private access roads	Y	N ³	Y	N ³
RECREATION ACTIVITIES				
Sport fishing	Y	Y	Y	Y
Sport hunting	Y	Y	Y	Y
Facility development	M	M	M	M
Non-trail snowmobiling	M ⁴	M ⁴	M ⁴	M ⁴
Non-trail ATV use	M ⁴	M ⁴	M ⁴	M ⁴
Trails: - hiking - snowmobiling - cycling - horse riding - cross-country skiing	Y	M	Y	M

¹If a new conservation reserve has been recently cut, companies have an obligation to proceed with renewal. It can be conducted where it will be of net benefit to the protected area and to, the greatest extent possible, it should be designed to replicate natural conditions.

²The intent is to actively discourage these uses, but it is recognized that in some circumstances these will be no alternative; this will be determined through planning.

³New private access roads, including additions to existing roads, will not be permitted except where there are previous commitments that were made prior to March 29, 1999. Such commitments will be subject to the completion of a public planning process.

⁴Use may be permitted for the direct retrieval of game only.

ACTIVITY	GENERIC OLL POLICY		SPECIFIC APPLICATION	
	Permitted? (Y = Yes, N = No, M =Maybe)		In Proposed Crotch Lake Conservation Reserve	
	Existing	New	Existing	New
Motorized boating	Y	Y	Y	Y
Private recreation camps	Y ⁵	N	Y ⁵	N
COMMERCIAL ACTIVITIES				
Fishing	Y ⁶	M	Y ⁶	M
Bait-fish harvesting	Y ⁶	M	Y ⁶	M
Commercial fur trapping	Y ⁶	M	Y ⁶	M
Trapping cabin	Y	N	Y	N
Out-post camps/tourism facilities	M ⁷	M ⁷	M ⁷	M ⁷
Commercial bear hunting (tourist operators)	Y	N	Y	N
Wild rice harvesting	Y ⁶	M	Y ⁶	M
Food harvesting	M	M	M	M
RESOURCE MANAGEMENT ACTIVITIES				
Resource inventorying	Y	Y	Y	Y
Resource monitoring	Y	Y	Y	Y
Fire protection	Y	Y	Y	Y
Insect and disease	M	M	M	M
Featured species management	M	M	M	M
OTHER ACTIVITIES				
Research	Y	Y	Y	Y
Collecting	M ⁸	M ⁸	M ⁸	M ⁸
Food gathering	Y	Y	Y	Y
Land disposition	Y ⁹	M ⁹	Y ⁹	M ⁹
Habitat management for wildlife	M ¹⁰	M ¹⁰	M	M

⁵ Existing private recreation camps are eligible for enhanced tenure but not for the purchase of lands. A decision to grant enhanced tenure, or to transfer recreational camps will be addressed through a screening process.

⁶ Existing use permitted to continue, unless there are significant demonstrated conflicts. New operations can be considered, subject to the 'test of compatibility.'

⁷ Existing authorized tourism facilities can continue unless there are demonstrated conflicts. The operators of tourism facilities can apply to upgrade tenure from LUP to lease. New tourism facilities can be considered during planning for a conservation reserve.

⁸ Must be part of an authorized research project.

⁹ Sale of lands is not permitted with the exception of some minor types of dispositions where it does not detrimentally affect the values an area is intended to protect. Renewals of existing leases or land use permits are permitted. Requests for transfer of tenure will be considered in the context of the SCI. New leases or land use permits will be allowed for approved activities.

¹⁰ A specific policy was not identified in the *OLL Land Use Strategy*, although specific management prescriptions will be identified in the context of an SCI.

Appendix B:

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

Research 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 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 .

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.