# **Bigwind Lake Provincial Park** Background Information



#### **Approval Statement**

I am pleased to approve the background information file which will inform the development of the Bigwind Lake Provincial Park Management Plan. This document consolidates information about the park's natural and cultural features and current recreational use. The Ministry of the Environment, Conservation and Parks is in the process of gathering updated and new information on the values of the park. Collectively, this information will be used to support the management planning process as outlined by the Ontario Protected Area Planning Manual.

I invite you to review and comment on this document.

20/06/2023

Jason Travers Director, Ontario Parks Operations

Date (dd/mm/yyyy)

#### TABLE OF CONTENTS

TA	BL	E OF CONTENTS	
1		INTRODUCTION4	
2		PLANNING HISTORY4	
3		PLANNING AREA	
	3.1	Regional setting5	
	3.2	Indigenous Communities5	
	3.3	Access	
	3.4	Adjacent Land6	
	3.5	Authorized Third Party Uses and Development6	
4		NATURAL HERITAGE VALUES AND PROCESSES	
	4.1	Ecological Integrity7	
	4.2	Life Science Values	
	4.3	Earth Science Values9	
	4.4	Watersheds10	
5		CULTURAL HERITAGE VALUES11	
6		RECREATION VALUES	
7		COMMERCIAL USES12	
8		SOCIAL AND ECONOMIC BENEFITS12	
9		PROTECTED AREA PRESSURES	
10		REFERENCES14	

# **1 INTRODUCTION**

Indigenous people lived on and developed relationships to the lands and waters that we now call Ontario long before the establishment of provincial parks. We understand that these relationships have formed the basis of Indigenous communities' harvesting practices, governance structures, cultures, and spirituality. Indigenous peoples continue to rely on, care for, and renew their connections to the lands and waters in Ontario, including traditional territories that now overlap with provincial parks.

Bigwind Lake Provincial Park (BLPP) is in the geographic township of Oakley, Town of Bracebridge, in the District Municipality of Muskoka (Figure 1). The park is approximately 20 kilometres east of the town of Bracebridge and is 1,967 hectares in size.

BLPP is administered by the Ontario Ministry of the Environment, Conservation and Parks (MECP), Ontario Parks Operations Branch, Algonquin Zone. The Algonquin Zone administrative office is located in Huntsville, Ontario.

Classified as a natural environment class park, Bigwind Lake Provincial Park offers low-intensity, self-guided recreational opportunities by providing an attractive natural setting for paddling, hiking and nature appreciation. The park is currently non-operating and has no dedicated staff or facilities.

The planning and management of provincial parks is governed by the *Provincial Parks and Conservation Reserves Act, 2006* (the Act). Provincial parks protect provincially significant elements of Ontario's natural and cultural landscape and maintain biodiversity while offering opportunities for ecologically sustainable outdoor recreation. The Act dedicates provincial parks to the people of Ontario and to visitors, for their inspiration, education, health and recreational enjoyment – with the intention that these areas be managed to maintain their ecological integrity and preserved for future generations.

# 2 PLANNING HISTORY

Bigwind Lake Provincial Park was originally established by regulation in 1985. In 1998 the boundaries of BLPP were amended to remove two road allowances from the park.

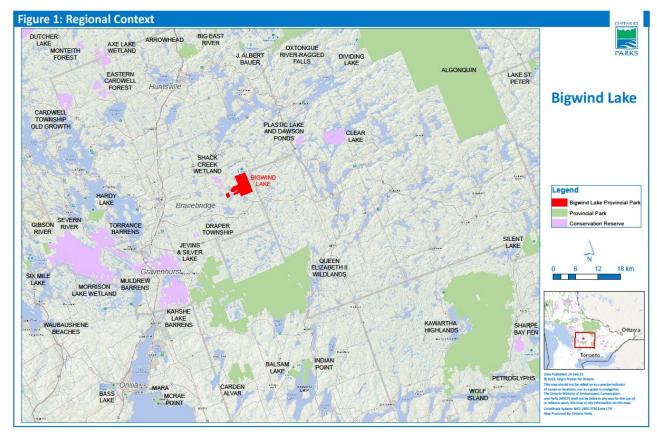
The current boundary of Bigwind Lake Provincial Park is described in section 2 of Regulation 951 of the Revised Regulations of Ontario, 1990 (Designation of Parks) made under the former *Provincial Parks Act*, as that section read on September 3<sup>rd</sup>, 2007, and is continued under the PPCRA.

The Bigwind Lake Provincial Park Interim Management Statement was first prepared in 1998, updated most recently in 2007, and provides the current direction for the park's management. A replacement park management plan will be developed to support the proposed development of a new four season, full service operating provincial park.

# **3 PLANNING AREA**

### 3.1 Regional setting

Bigwind Lake Provincial Park is located in southern Ontario, approximately 20 kilometres east of the Town of Bracebridge (Figure 1: Regional Setting). This 1,967 ha provincial park occurs entirely in Ecodistrict 5E-8 and contains biological features of provincial significance and representation of locally significant geological features.



# 3.2 Indigenous Communities

Ontario respects Aboriginal and treaty rights recognized and affirmed by Section 35 of Canada's Constitution Act, 1982, and is committed to meeting its constitutional obligations in respect of Indigenous peoples.

Bigwind Lake Provincial Park is located within the traditional territories of some of the First Nation signatories to the Williams Treaties; and in the traditional territories of some of the First Nation signatories to the Robinson Huron Treaty of 1850; and within the Métis Nation of Ontario's (MNO) asserted Georgian Bay Métis Harvesting Area.

MECP is currently undertaking a Stage 1 archaeological assessment of the site. A Stage 2 archaeological assessment will occur if results identify areas of archaeological potential.

MECP is also engaging with Indigenous communities to document their relationship with these lands, including any historic or current use of Bigwind Lake Provincial Park for the exercise of Aboriginal or treaty rights.

#### 3.3 Access

Access to Bigwind Lake Provincial Park is via Highway 118 and utilizes municipally maintained paved and gravel roads north to the park's entrance in the south-eastern corner. There is one unmaintained road that runs north through the eastern side of the park and is primarily used as a snowmobile trail.

#### 3.4 Adjacent Land

Bigwind Lake Provincial Park is surrounded by a combination of Crown and patented land. Private cottage lots abut the park on Bigwind, Pine and Bird Lakes, and large areas of patented land are found to the south and east of the park. Private land is not included within the park boundary and park policy does not apply to these areas.

To the east and north of the park, land is largely owned by the Crown and is part of the French Severn Forest Management Unit. The Black River Enhanced Management Area (E-65r-1) runs past the south-east corner of the park. This riverine area is managed by the Ministry of Natural Resources and Forestry to protect recreational and natural values along the river, while permitting resource uses such as forest management. Much of the remaining adjacent Crown land falls within the Parry Sound District Multiple Resource Management Area.

#### 3.5 Authorized Third Party Uses and Development

Authorized uses or activities by third parties and current infrastructure within Bigwind Lake Provincial Park include:

• A Land Use Permit (LUP) for a recreation camp located on Lot 12, Concession XI near Bigwind Lake.

- A registered trapline covers much of the park area. The Trapper's Cabin associated with the trapline is located on the shore of Gullfeather Lake on Lot 5, Concession XIII.
- Two authorized snowmobile trails.
  - The primary trail runs north to south along Old Wagon Road. The second trail, the B Trail, runs east to west between Bigwind Lake Road and Old Wagon Road. This trail is currently closed due to unsafe bridges.
  - A LUP has been issued to the Ontario Federation of Snowmobile Clubs (OFSC) for two bridges in the park to support their current trail system. The Crosson Lake Bridge was replaced in 2018 with funding provided by OFSC and is located on Old Wagon Road. The B Trail bridge is currently closed and requires replacement.
  - OFSC has expressed an interest to MECP and the District Municipality of Muskoka in re-routing the "B" trail.
- Two small weirs are in the park, one at the inlet and one at the outlet of Crosson Lake.

# 4 NATURAL HERITAGE VALUES AND PROCESSES

#### 4.1 Ecological Integrity

- The maintenance of ecological integrity is the first priority in the planning and management of Ontario's protected areas. Ecological integrity is a concept that addresses three ecosystem attributes – composition, structure and function. This concept is based on the idea that the composition and structure of the protected area should be characteristic for the natural region and that ecosystem functions should proceed normally.
- Since ecological integrity is a concept, it is difficult to measure. There are hundreds of aspects of ecosystems that could be measured at a variety of scales. Since there is not a single approach to assessing ecological integrity, the approach adopted by MECP looks at the purpose of the protected area (why it was created and/or what role it plays in the protected area system), what features and values it contains, processes that occur and the pressures upon the protected area as a whole. The identification of values and pressures, and analysis to determine management priorities and appropriate actions to address those priorities is considered the basis for maintaining and enhancing ecological integrity.

#### 4.2 Life Science Values

Bigwind Lake Provincial Park is situated in Ecodistrict 5E-8 and supports good representative examples of forest and wetland habitats. The park is dominated by late successional (100-130 year old) deciduous and mixed forest (sugar maple,

yellow birch, American beech, eastern hemlock, eastern white cedar) over rugged, bedrock controlled substrates.

Wetlands in the park exhibit a great diversity of composition and structure. Water flow rates are often slow and beaver-influenced with severely interrupted drainage patterns. Wetland habitat types include poor fens, wet meadows, thicket swamps, and occasional Black Spruce dominated kettle bogs. Lakes in the park are cool, deep and oligotrophic, with narrow sand/gravel or peaty emergent shores (Brunton 1993).

Legros (2018) identified a total of 118 species of vascular plants are known to occur in the park. Due to the diversity of wetland habitats and challenges with accessing areas of the park, there is likely a high number of unidentified plant species.

Wildlife species that were found in the park are typical of the region and included snowshoe hare, American red squirrel, white-tailed deer, moose and American beaver. Two deer yards were identified within the park.

A variety of wetland and forest bird species were also identified in the park, including common yellowthroats, yellow warblers, red-eyed vireos and a variety of other wood warblers. Waterfowl species including common loon and common merganser were observed on the lakes. Singh (1979) identified a small breeding colony of American herring gulls on an island in the middle of Gullfeather Lake and a small heronry northeast of Bigwind Lake. Although these breeding colonies were not confirmed during the 2018 inventory, the presence of these species during the breeding season indicate they may still be active. There are recent Ministry of Natural Resources and Forestry (MNRF) reports which indicate the presence of red-shouldered hawk nests in the park and to the south-west of the park. An active heronry has been located to the south-west of the park boundary, west of Clear Lake, with 17 nests found in the summer of 2007.

Bigwind Lake Provincial Park is home to species at risk turtles including snapping and midland painted turtles. Recent community science platforms have noted the presence of blanding's turtle.

A total of 13 species of fish have been identified in Bigwind including brook trout, rainbow trout, lake trout, yellow perch, white sucker, creek chub, bluntnose minnow, northern redbellied dace, smallmouth bass and brown bullhead (LeGros 2018).

Crosson Lake was historically stocked by MNRF with rainbow trout (1981-2007), walleye (1939 and 1942), brook trout (1964, 1966, 1983), and lake trout (1972). These species are no longer present in abundance, with a 2005 netting assessment by Laurentian University finding rainbow trout (1) and brook trout (2).

Bigwind Lake, located on the western side of the park, had been managed as a 'put-grow-take' lake for lake trout and has been regularly stocked with that

species by MNRF since 1975. Stocking of brook trout (1989 and 1991) and rainbow trout (1979-1985) was historically done but is no longer occurring. A netting assessment for Bigwind Lake, also by Laurentian University in 2005, found brook trout (6), lake trout (39), white sucker (2), bluntnose minnow (36), brown bullhead (2), pumpkinseed (6), largemouth bass (213) and yellow perch (386). The largemouth bass found in both lakes are non-native.

There is one bait harvest area registered for the park. Existing commercial bait fishing is currently permitted, subject to sustainable resource management and local management needs as well as conditions identified in provincial park and fisheries management plans.

Current background information resources, available on request:

- [1.1] Singh, B. V. 1973. <u>Brief ecological study of Bigwind Park, Oakley</u> <u>Ontario.</u>
- [1.2] Simpson, H. 1979. Life science inventory check-sheet.
- [1.3] Noble, T. 1983. <u>Biophysical analysis: Site region 5E, Algonquin</u> <u>Region.</u>
- [1.4] Brunton, D.F. 1991. <u>Significant life science area checklist: Bigwind</u> <u>Provincial Park and Candidate NRZ.</u>
- [1.5] Legros, D.L. 2018. <u>A life science inventory of Bigwind Lake</u> <u>Provincial Park.</u>
- [1.6] Tapper, S. 2023. <u>Connectivity analysis of Bigwind Lake Provincial</u> Park.
- [1.7] iNaturalist. Available from https://www.inaturalist.org.

MECP is in the process of gathering new information on the life science values of the park, including:

- Leaf off bat cavity surveys
- Turtle surveys
- Species at Risk snake surveys
- Breeding bird surveys
- Marsh monitoring surveys (birds and anurans)
- Species at Risk lichen and plant surveys
- Fish and lake baseline surveys
- Invasive species surveys
- Freshwater stream classification
- Ecological connectivity assessment

#### 4.3 Earth Science Values

Earth science features of Bigwind Lake Provincial Park are considered locally significant and include representation of gneisses of the Opeongo Domain of the Algonquin terrain (Eaton, 1992). These gneisses have been described as granitized, banded, pink and grey rock (Lawrence 1973).

The area is dominated by low, rounded hills of bedrock cut by one fault and numerous joint planes which are frequently topographically expressed as valleys. Indications of glacial action include glacial polish and depositional features such as the bouldery-sandy till which thinly mantles the hills. Boulder trains are found at the mouths of the valleys and a small area of outwash deposits is found at the south end of the park (Lawrence 1973).

Current background information resources, available on request:

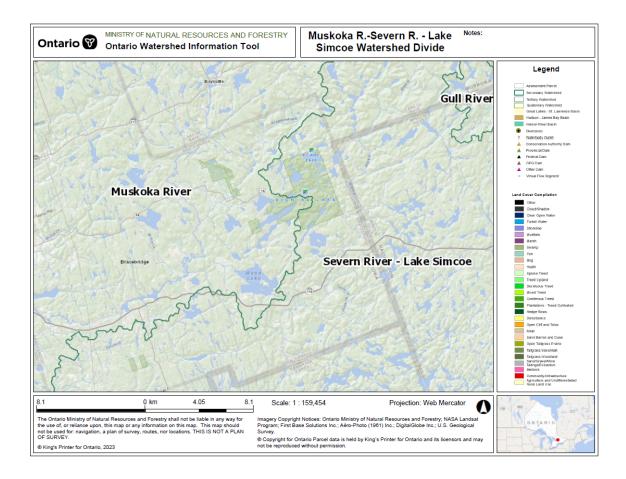
- [2.1] Satterly, J. 1943. Mineral occurrences in the Haliburton Area.
- [2.2] Hewitt, D. F. 1967. <u>Geology and mineral deposits of the Parry</u> <u>Sound-Huntsville Area.</u>
- [2.3] Lawrence, G. 1973. <u>A brief geological inventory of Bigwind</u> <u>Provincial Park Reserve.</u>
- [2.4] Spek, C. M. 1978. Earth Science Inventory Checklist.

MECP is in the process of gathering new information on the earth science values of the park, including Surface water sampling

- Groundwater sampling
- Hydrogeological monitoring

#### 4.4 Watersheds

Bigwind Lake Provincial Park is located on the divide of the Muskoka River (02EB) and the Severn River-Lake Simcoe (02EC) watersheds (see map below). The Muskoka River watershed is situated on the west, and the Severn River-Lake Simcoe, on the east, of the watershed divide. Bigwind and Pine Lakes are situated in the Muskoka, and Saw, Crosson and Gullfeather Lakes are in the Severn River-Lake Simcoe watershed.



# 5 CULTURAL HERITAGE VALUES

A reconnaissance inventory of cultural resources was conducted for Bigwind Lake Provincial Park in the early 1970s (Stevens 1973). It primarily examined the remnants of built heritage and historical landscapes related to the intense logging that once took place in the area, including remnant logging dams, camps, roads, and a sawmill.

Current background information resources, available on request:

• [3.1] – Stevens, M. 1973. The history of the Bigwind Lake Park Reserve.

MECP is in the process of gathering new information on the cultural values of the park, including a Stage 1 archaeological assessment of the park. A Stage 2 archaeological assessment will occur if results identify areas of archaeological potential.

# 6 RECREATION VALUES

Bigwind Lake Provincial Park offers low-intensity, self-guided recreational opportunities by providing an attractive natural setting for hiking, cycling,

paddling, fishing, snowmobiling and nature appreciation. The park is currently non-operating and has no dedicated staff or facilities.

Bigwind Lake Provincial Park was the historical site of an Ontario Junior Ranger Camp located on the shore of Crosson Lake. Youth employed were active natural resources stewards in the surrounding communities. The camp has been cleared but some remnants of this former use are still visible.

Current recreational uses include:

- Anglers access Crosson Lake, Gullfeather Lake, and unnamed lakes near Gullfeather lake via canoe
- Local cottagers and a nearby youth summer camp use a canoe route from adjacent Saw Lake to access the park at Keyhole Lake
- Old Wagon Road is a popular gravel cycling route connecting Baysville and Highway 118 with a loop route through the Hinden Forest Access Road to the east.
- Over the past decade the park has hosted multiple adventure races with sections of the cycling and orienteering occurring in Bigwind Lake Provincial Park.
- The Ontario Federation of Snowmobile Clubs operates two snowmobile trails through the park, one of which is currently closed.

# 7 COMMERCIAL USES

Current commercial activities within the park are managed by MNRF and include:

- a trapline (BR-06) which covers most of the park area and includes a trapper cabin on the shore of Gullfeather Lake on Lot 5, Concession XIII.
- a bait Harvest Area (PS-0246) encompasses the entirety of the park.
- a Bear Management Area (BR53-02) that includes the entirety of the park although hunting is not permitted within the park boundary as per the *Fish and Wildlife Conservation Act, 1997*.

# 8 SOCIAL AND ECONOMIC BENEFITS

There is no current information on the specific social and economic benefits that are directly resulting from the park. Anticipated benefits associated with the proposed development of the park will be identified in future planning documents.

# 9 PROTECTED AREA PRESSURES

The protection of Bigwind Lake Provincial Park natural and cultural values is a primary priority of the park planning process. MECP is undertaking work to identify potential pressures on park values from the proposed development that will be considered in the park management planning process.

Existing pressures impacting natural and cultural heritage values in Bigwind Lake Provincial Park include:

- Unauthorized camping on Gullfeather, Crosson, Keyhole and Saw Lakes
- Unauthorized use of all-terrain vehicles (ATV)
- Prohibited use of motorized boats
- Illegal sport hunting

These activities have resulted in road erosion, sediment deposits, and road braiding, development of unauthorized trails and the introduction of invasive species.

### **10 REFERENCES**

[1.1] – Singh, B. V. 1973. Brief ecological study of Bigwind Park, Oakley Ontario.

[1.2] – Simpson, H. 1979. Life science inventory check-sheet.

[1.3] – Noble, T. 1983. Biophysical analysis: Site region 5E, Algonquin Region.

[1.4] - Brunton, D.F. 1991. <u>Significant life science area checklist: Bigwind</u> <u>Provincial Park and Candidate NRZ.</u>

[1.5] – Legros, D.L. 2018. <u>A life science inventory of Bigwind Lake Provincial</u> <u>Park.</u>

[1.6] - Tapper, S. 2023. Connectivity analysis of Bigwind Lake Provincial Park.

[1.7] - iNaturalist. Available from https://www.inaturalist.org.

[2.1] - Satterly, J. 1943. Mineral occurrences in the Haliburton Area.

[2.2] – Hewitt, D. F. 1967. <u>Geology and mineral deposits of the Parry Sound-Huntsville Area.</u>

[2.3] – Lawrence, G. 1973. <u>A brief geological inventory of Bigwind Provincial Park</u> <u>Reserve.</u>

[2.4] – Spek, C. M. 1978. Earth Science Inventory Checklist.

[3.1] – Stevens, M. 1973. The history of the Bigwind Lake Park Reserve.