

# Mattawa River and La Vase Portages

*Canadian Heritage River System  
Ten Year Monitoring Report 1999-2009*



*Ontario Parks and North Bay-Mattawa Conservation Authority*

*Cover photo: Aerial view of Rice Bay Delta. This provincially significant wetland lies at the west end of Lake Talon, Mattawa River Provincial Park. Photo courtesy of Ontario Parks.*

# Mattawa River and La Vase Portages

*Canadian Heritage River System Ten Year Monitoring Report  
1999-2009*



Canadian  
Heritage  
Rivers  
System



Le Réseau  
de rivières  
du patrimoine  
canadien

**June 2010**

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## ***Executive Summary***

This report was prepared by Ontario Parks to fulfill two objectives:

1. to assess the current condition of the natural, cultural and recreational values of the Mattawa River—La Vase Portages as part of the Canadian Heritage Rivers System (CHRS); and
2. to document changes that have occurred to the river over its second ten-year term in the CHRS system, from 1999-2009 (this is the first reporting period for the La Vase Portages, which was included during this second reporting period).

Key changes which have occurred in the past decade include the following:

- La Vase Portages—an important link in the trade route between the Mattawa and French River—was added to the Mattawa River CHR designation in 2002.
- Mattawa River Provincial Park expanded by 10,687 hectares in 2006. The area of the two provincial parks along this historic waterway now totals 16,497 hectares.
- The new park additions provide a larger buffer for the river and protect significant headwater areas. The ecologically-based park boundary includes significant old growth forest and wetland areas
- A partnership with Lake Talon cottagers and residents developed to maintain campsites and remove garbage. A recreation plan for nearby Talon Chutes developed to minimize visitor impacts and to enhance the safety of visitors.
- Ontario Parks has initiated patrols to monitor the river and maintain the canoe route.
- Water quality along the Mattawa River continues to be monitored by the conservation authority. The water quality is good and remains suitable for supporting the river's natural and recreational values.
- Land tenure along the La Vase Portages remains tenuous, with all but a small portion being under private or Crown tenure. Aggregate extraction interests on adjacent land are a threat to a portion of the route.

Overall, the values and integrity for which the Mattawa was originally designated remain intact. The natural, cultural and recreational landscape through which the river flows continues to be enjoyed, appreciated and celebrated by area residents and visitors.

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## ***Introduction***

***The Mattawa River formed an important link in the historic canoe route from Montreal to the upper Great Lakes. For more than 200 years, explorers, fur traders, missionaries and coureurs de bois travelled the route including: Samuel de Champlain, Jean de Brébeuf, Sir Alexander Mackenzie, Simon Fraser and David Thompson.***

In 1988, the Ontario Government designated a 33-kilometre segment of the Mattawa River to the Canadian Heritage Rivers System. The first ten-year monitoring report for the river, covering the period 1988-1998, was published in 1999.

This second report covers the Mattawa River's second decade in the Canadian Heritage Rivers System from 1999 to 2009. The purpose of this report is to highlight key changes which have occurred in the river's condition over the past decade. This monitoring report briefly describes issues and activities that may threaten or enhance cultural, natural or recreational values for which the Mattawa River was originally designated as a Canadian Heritage River.

In 2002, the La Vase Portages was added to the Mattawa River's Heritage River designation through a supplementary nomination. This addition, located 10 kilometres to the west of the Mattawa River, provides an important historic linkage with Lake Nipissing and the French River to Georgian Bay en route to the west. The reporting requirements for the La Vase Portages are included in this document.

For ease of reference, the structure of the tables in this report is similar to the 1999 report. Additional text highlights significant changes which have occurred over the past decade.

## ***Overview of the Mattawa River and La Vase Portages***

The entire Mattawa River system, from Trout Lake eastward to its confluence with the Ottawa River, is 52 kilometres in length. The 33-kilometre portion of the river which was designated as Heritage River lies within two provincial parks:

*Mattawa River Provincial Park* is a waterway class park which was established in 1970. It is non-operating in that there is minimal infrastructure or staffing. Originally 3,260 hectares (ha) in size, the park was significantly expanded in 2006 to a total of 13,947 ha.

Adjacent *Samuel de Champlain Provincial Park* is a natural environment class park which was established in 1967. At 2,550 ha in size, it abuts the eastern end of the original Mattawa River park boundary and includes a 7-kilometre stretch of the Mattawa River. The park is fully operational with 211 car campsites and a range of visitor facilities. The management of both parks is administered from the park office at Samuel de Champlain.

The *La Vase Portages* is an 11-kilometre section of the historic Voyageur canoe route which crosses the height of land between the Mattawa and French river systems. From Trout Lake, three muddy portages connect a series of small lakes and ponds with the La Vase River and Lake Nipissing. The route is encompassed by a range of varying land tenures—private, municipal and provincial—all within the City of North Bay boundaries.

# Components of the Mattawa River as a Canadian Heritage River



**Mattawa River**

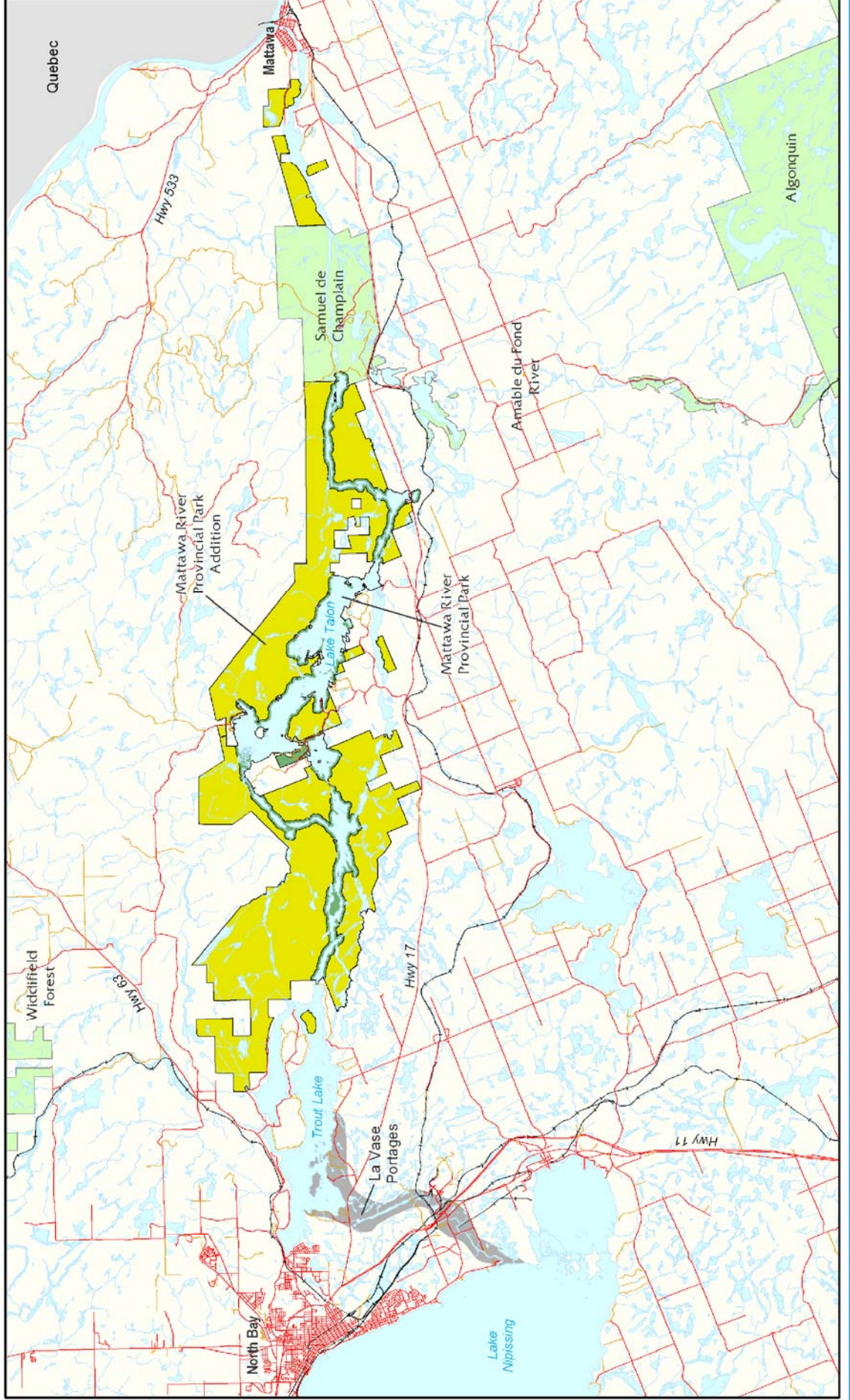
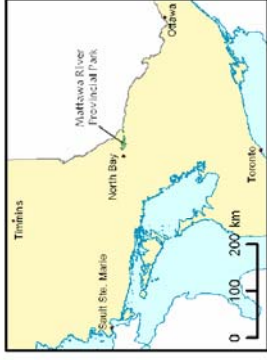
Published April 2010  
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This map is illustrative only. Do not rely on it as being a precise indicator of routes, locations of features, nor as a guide to navigation.

Projections: UTM Zone 17  
 Datum: North American Datum 1983  
 Base Derived From: HRMAS (Natural Resources Values Information System)  
 Produced by: Ontario Parks Northeast Zone

- Mattawa River Provincial Park
- Mattawa River Provincial Park Addition
- Other Provincial Park
- La Vase Portages
- Water
- River / Stream
- Primary Road
- Secondary Road
- Railway



## **Significant Changes since the 1999 Report**

Outlined below are brief descriptions of the key changes which have occurred for Mattawa River in the past decade. An overview is provided in Table 1 on page 6.

### **Lake Talon Conservation Association Partnership (1998-on)**

Since 1998, Ontario Parks has maintained a partnership with the Lake Talon Conservation Association to assist with the maintenance and cleanup of campsites and portages on the Mattawa River, specifically on Lake Talon. This partnership has been very successful in reducing the amount of refuse on campsites and helping to protect the natural environment. The partnership is expected to continue in 2010 and beyond.

### **Ontario Growth and Yield Permanent Sample Plot (1999-ongoing)**

Ontario Ministry of Natural Resources forestry research staff situated three permanent sample plots (PSP) within Samuel de Champlain Provincial Park to monitor growth and yield factors in an area of undisturbed forest. Part of a province-wide forestry assessment program, there is now a network of over 2,000 PSPs across Ontario's forest ecosystems.

These three permanent sites were established in 1999 and are assessed every five years. Each circular plot covers 6,400 m<sup>2</sup>. The three locations in the park were chosen as representative of varying forest and soil types. One plot in particular was selected as it lies between the Mattawa and Amable du Fond rivers in a virtually uncut stand of white pine. In addition to providing data for forestry research, this site is an important interpretive tool used by MNR research staff to educate park visitors, students and other researchers.

### **Talon Chutes Recreational Plan (2005)**

Traditionally, the Talon Chutes area has experienced a high level of use because of its proximity to sheer rock cliffs and a cascading waterfall downstream of Talon Lake. The Talon Chutes Recreational Plan was prepared in 2005 to provide specific prescriptions for this area to reduce human impacts, provide for the protection of park resources and to increase visitor safety.

### **Additions to Mattawa River Provincial Park (2006)**

The original Mattawa River Provincial Park was established in 1970 as the first "wild river" (now waterway) class of provincial park in Ontario. The park was established in recognition of its natural and historical values and its ability to provide a variety of water-based recreational and educational experiences. The park, in its original form, included approximately 3,260 hectares of land and water. The park contains 37 kilometres of canoe route from Trout Lake in the west continuing downstream to Samuel de Champlain Provincial Park in the east. The originally regulated park included the lakes formed by the widening of the river and a strip of land 122 meters in width measured perpendicular to the shoreline.

*Ontario's Living Legacy Land Use Strategy* (1999) identified 10,687 hectares of land adjacent to Mattawa River Provincial Park as having significant natural heritage features and landscape values that would enhance and protect existing park values. These lands form an ecologically-based boundary for the waterway park as well as continue to provide a range of recreational opportunities in the North Bay-Mattawa area.

Ontario Regulation 331/06 formally included these additional lands within the Mattawa River Provincial Park, increasing the size of this waterway class provincial park to 13,947 hectares. A minor amendment to the *Mattawa River Provincial Park Management Plan* was completed in 2007 to address the land base addition and to identify permitted uses and management



strategies. A life science inventory, completed in 2004, evaluated the biophysical resources and formulated recommendations that were outlined in the management plan amendment.

Some of the most significant areas now regulated within the Mattawa River Provincial Park include the *Rice Bay Delta*, a provincially significant wetland providing important wildlife habitat, particularly for waterfowl; the *Talon Lake Forest*, which includes representative old growth red and white pine and *Camp Island*, an area of archaeological significance. Large areas of land were added to both sides of the existing waterway park to enhance its natural and recreational values and to provide boundaries representative of ecological systems.

### **Windstorm (2006)**

A large expanse of area surrounding and including the Mattawa River was impacted by a significant windstorm on July 17, 2006. The intensity of the storm and its large geographic area of influence had a significant impact as vast numbers of trees, mostly white pine, were uprooted and damaged within the Mattawa River and Samuel de Champlain provincial parks. This significant storm was also noted in the 2008 French River Canadian Heritage Rivers System ten year report, demonstrating the far reaching scale of this catastrophe. Intense remediation efforts were taken in the weeks after the storm, with focus on Samuel de Champlain Provincial Park and portages and campsites along the Mattawa River to address immediate safety concerns.

### **Area Mapping Initiatives (2006)**

Several mapping initiatives have been undertaken during the last ten years that promote the Mattawa River as a focal point for the local area in an effort to promote tourism and understanding of the areas recreational opportunities.

The *Mattawa River Adventure Map*, produced by ChrisMar Mapping Services Inc. in 2006 is the most comprehensive mapping project to-date for the Mattawa River This waterproof information guide and map depicting the Mattawa River canoe route is suitable for navigation purposes.

The *Discovery Routes* organization has also produced an area map that prominently features the Mattawa River. Ontario Parks has been actively communicating with this organization as the second edition of this map is being produced in an effort to ensure the accurate mapping of trails in and near the Mattawa River.

### **Mattawa-Ottawa River Valley Work Centre Initiative (2007-on)**

Since 2007, Ontario Parks has employed a two-person crew dedicated to inventories, monitoring and maintenance of non-operating parks, including the Mattawa River Provincial Park. Projects included the collection of GPS data for campsites and portages, documenting the condition of natural and cultural resources, regular inspection and maintenance of portages, re-installation of cultural heritage signage at historic portages and investigation of unauthorized access issues. It is anticipated that this initiative will continue into the 2010 season and beyond.

### **Voyageur Museum, Interpretive and Educational Initiatives (ongoing)**

The *Voyageur Museum*, located in Samuel de Champlain Provincial Park, has provided park visitors with educational opportunities to learn about the history of the Mattawa River and its importance in the exploration and development of Canada. The museum currently provides interpretation of the natural, historical and cultural resources relating to First Nations, Explorers and the Fur Trade and their connection to the Mattawa River. A project to upgrade the interpretive content in the museum is planned, for completion in 2011.

The *Natural Heritage Education Program* at Samuel de Champlain is key component in orienting park visitors to Mattawa River Provincial Park. Various historical programs are offered, including the popular *Voyageur Adventure Tours*, an opportunity for visitors to learn first hand about the Mattawa River and its history. Daily tours during July and August offer guided, interpretive tours of the Mattawa River in a replica Montréal canoe.

Provincial media coverage highlighting the Mattawa River was achieved through a production with TV Ontario, on its popular *Studio Two* program, in 2006. The program focused on the historical and recreational value of the river and provided viewers with an opportunity for better understanding of the importance of the Mattawa River and its value as a protected area.

#### **Unauthorized Vehicular Access (ongoing)**

Areas of unauthorized vehicle access within Mattawa River Provincial Park have been identified and steps are being taken to reduce the impacts of off road vehicles on the natural environment. Park boundary signs have been installed at known points of entry. Unauthorized access sites are regularly monitored for compliance. Ongoing communication with local user groups is carried out to ensure that recreational mapping produced for tourism purposes is accurate and that unauthorized trails are not indicated on maps.

#### **Water Quality Monitoring by North Bay-Mattawa Conservation Authority (ongoing)**

The *Provincial Water Quality Monitoring Network* (PWQMN) is a partnership between the Ontario Ministry of the Environment (MOE), conservation authorities, municipalities and the Ontario Parks Branch of the Ministry of Natural Resources. This program currently involves eight sampling stations located throughout the North Bay-Mattawa Source Protection Area, including one along the Mattawa River.

Data was collected from six sampling locations in the Mattawa River watershed. The timing extent of sampling varied from station to station; the earliest sampling took place in 1968 and the most recent occurred in 2009. Four stations ceased operation by the early 1990's, while the station along Four Mile Creek was sampled from 1982 to 2005 as a part of the PWQMN. The only station still active on the Mattawa River is at Hwy 533 Bridge; this was sampled from 1968 to 1994, and again from 2007 to present. Due to the sporadic nature of sampling, more data are required to properly assess trends in the watershed.

*Trout Lake Summer Phosphorus Sampling Program.* Phosphorus concentrations for eight sites within the basins of Trout Lake are monitored each year by the NBMCA. The program has been active since 2000; however phosphorus data from these same sites date back to 1986. Trout Lake is oligotrophic (low nutrient and well oxygenated) with concentrations of phosphorus remaining stable and well below Provincial Water Quality Objectives at the sample sites.

*Mattawa Raw Water Characterization* was undertaken to assess potential drinking water issues associated with the Mattawa municipal well field supply. NBMCA contacted the local municipality for historical water quality data, however only limited data is available. MOE was also contacted regarding any environmental orders or assessment reports, with no potential issues reported for the Mattawa groundwater supply.

*Mattawa Water Treatment Plant.* The Mattawa water supply system consists of two wells. One well showed no exceedences of *E. coli* or total coliform from 172 water samples collected. The other well showed no exceedences of *E. coli*, but 11 total coliform exceedences did occur from the 165 samples taken. All 11 exceedences occurred in 2003 and 2004. Also, between 1999 and 2001, total coliform was detected in three of 48 samples in raw well water samples.

## Species at Risk (2009-ongoing)

Areas within Samuel de Champlain Provincial Park have been identified as habitat for the Blanding's turtle. The proximity to the Mattawa River makes this noteworthy. Preliminary monitoring began in 2009 to better understand the seasonal habitat requirements of the Blanding's turtle within the park.

**Table 1: Chronology of Significant Events for Mattawa River Since 1999**

Year	Events, Actions or Research	In Park	Adjacent
1999	The La Vase Portages, an 11-kilometre long heritage route linking the Mattawa River to the west, is nominated to CHRS in a supplementary document as an extension to the Mattawa designation.		✓
2002	La Vase Portages is officially designated by CHRS as a section of the Mattawa River. This 11-kilometre link between Trout Lake on the Mattawa River system, and Lake Nipissing, which drains into the French River, is an important part of the exploration and trade route to the west.		✓
2005	Talon Chutes Recreational Plan developed to increase visitor safety, reduce visitor impacts and protect park values. This site receives significant use with inappropriate activities such as parties and cliff-diving. Campsites in the Talon Chutes area were closed, with signage and patrols by Ontario Provincial Police and Ontario Parks staff.	✓	
2006	An additional 10,687 hectares of land regulated as part of Mattawa River Provincial Park. These areas were identified for inclusion through <i>Ontario's Living Legacy Land Use Strategy</i> (1999). The total park area now increased to 13,947 ha.  The shoreline of the Mattawa River within provincial park designation was extended downstream (east) of Samuel de Champlain PP by 6 km along the north shore, with several small parcels included along the south shore.	✓	
2006	A severe windstorm on July 17 caused extensive damage throughout north-central Ontario. The storm uprooted or damaged a large number of trees—mostly white pine—throughout both Samuel de Champlain and Mattawa River provincial parks. Nearby communities such as North Bay and Mattawa were also affected, with significant damage inflicted upon property and infrastructure.	✓	✓
2006-2008	Several new mapping products (one commercial and one a regional tourism initiative) are developed to promote the Mattawa River as a canoe route and as a destination for a variety of trail uses.	✓	✓
Ongoing	Lake Talon Conservation Association partnership with Ontario Parks to maintain campsites and portages on Lake Talon. This partnership has been successful in reducing the amount of trash on campsites and in protecting the waterway's natural environment	✓	✓
2007-ongoing	Ontario Parks employs a two-person crew to inventory, monitor and maintain a number of the area's non-operating parks, including Mattawa River Provincial Park. Successful projects include collecting GPS data for campsites and portages, documenting natural and cultural resources, maintaining portages, re-installing cultural heritage signage at historic portages and investigating unauthorized access. This initiative is anticipated to continue in 2010 and beyond	✓	
Ongoing	Interpretive, recreational and commemorative events to celebrate and appreciate the Mattawa River system: annual marathon canoe race from North Bay to Mattawa, Voyageur Days and a range of activities at Samuel de Champlain Provincial Park, annual Heritage Canoe Day along the La Vase Portages to name a few.	✓	✓
2009-ongoing	Preliminary monitoring work commences within Samuel de Champlain Provincial Park for Blanding's turtle—a species at risk in Ontario	✓	

## **Natural Heritage Values**

### **Background**

The 600 million-year old Mattawa River Fault—an extension of the Ottawa-Bonnechere Graben (an ancient rift valley)—is evident along the present-day watercourse. Looking at a topographic map of the area, one cannot help but imagine the connection between Lake Nipissing to the west and the Ottawa River to the east during early post-glacial times. The dramatic south-facing escarpment is visible along various sections of the river. The Mattawa River valley serves as an important ecological connection between eastern and western regions, with floral elements of both regions present.

The surficial geology of the area is provincially significant as it represents the primary early postglacial drainage outlet of glacial Lake Algonquin, ancestral to the modern Great Lakes. The river includes excellent and representative examples of glacial spillway features; these include extensive boulder pavement, abandoned river channels, river beds and rapids. In some instances, post glacial river features are now elevated 12 metres above present river levels; these include potholes and other water-erosion features.

### **Condition and Changes since Last Report**

Mattawa River Provincial Park quadrupled in size with the addition of 10,687 hectares in 2006. Providing a much wider buffer for the river, the new boundaries are defined by ecological parameters, protecting important headwater areas, groundwater discharge zones and a diversity of wetland habitat.

Mattawa River Provincial Park and its additions contain a diversity of landform and vegetation types within Ecoregion 5E. The park provides excellent representation of a range of deciduous, mixed and coniferous forest types, including old growth Red and White Pine stands and limited representation of open and treed rock barren communities. The park also provides good representation of riverine and lacustrine wetlands, as well as a range of peatlands. The diversity of wetland communities contains six provincially rare plant taxa.

Provincially rare elements include two provincially rare reptile species—Blanding's turtle and milk snake—and eight provincially rare species of dragonfly. Regionally rare elements include two plant taxa considered rare in Ecoregion 5E. There have been several unconfirmed reports of Eastern Fox Snake and Eastern Massasauga Rattlesnake for both parks.



*Extensive headwater areas and wetlands were added to Mattawa River Provincial Park in 2006*

**Table 2: Natural Heritage Values of the Mattawa River**

<b>Theme/sub-theme</b>	<b>Nature and Location of Value</b>	<b>Changes Since 1999 and Threats to Condition</b>	<b>Actions and Related Research</b>
<b>1. Hydrology</b>			
1.1.1 Water content: clear water (0-50mg/l) low turbidity & dissolved solids		Water quality continues to be good overall for entire system. Trout Lake—water supply for City of North Bay—is continuously monitored.	Ongoing monitoring by NBMCA
1.2.2 Seasonal variation temperate spring peak	Relatively short river has single peak; levels maintained artificially during summer. River valley is slightly milder than surrounding area		
1.3.6 Drainage basin	Atlantic Ocean Basin-St. Lawrence River System		
1.4.7 River size: 62-71 m <sup>3</sup> /sec; stream order >2	Entire river section. Flow regulated by 3 dams: Turtle, Talon & Hurdman		
<b>2. Physiography</b>			
2.1.4 Hydrogeology	Impervious gneisses & granites of Canadian Shield throughout area		
2.2.2 Faulting	Mattawa River Fault forms northern boundary of Ottawa-Bonnechere Graben		
2.2.4 Volcanism	Amphibolite & other dykes throughout area		
2.2.5 Metamorphism	Region was subjected to high grade metamorphism in Ottawa-Bonnechere Graben. Brucite mining in 1950s magnesium—largest deposit in N. America; potential for feldspar & mica extraction		
2.2.6 Glacial scouring	Bedrock scouring in Paresseux Falls area		
2.2.7 Glacial retreat	Kames & eskers found throughout river corridor	Industrial sand & gravel extraction continues outside parks to south; areas to north protected in new park additions.	
2.2.10 Glacial melting: Lake Algonquin drainage outlet (10,500 B.P.)	Gravel deposits; abandoned river channels. Potholes of varying sizes& cataracts at Talon Chute to Pimisi Bay; boulder pavement at Pine Lake/McCool Bay		
2.3.3 Physiographic region	Canadian Shield-Laurentian Region		
2.4.6 Topography: Moderate gradient, middle section of river	Drop of 50 metres over approx. 43 km from Trout Lake to eastern boundary of SDCPP		
<b>3. River Morphology</b>			
3.2.3 Lake influenced river system	Turtle, Talon & other lakes along length of system	New additions to Mattawa River PP (10,687 ha) protect several key headwater areas and ground recharge areas.	

3.3.2 Boulder rapids	Des Roches		
3.3.4 Cascading rapids	Campion, La Rose		
3.3.5 Chutes	Talon Chute		
3.3.6 Waterfalls	Paresseux Falls		
3.4.2 Deltas, outwash Plains, fans	Tombolo in Shields Bay, deltas at mouths of North River, Purdy Creek and Moore Lake	Tombolo privately owned. Moore Lake delta a Nature Reserve zone, surrounded by Development zone in Samuel de Champlain PP	SDCPP operating park; campgrounds; no plans for further development near NR zone
3.4.4 Meanders, oxbows	Oxbow lakes & blind channels near mouth of North River		
3.4.10 Gorges	Main Channel, The Gut, Purdy Creek		
3.4.11 Potholes	Large pothole on north shore near Talon Chute		
<b>4. Biotic Environments</b>			
4.1.2 River System: middle zone	Entire designated section of river	New additions to Mattawa River PP (10,687 ha) protect several key headwater areas and ground recharge areas.	
4.1.6 Oligotrophic Lakes	Talon, Turtle & Long lakes		
4.1.7 Mesotrophic lakes	Robichaud Lake, Moore Lake		
4.1.10 Bogs	Outlet of Long Lake, Gem Lake		
4.1.12 Swamp forests	Silver Maple complex in Rice Bay wetlands		
4.2.9 Ecozone: Boreal Shield	Entire river & management area	Mattawa River PP Additions include Ecozone 5E landform/vegetation types	
<b>5. Vegetation</b>			
5.1.3 Old growth hemlock & hardwoods	Northern part of SDCPP		
5.1.7 Significant plant communities	Mattawa R. a post-glacial plant migration corridor. Species rare in Ontario include jointweed, eyebright, false pimpernel, lake cress, wild rye, Virginia chain-fern, awlwort & waterwort	New additions to Mattawa River PP (10,687 ha) includes a range of habitats for significant or representative flora. Life science studies in the park additions were conducted in 2004	
<b>6. Fauna</b>			
6.1.1 Significant fish populations	Lake trout in Turtle & Talon lakes; spawning areas		
6.1.2 Significant mammal populations	White-tailed deer, black bear, timber wolves; significant white-tailed deer wintering ground	Wolf hunting now prohibited in Calvin Twp. (South central portion of Mattawa River, down to Algonquin Park).	
6.1.4, 6.1.7 Significant reptile populations	Sizable population of Blanding's turtle at northern extent of its range	Studies to document the range of this species with the parks currently underway. Known sites are in proximity to Hwy 17 corridor.	

## Cultural Heritage Values

### Background

For over two centuries, the Mattawa River served as a major link in the European exploration and fur trade route to the west. Due to this association, the Mattawa River originally met two of the four CHRS human heritage guidelines at designation: *Canadian Historical Development*, and *Cultural Associations*. These two guidelines continue to be met.

### Condition and Changes since Last Report

There is a notable increase in interest in cultural heritage along the waterway. The cultural heritage interpreted at Samuel de Champlain Provincial Park continues to draw both new and return visitors to the park. Similarly, interest in the La Vase Portages is increasing, with a range of events and interpretive opportunities presented by the Friends of La Vase.

**Table 3: Cultural Heritage Values of the Mattawa River**

<b>Theme/sub-theme</b>	<b>Nature and Location of Value</b>	<b>Changes Since 1999 and Threats to Condition</b>	<b>Actions and Related Research</b>
1.1.1 Aboriginal fishing	Aboriginal fishing sites: Elm Pt., Graswell Pt., Camp Is., Dugas Bay. Recreational camping has disturbed several sites; dams have drowned others		
1.3.4 Quarrying stone	La Porte de l'Enfer: aboriginal ochre mine and refining site. Site in Historic Zone SDCPP. Brucite (hydrated oxide of magnesium) deposit near Talon Chutes is nationally significant.		
2.1.1 Navigable channel	Aboriginal trade route for Early, Middle and Late Woodland cultures. 14 historic portages, 11 still intact. European fur trade route of the NWC and HBC. Commemorative plaques (HSMBC, OHF) La Vase Portages is provincially significant	La Vase Portages added to Mattawa River CHRS designation through supplementary nomination. Commemorative plaque installed in 2002 All portages on Mattawa River continue to be maintained by Ontario Parks crews	
2.1.2 Human-powered freight	Replica <i>canot de maitre</i> in Voyageur Museum, SDCPP		Voyageur Museum exhibits to be upgraded in 2011
2.1.5 Cargoes	Replicas, interpreted at Voyageur Museum, SDCPP		Voyageur Museum exhibits to be upgraded in 2011
2.3.1 Log running	Log driving route for square timber and lumber industry; log chute and camp remnants (1855) at Paresseux Falls; dam remnants		
3.1.3 Shoreline seasonal settlements	Aboriginal camp sites at Palframan Camp, Graswell Pt., and Campion Rapids		

3.2.1 Archaeological evidence of shoreline aboriginal settlements	Pits, rock cairns, 28 archaeological sites (e.g. Pimisi Bay, Campion rapids. Recreational camping threatens some sites near shoreline		
5.1.1 Ritual or ceremonial structures	Petroglyphs and pictographs at Camp is., other locations. Increasing visitation at Porte de l'Enfer	Camp Island now added to park land base.	
5.1.2 Spiritual sites	Watchdog rock		
5.3.4 Literary accounts	Literature: Diaries of Daniel Harmon, Gov. George Simpson, Alexander Mackenzie. Natural heritage books by Louisa de Kiriline Lawrence, Eric Morse ( <i>Fur Trade Canoe Routes Then &amp; Now</i> )		Voyageur Museum exhibits to be upgraded in 2011
6.1.1 Official exploring parties	Exploration: Brule (1610), Radisson & Groseilleurs, Champlain (1615), Henry (1764), MacDonnell, Marquette & Jolliet (1673), la Verendrye (1731) NHS plaque and Voyageurs Museum		Voyageur Museum exhibits to be upgraded in 2011
6.1.4 Commercial exploration	Mackenzie (1779), Simpson		As above
6.2.1 Aboriginal conflict	Conflict between Iroquois and Nipissing.		As above



*Celebrating La Vase Portages CHRS designation in 2002*



## ***Recreational Values***

### **Background**

The canoe route from Trout Lake to Mattawa is the primary means of experiencing and appreciating the entire river. Nine portages and 18 backcountry campsites are interspersed along the river's 43-kilometre length. The route typically takes two to three days to complete, however it can be done by marathon canoeists in one long and challenging day. Nine access points and a range of facilities enable visitors to experience various portions of the river on a day-use basis. Swimming, angling, boating and hiking are popular pastimes for both park visitors and area residents. Nature viewing and heritage appreciation are popular activities which are supported through interpretive facilities and programs at Samuel de Champlain Provincial Park.

While the natural character of the river is predominantly still intact, three existing dams on the Mattawa River system pre-date its 1988 CHRS designation. These include Turtle Lake, Talon Lake and Hurdman dams. The Turtle Lake spill dam controls the water level of Trout Lake for recreational and navigational purposes at an elevation of 202.2 m ASL.

The Talon Lake dam maintains the water level of Talon Lake at 193.8 m ASL. The Hurdman dam is a spill dam which also generates hydroelectric power. Located 3.2 km upstream of the Town of Mattawa, it backs water up for approximately 6 km, forming the narrow water body known as Chant Plain Lake.

Overall, water levels and flows are unchanged since the last report. Water quality remains suitable for recreational purposes.



*Talon Lake Dam*

### Condition and Changes since Last Report

Generally the river has received minimal recreational impact over the past decade. The level of recreational use of the waterway is unchanged since 1999. Several instances of graffiti occurred in the canyon areas downstream of Paresseux Falls; however they have been cleaned by park staff. Instances of partying, rowdy behaviour and cliff diving east of Talon Chutes resulted in two campsites being closed to minimize this activity and the area is patrolled by park staff and the Ontario Provincial Police. The CHRS plaque at Campion Rapids (SDCPP) has deteriorated over time but was refurbished in fall 2009 with ongoing maintenance scheduled. A series of provincial plaques from the 1970s commemorating each portage are in need of new support bases. This work is scheduled for 2010-2011.

Samuel de Champlain Provincial Park continues to provide a range of overnight and day use opportunities with its two operating campgrounds, day use area and visitor centre. While Mattawa River Provincial Park is non-operational in status (typical for most waterway parks) Ontario Parks has increased its monitoring and maintenance patrols along the river. Designated campsites are marked and cleaned of garbage; portages are cleared and marked.

Within the new land base added to Mattawa River Provincial Park in 2006, there are a range of existing recreational uses which will be evaluated and considered through future management planning. Most noteworthy are extensive nordic skiing trails north of Trout Lake servicing North Bay residents. North of Samuel de Champlain Provincial Park, a broad network of old roads and trails are used for snowmobiling and ATV travel. Some impacts which occur due to mechanized use will be addressed through an upcoming park management plan review.

**Table 4: Recreational Values of the Mattawa River**

<b>Theme/sub-theme</b>	<b>Nature and Location of Value</b>	<b>Changes Since 1999 and Threats to Condition</b>	<b>Actions and Related Research</b>
Canoeing	43 km canoe route managed by Ontario Parks; 9 portages, 9 access points, 6* backcountry campsites. Approx. 2,000 canoeists use route annually. (* incorrect number in 1999 report )	Several campsites at Talon Chutes closed to prevent parties and unsafe use. With further inventory and maintenance work there are now a total of 18 canoe campsites along river. River usage is consistent	Ongoing monitoring of sites and use for compliance.
Camping	216 designated campsites in SDCPP; also group camping. MRPP includes 6 dispersed backcountry campsites along river, some with privies.	211 campsites in two campgrounds at SDCPP. 2008 statistics include over 17,000 day use visitors and 10,000 overnight campers.  OP interior crews patrol the river 2-3 times per season cleaning sites, installing/maintaining box privies.  Canadian Ecology Centre in SDCPP operational since 1999; meeting/conference capacity for 180; 32 cabins can accommodate 160 overnight guests.	Ongoing monitoring and maintenance. No further increase in sites anticipated.
Natural heritage appreciation	Spectacular scenery along Mattawa River Fault;	Natural and cultural heritage interpretive topics continue	

	numerous picturesque rapids and falls; significant floral communities, vulnerable ecosystems; evidence of glacial scouring and melting; wildlife viewing.	to be popular in SDCPP; self use and planned programs/ facilities	
Human heritage appreciation	Exploration and fur trade are major interpretive themes for both parks. Voyageur museum in SDCPP houses replica Montreal canoe and fur trade artifacts.		Museum exhibit upgrade for 2011
Hiking	Trail system in southern portion of SDCPP (south of river).	MNR Forestry Research interpretive trail in SDCPP. 42 km of nordic ski trails maintained by North Bay Ski Club in MRPP additions north of Trout Lake. Mountain biking also occurs here.	
Motorized Vehicle Use (Not in nomination document or 1999 monitoring report)		Seven authorized snowmobile trails in MRPP and additions, as well as several unauthorized ATV trails. ATV use continues on old roads/trails in north section of SDCPP and Mattawa additions	Ongoing monitoring; address in future management plan review
Boating	Boat launch facilities at Jingwakoki campground, Long Lake and Campion Rapids in SDCPP.		
Sport fishing	Lake & brook trout walleye, bass, northern pike, sturgeon		



Annual North Bay to Mattawa Canoe Race

## ***Integrity Values***

### **Background**

Approximately three-fourths of the Mattawa River is located within two provincial parks.

The overall condition of the natural and cultural landscape is good, especially in the context of adjacent uses along the Mattawa Valley corridor. In essence, the historic trade route of two centuries ago has been paralleled by the mechanized trade routes of the past century. The Trans-Canada Highway (Highway 17) and transcontinental railway run south of the Mattawa River while several roads and utility corridors cross park lands. The recently added park land base provides a significant buffer to the river and a portion of its headwaters.

Three pre-existing dams along the Mattawa River control waters on Trout and Talon lakes. Cottage development on private land is extensive on Trout Lake, upstream of Mattawa River Provincial Park, as well as on Chant Plain Lake, downstream of Samuel de Champlain Provincial Park. Ongoing development has altered portions of natural shoreline. Docks and boat launches extend into emergent and aquatic vegetation which reduces and fragments shoreline habitat within these developed areas. Motor boat traffic is also quite extensive in these areas.

The Mattawa River continues to be a popular and scenic canoe route that follows an historic trade route. The nine portages along the river continue to be well-worn, illustrating a continued interest by the public in exploring and experiencing this heritage river.

### **Condition and Changes since Last Report**

An additional but unconnected portion of the historic route has been included in the CHRS designation. The La Vase Portages is commemorated by the city of North Bay and the North Bay-Mattawa Conservation Authority. While only a small portion of the 11-kilometre route is officially protected through land tenure, local groups are interested in seeing the area protected.



*Water quality is monitored throughout the watershed by North Bay-Mattawa Conservation Authority*

**Table 5: Integrity Values of the Mattawa River**

<b>Value</b>	<b>Condition or Threats at Nomination (1988)</b>	<b>Changes Since Last Report (1999)</b>	<b>Actions and Related Research</b>
<b>4.4.1 Natural Integrity Values</b>			
Free-flowing waters; no upstream or downstream impoundments; natural values not created by impoundments.		No new dams; an additional 10,687 ha of park lands protect important headwater areas in the Mattawa watershed	
Minimal human impact on key ecosystems		Small scale impacts in existing park and in additions.	Ongoing monitoring and enforcement by park staff
Water quality suitable for continuation of original aquatic ecosystems		While new lands secured as park additions on north side of river downstream of SDCPP, private lands continue along south shore in this area. More seasonal cottages on Talon and Trout lakes are being upgraded to year-round residences	Ongoing water quality monitoring by NBMCA
<b>4.4.2 Human Heritage Integrity Values</b>			
Same visual appearance as during period of historical importance.	Essentially unchanged for the majority of the river portions	Some instances of graffiti in canyon between Pimisi Bay and Bouillon Lake	
Artifacts unimpaired by human land uses		Some erosion along existing/historic portages	Ongoing monitoring and management by OP interior crew required
Neighbouring land uses do not affect historical experience	Existing development on Trout and Talon lakes.	Some increase in development; conversion of seasonal to year-round residences	
Water quality suitable for non-contact recreation	Ongoing monitoring by NBMCA	No significant changes; ongoing monitoring by NBMCA	Ongoing monitoring by NBMCA
<b>4.4.3 Recreational Integrity</b>			
Water quality suited to nomination values	Ongoing monitoring by NBMCA	No significant changes	Ongoing monitoring by NBMCA
<b>4.4.4 General Integrity</b>			
Sufficient size	Mattawa and Samuel de Champlain provincial parks = 5,810 ha	Mattawa River park additions of 10,687 ha now bring total park area to 16,497 ha. 11 km long La Vase Portages added to designated river.	
Ecosystem components		New boundary of additions added through OLL are defined by ecological parameters	
Water quality sufficient to enable continuation of nomination values		No significant changes in water quality	Ongoing monitoring by NBMCA

## **La Vase Portages**

***The three La Vase (Mud) portages, connecting Trout Lake with the La Vase River and Lake Nipissing, formed part of the historic canoe route to the west described by one despondent traveller as "an abominable marsh ... knee-deep in mud and tree-roots."***

Nominated in 1999 and designated in 2002, this is the first monitoring report for the La Vase Portages. Topics/themes which pertain to La Vase Portages are noted in the preceding tables.

The Friends of La Vase Portage was established in 2003 and has been active in maintaining the portages and raising awareness of this historic route. Each year they hold a *Heritage Canoe Day*; this year's event is scheduled for July 17, 2010.



*Heritage Canoe Day is celebrated annually by Friends of La Vase Portages*

The land tenure of the route continues to be a challenge for its long term protection. While the City of North Bay recognized the *Historic La Vase Portage* route in Schedule 2 of the 2009 Draft Official Plan, much of the land encompassed by the route is privately owned or is Crown land. Only one small portion of the route (in yellow on the map below) has been secured by the North Bay-Mattawa Conservation Authority NBMCA). NBMCA has funded trail improvements and signage along the portion of the route on their property. NBMCA is currently in negotiations with a land owner to secure a key section of the route adjacent to its property along Highway 17.

An application for rezoning was submitted to the City of North Bay in 2003. The subject lands are Crown land, for which mineral rights had been issued. The applicant was proposing to rezone the lands from Rural (A) to Rural Extractive Industrial (RME) for the purpose of aggregate extraction. The property and adjacent wetland lies adjacent to the historic La Vase Portage Route. After much debate the application was given third reading and final approval by the City of North Bay on August 2009. An Aggregate License from MNR is required.

While land tenure remains tenuous, there are several new management tools for protection. The Conservation Authority's regulation 177/06, *Development, Interference with Wetlands & Alteration to Shorelines & Watercourses*, offers protection to wetlands associated with the Mattawa River and the La Vase Portages. Ontario's *Provincial Policy Statement 2005* directs

that development is not permitted within provincially significant wetlands. These two recent pieces of legislation are the only tools in Ontario which offer protection/development controls in or near wetlands.

The values for which the portage route was designated are still intact today. Similarly, the natural, cultural and recreational integrity have not changed since the designation.

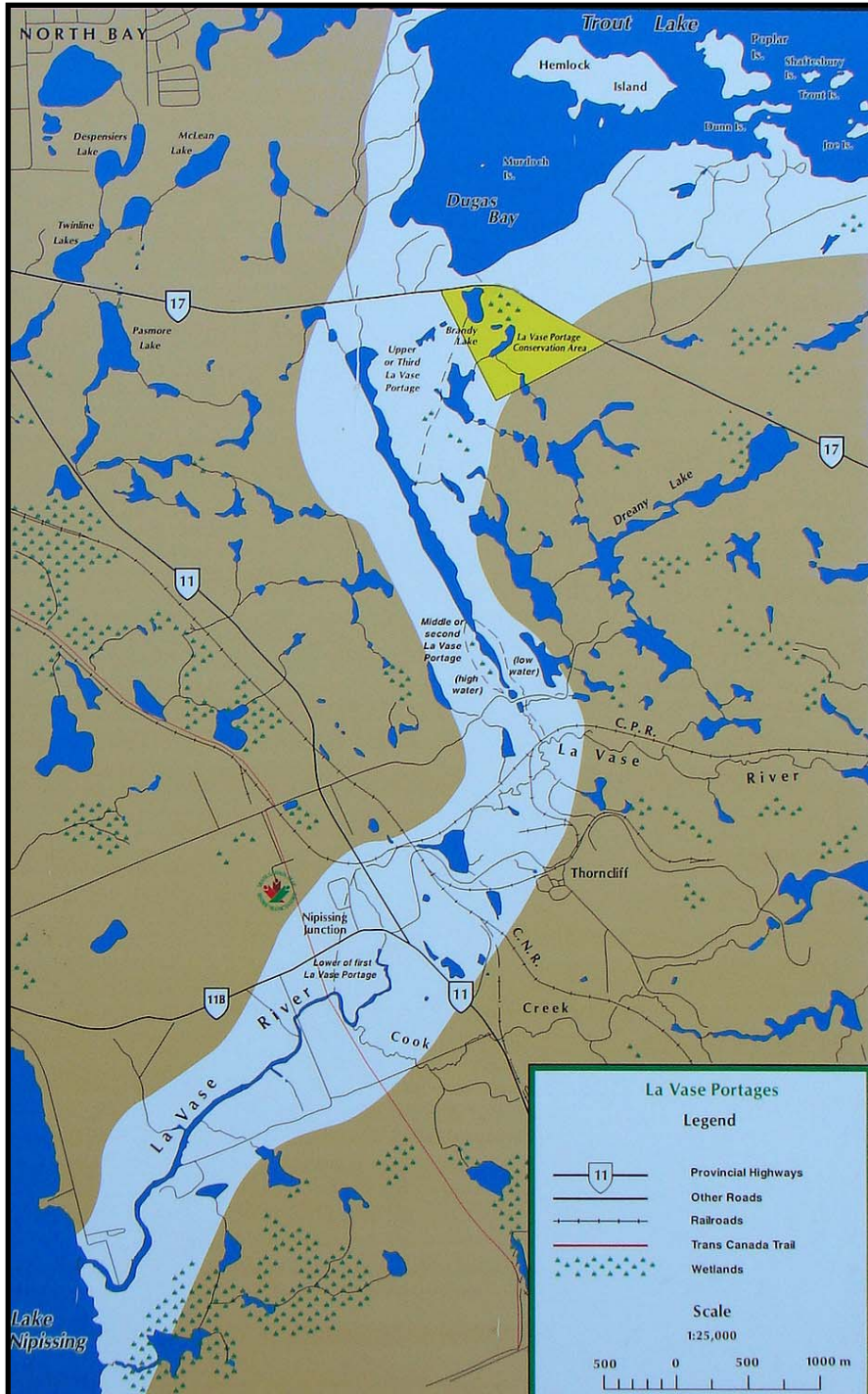


Figure 2 La Vase Portages

## **Overview of Mattawa River Management**

### **Mattawa River Provincial Park**

Mattawa River Provincial Park is a *waterway class* park (one of the six classes of parks in the Ontario Provincial Parks system). Waterway parks are based on outstanding recreational water routes and are meant to provide high quality recreational and educational experiences.

This is a non-operating park with custodial management limited to maintaining portages and campsites along the canoe route, and addressing site-specific issues as they arise. Examples include developing a recreation plan for the Talon Chutes area due to concerns over visitor safety and impacts of unrestricted use of campsites.

The 1988 *Mattawa River Provincial Park Management Plan* highlights the park's key themes and provides area-specific direction through zoning distinct segments of the river. A park plan amendment in 2007 outlines the permitted uses and activities within the extensive land base added to both sides of the river.

### **Samuel de Champlain Provincial Park**

A 2,550-hectare *natural environment class* park, "Sam D" is an operating park with a range of facilities and development to accommodate a variety of overnight and day use activities. The park has 216 car campsites in two campgrounds. In natural environment parks, the emphasis is on providing high quality recreational and educational experiences in an attractive outdoor setting.

The 1990 *Samuel de Champlain Provincial Park Management Plan* established the zoning of park lands to accommodate the multiple objectives of protection, heritage appreciation and outdoor recreation. Of the six-kilometre length of the Mattawa River within the park, one half of this segment is zoned historical to protect the significant cultural heritage found in the area. The remainder of the river, as well as the majority of the park land base, is zoned as natural environment to support low intensity backcountry recreation and interpretive opportunities.

### **Upcoming Park Management Plan Reviews**

There are noteworthy developments province-wide which direct park management and planning. These include the new *Provincial Parks and Conservation Reserves Act* (2006) and the new *Protected Areas Planning Manual* (2009) as well as a range of associated guidelines (currently in progress).

The review of the current management plans for both parks is scheduled to begin in 2010-11. Park management objectives and actions will continue to ensure that the integrity of the Mattawa River's natural, cultural and recreational values is maintained. CHRS designation of the Mattawa River will continue to be a key element in managing and celebrating the heritage of this important link to our nation's past.



## **References**

*Canadian Heritage Rivers System: Nomination Document for the Mattawa River, Ontario* (OMNR, 1988)

*Mattawa River Provincial Park Management Plan* (OMNR, 1988)

*Samuel de Champlain Provincial Park Management Plan* (1990)

*Samuel de Champlain Provincial Park Management Plan Major Amendment* (OMNR, 1998)

*A Canadian Heritage Rivers System Ten Year Monitoring Report on the Mattawa River: 1999* (OMNR, 1999)

*Canadian Heritage Rivers System: La Vase Portages-Mattawa River Supplementary Nomination Document* (La Vase Portages-Mattawa River Steering Committee, 1999)

*A Canadian Heritage Rivers System Management Strategy for the La Vase Portages-Mattawa River* (NBMCA, 2000)

*Mattawa River Provincial Park Additions: Life Science Inventory* (OMNR 2005)

*Mattawa River, the Adventure Map Series: Canadian Heritage Rivers. 1:40,000 scale.* ChrisMar Mapping Services, 2006

*Mattawa River Provincial Park Management Plan Minor Amendment* (OMNR, 2007)

Mattawa River CHRS annual report checklists (OMNR, 2000-2009)



*Paresseux Falls*

