



FORGES DU SAINT-MAURICE

NATIONAL HISTORIC SITE OF CANADA

MANAGEMENT PLAN

La Mauricie Field Unit

October 2007

Cover page illustration:

Hurst frame of the lower forge hammer, based on remains found Reconstructed by illustrator Bernard Duchesne, Parks Canada

Reconstruction of the exterior of the Grande Maison Parks Canada / E. Kedl

Aerial view of part of the historic site Parks Canada / J. Beardsell

Remains of the lower forge chimney as the subject of an interpretive talk Parks Canada / E. Kedl

Symbolic structure housing the remains of the blast furnace Parks Canada / E. Kedl

Foreword



Canada's national historic sites, national parks and national marine conservation areas offer Canadians from coast-to-coast-to-coast unique opportunities to experience and understand our wonderful country. They are places of learning, recreation and fun where Canadians can connect with our past and appreciate the natural, cultural and social forces that shaped Canada.

From our smallest national park to our most visited national historic site to our largest national marine conservation area, each of these places offers Canadians and visitors unique opportunities to experience Canada. These places of beauty, wonder and learning are valued by Canadians - they are part of our past, our present and our future.

Our Government's goal is to ensure that each of these special places is conserved.

We see a future in which these special places will further Canadians' appreciation, understanding and enjoyment of Canada, the economic well-being of communities, and the vitality of our society.

Our Government's vision is to build a culture of heritage conservation in Canada by offering Canadians exceptional opportunities to experience our natural and cultural heritage.

These values form the foundation of the new management plan for Forges du Saint-Maurice National Historic Site of Canada. I offer my appreciation to the many thoughtful Canadians who helped to develop this plan, particularly to our dedicated team from Parks Canada, and to all those local organizations and individuals who have demonstrated their good will, hard work, spirit of co-operation and extraordinary sense of stewardship.

In this same spirit of partnership and responsibility, I am pleased to approve the Forges du Saint-Maurice National Historic Site of Canada Management Plan.

John Baird

Minister of the Environment

Les Sain

Forges du Saint-Maurice National Historic Site of Canada

MANAGEMENT PLAN

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Parks Canada

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1. Introduction

1.1 Parks Canada Mandate and Legislative Framework

The mandate of Parks Canada, a federal agency under Environment Canada, is to fulfill national and international responsibilities in areas of heritage recognition and conservation. Parks Canada carries out that role by protecting and presenting representative aspects of Canada's cultural and natural heritage in ways that encourage public understanding, appreciation and enjoyment of this heritage, while ensuring long-term ecological and commemorative integrity.

One of the most tangible results of the actions of Parks Canada is the network of national historic sites, of which the Forges du Saint-Maurice National Historic Site of Canada is a part. Parks Canada administers 153 national historic sites, 28 of which are in Quebec. National historic sites are managed based on the following objectives:

- To foster knowledge and appreciation of Canada's past through a national program of historic commemoration.
- To ensure the commemorative integrity of national historic sites by protecting and presenting them for the benefit, education and enjoyment of present and future generations in a manner that respects the valuable and irreplaceable legacy represented by these places and their resources.

 To encourage and support initiatives designed to protect and present other places of national significance that are not administered by Parks Canada.

In accordance with the Parks Canada Agency Act of 1998, Parks Canada must draw up and update management plans for national historic sites. The main purpose of a management plan is to establish guidelines for actions aimed at the protection, presentation, use and administration of sites. The plan is developed in conformity with Parks Canada Guiding Principles and Operational Policies, including the National Historic Sites Policy and the Cultural Resources Management Policy. Parks Canada's strategic objectives are also taken into account in formulating a management plan. For each historic site, the management plan expresses the general Parks Canada policies and takes into account public concerns and points of view.

The vast network of national historic sites of Canada (NHSC) is made up of places that represent and reveal the many facets of our national history, character and identity. Designated by the Minister of the Environment upon the recommendation of the Historic Sites and Monuments Board of Canada (HSMBC), our national historic sites provide a rich overview of how history has left its mark on Canadian soil. Parks Canada's commemorative program applies to places, but

CANADIAN HERITAGE. Parks Canada Guiding Principles and Operational Policies, Supply and Services Canada, 1994, p. 73.

also to figures and events of national historical significance. More than 916 sites, 590 figures and 367 other elements of our history have been officially recognized as having national importance.

1.2 Developing the Management Plan

The present management plan was drafted according to the provisions of section 32.(1) of the *Parks Canada Agency Act* and will be reviewed in 2011 based on the provisions of section 32.(2).

The Forges du Saint-Maurice NHSC Management Plan is the result of work done by a multidisciplinary team composed of Parks Canada Agency staff. The team analyzed the situation at the site and identified the main management issues involved. It developed a vision for the future and proposed management measures to attain the vision. In April 2006 public consultations were organized in Trois-Rivières in order to present

that vision and the management measures to interested groups and citizens. These consultations enabled Parks Canada to hear the views of parties likely to be affected by the presentation and management of the site. Overall, the public was very favourable to the proposals put forward by the planning team. The comments expressed were compiled, analyzed and taken into account in the drafting of the management plan. The latter was submitted to an environmental assessment to ensure that the management measures would not lead to negative environmental impacts. The plan was then reviewed by the national office and presented to the Minister of the Environment for approval. After having received the necessary approval, the document was submitted to Parliament.

The purpose of this management plan is to analyze the current situation and identify interventions aimed at protecting cultural resources, conveying heritage messages to visitors, enhancing the visitor experience and involving Canadians in the running and conservation of the national historic site.

2. Forges du Saint-Maurice National Historic Site

2.1 The Designated Place and the Administered Place

Forges du Saint-Maurice NHSC is located in the Mauricie region of Quebec, halfway between Montreal and Quebec City (Map 1, page 27). It is situated within the city limits of Trois-Rivières and about fifteen kilometres north of the city's downtown. The site borders on a stream that flows into the St. Maurice River on its west bank. It commemorates the beginnings of the Canadian iron and steel industry and the country's first industrial community. The Forges were founded in 1730 by François Poulin de Francheville and were in operation until 1883, thus spanning all the political regimes of Canadian history, from the French Regime to Confederation.



A bird's-eye view of the Forges du Saint-Maurice, based on a photograph by John Henderson (circa 1870),
the plan of the ruins and various pictorial sources
Reconstructed by illustrator Bernard Duchesne
Parks Canada

Considered the cradle of the Canadian iron and steel industry, the Forges du Saint-Maurice were first recognized as having national historic importance in 1920 by the HSMBC, who laid a commemorative plague to that effect in 1923. In 1993, the HSMBC approved the new wording for a plague that was installed at the site in 1995. The place designated as having national historic importance refers to the 23-hectare area once occupied by the old industrial village. The site administered by Parks Canada covers some 60 hectares. Although the surface area administered by Parks Canada is larger than the designated place, it does not encompass it entirely. Part of the designated place is therefore not under Parks Canada jurisdiction. Situated mainly to the south of Boulevard des Forges, this part is privately owned and some cultural resources are found there (Map 2, page 29).

Essentially comprised of remains, some of which are presented on the site today, the Forges site has undergone several archaeological digs, initially by the Quebec Ministère des Affaires culturelles and subsequently by Parks Canada, which has been responsible for the site since 1973. The remains have revealed industrial and domestic components of a typical European ironworks dating back to the late 15th century. Parks Canada took the first steps towards presenting and preserving the remains. In 1974, a temporary building was built for visitor reception and interpretation purposes. The following year, an exhibit was set up there, while research and excavations were continuing. The year 1985 marked the inauguration of the blast furnace complex, followed in 1990 by the opening of the ironmaster's house, referred to as the Grande Maison, a reconstruction of the exterior features of the original residence. The site has great interpretive potential that has yet to be tapped.

2.2 Historical Background

It was mainly the hydrological features (strong flow, nickpoints) of the St. Maurice Stream, later called the Washery Stream, that motivated the founder of the Forges, Sieur François Poulin de Francheville, to choose the site for his project. In 1730, when the King of France granted him exclusive rights to work the iron mines in the surrounding region for the purposes of operating the first ironworks in Canada, it was at the foot of that stream that he chose to build the first forge activated by two waterwheels. Several years later, in 1736, ironmaster Olivier de Vézin began building a larger forge complex on the same stream, which included a blast furnace, two forges and the beginnings of an industrial village that included the Grande Maison (the ironmaster's house) and dwellings for the workmen. The first industrial community in Canada was thus born and bustled with activity for 150 years, until 1883 when the Forges were abandoned.

From 1730 to 1883, eighteen administrations successively operated the Forges. It became a Crown property in 1741 and was operated under lease from 1767 to 1846, when it was sold to private entrepreneurs. Six private owners operated the Forges until it was finally closed.

The history of the Forges and the historical remains attest to the existence of a typical old ironworks designed according to the European model imported by the first ironmasters, who were originally from the eastern part of France. The operation was based on an indirect iron ore reduction process that consisted firstly of reducing the ore to cast iron in a blast furnace, then fining the cast iron into wrought iron in the forge hearths. This process was never changed throughout the entire time the Forges were

in operation. The same holds true for the original equipment, which was, however, modified and optimized as a result of technical advancements and specialized production, changes that primarily occurred over the last thirty years of operation.

The division of labour resulting from the twostage process of reducing the ore required the hiring of skilled workers from France. These workmen and their families formed the foundation of the industrial community. Later, as a result of increased production of cast ironware in addition to the original production of bar iron, the arrival of British and Canadian moulders contributed in part to the growth of the industrial community. With a total of 200 inhabitants in 1800, the village grew to 425 by 1842 and then decreased to some 250 inhabitants at the time of the closing of the Forges in 1883. In addition to skilled workers, an entire work force was needed for gathering, dressing and transporting the raw material. Part of this work force of founders, forgemen, furnace keepers and other labourers had taken up permanent residence in the village, whereas the majority, some 350 workers, were employed on a seasonal basis.

During the colonial era, the Forges were known for the quality and variety of its products, in particular its stoves, which were very popular among the *habitants*. In addition, the special status held by the Forges as a Crown operation made it the only ironworks in Canada for over a century and a key player in the economic history of the country.



The Forges on the St. Maurice River, by M. M. Chaplin, 1842
Library and Archives Canada
National Map Collection, C-820

3. A Fundamental Notion: Commemorative Integrity

The notion of commemorative integrity is a concept used by Parks Canada to describe, plan and monitor the state of its national historic sites. When the commemorative integrity of a site is measured, the following three aspects are assessed individually: the condition of its resources, the effectiveness of messages conveying the site's national significance, and management practices at the site. A state of commemorative integrity is said to exist at an NHSC when:

- the resources directly relating to the reasons for designation as a national historic site are not impaired or under threat;
- the reasons for designation as a national historic importance are effectively communicated to the public;
- the site's heritage values (including those not related to the designation as a national historic site) are respected in all decisions and actions affecting the site.²

In order to guarantee the proper protection and presentation of national historic sites, Parks Canada drew up a *Cultural Resource Management Policy*. This policy is based on five main management principles, namely principles of value, public benefit, understanding, respect, and integrity. Meeting the requirements of these principles generally ensures the commemorative integrity of a national historic site. In practical terms, implementation of this policy means that cultural resources are identified and assessed and their historical value is taken into consideration each and every time actions are taken.

The commemorative integrity statement (CIS) of Forges du Saint-Maurice NHSC was approved in 2003. It determined the area covered by the designated site, defined its commemorative intent, described the cultural resources found on the site, assigned a value to those resources and identified commemorative messages to be conveyed to the public. The statement also set objectives for the protection of cultural resources and the communication of messages. The CIS is a reference framework that establishes the desired state of the site. The relation between the desired state and the existing situation is what determines the management measures required to preserve and present the site.

The Forges du Saint-Maurice were designated a national historic site in 1920. The commemorative intents for the site are the following:

- The Forges du Saint-Maurice, established in 1730, was the main industry under the French Regime.
- The founding of the Forges du Saint-Maurice marked the beginning of the Canadian iron and steel industry and the origin of the first industrial community in Canada.
- The Forges du Saint-Maurice closed in 1883 after more than 150 years of operation.

^{2.} CANADIAN HERITAGE. *Guide to the Preparation of Commemorative Integrity Statements*, Ottawa, Her Majesty the Queen in right of Canada, 2002, p. 2.

4. Preserving Cultural Resources and Conveying Heritage Messages

The value of a cultural resource is determined based on its relation to the commemorative intent. Commemorative integrity is achieved through the preservation of cultural resources and the communication of messages of national historical significance. At Forges du Saint-Maurice NHSC, the resources of national importance that must be protected are the designated place, landscapes and land-scape elements, archaeological remains, an archaeological collection and an ethnological collection. Certain other resources and values must also be preserved and additional messages must be conveyed to the public.

Parks Canada is directly responsible for the protection and commemoration of the cultural resources under its ownership. However, several other existing and presumed cultural resources within the designated place are situated on private property and thus not under Parks Canada jurisdiction.

4.1 Cultural Resources of National Historic Importance

The designated place

The designated place that has national historic significance refers to the 23-hectare industrial complex once occupied by the old industrial village (Map 2, page 29).

Historical values associated with the designated place are the following:

- The site's 252 remains reveal signs that the site was occupied and operated for over a century and a half, i.e. from 1732 to 1883.
- The site attests to the first iron and steel industry in the country and the first industrial community on Canadian soil.
- The site attests to the decisive, and for a long time exclusive, role played by the company in supplying material goods necessary for the development and defence of the colony.
- The remains bear witness to the technical environment of the old iron and steel industry, of which the Forges are the oldest and most complete example in Canada.

Landscapes and landscape elements

The topography and landscape elements of the Forges site have remained such that we can recognize the lay-out of the 18th century ironworks to this day. The landscape elements include the Forges Stream, the upper terrace, the gully through which the stream flows on its way to the St. Maurice River, the lower terrace situated on the bank of the St. Maurice River, remains of work areas and dwellings, the St. Maurice River and the surrounding natural environment.

Historical values associated with landscapes and landscape elements are the following:

- The Forges landscape is the key to our understanding of why the founders chose this particular site.
- An examination of the particular topography of the gully makes us realize the extent of the technical knowledge of the builders of the ironworks.
- Visual landmarks conserved by the landscape surrounding the Forges contribute to our understanding of the rural and forested environment in which the village was built, typical of the pre-industrial era when industries were often located in the countryside.
- The forest, cleared land in the marshy zones, revealing here and there the ferruginous nature of the soil, the strong flow of the stream and the river lined with former quarries are all elements that speak to us of the region's raw materials that were utilized throughout the long period of time that the ironworks were in operation.

The archaeological remains

The cultural resources contained on the actual site of the Forges are essentially archaeological remains. Among the 252 remains identified, 142 have been unearthed and the other 110 are presumed remains.³ The remains are divided into five zones that correspond to the main areas of the industrial village: the gully of the stream, the bank of the St. Maurice River, the upper terrace, the vegetable gardens and pastures, and the roads.

Historical values associated with all the archaeological remains are the following:

- All of the remains identified bear witness to the beginnings and evolution of the first iron and steel industry in Canada and the first community associated with such an industry, lasting over a period of 150 years.
- The remains also attest to the production operations and manufacturing methods of an industry that was crucial for equipping and developing the country, primarily during the colonial era.
- Because of their age, complexity and wealth, these remains are unique in Canada and represent the irreplaceable legacy of an old ironworks on Canadian soil.

Historical values associated with the remains of the gully of the stream are the following:

- Structures associated with the remains of dams and channels upstream from the blast furnace attest to the original components of the system for containing and channelling the water, installed during the initial years of operation (1736-1741).
- Remains in the area around the blast furnace are indicative of changes made over the years to the first blast furnace in Canada, built in 1736, which was also in operation for the longest period of time, until 1883. Remains unearthed still show visible traces of the erection of two types of blast furnace, the construction method used and their respective environment. The dense and composite set of remains of the blast furnace, evidence of the first processing of iron ore in the country, represents a masterpiece of Canadian industrial heritage.
- Remains of a flour mill, located down from the blast furnace, show the ingenuity of its designers, who re-utilized the water

^{3.} Presumed remains refer to remains that have not been unearthed but whose presence has been suggested by archival sources, drawings and old pictorial works.

from the spillway of the wheel of the blast furnace to activate an undershot millwheel.

- Remains in the area of the upper forge represent a synopsis of the history of techniques used in the Canadian iron and steel industry; at the base of the blast-furnaceand-forge installation typical of ironworks in the Franche-Comté region in France various structures were built over the years: a moulding shop, a railcar wheel foundry and a new blast furnace. They are a direct testament to major events in Canadian history with which the Forges were associated: the Seven Year War, the American invasion of 1775, expansion of the Canadian railway and the National Policy of 1879.
- Below the upper forge, remains of a shed used as a mill and remains of a saw mill adjacent to the lower forge dam show how additional equipment was integrated with the industrial installations along the course of the stream.
- Remains located in the area of the lower forge are evidence of two installations that marked the beginnings of the Canadian iron and steel industry: the original



An interpretive guide explains the remains of the lower forge chimney to visitors

Parks Canada / E. Kedl

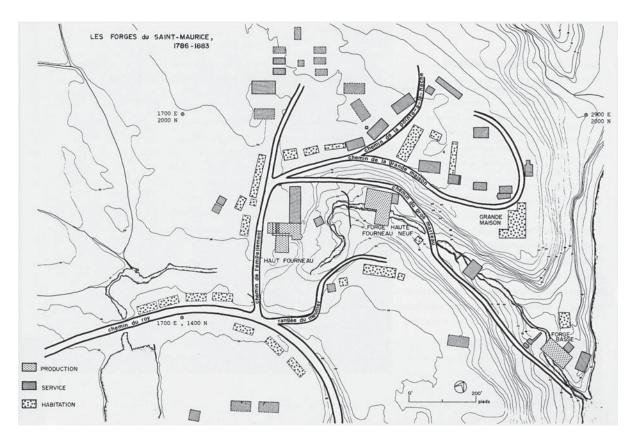
modest ironworks built by Francheville (1733-1734) and the European-style ironworks consisting of a blast furnace and forge, built by ironmaster Olivier de Vézin in 1736. The imposing ruins of the chimney still standing is the only one in Canada to attest to the use of 18th century Franche-Comté type chaferies.

Historical values associated with remains on the bank of the St. Maurice River are the following:

- The remains on the lower forge terrace show the very first living quarters for workmen employed at the forge built by Francheville in 1732.
- The "devil's fountain" plays an important role in legends surrounding the Forges, kept alive today through collective memory. For people living in and around Trois-Rivières, the "devil's fountain" has long served as an introduction to the history of the Forges du Saint-Maurice.

Historical values associated with remains on the upper terrace (those situated within the boundaries of the designated place and the administered place) are the following:

- Numerous remains unearthed on the upper terrace attest to the founding and growth of the first industrial community in Canada.
- Remains of the Grande Maison occupied by the Forges' ironmasters and remains of the workers' living quarters reveal the social structure of the industrial community.
- Remains of workmen's dwellings from different eras also attest to social differentiation among the workmen.
- Remains of charcoal kilns mark a technological change that occurred in the company's production of charcoal in the 1850s.



Historical roads at the Forges
Parks Canada / drawing by François Pellerin

Historical values associated with archaeological remains found on the upper terrace (the remains situated within the boundaries of the designated place but off the site administered by Parks Canada) are the following:

- The washery pond and remains of its dam are resources that are vital to understanding the stream water containment system.
- Presumed remains of the farm attest to the company's efforts to grow some of the food supplies needed by its employees.
- Presumed remains of the chapel built in front of the farm in the 1850s reveal that Catholic worship services were offered to Forges workers from the very beginning of the ironworks.

The historical value associated with remains of vegetable gardens and pastures is the following:

 Presumed remains of vegetable gardens, pastures and the fences enclosing them reveal the way of life of the population living at the Forges.

The historical value associated with remains of the Forges roads is the following:

 Remains of the routes followed by the roads are valuable indicators of the spatial organization of the industrial community.

The archaeological collection

The Forges archaeological collection is the largest Parks Canada collection in Quebec; it includes close to six million artefacts and ecofacts and attests to every aspect of community life. Numerous original archaeological objects are on display in the Grande Maison and at the blast furnace.

Historical values associated with the collection from the blast furnace are the following:

- The collection attests to the smelting of iron ore and the production of cast iron. The collection contains pig iron, evidence of the first stage in the indirect ore reduction process, as well as some finished products, such as cannonballs and fragments of stoves and kettles.
- It is particularly revealing of moulding techniques that were used: open sand moulding, box moulding and chill casting. In addition, evidence of trimming work on pieces has been uncovered.
- Ceramic and glass artefacts found at the blast furnace provide chronological indicators as to what type of objects were produced during the various periods of the ironworks' operation.
- Objects at the blast furnace associated with the production of artillery pieces and ammunition at the end of the French Regime are indicative of the war effort in New France and the oldest industrial war production in Canada.

Historical values associated with the upper forge collection are the following:

- Hammer scale, scraps from the forge hammer of the upper forge, attest to technical hammering processes used at the old ironworks.
- Artillery munitions produced in 1775 at the time of the American War of Independence provide evidence of the collaboration of the Forges' director with American invaders.

 Railcar wheel annealing pits attest to how the Forges specifically contributed to the building of the Canadian railway.

Historical values associated with the lower forge collection are the following:

- Objects discovered in the lower forge area are primarily indicative of the fining process, the second and last stage in the indirect ore reduction process. They include bar iron produced for shipyards in Quebec City and Rochefort, France, and also used by colonial craftsmen.
- This collection is also indicative of remelting (second fusion), a process used as a result of the diversification of production in the 19th century.

Historical values associated with the collection from the workshops are the following:

- Objects associated with work done by craftsmen show the type and diversity of wares produced.
- The presence of housewares is indicative
 of the fact that a good number of craftsmen lived in the same place they worked.
 The standard of living and certain aspects
 of the way of life of these craftsmen is
 brought out by this collection.

Historical values associated with the collection from the living areas (Grande Maison and the workmen's dwellings) are the following:

- The collection attests to the way and quality of life, and the standard of living of the inhabitants of the industrial community, both in the 18th and 19th century.
- Marked differences between the quality of ceramic and glass objects found and osteological evidence of a meat-based diet attest to social differentiation and cultural differences.
- The chronological seriation illustrated by the archaeological collection, particularly for ceramics, and specifically for locally produced common earthenware, creates

a unique range among the collections owned by Parks Canada. Similarly, numerous everyday wares provide evidence of 18th and 19th century folk culture.

The historical value associated with the collection from the *chemin de la Pointe-à-la-Hache* is the following:

 The collection of ceramics found along this road tells us the length of time a certain level of the road was used; it is an amazing find.

The historical value associated with large artefacts found in the gully of the stream is the following:

 They attest to similar equipment used during the time the ironworks were in operation. The turbine represents the last type of hydro-mechanical equipment used at the blast furnace and in the two forges; the set of millstones are indicative of equipment used at the community flour mill.

The ethnological collection

The ethnological collection includes 713 objects that are presumed to have been made at the Forges. The majority of these objects are part of the Tessier-Levasseur collection. However, only 43 of the objects in the collection are clearly identified with the company trade mark.

Many of the objects in the collection represent domestic life, wares produced, trade, and the iron and steel industry, and are displayed at the Grande Maison. Among these are stove plates and woodstoves from

different time periods, sugar and potash kettles, ploughshares, railcar wheels, tools and other household objects.

Historical values associated with the ethnological collection are the following:

- The objects in this collection show that a significant portion of the Forges production was to meet the needs of the colony.
- Home woodstoves bearing the Forges brand name represent rare evidence of the company's most renowned product.
- The Tessier-Levasseur collection represents a wonderful sampling of the most meaningful objects made over the 18th and 19th centuries. The collection is also valuable because of the fact that it was begun by Monseigneur Albert Tessier, whose actions have repeatedly contributed to presentation of the Forges.



Woodstove made at the Forges du Saint-Maurice
Parks Canada / J. Jolin

4.2 Messages of National Historic Importance

At Forges du Saint-Maurice NHSC, four messages of national historic importance stem from the site's commemorative intent and must be conveyed to the public. To enhance public understanding of the messages, they must include the following related elements:

- The Forges du Saint-Maurice, established in 1730, was the main industry under the French Regime.
 - The Forges were the first mineralprocessing industry in the country.
 - François Poulin de Francheville was the first Canadian entrepreneur to be granted iron ore mining rights in New France by the King of France.
 - The regional area covered by the timber and mining rights obtained by Francheville would long determine the vast territory taken up by Forges operations.
 - The Forges were the only industry of its type in New France and would remain so throughout almost the entire colonial era and right up until the middle of the 19th century.
 - The primary reason for founding the Forges was to provide the iron needed to supply the Royal shipyards in France, but also for shipyards in Quebec City, another large industry that began in 1738 around the same time as the Forges.
 - Furthermore, the Forges was the only colonial industry to meet the bar iron and cast iron needs of the colonists.
- The founding of the Forges du Saint-Maurice marked the beginning of the Canadian iron and steel industry.
 - The Forges site, located around a stream, is typical of old industrial operations that relied on the use of hydraulic energy.

- The Forges du Saint-Maurice represents a unique example in Canada of an industrial operation typical of the technical environment of old ironworks, imported from Europe in the 19th century.
- The Forges du Saint-Maurice was an integrated business where its operators controlled all production and mining operations right up to the manufacturing and marketing of products, including the control, dressing, shipping and processing of raw materials.
- The introduction of new equipment and processes, evident from remains dating back to the 19th century, is indicative of certain technical innovations that were made.
- The founding of the Forges du Saint-Maurice makes the Mauricie the oldest iron ore working region in Canada. Later, other ironworks were founded, with some of the owners and a good number of the workers coming from the old Forges.
- The founding of the Forges du Saint-Maurice resulted in the first industrial community in the country.
 - Right from the beginning, Forges ironmasters and workers settled on the very site of the ironworks, thus forming the first industrial community in Canada.
 - The workmen at the Forges were of French, Canadian and British origin.
 - Following the Conquest, the working community was re-established on the basis of seven French skilled workmen ordered to remain on the job by British authorities. Later on, new French-Canadian and British workers would complete the company's labour force.
 - Because of the demanding workload of Forges workmen, who had to continuously "do the rounds", the workers lived near their worksites, the company providing them with room and board.

- The Forges du Saint-Maurice closed in 1883 after nearly 150 years of operation.
 - Because of the exclusive rights it enjoyed for over one hundred years, the Forges played a decisive role in Canadian economic history during the colonial era.
 - The Forges operated under every political regime in Canadian history, from the French Colonial Regime to Confederation.
 - The diversity of wares produced at the Forges du Saint-Maurice throughout its long history bears witness to the significant role it played in the development of a rapidly growing colony.

 The Forges du Saint-Maurice is a national historic site, i.e. a place designated by the Canadian government because of its national historic importance.

4.3 Other Heritage Values

These values are resource-related – historical values and messages that, while not recognized as having national importance, are historically meaningful. These other heritage values correspond to archaeological collections and sites that must be preserved and messages that should be conveyed in the form of additional information.



The Forges du Saint-Maurice around 1840 (anonymous wash drawing)
Parks Canada Collection, Quebec

Archaeological sites

Remains of farm equipment and buildings (dam, houses, barn, dairy, henhouse, sheds) are presumed to be present on the site.

The historical value associated with these remains is the following:

 The remains of these buildings no longer standing is associated with farming carried out on the site by Ernest Marchand in the 20th century.

Remains of a paint powder plant and its annex are presumed to be present on the site. Remains of log drivers' camps have also been found.

Historical values associated with these remains are the following:

- Presumed remains of the paint powder plant bear witness to the re-utilization of Forges buildings. The production of ochre powder composed of iron oxide, clay and magnesium is thus related to the ferruginous soils that led to the working of the Forges in the 18th century.
- Remains of log drivers' camps indicate the continuity of forestry operations that were closely associated with Forges operations throughout the entire time the company was in business.

We also presume that there are remains of a cairn bearing a 1923 Historic Sites and Monuments Board plaque. Furthermore, the concrete pillar from the chimney of the lower forge chafery contributed directly to the preservation of the structure in the 1930s.

Historical values associated with these remains are the following:

 The site of the cairn attests to the first commemorative action taken by the HSMBC towards recognizing the national historical importance of the Forges in 1920. The concrete pillar from the lower forge chimney contributed directly to the preservation of the structure, which at the time was in danger of collapsing. This action resulted in the conservation of a unique testament to an old ironworks on Canadian soil.

The ethnological collection

This collection includes the first plaque laid by the HSMBC in 1923, displayed today at the Grande Maison, additional commemorative plaques laid by other associations, and the original reconstruction plans of the Forges by architect Ernest Denoncourt.

The historical value associated with the ethnological collection is the following:

 These objects are evidence that steps were taken towards recognizing the historical importance of the Forges.

Additional messages

In the overall context of the resources and components associated with other heritage values, the following messages should be conveyed to the public in the form of additional information:

- Actions taken towards commemorating and conserving remains of the Forges date back to the beginning of the 20th century and were initiatives of citizens living in and around Trois-Rivières.
- Works by historians Benjamin Sulte, Dollard Dubé and Albert Tessier were important milestones in the long process that has led to the recognition and safeguarding of Forges remains.
- Large public gatherings that took place on the site organized by the local historical society in the 1920s and 1930s raised public awareness of the importance of preserving and presenting the Forges.

- The occasional gathering of families who are descendants of Forges administrators and workmen has contributed to commemorating the historic site.
- The regular production of plays based on themes and figures associated with the history of the Forges has contributed to commemorating the historic site over a number of years. In addition, a television series based on the Forges du Saint-Maurice, produced by Radio Canada at the beginning of the 1970s, largely contributed to making the public aware of the history of the Forges.
- The Forges du Saint-Maurice is one of the most important archaeological sites in Canadian industrial heritage.
- The NHSC has been the subject of other commemorations (The Canadian Institute of Mining, Metallurgy and Petroleum, the American Society for Metals, the Ordre des architectes du Québec and a Governor-General of Canada medal).
- The NHSC is part of a regional and national network of historic sites.
- The national historic sites administered by Parks Canada belong to all Canadians.



The Forges du Saint-Maurice around 1870 as the site appeared to visitors from Trois-Rivières
Library and Archives Canada, PA-135-001 / J. Henderson

To be inserted:
- Map: Location of Forges du Saint-Maurice NHSC

- Map:

Forges du Saint-Maurice NHSC (designated place, administered place and main components).

5. Analysis of the Current Situation

5.1 State of Ownership of the Administered Place

The place administered by Parks Canada covers some sixty hectares (Map 2, page 29).

Under a Canada-Quebec agreement reached in May 1973, Quebec agreed to transfer to the Canadian government six hectares of land where the main remains of the old industrial village of the Forges were concentrated. In return, the federal government agreed to give Quebec the Pointe-du-Moulin heritage site on Île Perrot. The federal Orderin-Council transferring the Pointe-du-Moulin site was enacted in June 1973, and the provincial Order-in-Council transferring, in perpetuity, the Forges site to the Canadian government was enacted in April 1982. The federal Order-in-Council was ratified by the Privy Council in December of the same year. The Canadian government therefore holds in perpetuity the property rights of the site identified in the 1973 agreement.

In the meantime, the small area covered by the original site and the possibility of conducting archaeological excavations on the periphery led Parks Canada to undertake an expansion program. In July 1974, invoking Clause 3 of the 1973 agreement, the Canadian government asked Quebec to proceed with the acquisition and subsequent transfer of various parcels of land bordering the area that had already been acquired. In 1975 and 1976, Quebec proceeded with expropriation of the land involved. In 1979, the two parties came to an agreement regarding expropriation costs, namely a total of \$455,000. However, following negotiations, it was agreed that the parcels of land expropriated by Quebec in 1975 and 1976 would be transferred to the federal government, not in perpetuity, but rather in the form of a long-term 42-year lease. The provincial Order-in-Council was enacted in June 1987 and ratified by the federal Order-in-Council in March 1988. The agreement states that when the lease expires in 2029 it will be renewable with the consent of both parties.

5.2 State of the Cultural Resources

Although since its acquisition by Parks Canada major interventions have been carried out on the site to preserve and present cultural resources, threats to and concerns involving the commemorative integrity of the resources are still present.

The designated place

The greater part of the designated place is under Parks Canada jurisdiction. A small area of the designated place, located mainly south of Boulevard des Forges, is on private property and therefore outside of Parks Canada jurisdiction.

Resources situated within the designated place but outside of the administered place

A part of the designated place, a part of the cultural landscapes (washery stream and pond) and several archaeological remains are privately owned (Map 2, page 29). Protection of resources found on private property depends on how the land is being used and the awareness and goodwill of the owners involved.

These resources are primarily located south of the present Boulevard des Forges, According to historic maps and pictorial material, this zone contains mainly workers' dwellings and farm buildings, as well as the presumed remains of a chapel. The washery pond and the surrounding wetland are also found there. At the time the Forges were in operation, the pond served as a reservoir that fed the millponds of the various elements of the ironworks located farther downstream. The washery pond has been for sale for the past several years. This land is zoned for residential use, which could pose a threat to resources found there. Any intervention in this zone would threaten the existence of the pond itself, the dam that controls the water level of the pond and any archaeological remains found there. The landowner and the City of Trois-Rivières need to be made aware of the importance of these resources for the historic site in order to ensure their protection in the future. Our desire is that this zone be used in a way that is compatible with its historic importance.

Two small areas situated north of Boulevard des Forges and included in the designated place are also outside of Parks Canada jurisdiction and may contain archaeological remains.

Landscapes and landscape elements

Although the landscape has changed considerably since the closing of the ironworks over a century ago, certain features of the Forges landscape are still apparent today. The Forges Stream, the deep crevasse eroded by the stream as it flows down to the St. Maurice River, the lower terrace where Francheville had set up his first installations in 1730, and the upper terrace on which the industrial village was built are all landscape

elements that are still visible today. These landscape features, which evoke the history of the Forges, do not appear to be threatened, but few messages of their historical value are currently being conveyed. Several years ago, the period landscape was the subject of studies and proposals as to how it should be developed, but to date no specific interventions have taken place. Before the CIS was drawn up, cultural landscapes were not considered to be cultural resources. Their presentation and the communication of their historical value must now be reconsidered.



The Forges Stream near the remains of a mill Parks Canada / E. Kedl

Today the historic site consists of a vast green space with lawns and densely forested zones on the slopes between the plateau and the St. Maurice River and slopes in the area of the gully. To the north of the village is another naturally forested zone. The steep slopes between the plateau and the St. Maurice River and the slopes in the area of the gully are not showing signs of major erosion at the present time thanks to the natural forest cover and stabilization work conducted previously. However, the clayey nature of the soils makes these areas vulnerable to erosion and landslides. Work begun at the beginning of the 1980s along the St. Maurice River has solved the problem of stability and erosion along the river bank. The area where the "devil's fountain" is located still appears to be vulnerable to erosion. This is being monitored on yearly basis.



Interpretation activities, with part of the Forges landscape in the background Parks Canada / E. Kedl

Archaeological remains

Between 1973 and 1979, an extensive campaign of archaeological excavations was carried out at the historic site. These excavations provided the information necessary to begin presentation work on the site. The condition of the 252 archaeological remains varies and is cause for some concern.

- Although the sheltered remains (those in the blast furnace complex and in the Grande Maison) were altered in varying degrees during construction work, they have remained in stable condition since that time. Only the flooded part of the stone wall located in the area of the great wheel of the blast furnace shows signs of problems caused by ambient humidity.
- Some of the archaeological remains are outdoors – the foundations of some fifteen buildings made of sandstone, fieldstone and mortar. These remains react adversely to changes in temperature and foot traffic, particularly those on

the upper and lower terraces. Monitoring of these remains is minimal because of a lack of resources. Their deterioration has increased over the past five years, particularly the part of the remains that are above ground, which corresponds to about one third of their height. We are not aware of the condition of the buried part of the ruins but presume it has remained relatively stable compared to when they were found, even though the infiltration of surface water combined with the action of freezing and thawing definitely has an impact.

- The condition of the buried remains is difficult to assess because of the absence of monitoring measures.
- Several zones have not yet been subject to archaeological interventions. Activities or work carried out in these areas could potentially damage remains found there because their exact location is not known.
- The accidental discovery of a paleohistoric object of Amerindian origin is indicative of the presence of Amerindians in the region. No such objects had been identified during archaeological excavations conducted on the site.



Symbolic structure housing the remains of the blast furnace Parks Canada / E. Kedl

The archaeological collection

The archaeological collection of the Forges is one of the most important Parks Canada collections, both because of the quality of the objects it contains and the quality of the information the objects reveal, especially regarding the metallurgical industry of the 18th and 19th centuries. It is composed of nearly six million artefacts and ecofacts and testifies to every aspect of life in the industrial community. Part of this huge collection has been documented to date, and analyses conducted have focused on the artefacts that provide information on the numerous facets of the industrial operations. Much less is known about the domestic activities of the industrial community, which have been documented by numerous physical clues found. Given that they have never been computerized, it is difficult to access the data relating to this collection.

In 1990, it was determined that the collection of metallic objects is threatened. Various interventions aimed at increasing our knowledge and improving the protection of the metallic objects have therefore been undertaken. Magnificent objects that have been ignored for over twenty years have thus been brought to our attention. Additional work will be required to ensure the permanence of this collection. Non metallic objects recovered during excavations, less endangered than the metal objects found, have not been documented to date.

Much documentation and computerization work still remains to be done for the archaeological collection.

The ethnological collection

The ethnological collection is displayed or stored in conditions designed for the conservation of such objects. A conservation and maintenance program is in effect and the artefacts are properly monitored. Objects in the ethnological collection are found both at the Forges and in Quebec Service Centre

storerooms. Some objects have also been indexed elsewhere than the historic site and Parks Canada storerooms (ex. Musée Pierre-Boucher, Trois-Rivières).

5.3 Natural Resources and the Environment

The national historic site is made up of four physiographical units: the valley of the Washery Stream, the north and south plateaus, and the west side of the St. Maurice River. The site's physiography has been marked by its hydrographic components. Originally covered by glaciers during the Quaternary Era, leaving behind gravelly morainic sand, the area was then flooded by the Champlain Sea, which, as it receded, left behind a layer of fine deltaic sand. Two tiered fluvial terraces, with respective altitudes of 15 and 33 metres, bear witness to the retreat of the post-glacial sea in successive stages. A slowly flowing watercourse that drains subterranean springs on the upper terrace gradually carved out a bed in this fine material and is found today at the bottom of the gully that starts out steep-sided and then widens as it approaches the St. Maurice River. One particularity of the site is most certainly the nature of the surface deposits, which are rich in limonite (iron oxide). These deposits were primarily mined manually when the iron ore was extracted for the Forges' ironworking operations and are the reason for the rust colour of the surface waters and the river and streams.

This natural environment has a variety of plant life and ecological features, given the surface deposits, the relief and the presence of streams and ponds, and the proximity of the St. Maurice River. It is fairly representative of the biodiversity found in the surrounding region. Inventory work carried out between 1975 and 1979 listed nearly 38 mixed populations, the presence of 24 tree species and 14 shrub species, and close to 200 herbaceous and ground cover species.

Two invasive species, purple loosestrife and common reed, have been noted. Ragweed, a highly allergenic species, is also present. The plant communities found on the historic site are relatively diverse considering the small area covered by the site. A grove of eastern white cedar is found on the eastern part of the site, on a steep slope down to the bank of the St. Maurice River. It is the most interesting forest community because of the impressive size of some of its trees. The finely-textured soil, damp and poorly drained, provides an ideal habitat for cedar.

From 2003 to 2005, inventories aimed at detecting the presence of threatened species confirmed the presence of some twenty butternut trees, an endangered species in Canada (Gérin-Lajoie, 2005).

The present-day site is visited by a number of species of wildlife, some of which may be in conflict with the preservation of cultural resources and, to some extent, visitor safety. The predominance of open landscaped areas has meant a large and continuous population of marmots. They dig numerous holes and this occasionally poses a threat to the conservation of unearthed archaeological remains and to visitor safety. In addition, the presence of farmland and wilderness areas bordering the historic site means that the site is occasionally visited by black bears. In the wetland areas, beaver activity is a factor and shapes the landscape. Lastly, the small Washery Stream is home to a population of brook char.

The last complete biophysical inventory dates back to 1979 and it would be important to conduct another inventory. For the time being, the only species that needs protection is the butternut tree because it appears on the list of species in jeopardy in Canada. Invasion of the site by detrimental and exotic vegetation will have to be reassessed. Unless we proceed with intervention aimed at maintaining young and shrubby vegetation, the aging of forest populations will have to be examined to assess the risk of fire and to determine

preventative measure to ensure public safety and protect the site's cultural resources and infrastructures.

Special attention should be focused on conflicting wildlife management strategies and a management plan needs to be drafted to address the issue. Land use and management must respect the principles of sustainable development and protection of the environment while at the same time ensuring that conservation of cultural resources takes precedence. Special attention needs to be paid to protection of the banks of the river and streams.

In its daily operations, Parks Canada must opt to use ecologically sound practices. Operations will therefore have to respect the Canadian government's mandate to make its operations more ecological. Improving environmental stewardship will require the implementation of concrete actions.

5.4 The Current Visitor Experience

At Forges du Saint-Maurice NHSC, reception and interpretation services are available to visitors from mid-May to mid-October in both official languages and have been subject to a fee since 1992. Installations have been built so that physically challenged or wheel-chair-bound visitors have access to the exhibits, sound and light show and the various facilities.

A large parking area enables visitors to park their vehicle a short walking distance from the Grande Maison. The visitor reception area is in the Grande Maison, where personnel explain the commemorative intent and service offer. Near the reception counter is a sales counter where visitors can purchase various items. The exhibits at the Grande Maison, the sound and light show presented there and the interpretation centre at the blast furnace enable visitors to become familiar



A guide greeting visitors Parks Canada / E. Kedl

with the history of the Forges. They can follow a path, along which are various interpretation panels explaining the remains of the village and ironworks and the natural features that led to the establishment of an industrial community in this location. Guided tours and interpretation activities designed for a range of audiences complete the information conveyed to visitors.

Exhibits at the Grande Maison:

- On the ground floor of the Grande Maison, a scale model showing a crosssection illustrates how the various parts of the residence were used. An exhibit on the administration of the ironworks features the three main periods in the history of the Forges represented by three prominent figures. Artefacts found during excavations illustrate various aspects of domestic life in the community.
- The ground floor exhibit featuring all three administrative phases of the Forges is reflected in the three corresponding

- periods of production illustrated in the cellars, namely "The Forges and the War", "The Forges and the Colony" and "The Forges and Industry". These themes cover 150 years of operation, illustrated with artefacts discovered during archaeological excavations. The last part of the cellars shows the role played by the Forges in regional history and the collective memory.
- on the upper floor, a sound and light show is presented using a large scale model of the Forges village, as it was in 1845 during the heyday of the ironworks. At that time, there were more than one hundred buildings in the industrial complex and more than 400 persons living and working in the village. In the show, the audience is introduced to a number of historical figures living in the Forges village. The story is built around events in their personal lives and their work environment.



Reconstruction of the exterior of the Grande Maison
Parks Canada / E. Kedl



Guide presenting the historical scale model situated inside the Grande Maison
Parks Canada / E. Kedl

The space inside the blast furnace interpretation centre is organized according to how this complex was used historically: the charcoal house, bellows shed, casting house, moulding shop, oven and founder's living quarters. The exhibits have been developed based on these historical functions:

- at the charcoal house, the exhibit deals with the transporting and processing of ore, the extraction of limestone, the making and use of charcoal, and technical changes that took place up until 1883;
- at the bellows shed and casting house, the exhibit focuses on the cannon pit, blower, great wheel, gearing and the various activities associated with casting;
- at the moulding shop and the oven, the two main moulding techniques are illustrated, namely open sand moulding and box moulding;
- at the founder's living quarters, a display compares the possessions of a founder with that of a labourer, and presents the great founders of the Forges and numerous archaeological artefacts.



An interpretation activity inside the symbolic structure of the blast furnace Parks Canada / E. Kedl

A guided tour of the historic site is the ideal way for visitors to learn about the site. It starts near the Grande Maison. The interpretive guide begins by outlining the main periods in the history of the Forges, the products manufactured and the role of the stream in providing hydraulic power. Referring to the presence of archaeological remains, the guide explains the existence of workers' dwellings. He/she explains how symbolic structures are used as an interpretation tool to recreate the ambience of the industrial operations that took place at the blast furnace, and describes the blast furnace and the complex of buildings that once surrounded it. The guide talks of how the ironworks produced, over more than 150 years, thousands of tons of cast iron for moulded objects and ironwares. Inside the symbolic structure housing the blast furnace, he/she comments on the displays illustrating the extraction, transport and dressing of the raw materials needed to produce cast iron. The guide explains how the blast furnace and the bellows worked, the production of cast iron and the way it was moulded in sand. He/she explains how the great wheel outside is activated by water power supplied by the stream. The guide takes visitors down the path

that runs along the stream and points out remains of the upper forge-new furnace and remains of the flour mill. At the lower forge, visitors learn how cast iron had to be fined and hammered to obtain wrought iron. The tour ends at the "devil's fountain" where visitors are told of a popular legend of the history of the Forges.

The site has a specific interpretation program designed for school groups and based on *Ministère de l'Éducation du Québec* objectives. The program is particularly aimed at students in grades 4 to 6. Like other groups, school groups may participate in special workshops on living quarters, furniture, diet, clothing and archaeology.

Special activities take place on-site, such as theatrical and musical presentations, organized jointly with local organizations and according to resources available. Picnic areas and footpaths encourage visitors to relax in a natural setting and discover the St. Maurice River and its surrounding land-scape.

5.5 Challenges involved in the Communication of Commemorative Messages

At the present time, visitors learn about the site's resources, their historical values and other heritage messages through the visitor experience described above. The CIS refers to four messages of national importance that should be communicated to the public and a number of corresponding context messages. Additional messages must also be conveyed to visitors.

The messages of national historic importance are relatively complex. The period commemorated covers over 150 years of operations

and deals with the implementation, evolution and production of the industrial installations that made up the ironworks. The commemoration also encompasses the organization and characteristics of the industrial village where the people lived and worked. Several archaeological remains have been uncovered that are evidence of community activities, but most of the remains are buried and not visible on the landscape. Bringing the remains to life and interpreting the other cultural resources are major challenges that require the support of a range of communication tools. With proper guidance, visitors can learn to interpret the surroundings and become aware of the site's significance. However, their ability to absorb the vast wealth of knowledge available, their desire to do so as part of a leisure activity and the time they have available for their visit, particularly in the case of tour groups, hinder the public's understanding of the resources and associated values and messages.

In the current service offer, certain aspects of themes are only partially covered and others are barely mentioned. For example, the second stage of the technical process used at the Forges, namely the processing of cast iron into wrought iron and work performed at the blast-furnace-and-forge complex is presently only briefly introduced. According to the 1981 management plan, this aspect was to be conveyed through a major exhibit set up inside a symbolic structure built on the site of the lower forge, but this was never carried out. Characteristics of the company, changes that took place in the processes used, technical innovations that were introduced over the years, particular aspects of the industrial community and its working class population, and the decisive influence that the Forges had on the Canadian economy during the colonial era represent other themes that have received little or no attention. The fact that the workers lived on the site and formed a unique and rather closed community is not currently being highlighted. Communication tools could be modified to provide a better balance in the presentation of the various messages and compensate for these shortcomings. We need to seek a more appropriate balance between the presentation of the industrial environment vs. community life and the human environment.

The exhibits set up in 1985 (blast furnace complex) and 1990 (Grande Maison) are in good condition, but have not been renewed since their original installation and are showing signs of age when one thinks of the modern techniques now used in museology. A formative assessment was therefore conducted at the Forges du Saint-Maurice in the summer of 2000. The study was aimed at measuring the effectiveness of the sound and light show presented in the Grande Maison and that of the exhibit displayed at the blast furnace. The study was also to determine if visitors made the connection between the indoor installations and outdoor structures of the blast furnace.

Evaluation of the sound and light show revealed that 80% of visitors understand the messages conveyed and that, along with the scale model of the Forges, the show gives them a better understanding of the site's history. The study revealed, however, that the sound and light show was not as well received as the overall facilities in the Grande Maison; they found the presentation a bit lengthy, the lighting poor and the content sometimes difficult to understand.

Secondly, the study revealed that visitors do not properly comprehend the interior of the blast furnace. They find it difficult to understand the lay-out of the complex and the operations that took place there, as well as the representation of old industrial mechanisms using contemporary metallic structures. For example, they understand that raw

materials were handled there, but cannot situate the charcoal shed as the place where that activity took place. The same holds true for the living quarters, bellows shed, moulding shop and stack of the blast furnace. Orientation panels do little to improve their understanding.

Lastly, visitors react strongly to the symbolic structure: they either like it or they don't. However, nearly half of the people polled were unaware of the purpose of these metallic structures, both inside and outside the complex.

The diagnostic study therefore concluded that a major revamping of the exhibits at the blast furnace is required, and the sound and light show needs to be reviewed based on the comments received. In the meantime, explanations given in the guided tour fill in the gaps identified in the visitors' understanding of the organization and operation of the blast furnace.



Symbolic structure of the blast furnace Parks Canada / E. Kedl

Moreover, the fact that a large part of the blast furnace complex is covered in lawn, as is the area immediately around it, tends to give the mistaken impression that the complex was once an underground work area.

The remarkable scale model of the site that is used during the sound and light show could be better utilized for educational purposes, i.e. to show visitors the spatial organization of the site as it was in 1845.

The current outreach program has succeeded in reaching a certain segment of the population and the historic site has had its own website since 1996. Modifications are required, however, in order to reflect all the commemorative messages, and specifically the additional messages.

Lastly, although interpretive content has been updated and adapted over the years in light of progress made in research and the publication of various books, the site's heritage interpretation plan, now nearly twenty-five years old, needs to be updated in order to fill in the gaps mentioned in the communication of messages.

5.6 Visitation and Use of the Site

From 1985 (the year the blast furnace opened) to 1993, the average annual number of visitors to the site was 58,000, with a peak of 82,200 visitors in 1991, the year the Grande Maison was inaugurated. Over the last few years, visitor traffic has decreased considerably, with an average of 21,938 visitors annually over the past five years. In 2004,

the site received 18,443 visitors, 19% less than the average over the previous four years; of that number, 12,748 were individual visitors, 3,194 were in school groups and 2,501 in other tour groups.

The decline in visitor traffic can be explained by several factors, including the arrival of new destinations on the Mauricie recreational tourist scene (ex.: the Cité de l'énergie, the Trois-Rivières port park, the Parc de l'île Saint-Quentin and the Quebec Museum of Folk Culture), the lack of renewal in the service offer, and budget cuts that have translated into a decrease in operating and marketing resources. Visitor traffic remains below capacity and under the historic site's attraction potential. The challenge is now to keep the interest of existing clientele and to increase the site's ability to attract new clientele.

A study that polled visitor satisfaction and demographics was carried out from June to September 2004 on a representative sample of visitors who came to the site, either on their own or in tour groups. The study enabled us to draw up a profile of visitors to the historic site and the nature of their visit. Their expectations with respect to interpretation facilities, i.e. how well they enhanced their understanding of the history of the Forges du Saint-Maurice, were also polled.

Visitor profile at the historic site

In 2004, 15% of visitors came from an 80-km radius around the historic site and 65% lived elsewhere in Quebec. Other Canadians made up 4% of the visitors, 1% were American and 12% were from other countries, almost exclusively France. Although the territory defined as regional was considerably different in 1995, the proportion of regional visitors has clearly declined since the last

survey, decreasing by half for both individual visitors and those in tour groups. However, a large proportion of overseas visitors always come to the site as part of tour groups (30%), confirming the site's visibility on the international tourist market.

French was the language preferred by 95% of visitors for services at the site.

In 2004, 66% of individual visitors came to the Forges in groups of adults without children and 34% were adults with children. The average number of visitors in these groups was 3.2 persons.

Visitors in tour groups averaged 39 persons per group and represented 30% of the site's annual clientele.

In 2004, the age of individual visitors to the site was relatively advanced. Visitors under the age of 35 were in the minority: 22% were under the age of 17 and 13% were between 17 and 34 years of age. As for older visitors, 37% were between the age of 35 and 54 and 22% were 55 or over.

A typical visit

Most visitors polled (81%) said it was their first visit to the Forges historic site. In comparison with the 67% observed in the 1980s and 1990s, this new figure reflects a definite improvement in the site's ability to attract and renew its clientele.

As in the 1990s, the guided tour is the way visitors choose to enjoy their 2 or 3 hours spent immersed in 150 years of history of the Canadian iron and steel industry. Only 19% of visitors mentioned that they had not taken part in the guided tour of the site. Of these, several other possibilities seem to have met their expectations, since 49% also indicated

they had visited the remains on their own, more than 50% stated they had listened to an interpretive talk given by staff and 86% had visited the blast furnace or the Grande Maison.

Tourists represented 65% of the site's visitors and spent an average of 6.9 nights away from home, 3.2 of which were spent in the Mauricie region. Ten years ago, 55% of visitors were tourists as opposed to same-day visitors.⁴

Visitors came to the historic site primarily because of its reputation and the various promotional tools used to publicize it. Friends and family (36%), the brochure published by the Association touristique de la Mauricie (18%), the site brochure (17%) and a stop at the tourist information centre (14%) were the sources most often mentioned. More than 50% of visitors also took advantage of their stay in the Mauricie region to visit other heritage institutions in addition to the Forges.

High visitor satisfaction

Visitors indicated that they were very satisfied with the interpretation activities in general, the guided tour, and the interpretive talks given by site personnel. The courtesy and communications skills of site personnel were very much appreciated by nearly all the visitors polled. More than 90% of people visiting the exhibits at the blast furnace and the Grande Maison indicated their satisfaction and 98% of visitors to the Forges were satisfied with their overall visit. The interpretation service receiving the highest level of visitor satisfaction was the guided tour, with the greatest degree of satisfaction (5/5) indicated by 88% of participants.

There appears to be a lesser degree of satisfaction with regard to the sound and light show presented at the Grande Maison and the souvenir boutique.

Expectations of a better understanding of the history of the Forges

After their visit to the site, visitors who participated in the 2004 survey completed a quiz that tested their newly acquired knowledge of the historic significance of the site. Their responses are a good indicator for administrators as to how well visitors remember what they learned on their visit to the Forges. The statements involved the origin of workmen at the Forges, the raison d'être of the national historic site, the time period during which the Forges were in operation and its industrial production. An analysis of the results indicate that 68% of participants gave a correct response for at least four of the six statements and almost all participants responded correctly to at least two statements. These results indicate areas where information conveyed to visitors could potentially be improved with regard to the raison d'être of the national historic site.

In the 2004 survey, few visitors (15%) indicated they had expectations regarding the addition of new interpretation facilities that would enhance their understanding of the history of the Forges. Those who did express such expectations suggested the reconstruction or recreation of at least one of the workmen's dwellings, a better explanation of the remains of the village, animation with guides in period costumes, and further development of the areas around the upper and lower forges.

^{4.} Tourists are defined as those who stay overnight or longer in the place visited, as opposed to same-day visitors.

When questioned about improvements that would make the site visit more enjoyable, 15% of visitors surveyed gave suggestions, including the need for more animation and information, availability of more guided tours, especially in English, improvements to the sound and light show, and better directions to the site on roads in the outlying area.

5.7 Regional Tourism

The Forges du Saint-Maurice NHSC is located in Trois-Rivières and is part of the Mauricie tourist region. With nearly 126,000 residents, Trois-Rivières is the region's main hub of economic and urban development. The Mauricie region covers a vast territory that extends from the St. Lawrence River north to the boundaries of the Abitibi and Saguenay-Lac-Saint-Jean regions. To the west of the Mauricie is the Lanaudière region and to the east the Quebec City region. Situated halfway between Montreal and Quebec City, the province's two main urban centres, the region is less than a 90-minute drive from either city (Map 1, page 27).

The surrounding landscape is formed by the plain bordering the St. Lawrence River and the Canadian Shield covering the back country. The St. Maurice River is the region's main waterway and has been a determining factor in regional economic development. Lake St. Pierre, a UNESCO biosphere reserve, has also contributed to the region's status. The Mauricie is a region rich in lakes and forests. Also found in the region are La Mauricie

National Park of Canada, numerous outfitters, a number of controlled harvesting zones, wildlife reserves and regional parks. The region is also home to the *Cité de l'Énergie*, which includes the Former Shawinigan Aluminium Smelting Complex NHSC, where the first ingot of aluminium was cast in Canada in 1901. Numerous historic buildings and museums, including the Quebec Museum of Folk Culture in Trois-Rivières, are also found in the region.

The strong current of the St. Maurice River led to the development of hydro-electric power plants, pulp and paper mills and aluminium smelting plants along its banks. The St. Maurice has also been used to transport logs to pulp and paper mills. This practice came to an end in 1996, restoring the river's potential for recreational purposes.

The Forges du Saint-Maurice NHSC is well known among cultural and recreational tourist networks in the region. Since its creation, it has developed close ties with groups in the cultural and tourist community, including Collège Laflèche, Tourisme Mauricie, the Office du tourisme de Trois-Rivières, Appartenance Mauricie, the Société de conservation et d'animation du patrimoine de Trois-Rivières (SCAP), Médiat-Muse and the cooperative association Info-Nature Mauricie, in order to promote tourism and benefit from the pool of clientele formed by these associations. The NHSC is currently active in the regional tourist industry through services it offers, joint promotional efforts, participation in tourist packages and the joint organization of activities and sociocultural events.

6. Objectives

It is Parks Canada's duty to protect and present representative examples of Canada's natural and cultural heritage. Parks Canada must also encourage public understanding, appreciation and enjoyment of this natural heritage so that it is left unimpaired for future generations. In order to fulfil its mandate, Parks Canada has adopted the following strategic objectives to achieve over the next five years:

- To improve the network of national historic sites, substantially add to the network of national parks and make solid progress in the network of national marine conservation areas.
- Maintain or improve the state of commemorative or ecological integrity of each of the national historic sites and national parks.
- Increase public awareness of national parks, national historic sites and national marine conservation areas, and promote public understanding, appreciation and a collective sense of ownership.
- Develop a stable long-term financial strategy to protect historic and present-day assets.

With regard to the protection of cultural resources, specific objectives have been set for the designated place in the CIS. Parks Canada will work to meet these objectives insofar as they involve cultural resources under its ownership. As pointed out in previous pages, some of the designated place's cultural resources are not owned by Parks Canada and are therefore not under its administrative jurisdiction. As an agency

dedicated to the protection of cultural resources, Parks Canada encourages the owners involved to take a keen interest in the protection of resources found on their property. Parks Canada ensures that private owners and other authorities are aware of the existence and value of cultural resources owned by others and the importance of preserving them. The objectives set for the designated place are the following:

- To raise awareness in key players in the community as to the importance of preserving landscape-related values.
- To respect resources and the historical values associated with them.
- To base management decisions on the application of the Cultural Resource Management Policy.
- To ensure that resources and their historical values are not lost, damaged or threatened by natural processes, such as erosion and deterioration, or by human activity.

With regard to the presentation of cultural resources, their historical values and messages of national historical importance, specific objectives set for the historic site in the CIS are the following:

- To convey the historical values of cultural resources to visitors and key players.
- To convey messages of national historical importance to the public and provide further information in the form of additional messages.
- To base management decisions on implementation of the Cultural Resource Management Policy.

Regarding the quality of the visitor experience, specific objectives set for the historic site are the following:

- To offer a visit that is safe, meaningful, enriching and memorable, and that corresponds to the specific needs and interests of various clientele.
- To promote the involvement of the regional community in enhancing the service offer.
- To optimize visitor traffic while at the same time preserving the integrity of the site and the quality of the visitor experience.

With regard to working with key players in the region, specific objectives set for the historic site are the following:

- To implement Park Canada's strategy for external communications Engaging Canadians.
- To work with the regional tourist industry and with Parks Canada's national network to increase public awareness of the site.
- To become one of the leaders in the regional tourist industry in the protection of cultural heritage and on-site communication of historical knowledge.
- To participate, as a national historic site, in the development of the sociocultural life of the local and regional community and the presentation of local, regional and national cultural heritage.

7. Looking to the Future: Forges du Saint-Maurice National Historic Site of Canada around 2020

The following section outlines Parks Canada's fifteen-year outlook for the Forges du Saint-Maurice National Historic Site of Canada. The objectives stated in the preceding section will direct this vision, and its implementation will be facilitated by the management actions outlined in Section 8. Based on Parks Canada legislation and policy, the primary concern of this vision is to ensure the commemorative integrity of the site.

- Cultural resources at the Forges du Saint-Maurice NHSC, in particular the designated place, cultural landscapes and archaeological remains, are well protected. The historic character of the place is strengthened by the presentation of these cultural resources, including the presentation of cultural landscapes. A program for the regular maintenance of cultural resources is in place. The public has adopted and supports the conservation values featured at the national historic site. It is considered a historic and natural treasure by the citizens of Trois-Rivières.
- The Forges du Saint-Maurice NHSC is an important site of Canadian industrial heritage, and a place of commemoration, discovery and learning that highlights a period in the industrial and economic history of our country. It bears witness to the beginnings of the iron and steel industry and the first industrial village in Canada. It has become a reference and a place of inspiration for fields of activity related to the themes presented (hydraulic engineering, metallurgical engineering, mining engineering, forestry engineering, restoration and archaeology).
- The Forges du Saint-Maurice NHSC is a friendly place where visitors can relax. It maintains high standards in terms of visitor services, providing them with an enriching and memorable experience where they discover the presence of numerous archaeological remains and learn about the site's main components, particularly its cultural landscapes. There is a good balance between presenting the industrial community vs. the human side to life in the village. It evokes the presence of the 400 persons living here in 1845 – their dwellings, their way of life, roads, and the presence of fields, orchards and gardens. Enhanced exhibits, improved guided tours (both general and theme-related), various special events, a renewed outdoor interpretation circuit and the availability of interpretive guides enable visitors to discover the historical environment and the importance of the site's cultural resources. Involvement of the local community also enhances activities and services offered at the site.
- The Forges du Saint-Maurice NHSC draws an optimal number of visitors and enjoys an enviable reputation with its outreach clientele. In the Mauricie region, in Canada and abroad it is known as a leader in the promotion of industrial heritage and the communication of historical knowledge in that field. It is well established at the heart of the tourist industry and plays a key role in the regional tourism dynamic. Collaboration with its regional partners means that the site can offer a concerted tourism product.

8. Implementation

In 1981, the first management plan was approved for the Forges du Saint-Maurice NHSC. The plan included the preservation and interpretation of the site's archaeological remains, the addition of an architectural structure over certain chosen remains, landscaping work and development of the stream. The 1981 management plan also outlined the main points in an interpretation concept designed to raise visitor awareness of how an industrial community came to be established at the Forges du Saint-Maurice and the organization and growth of that community. The concept included a number of interpretation themes that would be presented throughout the site in places that would best illustrate them.

As a result of the 1981 management plan, a symbolic architectural structure was erected over the remains of the blast furnace complex and a reconstruction of the exterior of the Grande Maison was built over the remains of the cellars. Large exhibits were set up in both locations. According to the 1981 plan, the following interventions had yet to be undertaken: presentation of the living and service areas, construction of symbolic architectural structures to house exhibits over the upper forge-"new furnace" remains and over the lower forge remains, and completion of the presentation of the historical landscape.

The present context of limited financial resources means that presentation of the site must be pursued along more modest lines. The gradual deterioration of some of the archaeological remains unearthed for public display has forced us to revisit this type of presentation in order to preserve the commemorative integrity of the ruins. The symbolic structure concept projected in 1981 will

be reviewed and adapted. Presentation efforts will be concentrated on protecting cultural resources, seeking a better balance between presenting the human vs. the industrial environment, and on presenting the lower forge area, living and service areas and cultural landscapes. Particular emphasis will be placed on the presentation of landscapes and landscape elements, including the stream and views of the St. Maurice River.

The interpretation concept will be revisited, but messages will continue to be distributed throughout the site in places that best represent them. The concept will focus on enhancing the link between the visitors and the cultural resources of the designated place, making it easier for them to understand messages stemming from the commemorative intent. The interpretation concept will continue to take into account visitor needs in terms of education, exchange of ideas, friendly atmosphere, social experience, recreation and relaxation. The site's guided tour will remain the primary means of conveying the value of cultural resources and related messages to visitors. Interpretive guides will play a key role in providing information.

The commemorative integrity of cultural resources will primarily be ensured through the implementation of management measures aimed at protecting these resources and communicating the messages identified. Application of these measures will help strengthen the site's historic character. These management measures also involve the quality of the visitor experience and the importance of working together with private owners and regional players. Over the next fifteen years, implementation of management strategies will enable us to achieve the desired vision for the historic site.

8.1 Management Measures relating to Protection of Resources

Parks Canada will implement the following management measures aimed at protecting resources:

- Raise awareness among private owners of the presence of cultural resources on their property (part of the designated place, archaeological remains, landscapes and landscape elements) and the importance of these resources, encouraging the owners to factor them into any plans for developing their property.
- Raise awareness among municipal and provincial authorities with regard to the existence and importance of the designated place's cultural resources that are situated outside of the administered place.
- Monitor, on a regular basis, the condition of the site's cultural resources and perform maintenance to prevent the deterioration of all cultural resources. Special attention should be paid to the blast furnace and the chimney of the lower forge.
- Set up a maintenance program to prevent deterioration of archaeological remains that have been unearthed and ensure that they are protected over the long term.
- Draw up an architectural concept for the protection and interpretation of archaeological remains in the area of the lower forge.
- Implement the architectural concept chosen for the protection and interpretation of remains in the area of the lower forge.
- Continue documentation and computerization work on the archaeological collection.

- Draw up an emergency prevention and intervention plan to reduce potential risks to movable cultural property and to introduce proper emergency procedures.
- Draw up a land conservation and management plan to protect and present meaningful landscape elements while strengthening the historic character of the site. This plan would, in particular:
 - include measures to protect the spatial organization and features of the landscape;
 - identify viewpoints that should be preserved and suggest ways to maintain them;
 - recommend ways to convey the presence of specific archaeological remains on the site;
 - recommend ways to highlight the presence of the stream and convey the strategic role it played in establishing and operating the Forges;
 - determine proper methods for managing vegetation and other surfaces in order to strengthen the historic character of the site;
 - recommend ways in which elements such as fences, gardens or roads can be represented on the landscape so as to enhance visitors' understanding of the site;
 - identify conflicting elements and suggest ways of eliminating or lessening negative impacts by, for example, the planting of trees and shrubs, while at the same time respecting the industrial and residential character of certain areas:
 - set criteria for better use of future outdoor furnishings, facilities and equipment.

- In order of priority, and when opportunities arise, gradually implement the recommendations of the landscape conservation and management plan, especially with regard to maintenance and improvements.
- Update the complete biophysical inventory of the site and take the necessary measures for the endangered species identified.
- Take leadership in terms of environmental stewardship, sustainable development and environmental assessment for any projects at the historic site and in the immediate surroundings.
- Update the map of forest populations in order to assess the risk of forest fire and determine preventative measures that will ensure visitor safety and protection of the site's cultural resources and infrastructures.
- Develop a wildlife management plan with regional partners that addresses the issue of conflicting wildlife in order to effectively intervene to prevent problems and ensure visitor safety and wildlife conservation while at the same time ensuring that the preservation of cultural resources takes precedence.

8.2 Management Measures relating to Communication of Messages

Educational communication is one of three aspects of the external communications strategy known as *Engaging Canadians*. To help reinforce the application of this strategy, Parks Canada will implement the following management measures aimed at the presentation of cultural resources, their historical values and commemorative messages:

 Update the interpretation concept, with emphasis on communicating the following messages:

- social structure in the village, the organization of households, families and schooling, religious practices, leisure activities and community life in the village;
- particularities of the industrial community, the various trades practiced at the Forges, the transferring of trade skills within families, and the social status, living quarters and possessions relating to each trade:
- the roles of the various ironworkers, their working and living conditions and the organization of their workplace;
- the role played by craftsmen in supporting industrial production (carpenters, carters, wheelwrights, blacksmiths, forgemen, colliers, miners, etc.) their working and living conditions, their role in the economic life of the village and the organization of their workplace;
- the position occupied by the Forges in the iron and steel industry in the Mauricie region in the 19th century;
- the dynamics of interactions that took place between the company, its workers and the surrounding physical environment, that led to significant changes in the environment:
- the decisive role the Forges played in the Canadian economy during colonial times;
- the second stage in the technical process used at the Forges, the processing of cast iron into wrought iron, and work performed in the European-style blastfurnace-and-forge installation;
- changes that occurred in ironworking processes;
- technical innovations made over the years;
- the communication of additional messages associated with the site.

- Review the various communication tools:
 - renew the blast furnace exhibits so that the spatial organization of the interior properly reflects the operations that historically took place in the complex;
 - improve the outdoor interpretation circuit:
 - revisit the scenario of the sound and light show;
 - reinforce the educational use of the scale model of the village and old pictorial materials to increase the visitors' understanding of the cultural landscape;
 - develop ways in which cultural landscapes were used, including the presence of the stream and the St. Maurice River, to communicate messages, particularly during the guided tour;
 - add large archaeological artefacts (flagstone floor of the kitchen, the casting pit floor, gearing, stream channelling structures, etc.) to the presentation if they can be properly protected.
- Develop the community aspect to achieve a better balance between presentation of the human vs. the industrial environment.
 Wherever feasible, these or other means could be implemented:
 - a re-creation, based on forms and materials that are in harmony with the historic character of the site and buildings, of the exterior and interior of a dwelling, shed or other building deemed representative or meaningful to an understanding of the site;⁵
 - a reconstruction, in an appropriate area of the site, of the exterior of period buildings (barns, charcoal kilns, etc.) to house the facilities needed to receive groups and hold larger-scale activities. The building could also be used to convey certain messages and illustrate the existence of such buildings in the past;

- represent the location of certain buildings on the ground (dwellings, workshops, barns, etc.), using simple visual techniques to identify how the buildings were used.
- Develop the outreach program to raise awareness among the various audiences regarding the existence and values of the historic site, including, but not limited to:
 - updating the contents of the website in order to reflect all commemorative messages and with particular attention paid to additional messages;
 - publishing documents relating to the commemorative messages.
- Continue updating the educational program to correspond to school reform in Quebec and make these changes known to teachers and students.
- Assess, on a regular basis, the effectiveness of messages communicated using conventional methods and tools.

8.3 Management Measures relating to Enhancing the Visitor Experience

Parks Canada will implement the following management measures to improve the quality of the visitor experience:

- Ensure proper maintenance of modern installations, particularly those protecting the remains of the blast furnace and the Grande Maison.
- Improve outdoor visitor facilities, for example, by setting up a shelter to enhance the visitor experience at the lower forge.
- Provide permanent visitor facilities designed for special larger-scale events.
 These facilities could also be used for interpretation of the village (reconstruction of a barn, charcoal kilns, etc.).

^{5.} Various proposals will be examined at the time of the implementation of this measure.

- Bring the site to life through the presence of historic figures in period costumes.
- Ensure that the service offer is renewed so as to keep the interest of a range of clientele and respond to their needs and expectations.
- Ensure the safety of visitors during their visit to the various indoor and outdoor components of the site.
- Ensure that there are adequate signs on the main roads and highways indicating the location of the historic site.
- On a regular basis, measure performance indicators in terms of visitor satisfaction and the visitor experience.
- Continue measuring and documenting visitation at the national historic site and visitor participation in services provided.

8.4 Management Measures relating to Collaboration with Key Regional Players

Agency and Program/Service communications are two of three aspects of the external communications strategy known as *Engaging Canadians*. Implementation of this strategy at the site is a priority. In the spirit of this strategy, Parks Canada will implement the following management measures to improve its work with key regional players:

- Inform, influence and involve regional partners and the public with regard to conserving natural and cultural resources and achieving commemorative integrity at the historic site.
- Develop a range of activities at the historic site, including large-scale events, with the help of partners in the local community.

- Offer students at the Université du Québec à Trois-Rivières the possibility of working on research projects relating to the Forges.
- Develop and put forward a marketing strategy that integrates with local efforts to increase the numbers of tourists and students coming to the national historic site.
- Pursue and increase collaborative efforts with regional tourist groups, including the activities already underway with Médiat-Muse, in order to share clienteles and improve the service offer.
- Develop a sense of belonging and ownership of the site among members of the local community, particularly by getting involved in regional tourist development projects that reflect the mission of Parks Canada. Where appropriate, the Forges could thus become a stop along heritage circuits or walking paths around the city of Trois-Rivières and the surrounding area.
- Participate in the development of new regional tourist circuits by creating ties with other national historic sites, particularly the Former Aluminium Smelting Complex NHSC and other sites or museums devoted to industrial activities, both nationally and internationally.
- Propose the national historic site as a reference and source of inspiration for Canadian school groups, professionals and industrialists in terms of the themes presented (hydraulic engineering, metallurgical engineering, mining engineering, forestry engineering, restoration and archaeology).

9. In Conclusion: Implementation Priorities

The purpose of the present management plan is to set management guidelines and parameters based on Parks Canada's mission to ensure the protection and presentation of Forges du Saint-Maurice NHSC. Parks Canada can act on cultural resources it owns and as an agency dedicated to conservation is committed to setting an example with regard to cultural resources under its jurisdiction. Acknowledgement of the heritage significance and cultural values of resources that are privately owned has proven to be a key condition to their conservation and presentation.

The most important management measures described in this management plan are aimed at ensuring the commemorative integrity of Forges du Saint-Maurice NHSC. These and other measures will also contribute to enhancing the visitor experience and increasing collaborative efforts with key players in the community. Implementation of the management measures chosen will require considerable financial resources. Since the site does not currently have the capital budget required, the majority of the measures involved cannot be carried out in the short term. It will probably take several years before the necessary funds are available. As it focuses on the problem of funding the initiatives proposed, Parks Canada will seek the support of partners and community groups who share its values and its vision of the site's future.

Over the next five years, the La Mauricie Field Unit, the Parks Canada division responsible for managing the site, will seek to implement, using its own capital or by involving its partners, several priority measures designed to ensure the commemorative integrity of the site. These measures are the following:

- Perform interventions designed at raising awareness.
- Maintain the cultural resources and ensure regular monitoring of their condition.
- Ensure the long-term protection of unearthed archaeological remains.
- Come up with an architectural concept for archaeological remains in the area of the lower forge.
- Draw up an emergency prevention and intervention plan.
- Draw up a plan for preserving and presenting the landscape.
- Carry out a complete biophysical inventory.
- Update the interpretation concept.
- Review certain communication tools.
- · Develop the outreach program.
- Continue updating the educational program.
- Assess the effectiveness of messages conveyed.
- Come up with an architectural concept for a building that could be used for special large-scale activities.

 Pursue and improve collaboration with key regional players in the spirit of the external communications strategy Engaging Canadians.

After the first five-year period that the management plan has been in force, a decision could be made to prolong its duration for one or more additional five-year periods, without a review of its content. Therefore, once the management measures identified for the first five years have been carried out, the remaining management measures, outlined in section 8, whose implementation is projected as part of a fifteen-year outlook, could be carried out progressively, based on potential funding, future circumstances and opportunities that may arise.

The present management plan was developed taking into account the views of members of the public. They were given the occasion to express their point of view and to evaluate the plan during the planning process. The final drafting of the management plan does not mark the end of public consultations; it marks the beginning of a sustained dialogue with community members, interest groups, companies, and government departments and organizations.

It is the responsibility of the superintendent of the La Mauricie Field Unit to monitor implementation of the management plan and to report back to the public on work carried out. Parks Canada will determine the extent and form of that report based on public interest. The Field Unit's business plan will state the strategy for implementing management measures and will determine the allocation of resources in accordance with the priorities set down in the management plan. The business plan's annual report will assess the progress that has been made in implementing the measures. The national report on the State of Protected Heritage Areas will provide an overall view of the state of the network and the results of management planning for the Forges du Saint-Maurice NHSC.

The Parks Canada Agency Act of 1998 stipulates that management plans be reviewed every five years and that proposals for changes be submitted to Parliament. A five-year internal review of a management plan will determine if it is still appropriate or if the public should be involved in a new detailed five-year review.

10. Environmental Assessment Summary

Context

The Forges du Saint-Maurice NHSC Management Plan was the subject of a strategic environmental assessment. The purpose of this assessment was to examine the impact that management measures would have on achieving commemorative integrity and protecting the biophysical resources at the site.

This evaluation is based on the 1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals. It respects the guidelines in Parks Canada Guiding Principles and Operational Policies (1994) and Parks Canada Management Directive 2.4.2 on Impact Studies (1998).

Compliance of the plan's management measures

The management plan complies with all Parks Canada and Canadian government policies.

Scope of the strategic environmental assessment

The area of land included in the environmental assessment corresponds to that of the designated place. The assessment extends over the same 15-year time period as the management plan.

Assessment of potential impacts of management measures

Impact analysis examined sources of stress on cultural and biophysical resources. This analysis showed that the majority of sources of stress have a low impact on the cultural resources or do not apply to them. However, in some instances human activity could threaten cultural resources, particularly for the portion of the designated place that is not owned by Parks Canada.

The management measures will contribute to achieving commemorative integrity at the site. Analyses show that the management plan will have a positive effect on achieving commemorative integrity of the designated place. A number of management measures will have a potential positive impact on sustainable development and one general management measure introduces the application of sustainable development to the site.

Certain management measures are likely to have an impact and merit particular attention. These management measures are the following:

- Drawing up an architectural concept for the protection and interpretation of archaeological remains in the area of the lower forge.
- Drawing up a landscape conservation and presentation plan to protect and present meaningful landscape elements while strengthening the historic character of the site
- Improving the outdoor interpretation circuit.
- Developing the industrial community aspect to achieve a better balance between presentation of the human vs. the industrial environment.
- Re-creating the exterior and interior of a dwelling, shed or other building deemed representative or meaningful to an understanding of the site.

- Reconstructing, in an appropriate area of the site, the exterior of former buildings to house the facilities needed to receive groups and hold larger-scale activities.
- Representing the location of certain buildings on the ground using simple visual techniques to identify how the buildings were used.
- Improving outdoor visitor facilities, for example, by setting up a shelter to enhance the visitor experience at the lower forge.
- Ensuring that the service offer is renewed so as to maintain the interest of a range of clientele and respond to their needs and expectations.
- Ensuring the safety of visitors as they visit the various indoor and outdoor components of the site.
- Developing a range of activities at the historic site, including large-scale events, with the help of partners in the local community.

Assessment of potential cumulative impacts of activities and management measures in the management plan

An analysis of residual effects shows that few residual effects should persist as a result of the application of management measures and mitigation strategies.

The assessment of cumulative impacts is based on the principle that the combined effects of various projects and activities may have an impact that is greater than or different from their respective individual impacts. Cumulative effects are related to climate changes, an eventual increase in visitor traffic and the way the site is used. These factors play a greater role in the portion of the designated place that is off Parks Canada property.

Mitigation measures to eliminate or minimize negative impacts

Mitigation of impacts will be done strategically. Mitigation strategies will be aimed particularly at:

- applying the precautionary principle and adaptive management practices in the Parks Canada strategy for achieving commemorative integrity;
- establishing, based on the environmental assessment process for projects, mitigation measures to minimize impact on cultural and natural resources when implementing projects or activities contained in the management plan;
- preparing a preventative strategy for adapting to climate changes to protect the site's cultural resources, biophysical resources and infrastructures;
- assessing the site's carrying capacity;
- putting into place a strategy for environmental management so that the site uses sound environmental practices in its operations and programs and improves its environmental performance.

Conclusion

The result of the strategic environmental assessment leads to the conclusion that, based on the information available, the presentation concept chosen for the site is acceptable from a heritage standpoint. The assessment determined that the management plan will lead to an improvement in the commemorative integrity of the site. A number of negative impacts can be lessened through the application of mitigation strategies and measures. However, this strategic review brought out several concerns with regard to the protection of cultural resources and sustainable

development. The main impact that remains is the risk of losing cultural resources for the designated place in the portion that is not owned by Parks Canada.

The potential negative impacts that are the greatest cause for concern can be mitigated through the application of known technical measures or other means that have proven effective in the past. The environmental assessment of projects will have to take place at a later stage of planning when details of what is involved are available.

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Collaborators

Numerous individuals contributed to the content of the management plan for the Forges du Saint-Maurice NHSC, including members of the public, employees, local residents, representatives of non-governmental organizations and other partners.

The plan was developed by a multidisciplinary team. It required research, the gathering of a large body of background information, analysis of the issues involved, discussions and a review of the content by experts in various fields. Members of the planning committee showed professionalism and a sustained commitment throughout the entire duration of the project. The planning committee was made up of the following members:

- Jacqueline Bélanger, Interpretation Project Manager, Quebec Service Centre, Parks Canada;
- Luc Bérard, Landscape architect, Program Manager, Public Works and Government Services Canada;
- Thierry Bouin, Superintendent, La Mauricie Field Unit, Parks Canada;
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