



Canadian Heritage Rivers: The North Saskatchewan River

North Saskatchewan River Basin Council
2017



This document was prepared for the North Saskatchewan River Basin Council.

Prepared by Katherine Finn

Canadian
Heritage
Rivers
System



Réseau
des rivières
du patrimoine
canadien



Cover photo: Katherine Finn

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Photo Credit: Wendy Chrusch

This report is dedicated to the legacy of Vinessa Currie-Foster

April 3, 1980 - April 25, 2015

Chapter One: Canadian Heritage River Status

Executive Summary

The Canadian Heritage River Designation had been discussed at the preliminary meetings of the North Saskatchewan River Basin Council (NSRBC). Shortly after incorporating in 2008, the idea of capturing the historic cultural and natural values of our river was considered. However, being a new non-profit organization with a source water protection plan of 140 key actions to address, pursuit of the designation was tabled. The topic came up again in 2012, when canoe and nature enthusiast Vinessa Currie-Foster joined the group as a board member. The importance of raising awareness of the values linked to the river and the history held within its valley walls was once again discussed. This time it was decided we would take action towards a designation. Information about the process of pursuing a designation was formally presented to the NSRBC membership at their AGM on April 28, 2014. Guest speakers: Ken Lozinsky, Janette Hamilton, John Vandall, provide information on the process, the benefits and the resources available for an organization considering the designation. In January 2015 we submitted the request to Parks Canada for financial support to develop the background and nomination documents.

The NSRBC received devastating news in April 2015 that Vinessa Currie-Foster was killed in a motor vehicle accident enroute to a Paddle Symposium. Miraculously, her husband and three very small children were unharmed. Anyone who knew Vinessa would have a difficult time to fully capture and describe her passion and enthusiasm for paddling, for nature, for her loved ones. She was so vigorously involved with so many people and organizations that it truly requires a team to maintain her legacy. For our part, this was a driving force behind pursuing the designation of the North Saskatchewan River. To carry on Vinessa's passion for turning people's heads, and tuning their ears to hear the wonders and stories that tumble along with the river's perpetual flow. It is for Vinessa that we dedicate this document and process.

In December of 2015, we signed a formal contract with Parks Canada to develop the background and nomination documents needed to precede a designation.

An important note is that this background report is only half the story of the North Saskatchewan River. The North Saskatchewan Watershed Alliance, our sister watershed organization in Alberta, completed a background report, in 2005, for the same purpose: to recognize the cultural, natural and recreational values of the river. It is our hope to partner with them in a, first ever, interprovincial collaboration in the nomination and designation process. Not to slice the river's values at a provincial boundary, but acknowledge its significance from the headwaters to its confluence at the forks.

Résumé Analytique

La Désignation de Rivière du Patrimoine Canadien a été un sujet de discussion lors des premières réunions du Conseil du Bassin de la Rivière Saskatchewan Nord (NSRBC). Peu après son incorporation au réseau en 2008, nous avons commencé à considérer l'idée de préserver ses valeurs historiques, culturelles et naturelles. Toutefois, étant une nouvelle organisation non gouvernementale avec un Plan de Protection des Sources d'Eau identifiant 137 actions clefs, les démarches de la désignation ont été ajournées. Le sujet est redevenu d'actualité en 2012 quand Vinessa Currie-Foster, passionnée par le canoë et la nature, a rejoint le groupe en tant que membre du conseil d'administration. Nous avons donc repris les discussions sur l'importance de sensibiliser le public aux valeurs reliées à la rivière et à l'Histoire contenues au sein des parois de sa vallée.

Cette fois, nous avons décidé d'agir en vue d'obtenir une désignation. De l'information sur les démarches pour obtenir la désignation a officiellement été présentée aux membres du NSRBC à leur AGM le 28 Avril 2014. Les intervenants Ken Lozinsky, Janette Hamilton et John Vandall ont fourni de l'information sur le processus, les bénéfices et le soutien disponibles à une organisation envisageant la désignation. En

Janvier 2015, nous avons soumis une demande de soutien financier à Parcs Canada afin de développer les documents d'information et de nomination. En avril 2015, le NSRBC a reçu l'annonce dévastatrice de la mort de Vinessa Currie-Foster dans un accident de voiture sur la route du Paddle Symposium. Par miracle, son époux et leurs trois jeunes enfants ont survécu.

Tous ceux qui ont connu Vanessa auraient des difficultés à décrire l'ampleur de sa passion et de son enthousiasme pour le canoë, la nature, et ses proches. Elle était si fortement impliquée avec de nombreuses personnes et organisations que c'est de toute une équipe dont nous aurons besoin pour maintenir son héritage. En ce qui nous concerne, voici ce qui a joué un rôle moteur dans nos démarches pour obtenir la désignation de la Rivière Saskatchewan Nord : poursuivre la passion de Vinessa pour faire tourner les têtes et accorder leurs oreilles, afin d'entendre toutes les merveilles et les histoires qui dansent le long des courants perpétuels de la rivière. C'est à Vinessa que nous dédions ce document et ces démarches.

En décembre 2015, nous avons signé un contrat formel avec Parcs Canada pour développer les documents d'information et de nomination nécessaires à l'obtention d'une désignation. Il est important de noter que ce rapport ne couvre que la moitié de l'histoire de la Rivière Saskatchewan Nord. L'Alliance du Bassin Hydrographique de la Saskatchewan Nord, notre organisation sœur du bassin en Alberta, a achevé un rapport d'information en 2015 dans le même but : reconnaître les valeurs culturelles, naturelles et récréatives de la rivière. Nous espérons nous allier à eux dans ce qui serait la première collaboration interprovinciale dans le processus de nomination et de désignation, dans le but de ne pas limiter les valeurs de la rivière à une frontière provinciale, mais de reconnaître son importance, de ses sources jusqu'au confluent de ses branches.

Excerpt from "A River"

If I could be a river, any river
I would be the Saskatchewan
If I could decide the age, any age
I would choose time before Canada.

Around about when Neheywak came
Shortly after the Manitou made them
To them, I was a powerful Spirit
Offering tobacco to seek my kindness
Before travelling on my belly in their canoes
I took them up and down my entire being
From the Rockies down to Lake Winnipeg
Carrying their goods and families to and fro
I watched them drink from my shores
I let them bath and clean their brown bodies
And to use my water for cooking their foods
I was happy when my water was in Ceremony
Neheywak knew how to pray with me.¹

Ovide Mercredi

The North Saskatchewan River Basin Council

The North Saskatchewan River Basin Council (NSRBC) is a non-profit organization formed to support and direct the implementation of the Source Water Protection Plan for the North Saskatchewan River watershed. For planning purposes, the watershed includes 51 rural municipalities, 29 First Nations with lands, 17 First Nation Reserves, 100 towns and villages, and the cities of Lloydminster, North Battleford, and Prince Albert. It also includes a portion of the Prince Albert National Park.

Vision statement:

A watershed which provides for the social, economic, environmental and cultural water needs of the future generations.

Mission:

To create and implement a plan to develop and protect source waters in the watershed so that the resource can sustain future social, economic, environmental and cultural needs.

The source water protection plan outlines 140 key actions to be undertaken by various levels of government, stakeholders, and non-government agencies. The primary themes for action are:

- Water conservation
- Climate change
- Ground water
- Surface water quality
- Apportionment of inter-provincial water flows
- Surface water supply
- Natural habitat

In the 10 years since the plan was developed, the NSRBC has implemented activities relating to:

- Education and outreach
- Agricultural beneficial management practices
- Well decommissioning
- Erosion control
- Culvert mapping
- Shoreline assessments and restoration
- First Nations Source Water Protection planning
- Aquatic invasive species awareness and monitoring
- Community Source Water Protection planning
- Climate change adaption

Water security is a key value to any community. In our experience, focused time and thought towards protecting our water resources leads to actions that result in positive gains. The critical factor in achieving this is having people come together to find solutions. We have seen time and time again, the advantage of being a watershed organization, that we are able to bring people together for this cause.

The Background Report

The story of this background report is a quintessential example of the value of partnerships and collaboration. The NSRBC is a member of the Prince Albert Model Forest. At one of their meetings, which is often the case, a networking opportunity provided a link to the Community Historical Research Collaboratorium with the University of Saskatchewan (U of S). Professor Keith Carlson linked the NSRBC with three students who contributed greatly to researching the cultural values of the North Saskatchewan River. Angélique Tardivel, reviewed the recently digitized missionary letters of the Oblates from 1860-1910 for references of the North Saskatchewan River. Caitlin Bill, a member of the Pelican Lake First Nation, contributed to the spiritual and

cultural significance of the river to First Nations. John Bird completed the research and writing of the Cultural Heritage Values, based on the 2002 Canadian Heritage River Systems Cultural Framework.

The NSRBC intern Ashleigh Yakemchuk, provide tremendous assistance in researching and writing the Natural Values component. Again working with the U of S, Professor Vladimir Kricsfalusy provided resources for capturing data on the flora and fauna specific to the North Saskatchewan Watershed area.

Velma Foster, curator for the Bresaylor Heritage Museum, was a valued resource in providing information on the Métis history on the river, along with her many years of service to the NSRBC.

Another major link was made with the Prairie Steamboat Heritage Association. Butch Amundson was a valuable asset in attaining specifics in the history of transportation.

Leah Garven, curator for the Alan Sapp Gallery, provided information on the Allen Sapp collection. She provided the image included as an example of artistic interpretation of the cultural link between people's lives and the river.

Mistawasis First Nation has been a partner and mentor for the NSRBC for many years. Anthony Johnston contributed his time, knowledge, and stories for the preparation of this document.

The North Saskatchewan Watershed Alliance (NSWA) has been an ally on numerous projects and issues since the NSRBC began its work in 2008. Once again, the work of Billie Milholland, in the North Saskatchewan River Background Report, was frequently referenced in the development of this background report.

The Partners FOR the Saskatchewan River Basin completed their CHRS background and nomination document in 2011 for the South Saskatchewan River and the

Saskatchewan River. This was often referenced and proved to be valuable on many occasions.

About Canadian Heritage River Systems

Beginning in 1984, the CHRS was developed as a collective initiative, between federal, provincial and territorial governments. In the interest of encouraging long-term management for the conservation of natural, cultural, and recreational values, the CHRS gives national recognition to Canada's outstanding rivers (Figure 1). All this, to help support the sustainable use of our rivers and to preserve their unique values for the enjoyment and benefit of Canadian's for generations to come.

The background report outlines the inventory of the river's natural, cultural and recreational values. It provides the means to analyze the degree to which the river's features and values meet the CHRS selection and integrity guidelines. The background report identifies the various stakeholders and First Nation interests in supporting the process toward a Canadian Heritage River nomination. It is also a tool to provide an initial assessment on the national significance of the river and whether or not it should be considered for designation.



The federal-provincial-territorial government program works with a community-level stewardship groups to take efforts to promote and protect rivers with outstanding cultural, natural and recreational values. Once the background report is completed and reviewed, the stewardship group can proceed with a nomination document.

The nomination document includes all information needed to demonstrate that the river is of 'outstanding Canadian value'. A key component of this is to demonstrate community engagement and support. The designation process follows this (Figure 2). The designation document outlines a shared vision and direction managing the river's

outstanding values. Engaging stakeholders, First Nations, political representatives and local communities is foundational in the preparation of the proposal.

Once a river is designated, mitigation activities are voluntary and dependent on existing laws and regulations. This is a non-regulatory process. Responsibility for the administration and delivery of the CHRS program lies with:

- The Canadian Heritage Rivers Board
- Parks Canada
- The Technical Planning Committee
- River Managers.

Rivers are a foundation to our communities, a part of our identity, and essential to our health. The CHRS is a vehicle that works with community members to conserve these values and to capture the stories of our people and our country.

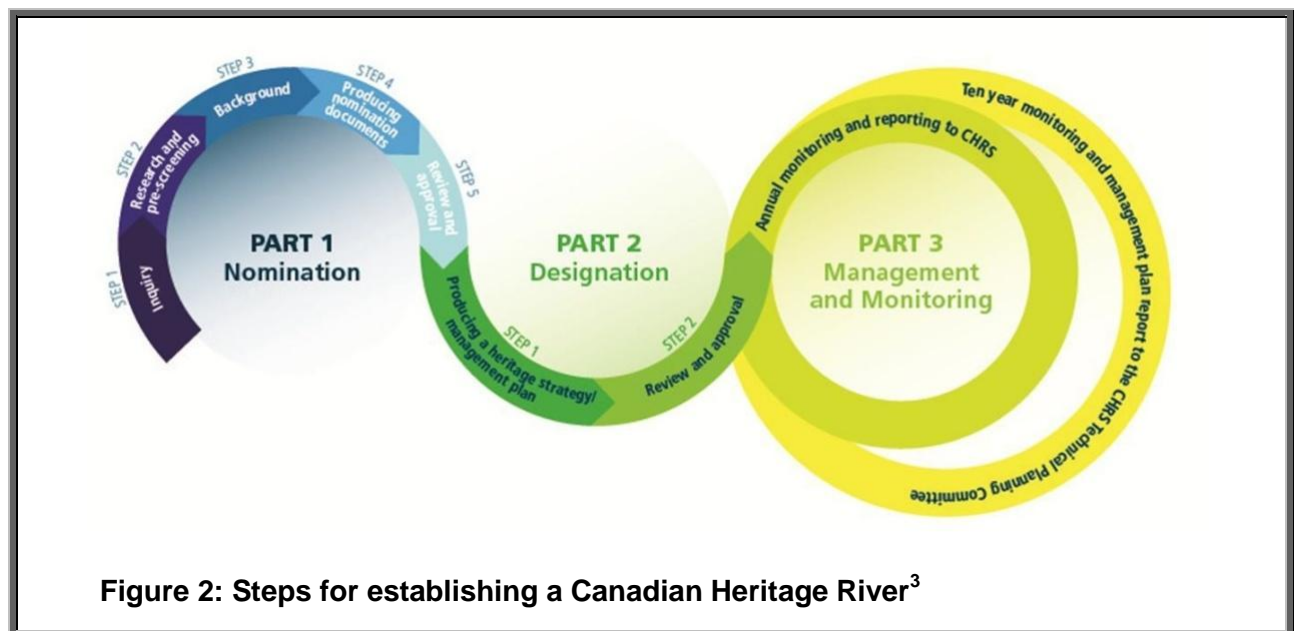
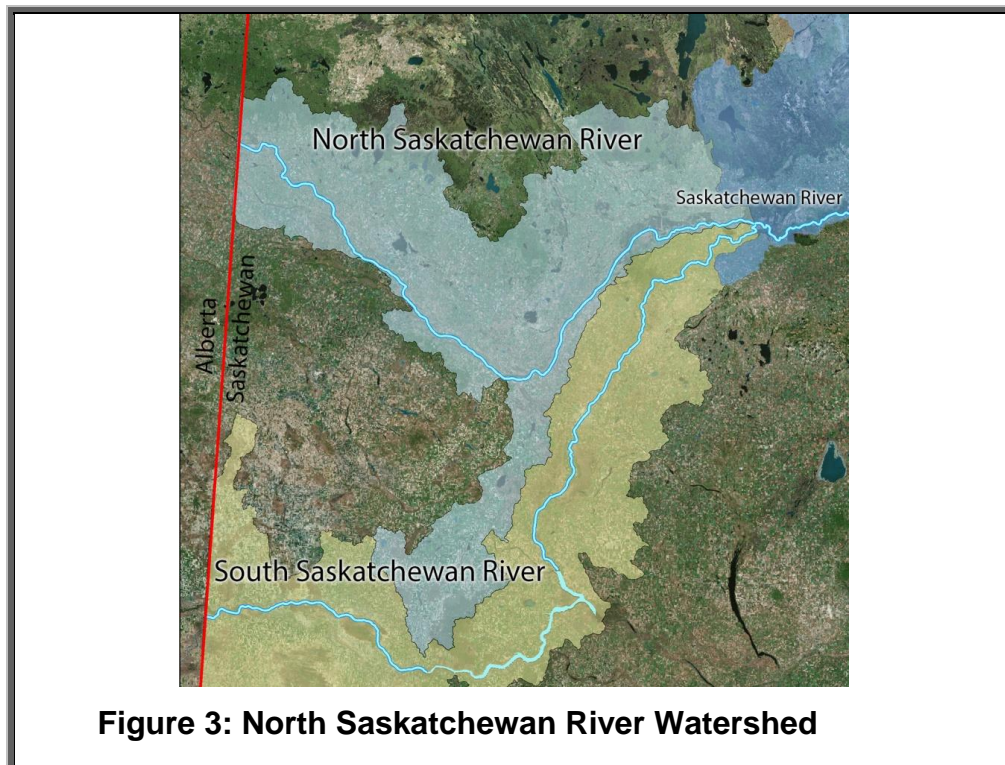


Figure 2: Steps for establishing a Canadian Heritage River³

Study Area

As previously mentioned, we hope to achieve a Heritage River Status designation for the entire North Saskatchewan River. This means linking efforts with the North Saskatchewan Watershed Alliance, who have already completed the background study for the Alberta side of the River. For our background report, we limited our research to the area between the Saskatchewan-Alberta border and the forks: where the North and South Saskatchewan rivers join to form the Saskatchewan River (Figure 3: North Saskatchewan River WatershedFigure 3). Following the frameworks for the CHRS guidelines we generally limited our research to topics that could be linked to *in situ* features or resources. However, there were conscious decisions made to expand the scope to the documentation to include aspects that are relevant but not directly linked to a specific location on the river. This decision was made in order to include First Nations mythology and spiritual values linked to the river.



Previous Studies

A valued resource, frequently referenced was the substantial *Canadian Heritage Rivers System Background Report for Alberta*, completed by the North Saskatchewan Watershed Alliance. The information within the document was tremendously helpful along with the bibliographies. We were able to quickly find valued resources for our own study. Anytime there were limitations in the resources available for the topics researched, we referenced the NSWA study for clues.

The CHRS guidelines for the Cultural and Natural values framework guided the format and material assembled. The Canadian Heritage River Systems 2002 Gap Analysis outlines cultural, natural and geographic gaps, of underrepresented values in the existing inventory of designated Canadian Heritage rivers. Though the North Saskatchewan River is identified as having possible representation for agricultural extraction and interprovincial-territorial boundaries, we have also found examples of Aboriginal-European conflict, architectural responses to the river location, land-based tourism, as well as, the aquatic ecosystems with contributing tributaries from eutrophic lakes.

The North Saskatchewan River as a CHRS

Canada comprises many rivers. Many of which hold ties to the development of the nation, to the history of the peoples before Canada was ever a nation. The North Saskatchewan River houses a significant component to Canada's cultural history, geological history and has significant representation of ecosystem diversity. The nomination of the North Saskatchewan River will contribute to the inclusion of Canada's rich and diverse natural and cultural pasts. As mentioned above, we were pleased to uncover the important contribution the North Saskatchewan River will provide to areas identified in the CHRS 2002 Gap Analysis.

Overview of Heritage Values

The North Saskatchewan River has a significant cultural heritage. The river is linked to the genesis of many communities that developed on and around the river valley. The stories of faith, opportunity, resources and wealth, battle and bloodshed are written in the fabric of the ravines and plains around this river. The histories of entire peoples, the First Nations, the Métis, and the many European lineages have touched the waters that still flow today.

Having a rich natural heritage that is still intact is major asset. The North Saskatchewan is a relatively healthy, and abundant river. It has no major impoundments, its flora and fauna still provide for First Nations communities today. Compared to many other rivers in Canada, and around the world, one can still capture the natural values as they existed so many centuries ago.

The recreational values provided by the river and its valleys demonstrates the importance of this to the people of the province. In a place where people joke that you can watch your dog run away for days, having a valley substantial enough to make a day of skiing or snowboarding is valued. Having an ecosystem substantial enough to forge a paddling eco tourism business is significant. Though these features may not compare to other places in Canada or around the world, they embody the meaning of Canada and mean the world to the people who recreate themselves in the spaces forged by the River.

Purpose of the Study

Is to provide information of the Cultural, Natural and Recreational Values, and to see if the River meets the criteria as established by the CHRS. This is a tool for the CHRS to assess the significance of the North Saskatchewan River to the Nation. It also provides a collection of information that may aid others in research and writing of the River.

Endnotes

¹ Ovide Mercredi

² Canadian Heritage Rivers

³ Establishing a Canadian Heritage River

Bibliography

Canadian Heritage Rivers - Designations and Nominations map credit: URL <http://chrs.ca/about/>

Accessed November 18, 2017.

Establishing a Canadian Heritage River – a guide for community groups and stewards

Ovide Mercredi, “The River,” in *My Silent Drum* (Winnipeg: Aboriginal Issues Press, 2015)

Chapter Two: Cultural Heritage Values

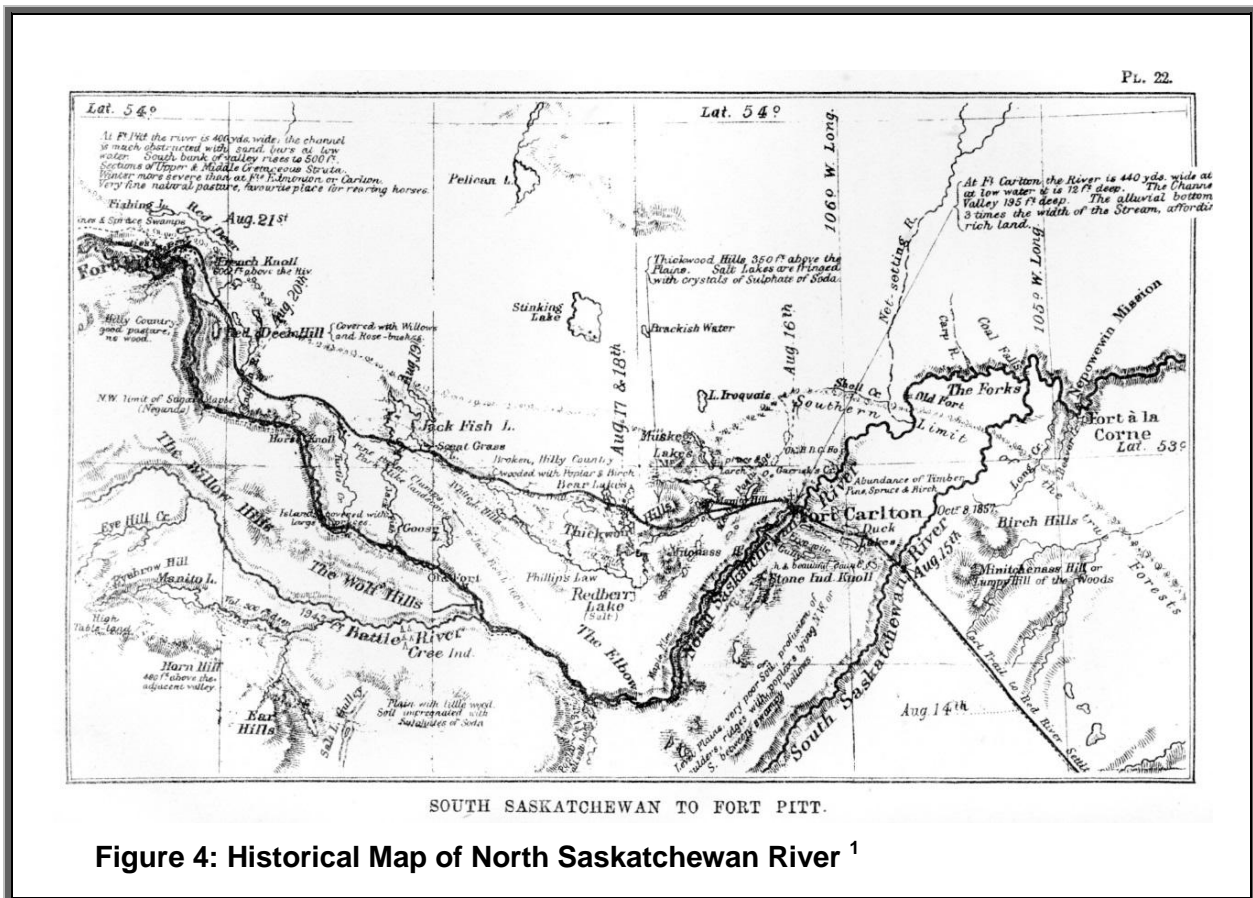
Introduction

The eastern portion of the North Saskatchewan River has been a central influence on the cultural heritage of the communities that have lived on its shores. Not only was the North Saskatchewan River a theatre for military conflict and a transportation route for fur brigades, but it also provided a space for artistic inspiration, technological innovation, and the development of leisure activities and spiritual ritual. Fundamentally, the river was a source of life in that it provided the basic necessities needed to establish a home in the prairies, and these resources are what initially drew indigenous and later newcomer communities to the region.

The North Saskatchewan River has played a key role in shaping the social, political, and cultural fabric not only of the communities along its shores, but also provincially and federally. This legacy can still be seen in the large number of historical sites and structures, art galleries, and archaeological sites. It is not only the physical evidence that testifies to the significant heritage of the North Saskatchewan River. This chapter's bibliography represents only a tiny portion of the extensive textual, artistic, and oral accounts that analyze, appreciate, and explore the river and its historical influence on the cultures of the northwest and its impact on the political, social, economic, and military makeup of what is now called Canada.

A Cultural Framework for Canadian Heritage Rivers provided a guide in the research and writing of this chapter and it is structured according to the themes emphasized by that framework. Special focus has been placed on those events and figures that set the North Saskatchewan apart as a river with a unique and important story. Based on wide-ranging research, correspondence, interviews, and analysis, this chapter's conclusion is that the extant cultural resources and historical influence of the eastern North Saskatchewan River fulfill the CHRS guidelines for designation as a Heritage River.

Theme One: Resource Harvesting



Throughout its history, the North Saskatchewan River (Figure 4) has been a source of essential resources for the communities that have lived along its banks. The locations of the regions' First Nations and Métis communities, and its later towns and cities, were influenced by proximity to the river and its natural resources up until the dominance of the railway, long-distance water transportation, and farming in the late 19th and early 20th-century. This theme covers all resource extraction from human consumption to power generation, as well as animal, plant, and mineral resources from the river and its banks. Human communities' need for food, shelter, and income tied them intimately to the river up until the 1910s as it provided these resources in abundance. The search, transportation, and use of these resources often became central to human activity, and

came to shape the cultures that developed among the laborers, administrators, hunters, and navigational experts who worked in the river basin.

1.1 Fishing

Though the indigenous people of the plains primarily relied on bison meat, they also caught fish on the river to supplement their diet.² Early immigrants also caught fish, sometimes setting up small cottage industries, some developing into major commercial enterprises.

In his account of Sanford Fleming's expedition from the Atlantic to the Pacific, Rev. George Grant remarks on the size and number of fish that could be caught in the North Saskatchewan River Basin: "...the lakes... are filled with jackfish or pike, and with white fish – the finest fresh water fish, perhaps, in the world." The particular location mentioned in this passage is the narrow region between Jackfish Lake and the North Saskatchewan, into which Jackfish Lake flows. Almost fifty years later, in the 1920s, commercial fishing was established in the area to take advantage of the plentiful fish.³

1.2 Shoreline Resources

Trapping of Fur Bearing Animals

What initiated European interest in the region was the search for an animal resource found along the banks of the rivers and lakes in the North Saskatchewan River basin: the beaver. Driven largely by Europe's desire for felt hats made from beaver fur, a huge fur trade grew up in the northwest, driving European traders westward towards the Rockies. This trade began in the early 1700s and continued to be a major industry until the mid-19th century.⁴

Between 1700 and the outbreak of the Seven Year's War (1756), the French fur trade pushed exploration westward, initiating some of the earliest trips onto the North Saskatchewan River and reaching as far as the Rocky Mountains (Figure 5). The

aggressively expansionistic and mobile strategy of the French companies contrasted with the more passive Hudson's Bay Company (HBC) that encouraged trappers to bring their furs to their forts on James and Hudson Bay from their trapping grounds in the northwestern interior. With the defeat of the French in the Seven Year's War (1763), new trade territories became open to English traders, and the Hudson's Bay Company came to dominate the fur trade in the region. As independent entrepreneurs like the North-West Company (NWC) began to challenge this monopoly in the 1770s, rival trading posts began to be constructed in a leap-frog manner westward up the North Saskatchewan River. This westward expansion allowed traders to meet with the fur brigades before their competitors and to thus trade for the best quality furs.⁵

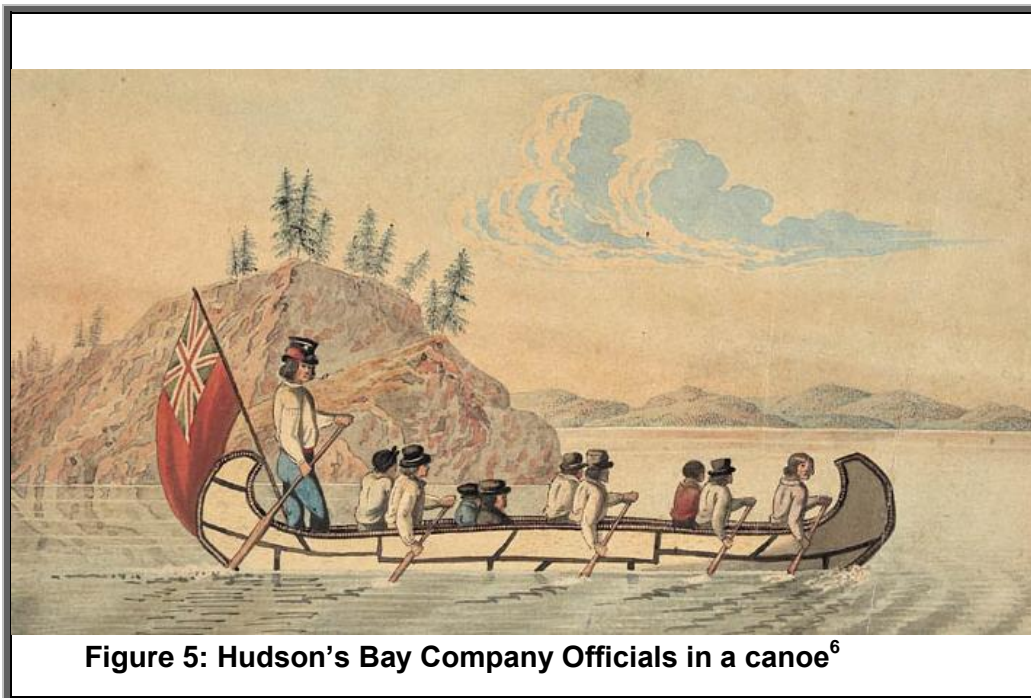


Figure 5: Hudson's Bay Company Officials in a canoe⁶

At Fort Carlton on the North Saskatchewan, the HBC and NWC reached a balance by sharing a common palisade, turning it into a major outpost and a primary destination for indigenous fur brigades travelling down the North Saskatchewan River in spring. In 1816, the NWC broke this tacit agreement by moving upriver to establish a new post,

Fort La Montée. When the two companies combined five years later, in 1821, this fort was decommissioned and its materials were used to expand HBC's Fort Carlton.⁷



The fur trade continued to draw seasonal bands of trappers (Figure 6) throughout the 19th-century and, as will be noted in “Theme Two: Water Transportation,” the search for indigenous communities, with which to barter, forced the trading companies to send operatives ever westward on exploratory trips up the North Saskatchewan River in pursuit of the beaver, one of the river’s most sought after resources.

Plant and Mineral Shoreline Resource Harvesting

The banks of the river also provided building materials for early structures in the form of healthy stands of pine, poplar, and other trees for wood, large, smooth stones, and lime for mortar. Forts like Carlton were purposefully located near these resources to aid in their construction.⁹

As European settlement increased throughout the 1800s and early 1900s communities near the river would primarily get their wood for log structures from large tree stands on the riverbank. Often when enough trees of appropriate size grew in a single location a small sawmill business would be created to harvest and sell the lumber both for construction and as fuel for passing steamships.¹⁰

1.3 Extraction of Water

Water-based Power Generation

Another, less-obvious, resource is that of energy. Power could be generated from the river by either boiling its water to run steamship engines, or by harnessing its kinetic energy to turn turbines and produce electrical or mechanical power. The forests alongside the river provided an impetus for the construction of sawmills, most notably in Prince Albert.

The lure of hydroelectric power played a significant role in the development of the City of Prince Albert through the ambitious, but ill-fated, La Colle Falls dam project (Figure 7). In 1912, as the major railways bypassed the city and steamboat traffic began to decline, Prince Albert's leaders undertook a major \$1.2 million industrial project to harness the energy produced by La Colle Falls. The rapids proved to be incompatible with the goals of the project and it ended abruptly with the dam less than halfway across the North Saskatchewan River. The massive cost of the project caused the city to declare bankruptcy and it would not finish paying off the debts from the project until 1965.¹¹ This story illustrates that the river's influence on the economic, social, and cultural makeup of a community can be powerful, though not necessarily positive.



Figure 7: Partially constructed La Colle Falls hydroelectric dam, 1916¹²

Human Water Consumption

Perhaps the most obvious resource is the fresh water that can be used for irrigation as well as human and animal consumption. This most basic resource was also the first that drew humans to the river, as well as the birds and larger game that provided food for both indigenous and newcomer inhabitants. Water often had to be hauled in buckets by wagon, or in specially-made water tank wagons in communities that lacked wells or other water sources. Cattle and other livestock also had to be herded down to the river to drink. The hauling of drinking water was a regular, if not daily, task that gave rhythm to life near the river.¹³ Besides drinking water, the river also provided ice in the wintertime that could be used for cold storage in underground larders or in 'ice houses' like the ones that the Hudson's Bay Company used to store bison meat.¹⁴ With later Euro-Canadian settlement in the area, the river was also used to provide fresh water for the irrigation of nearby crops.

Theme Two: Water Transport

The North Saskatchewan was historically one of the most important transportation routes into the Western Prairies, as it presented a navigable ‘water highway’ stretching from Banff in the Rocky Mountains to the marshes around Cedar Lake in northern Manitoba.¹⁵ These connections created a natural transportation system allowing river traffic from as far away as Minnesota and the edge of Hudson’s Bay.¹⁶ Before the arrival of a complete railway network, the river dominated transportation throughout northwestern Saskatchewan. In summer, it presented an unobstructed passage for floating cargo and passengers across the prairies, and in winter its surface furnished a road of ice. The fur trade relied on these means of transport to function and its indigenous and European traders and trappers used it to move increasingly inland from Hudson’s Bay. The steamships of the 1800’s turned the towns and cities along the river into thriving transportation hubs that attracted immigrants, businesses, and made Battleford, North Battleford, and Prince Albert into important political and cultural centres.¹⁷

2.1 Commercial Transportation

The Steamship Era

In the mid-nineteenth century the North Saskatchewan River entered a radical new stage in its transportation history. Starting in the 1870s, the Hudson’s Bay Company began to encourage the use of steam technology in its transportation of cargo.¹⁸ The depth of the North Saskatchewan river made it conducive to steamship navigation, unlike the shallower South Saskatchewan, leading to a new rise in the commercial importance of the river and riverside communities. The introduction of steamboats (Figure 8) led to a forty-year period where the North Saskatchewan River again dominated commercial transportation across the northwest.¹⁹

The Winnipeg and Western Transportation Company (WWTC) quickly became a major shipping company by acquiring all five of North Saskatchewan’s large steamships: the *Manitoba*, *Lily*, *Marquis*, *Northcote*, and *North West*. At the height of river transport,

steamboats constructed in Moorhead, Minnesota, or Grand Rapids, Michigan, would travel up the Red River into Manitoba and then onto the North Saskatchewan, giving them access to Prince Albert, Battleford, and Edmonton.²⁰ Inspired by the famous riverboats used on the Mississippi, these ships could be up to 60m (200 feet) long and 10m (33 feet) wide at their boiler deck. The passenger-ferrying *North West* had eighty berths including two bridal suites, a \$5000 grand piano, and a crew of more than twenty.²¹



Figure 8: The Northcote²²

Before its involvement in the Northwest Rebellion docked at Fort Carlton.

The steamships carried a diverse range of cargo including flour, coal, fur, and cattle, as well as farm equipment and bags of seed for reservations in fulfillment of treaty obligations.²³ Despite the HBC's need for cargo shipping, the steamboats also served as an important means of civilian transport and a source of recreational activities. Riverboat cruises, well-kept berths, and on-board entertainment brought passengers seeking leisure and relaxation as well as passage to another city.

The *Alberta*, a smaller vessel than the five WWTC ships, served primarily as a leisure vessel by hosting dances with candy, fruit, and ice cream for sale. The *Lily* also twice served an important political role as the transport of the Marquess of Lorne, Governor General, on his tour of Western Canada in 1881, and Lieutenant-Governor David Laird on his 1879 tour.²⁴

In addition to these more traditional transportation activities, the fleet played an unlikely military role transporting soldiers during the Northwest Uprising. As General Middleton's flagship, the *Marquis* became particularly important carrying him up and down the river to assert federal authority by carrying out punitive measures against suspected allies of Louis Riel and his forces.²⁵

Despite being deeper than the South Saskatchewan, the North Saskatchewan River's shallows still presented challenges for steamship navigation. This contributed to the eventual decline of steam travel by adding danger to an already difficult means of transportation. All the ships had to be equipped with low-water spars that allowed them to 'crawl' across sandbars and into deeper water by lifting the ship and pushing it forward. Many were also fitted out with hawser winches to tow them across shallows.²⁶ The river's low water levels made these obstacles a part of regular navigation. They were exacerbated in 1889 by a year of light precipitation that caused the river to drop to a record low, making it temporarily unnavigable. This inefficiency grew from a nuisance into a serious drawback with the Canadian Northern Railway reaching Prince Albert in 1905.²⁷

Despite these developments, the City of Prince Albert continued to promote steamship transportation throughout the early 1900s as an alternative to rail, with another ship, the *George V*, being built in 1911 to transport construction materials to the ill-fated La Cole Falls hydroelectric project. When the La Cole Falls site was permanently shut down, the *George V* was sold off to become a floating liquor store in Manitoba.²⁸ The steam fleet's fate was ultimately decided when Prince Albert was chosen as the terminus of the

Hudson Bay Railway.²⁹ With the arrival of efficient rail transportation, the North Saskatchewan's era as the primary route across the prairies came to a close.



Figure 9: “Steamboat on the North Saskatchewan River”³⁰

By artist Sydney Prior Hall, August 30, 1881.

Despite the eventual sinking and decommissioning of the North Saskatchewan's steam fleet, the vessels went on to leave their mark both physically and culturally in the communities that they had served (Figure 9). The beached *Marquis* was converted into a saloon dance hall until a family purchased her for use in the construction of new homes, and her boilers were used to anchor power polls in a nearby stretch of muskeg. The ship's bell ended up in the Prince Albert City Museum, and the President of the Historical Society of Prince Albert still uses a gavel made from a piece of her hull.³¹ Another gavel, used in Prince Albert's City Hall, is made from an oak plank taken from the deck of the *North West*.³² These symbolic and practical uses of the old steamships illustrate the cultural impact of steamships on the communities on the North Saskatchewan River.

2.2 Transportation Services

Indigenous River Transportation

In 1868, Oblate missionaries observed a band of one-thousand Cree cross the North Saskatchewan by quickly constructing boats from wood and hide which were then pulled across the river by ropes held in the mouths of strong swimmers. A similar technique was then employed by the Oblates' party who pulled their boats upstream with ropes as they walked along the bank.³³ The boats that the missionaries watched the Cree build were likely what historian Victor Friesen calls 'bullboats,' (Figure 10) circular craft similar to a coracle.³⁴ These could be built quickly from local materials and enabled efficient transportation along or across the river in the absence of a bridge or ford.

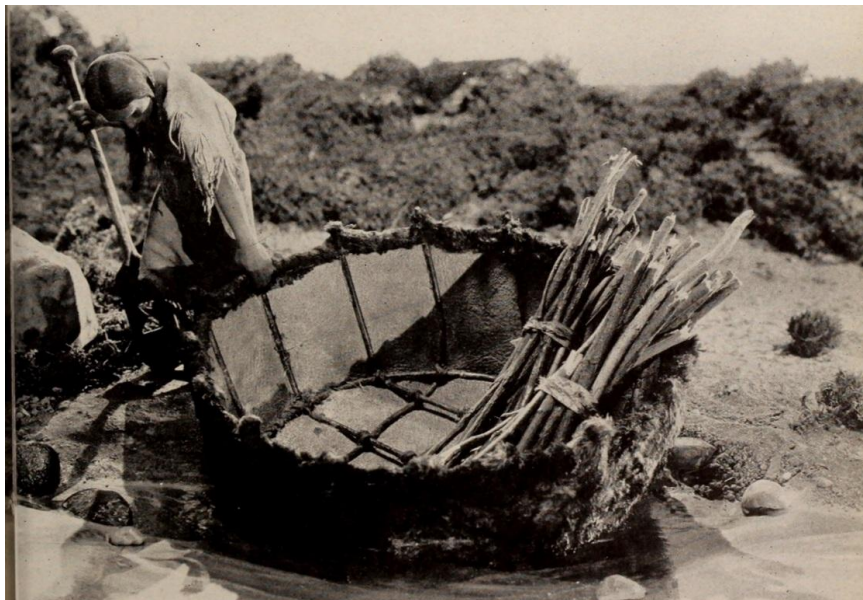


Figure 10: Hidatsa (Hiraacá) bull boat North Dakota, ca. 1911³⁵

Similar to those that would have been used by indigenous communities along the river.

Transportation During the Fur Trade

As competition drove the fur trade westward, indigenous hunters began making seasonal trips downriver to trade for goods at company outposts like Fort La Corne and

York Factory. As they made their way down the river, the brigades would grow as indigenous and Métis trappers and traders joined them. Into the eighteenth-century, the northwestern fur trade grew into a massive operation with competing companies operating out of increasingly western forts.

River transportation during this period was dominated by small, portable watercraft that could be built by travelling traders and hunters far from their villages and bases and in a camp setting. The most famous of these is the canoe, an indigenous solution to longer-term journeys along the river that would be too dangerous in a smaller bullboat. Canoes could also be easily constructed from birch bark, spruce roots, and spruce gum native to the river basin area. These strong, but readily accessible materials, allowed canoes up to eight metres long and a meter and a half across to be constructed. In addition to the convenience of construction, the canoes' larger size also proved essential in hauling large amounts of equipment and furs while still being light enough to carry in overland portage trips. Their size and shallow draught allowed them to nimbly navigate dangerous rapids and spring ice floes.³⁶

Another important means of transportation in the fur trade was the larger York boat that increased the amount of cargo that the seasonal fur brigades could carry up and down the river. As they were made of wooden planks, they could withstand the rigors of regular use better than the lighter canoe. York boats proved to be a very reliable form of transport and were used well into the 1800s.³⁷

2.3 Exploration and Surveying

Exploration and Surveying by European and Canadian Newcomers

The first known European to travel along the North Saskatchewan River was the twenty-year-old Henry Kelsey in 1690. What little information he recorded was written entirely in verse, which proved frustrating for his HBC superiors at York Factory.³⁸ This expedition did not lead to any major changes in the HBC's practices, and his account was largely forgotten until the 1920's when his poem about the northwest was

rediscovered in a Scottish castle. Kelsey was followed sixty years later by Anthony Henday in 1740.³⁹ Both Kelsey and Henday travelled as guests of the seasonal Cree trading bands who provided protection and leadership, as well as political, geographical, and ecological knowledge about the region and its inhabitants. Henday went west as a guest of Cree chief Attickasish, or Little Deer, who lead his expedition up the North Saskatchewan River.⁴⁰ The band Henday accompanied spent a large portion of their return trip walking downriver on the frozen surface of the North Saskatchewan, then, when the ice broke up during the spring thaw, they built a fleet of twenty canoes for the remainder of their journey.⁴¹

In response to increasing competition from other companies, the HBC followed up Henday's expedition with trips by Joseph Smith, Edward Lutit, and James Allen throughout the mid-1700s. However, these explorers provided confusing and often incoherent information, so in 1772 HBC operative Matthew Cocking set out on two trips to develop a systematized report on the situation out west.⁴²

In addition to these commercial enterprises, French Oblate missionaries added to European knowledge of the North Saskatchewan River as they sought to spread Roman Catholic Christianity among its indigenous inhabitants. Prior to 1860, the Oblates did not differentiate between the North and South branches of the Saskatchewan and would refer to it by many names including Beaver River, Kisiskatchewan, Sckatchwan, and Siskatchiwan.⁴³

In a series of surveying expeditions beginning in 1857 and ending in 1860 John Palliser and Henry Hind concluded that a 'fertile belt' along the North Saskatchewan held the future of industry and European settlement in Saskatchewan. In contrast, the former expedition identified Palliser's Triangle, a vast region south of present-day Saskatoon, as a largely infertile stretch of prairie, largely due to its lack of suitable water sources.⁴⁴ The conclusions of these surveys seemed to cement the dominance of the North Saskatchewan River region and gave impetus to the continued growth of Prince Albert, Battleford, and the newer North Battleford.

It is partly due to the North Saskatchewan's importance as a means of transportation that major communities like Edmonton, North Battleford, and Prince Albert became established. Unless an individual was willing to take a long overland journey along one of the wagon trails, the North Saskatchewan River served as the most efficient 'highway' across northwestern Canada. The dominance of the canoe, the York boat, and the steamship came to define the region's early history and shape the culture of its residents, both in their approach to travel and industry, and in the location of their communities themselves. Throughout this period and up until the establishment of a reliable railway network, the North Saskatchewan River served as the primary means of travel from central Manitoba to northern Alberta.⁴⁵

Theme Three: Riparian Settlement

The resources and transportation possibilities offered by the North Saskatchewan River made it an attractive location for indigenous and newcomer inhabitants to settle and create homes for themselves. Until the late 1800s, the livelihoods of most people living in the northwest relied on the river, and so communities grew up naturally along or within walking distance of its banks. Some of these communities developed into towns and cities like Battleford, North Battleford, and Prince Albert, while others remained seasonal or vanished over time, especially with the arrival of the railway. All along the river exist historical sites and archeological evidence revealing the significant influence of the river in the social, political, and economic history of Saskatchewan.

3.1 Siting of Dwellings

There are three heritage sites on the North Saskatchewan river that are currently open to public visitation. These are the HBC post at Fort Pitt, the North West Mounted Police post at Fort Battleford, and the HBC post at Fort Carlton. All three appear throughout this chapter as the sites of significant events in the region's history and as historical sites, they continue to be important resources of knowledge about the region's past and

cultural heritage. In addition to these publically accessible sites, there are well over 400 other archeological sites in close proximity to the Saskatchewan portion of the North Saskatchewan River with the number increasing every year. The exact location and nature of these sites is not publically available, but common examples are pre-contact settlements, petroglyphs, tools, and spiritual sites as well as post-contact structures and tools from the fur-trade and homesteading era. The location of these sites reveals the importance of the river in human settlement as there is an unusually high concentration of archaeological sites along the North Saskatchewan River compared to the surrounding area.⁴⁶ Each site constitutes a very important historical record of the region's culture and history.

Indigenous Communities

The earliest river-side settlements were most likely established as soon as the Laurentide ice sheet retreated from the prairies in about 4,000-3,000 BCE.⁴⁷ Victor Friesen points to mammoth tusks and the bones of extinct horses and bison worked into art and tools by indigenous peoples as key archaeological evidence of these earliest communities. Another indicator is the large number of high-quality stone projectiles discovered throughout the river-basin region.⁴⁸

A diverse number of distinct indigenous groups lived in communities spread along the North Saskatchewan River. The Assiniboine, or Nakota, lived mainly between the north and south branches, but not at the Forks directly. This group was closely related to the Stoney and Hidatsa and all three spoke a Siouan dialect.⁴⁹ The Gros Ventre spoke an Athapaskan dialect and often resided near what are now called the La Cole Falls and their environs. Algonquian speaking bands of Saulteaux or Anishinaabe also moved into the area into the early 1800s from the east along with bands of Blackfoot people from the plains. The largest group residing along the Saskatchewan portion of the North Saskatchewan River were the Cree or Nehiyaw people. They and the Assiniboine were the most populous groups living in the region with the Cree generally occupying northern areas and the Forks, and the Assiniboine living in the south.⁵⁰ It is from the Cree word Kisiskatchewan, 'swift flowing,' that the river received its modern name. The

Cree and Assiniboine were usually close allies who engaged in trade with each other, along with the other bands and linguistic groups in the area, and the European and Métis traders who were to arrive in the 18th-century.

The prairies' indigenous inhabitants wintered in the river valley area after hunting on the open plains throughout the summer.⁵¹ This way, they could make use of the river's water, timber, and sheltered topography in the winter, and then fish, hunt, and harvest berries in spring and early summer.⁵² These bountiful resources made the river an attractive and practical area to establish semi-permanent camps throughout the year.

Newcomer Communities

The earliest European settlements consisted of trading outposts to supply and facilitate the fur trade. From 1750-1830, various trading companies established forts located increasingly upstream on the North Saskatchewan, including Forts Carlton, Battleford, and Pitt. In an interview with Edward Ahenakew, Chief Thunderchild reported that the HBC traded a boatload of goods in exchange for the use of the Saskatchewan River.⁵³ Increasingly, in the mid to late 1800s immigrants from Europe and eastern Canada began to move westward along the North Saskatchewan River, establishing settlements around these forts. In 1866, the settlement of Prince Albert (Figure 11) was founded by the Reverend James Nisbet as a Presbyterian mission to the Cree and Métis. He named the settlement after the deceased husband of Queen Victoria and the community that grew up around the mission adopted the name. By 1882, steamboat traffic had turned Prince Albert into such an important hub that the annual meeting of the HBC's northern council was held there rather than in Carlton, as had been customary.⁵⁴ In 1901 a land titles office was opened and the community swelled as hundreds of settlers arrived.⁵⁵



Figure 11: Site of Settler's First Landing in Prince Albert.⁵⁶

3.2 River Based Communities

The first decade of the twentieth century saw more applications for homesteads in western Canada than in the entirety of the nineteenth century. In addition, from 1906 to 1911 three out of every five homestead applications for the prairie provinces were for Saskatchewan. With one-third of these newcomers hailing from countries other than Great Britain or Canada, this wave of homesteading increased the diversification of Saskatchewan's population.⁵⁷ An interesting example is the settlement of North Battleford, which was initially established in 1901, by a group of about forty Assyrian Presbyterians from the community of Urmia in northwestern Persia (modern Iran) who sought to escape persecution and begin a life of farming in northwestern Saskatchewan.⁵⁸

Settlers to the region mainly established their homes along major transportation routes. This meant that by 1891 homesteaders in the northwest were clustering along the North Saskatchewan River with higher concentrations around the proposed railway route through Prince Albert and Battleford.⁵⁹ River traffic continued to dictate the development

of these communities which largely depended on steamships for the transportation of produce, lumber, and equipment.

Bresaylor: Between Two Rivers

In the spring of 1882, a group of 50 people left the Red River Settlement in Manitoba and joined a steady stream of immigrants travelling west to Battleford. When they arrived at the land between the Battle and North Saskatchewan rivers they decided to establish a new home for themselves. The river itself was one of the primary draws to this location: the fresh water could be used for drinking and irrigation, and the plentiful trees along the river-banks provided fuel and lumber. In a meeting in 1884, the town was given its name, Bresaylor, a combination of three letters each from the names of the three founding families: Bremner, Sayer, and Taylor. The river provided a lifeline of communication and transportation to the small community, especially during the steamboat era. One resident recalled riding his bicycle to the riverbank in excitement at the sound of the steam whistle, hoping to catch a glimpse of the river fleet. To cross the North Saskatchewan, the town was also involved in establishing two ferries including the extant Paynton Ferry.⁶⁰

Existing Historical Sites and Structures Along the River

The cities of Battleford, North Battleford, and Prince Albert feature a number of historical buildings whose design reflects the significance of the river in the day-to-day life of those communities. The Battleford Land Registry Office, old Prince Albert City Hall, Old Government House in Battleford, and other structures were often designed both to take advantage of the communication and transportation benefits of the river, as well as, to provide their occupants with views by which they could enjoy its natural beauty.⁶¹

The Carlton House, Fort Battleford, and Fort Pitt historic sites are all located on the banks of the North Saskatchewan, reflecting the militarily and economically strategic importance of river-based fortifications and dwellings. Besides the transportation capabilities offered by the river, it also provided easy access to stones, lime, clay, and

lumber for construction of walls, bunkhouses, and watercraft.⁶² These early permanent communities needed access to fresh water as well as the fish, beaver, and other resources provided by the river.

Pine Island served as a key stopping point along the east-west fur trade route, with as many as five trading posts being constructed on it between 1785-1793.⁶³ The Hudson's Bay Company established the particularly successful outpost of Manchester House, but due to competition between companies as well as conflict with indigenous residents, the island was deserted by the trading companies in 1793.⁶⁴ With the arrival of steamship traffic on the North Saskatchewan River, Pine Island once again became an important docking site due to its forests that served as fuel for the ships' boilers. Although none of the forts or other structures still exist on Pine Island, the island itself is an important location identified by a prominent historical marker.

3.3 River-influenced Transportation

In addition to these dwellings, forts, and government buildings, the North Saskatchewan River is traversed by structures and transportation systems designed for the sole purpose of crossing the river. The North Saskatchewan River has not only influenced the region's culture by providing a convenient means of transportation, but also by presenting an obstacle that requires ingenuity to overcome. Ferries were one of the earliest methods used to cross the river (Figure 12). Developing naturally from the concepts and techniques behind indigenous bull boats, canoes, and Canadian York Boats, the simple rafting of cargo and passengers across the river provided a quick and flexible means of transportation before the construction of permanent bridges.



Figure 12: Crossing the North Saskatchewan River, circa 1936⁶⁵

Road and Rail Bridges

At least fifteen bridges cross the Saskatchewan portion of the North Saskatchewan River. These include historically significant structures like Borden Bridge (Figure 14), the Canadian North Railway Bridge in Prince Albert (Figure 13), and the Diefenbaker Bridge as well as more modern bridges that allow highway and railway traffic to move between the north and south regions of Saskatchewan.⁶⁶ Prince Albert's first bridge across the North Saskatchewan was completed in 1909 as a dual-purpose rail and road bridge. To keep from interfering with steamboat traffic, the Canadian National Railway bridge was equipped with two moving spans that swung out to reveal a gap in the middle of the bridge. Two men were employed full-time to listen for the ships' steam whistles, halt land traffic, and open the moving spans. The CNR bridge continued to be the city's only bridge until 1960, when the Diefenbaker Bridge was built.



Figure 13: Prince Albert's CNR Bridge, circa 1909⁶⁷

Built in 1937 during the Great Depression, Borden Bridge (Figure 14) was planned as a job-creating 'make work' project. Chalmers Mackenzie, a professor of engineering at the University of Saskatchewan, decided to construct the bridge from concrete, rather than the steel used in more conventional designs. The purpose behind this unorthodox and labour-intensive method was to put as many people to work as possible. 60,000 tons of concrete was mixed, transported by hand in wheelbarrows, and then poured. About seven-thousand people travelled to the North Saskatchewan to attend the bridge's grand opening in 1937.⁶⁸



Figure 14: Borden Bridge⁶⁹

Theme Four: Culture and Recreation

Although the river was strongly associated with economic resources, the North Saskatchewan has served as a spiritual and artistic influence on the culture of the region. The builders and establishers of burial sites, places of worship and ritual, and museums and galleries have all been drawn towards the river throughout history. In addition, many military and political leaders grew up and worked along its shores, and writers and painters have looked to it for inspiration. Tourists, people on holiday, and the ecological explorers have also gone to the river as a source of relaxation, leisure, and knowledge. This broad theme collects an eclectic sampling of these important cultural resources to display some of the results of the North Saskatchewan River's influence on art, culture, spirituality, and recreation.

4.1 Spiritual Associations

Both as a setting for the construction of religious structures and sites, and as a physical part of rituals themselves, the river has provided a spiritual resource for the inhabitants of its banks.

Indigenous Spiritual Associations

Many Cree who lived along the North Saskatchewan viewed each body of water as the home of water spirits, with the most powerful being its 'keeper'. Although this spirit keeper was very mysterious, it was often visualized as a serpent. The other water spirits took on many other forms including sea-serpents, water-lynxes, and half-beaver or half-fish mermaids and mermen. All the water spirits tended to the land and sustained its nourishment by governing the river's flow.

Visitors to the river would make offerings to the spirits by releasing ribbons or sparkling jewelry into the water. Beforehand, offerings would be smudged with sweetgrass or sage, so that the act could bring good returns. This ceremonial practice was to pay special recognition to these 'keepers of the land' so that in return the water spirits could be asked to bless the land.⁷⁰

Memekwesiw: Cree: “little person, one of the sacred little people”

Memekwehsyi: Algonquian: “little people who live inside cliffs at the water’s edge”

Stories of *Memekwesiw*, or ‘little people’, living along the banks of rivers were common among the Cree, Saulteaux, Algonquian, and other indigenous communities that lived in the North Saskatchewan River Basin. These little river people would usually avoid human contact, but could become mischievous or dangerous if shown disrespect, stealing fish from nets and even overturning canoes. Described as being about the size of a small child, they lived in caves or holes in the banks of the river, especially near sandy hills. Because of their close association with the river and the underground world the Memekwesiw were also knowledgeable in the healing power of plants and roots and could use this knowledge to help humans. According to some traditions they could only be seen by spiritual leaders and children, but they could also be asked for aid with gifts of tobacco. In some stories, they carve symbols on rocks and make small canoes out of stone or logs to travel up and down the river.⁷¹

Newcomer Spiritual Associations

As European settlers and other newcomers from the United States and eastern Canada began to make homes along the North Saskatchewan River, the religious traditions and practices of their home cultures came with them. These newcomers began to incorporate the river both as a source of ritualistic materials, and as a natural setting for religious practices.

Early Catholic Oblate missionaries used the river to perform baptisms, performing several hundred each year by 1864.⁷² The missionaries would conduct the service on the banks of the river, using its water for the baptism ritual. This practice continued into the 1870s as missionaries followed in the wake of the newly established trading posts. As more permanent settlements developed, clergy would haul water from the river to their more permanent church buildings to use in baptisms, christenings, and other religious services.⁷³

Ritual and Ceremonial Structures and Sites

Due to the transportation and resources provided by the river, European and Canadian missionaries often established their missions and church buildings close to its banks. Between the years 1820 and 1910 at least seven different missions grew up on the North Saskatchewan River, five Catholic and two Anglican.⁷⁴ The river also served as an important location for the placement of graves and graveyards. This can be seen in the location of Battleford Cemetery north of the City of Battleford on the south bank of the North Saskatchewan River.⁷⁵



Figure 15: Shilo Baptist Church⁷⁶

When Oklahoma adopted a segregationist government in the early 1900s, it drove a group of twelve families north to establish Saskatchewan's first African American community. The original group settled thirteen miles north of Maidstone in the Eldon district in 1910 to escape the threat of slavery. In two years, their town grew to include fifty families and in 1912 they decided the time had come to construct a church within which they could practice their Baptist faith. To accomplish this project, the community turned to the banks of the North Saskatchewan River with its plentiful stands of poplar trees. By hauling the hand-hewn timber on an ox cart, the congregation built Shiloh Baptist Church (Figure 15), a structure that became the centre of their community's social and spiritual life. It continued to be used into the 1940s, when the last of the town's residents moved away. The church and its graveyard still stand and serve as an important historical and cultural resource today.⁷⁷

Aboriginal Burial Places

Many influential indigenous leaders were born and raised within walking distance of the North Saskatchewan River including Poundmaker, Big Bear, Thunderchild, Moosomin, Mistawasis, and Ahtahkakoop. Poundmaker's gravesite is on top of a hill that overlooks the river region.

4.2 Cultural Expression

Riverside museums, art galleries, and commemorative structures

There are several memorials and historical sites along the river dedicated to the structures that supplied the northwest fur trade and early settlement. These include Forts Pitt, Carlton, and Battleford as well as old government structures in Battleford. The 1885 battle of Frenchman's Butte took place about 6 km northeast from the North Saskatchewan and is also marked with a memorial and walking paths.

In addition to these commemorative structures, there are art galleries and museums that both take advantage of the river's presence, and commemorate artists who lived near its banks. The Chapel Gallery of contemporary and regional art in the City of North Battleford is located on a rise overlooking the river valley. The gallery also has an outdoor sculpture garden and labyrinth that take advantage of the proximity of the North Saskatchewan River.⁷⁸



Figure 16: Artist Allen Sapp (1928-2015)⁷⁹

A descendant of Chief Poundmaker, Allen Sapp (Figure 16) was born into the Cree Nation on Red Pheasant Reserve, about 10 km south of the North Saskatchewan River. Equipped with a photographic memory, Sapp trained himself to become a professional painter by depicting scenes of every-day life in his community. In this way, Sapp developed a distinct artistic style and went on to receive the Order of Canada, the National Aboriginal Lifetime Achievement Award, an Honorary Doctorate from the University of Regina, and a number of other honours. Although he is not known to have painted the North Saskatchewan itself, his paintings are a record of day-to-day life in the river basin area (Figure 17). The Allen Sapp Gallery in North Battleford is situated on the heights overlooking the north bank of the North Saskatchewan River and houses a large collection of Sapp's work.⁸⁰

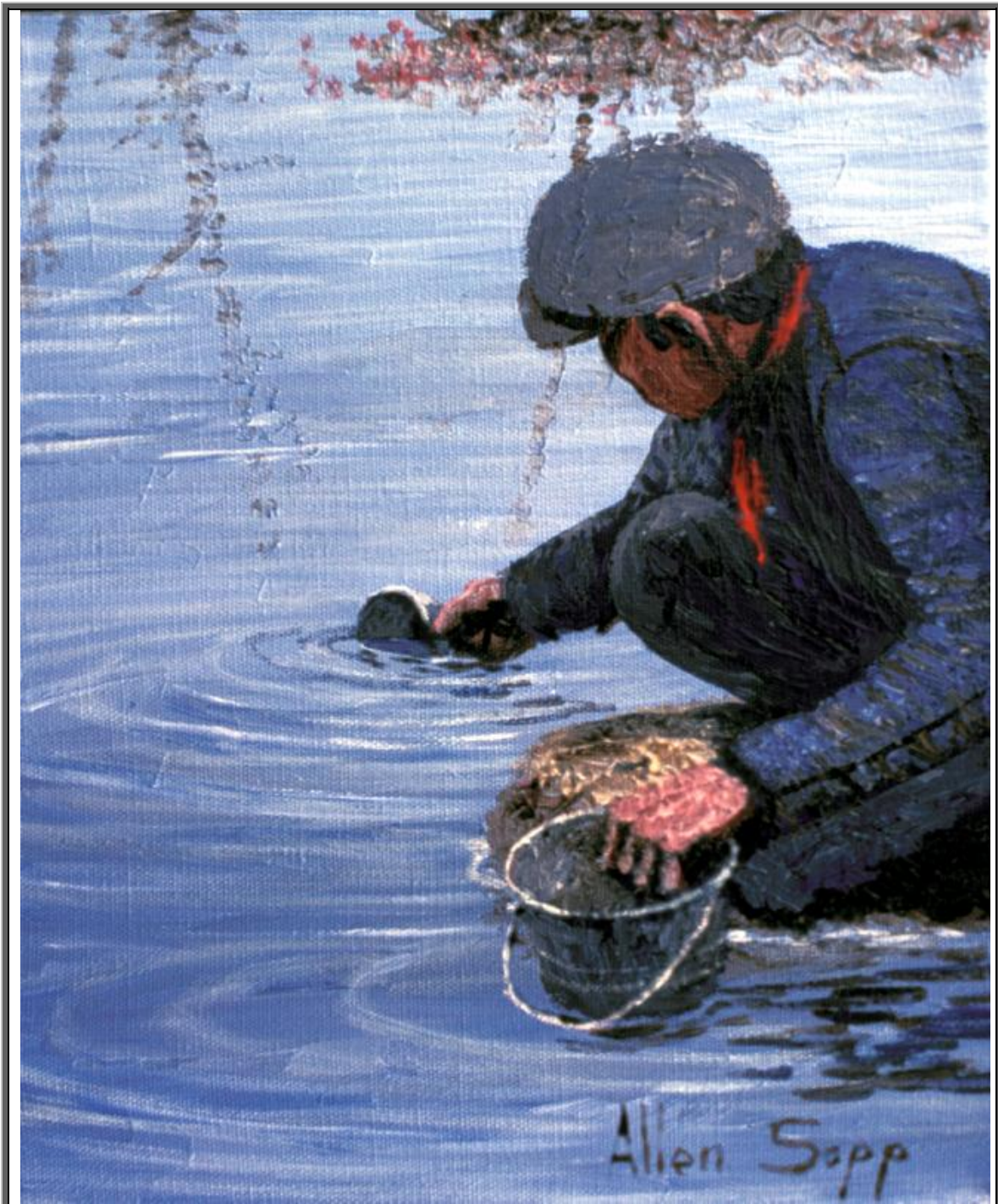


Figure 17: Getting Water for the House, Allen Sapp

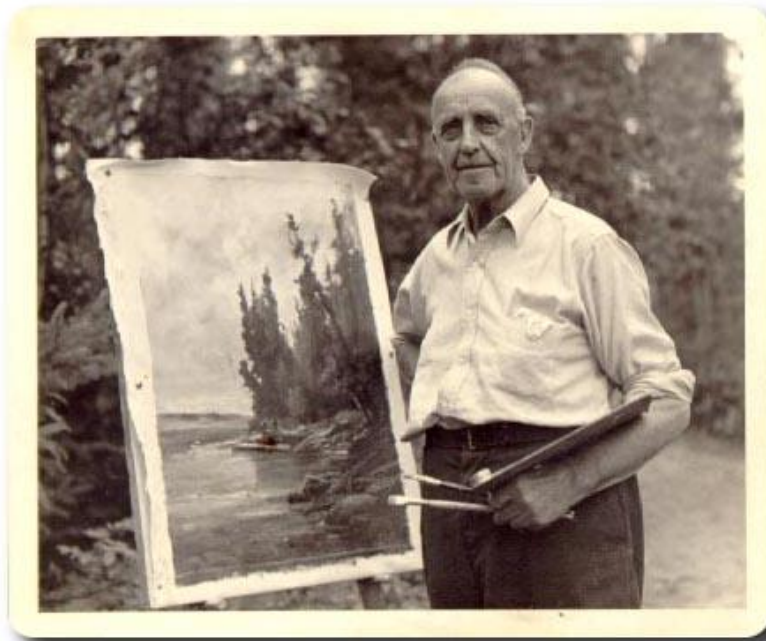


Figure 18: Artist Gus Kenderdine (1870-1947)⁸¹

Augustus “Gus” Kenderdine (Figure 18), the first professor of art at the University of Saskatchewan in Saskatoon, is remembered by a memorial placed on Pikes Peak in the Rural Municipality of Eldon.⁸² He ranched and farmed in the area and produced numerous paintings of the Saskatchewan landscape including the North Saskatchewan River and its environs.

Architectural Response to River Locations

Another extant historical site is the Doukhobor Dugout House located on the west bank of the river near Blaine Lake. Constructed in 1899, it illustrates the adaptability of early settler architecture that had to deal with limited materials while protecting the residents from bitter Saskatchewan winters.⁸³ Exhausted from their journey, a group of migrant Doukhobors stopped by an abundant spring on the west bank of the North Saskatchewan River. Arriving too late in the season to build proper shelters, the builders made use of the river’s topography by digging into a riverside ravine to construct as sheltered and stable a dwelling as possible.⁸⁴ The 'dugouts', or 'caves',

were enclosed with three walls, built with dovetails and pegged wood logs, and topped with a sod roof (Figure 19).⁸⁵ The shelter of the valley, and the nearby spring that was named Oospenia,⁸⁶ was enough for these homesteaders to survive the harsh winters and establish a strong cultural foothold in the area. The location has been maintained as a Provincial Heritage Property. It is a prime example of vernacular architecture, and a significant site, for the fact that it has been maintained so well.⁸⁷ This site has outstanding heritage significance as it associates with the arrival of Doukhobors in Canada, who sought religious sanctuary from persecution in Russia.



Figure 19: Doukhobor Dugout Home⁸⁸

4.3 Early Recreation

Land-based Touring

In addition to the large-scale hunting and trapping of the fur trade and buffalo hunts, a number of other amateur hunters also came to the Canadian west looking for adventure and recreation. The first of these tourists was James Carnegie, Earl of Southesk, who travelled up and down the North Saskatchewan River on an 1860 hunting expedition, and later published a book narrating his exploits. He was followed throughout the late 1800s by a series of upper-class British men who made the journey to Prince Albert where they could embark with guides and supplies to hunt and fish throughout the river region.⁸⁹

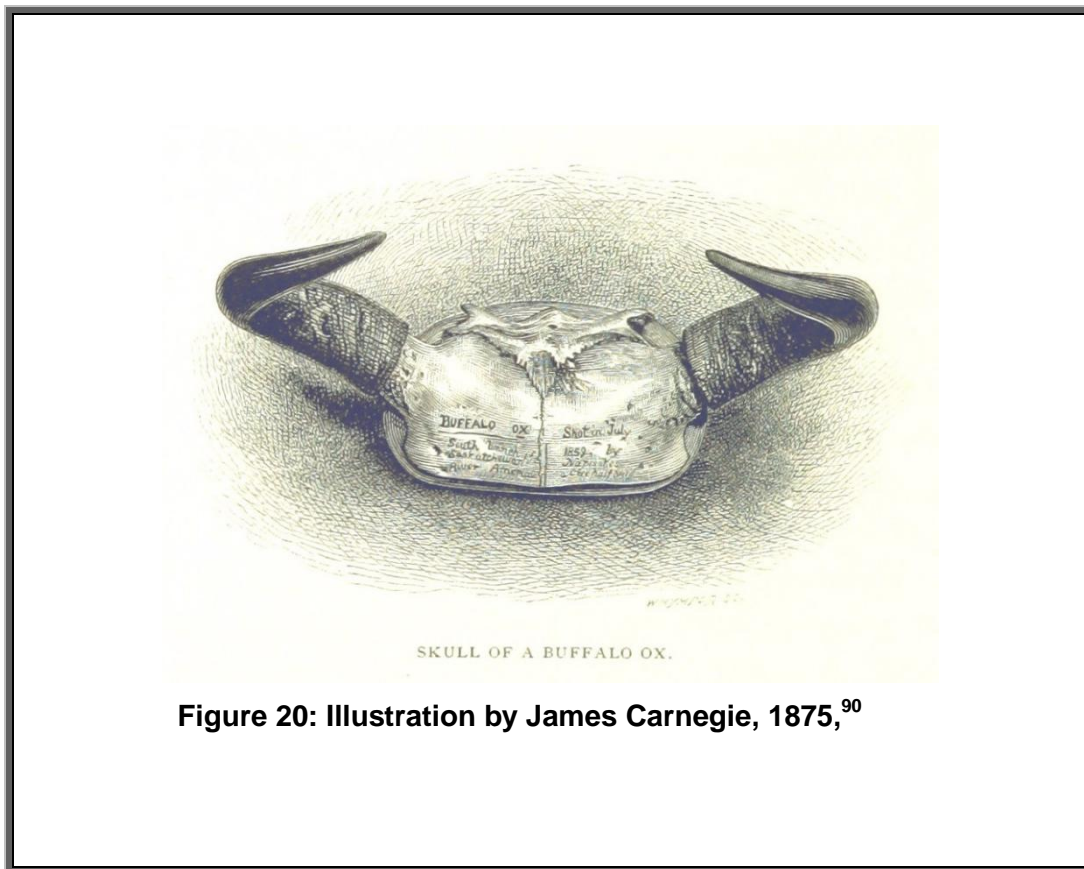


Figure 20: Illustration by James Carnegie, 1875,⁹⁰

James Carnegie, Earl of Southesk, used the North Saskatchewan as the main route on his 1860 hunting expedition.⁹¹ He later published a popular account of his adventures as *Saskatchewan and the Rocky Mountains: A Diary and Narrative of Travel, Sport and*

*Adventure in 1859 and 1860.*⁹² Carnegie's journey represented the beginning of tourism in the northwest as wealthy British men hunted and fished for leisure and entertainment rather than necessity. An illustration of his is shown in Figure 20.

Theme Five: Jurisdictional Uses

5.1 Conflict and Military Associations

Signing of Treaty 6

Treaty 6 predates the creation of the province by thirty-eight years and the Saskatchewan portion of the North Saskatchewan River is completely within Treaty 6 territory. In addition, the negotiation and signing of this treaty (Figure 21) took place near the river at forts Carlton and Pitt.⁹³ The Carlton site was about a mile from the fort itself, tucked between the Governor's camp and the two-hundred-and-fifty lodges of the indigenous people who had gathered to dialogue and observe. This space was bordered on the west by the North Saskatchewan River.⁹⁴ Chief Mistawasis was the first to sign Treaty 6.

"Chief Mistawasis believed in partnerships, and knew this was a way his people could succeed in a changing world. He agreed to partner with the newcomers and signed the Treaty. Because of his example Mistawasis continues to recognize the value and importance of partnerships. So whenever there is an issue at hand, we look to other governments, organizations and people to work with us to find the best solution."

Anthony Johnston - Mistawasis First Nation.



Figure 21: “Indian Chiefs Medal” Presented to Commemorate Treaties 3-8⁹⁵

The Northwest Rebellion

In 1885, the North Saskatchewan River region erupted into violence as Louis Riel's followers fought and defeated the Northwest Mounted Police at Duck Lake between the North and South Saskatchewan rivers. Despite disagreements with the rebellion's goals and methods, and attempts to declare their own diverse responses to the conflict, several indigenous communities on the North Saskatchewan River were quickly swept up into the violence.⁹⁶ Serving as an obstacle, resource, and transportation route, the river played a key role in shaping the strategy and tactics of all the forces involved.

After setting up a provisional government at Batoche on March 19, 1885, Louis Riel began laying plans to capture Fort Carlton by overwhelming its detachment of North-West Mounted Police. A force of volunteers was formed in Prince Albert. Travelling by sleigh, they arrived at Carlton on March 20. Despite these volunteers and an additional one-hundred police, the fort was abandoned on March 27 due to its dilapidated defenses. During the night of the evacuation, a fire started in the police barracks and it was left to burn, razing the fort along with abandoned supplies.⁹⁷

On March 27, 1885, after hearing about the Battle of Duck Lake and the mounting violence between Riel's provisional government and the police, Poundmaker (Pitikwahanapiwiyn) (Figure 22) and Little Pine lead their bands to Battleford to meet with the Indian agent in order to reaffirm their loyalty and to ask for much-needed rations.⁹⁸ Believing rumors of a general indigenous uprising, the settlers living near Battleford had all taken shelter within the fort, and Indian agent, Rae refused to speak with the chiefs. Left without a government liaison through which to request food, members of the band began to loot the abandoned settlement, angering the settlers hiding within the stockade. After gathering food, the group turned around to return to Poundmaker's reserve where they planned to sit out the coming conflict.⁹⁹

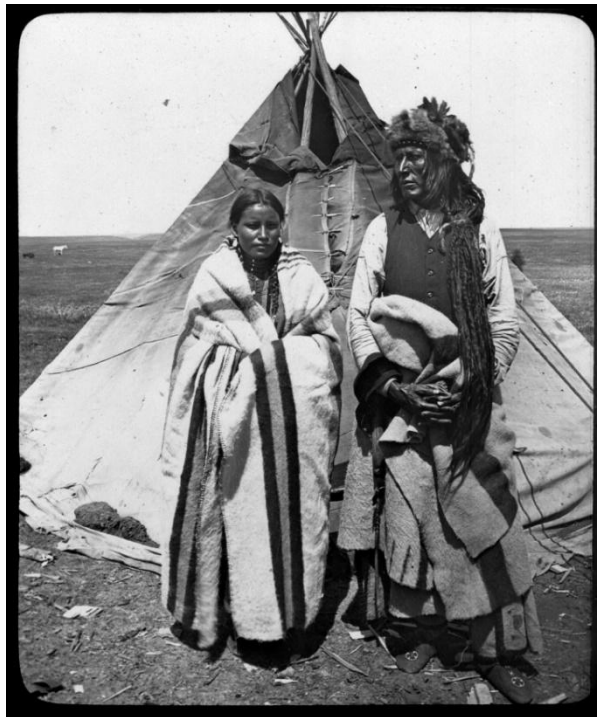


Figure 22: Poundmaker and wife, c. 1884¹⁰⁰

Downriver, in Prince Albert, civilians began fortifying the town's Presbyterian church, constructing a complex of walls, guard posts, and barracks (Figure 23). Blocks of ice were cut from the frozen river and hauled to the compound to provide a source of

drinking water during the expected siege. Chief Mistawasis offered to send his warriors to aid in the town's defence, although this offer was declined.¹⁰¹



Figure 23: Guard on duty outside a sentry box¹⁰² at Camp "B" located in Prince Albert.

On April 2, 1885, Wandering Spirit (Kapapamahchakwew) and Big Bear's (Mistahimaskwa's) band travelled down the North Saskatchewan River to the hamlet of Frog Lake. Challenging Big Bear's leadership, Wandering Spirit and his warriors took prisoners and killed nine settlers in what became known as the Frog Lake Massacre. More would likely have died if not for the intervention of Big Bear (Figure 24).¹⁰³



Figure 24: Mistahimaskwa (Big Bear), 1885¹⁰⁴

Travelling northwest along the North Saskatchewan River, Big Bear and Wandering Spirit's band arrived at Fort Pitt which was under the command of Inspector Francis Dickens, son of the famous novelist Charles Dickens. Dickens negotiated with the chiefs, surrendering the fort in exchange for unhindered passage to Battleford. Gathering up his small group of police, he embarked a hazardous journey down the ice-bound North Saskatchewan River aboard a scow. Wandering Spirit and his followers took the abandoned fort on April 15.¹⁰⁵

At the news of these events, General Thomas Strange mobilized a military force in Edmonton and began travelling down the North Saskatchewan River with the intention of recapturing Fort Pitt. Inspector Sam Steele arrived there first on May 26 and began engaging Big Bear's Band in small skirmishes.

Wandering Spirit led his warriors in a successful clash with government forces in the Battle of Frenchman's Butte on May 28 on a hill near the North Saskatchewan River.¹⁰⁶ On June 3, in another engagement at Steele's Narrows, Steele caught up to the band, capturing Wandering Spirit and other leaders, but missing Big Bear, who managed to slip away. This led to "the largest manhunt in Canadian history" which ended anticlimactically when Big Bear walked up to Fort Carlton, surrendering without resistance.¹⁰⁷

With the indigenous leaders in captivity, General Middleton, overall commander of the Canadian forces, and his staff boarded the steamship *Marquis*, and travelled up and down the North Saskatchewan accepting surrender from different bands and establishing the government's authority over Aboriginal and Métis communities regardless of their involvement with Riel and the uprising.¹⁰⁸

Poundmaker's Guns

On May 26, 1885, Poundmaker and his band rode into Fort Battleford to surrender. As part of the surrender ceremony, General Middleton had the Cree warriors carry their firearms down to the North Saskatchewan River where they were stacked in a huge pile on the fore deck of the waiting steamship *North West*. Five days later, packed with extra provisions and soldiers, the ship made its way northwest to Fort Pitt. When they stopped at Pine island to refuel, the crew realized that they did not have enough room to store the fuel necessary to complete the voyage, and so they threw the guns of Poundmaker's band overboard into the river. Most of the passengers were happy to be rid of the pile of flintlock muskets, but some regretted losing souvenirs of their involvement in the conflict.¹⁰⁹

Battleford Executions

Following the trials of Poundmaker, Big Bear, Riel, and others in Regina, the remainder of the indigenous prisoners were moved to Battleford, where the settler population's anger could be satisfied and the rest of the indigenous community warned through a public display of federal power. The court sentenced eight warriors to death by hanging:

Miserable Man, Bad Arrow, Round the Sky, Wandering Spirit, Iron Body, Little Bear, Itka, and Man Without Blood. Prime Minister Macdonald stated the hanging's political purpose bluntly in a letter to Lieutenant-Governor Edgar Dewdney: "[t]he executions... ought to convince the Red Man that the White Man governs."¹¹⁰ In Battleford, the prisoners were held in a stable that had quickly been converted into a temporary jail, and a gallows was constructed twenty feet by eight feet and raised ten feet off the ground.¹¹¹

At 8:15 on November 27, the eight prisoners were led onto the platform before small clusters of townspeople and a large crowd of families from the Moosomin, Thunderchild, and Sweetgrass reserves. Two of the eight delivered speeches showing regret for their actions while Itka remained defiant, criticizing the government. He began singing a death chant and was joined by the other seven. The Battleford hanging remains the "largest mass execution in modern Canadian history."¹¹²

Their bodies were buried in a common grave on the bank of the nearby North Saskatchewan River behind Fort Battleford. When the river uncovered their grave in 1954, it was topped with a concrete slab, and later marked with a granite headstone with their names in either Cree or Assiniboine and English. The gravesite was also marked with a circle of bare poplar lodge poles.¹¹³

Influence of the Rebellion

During the Rebellion, the North Saskatchewan River region dominated the newspapers and public discourse of the day, bringing the social, racial, and political issues of the northwest to the forefront of regional and national discussion. Although the conflict ended in the violent assertion of colonial authority, it raised questions about the supposed benevolence and morality of Canadian indigenous policy and attitude towards the western territories, questions that continue to influence the culture and politics of contemporary Canadian, indigenous, and provincial dialogue. In this way, the North Saskatchewan River and its surrounding communities have left a deep mark not only on

the regional and provincial cultural identity, but also on the country of Canada as a whole.

The river has also been the site of major jurisdictional decisions and events like the negotiation and signing of Treaty 6. The North Saskatchewan has also played a key role historically as the site of one of Canada's most famous conflicts, the Northwest Rebellion. Besides serving as a theatre for significant portions of the conflict, the river also played a direct role as an escape route, a barrier, and a means for rapidly transporting soldiers and supplies. At the conflict's conclusion, the river became the site for the largest mass execution in Canadian history. With the sudden outbreak of violence, the Northwest Rebellion brought to light tensions that had often been ignored by the government and the larger population.

5.2 Boundaries

Geographic Boundaries

When Saskatchewan joined Confederation on September 1, 1905, it differed from the other provinces by having arbitrary boundaries that did not reflect the natural geography. Thus, the North Saskatchewan River was divided between the provinces of Alberta and Saskatchewan. In addition, the new province was named Saskatchewan, after the river that had defined so much of the region's history.¹¹⁴

5.3 Environmental Regulations

Improvements in Aquatic Ecosystems

Water quality in the North Saskatchewan River was an issue for concern in the mid 21st century. Winter oxygen levels were devastatingly low in studies completed in 1957 and 1958¹¹⁵. Industrial and municipal wastes were identified as causative agent. Since then, the implementation of waste water treatment and the influence of reservoirs have improved water quality significantly. Mercury levels in fish have decreased since the 1970's due to the elimination of mercury from point source waste waters¹¹⁶ (chloro-alkali

plants, pulp and paper mills, municipal waste waters). Changes in environmental regulations by the government has had a significant influence over the improvement of aquatic ecosystem health.

Conclusion

Based on the interpretation of the Canadian Heritage Rivers System Guidelines in *A Cultural Framework for Canadian Heritage Rivers*, the North Saskatchewan River successfully fits the profile for a Canadian Heritage River. The quality and number of extant historical sites, commemorative structures, archaeological locations, and other cultural resources located on or near the river, show that it has played an essential role in the development of not only the culture of the province of Saskatchewan and its diverse inhabitants, but also of the nation. Powerful economic and geopolitical events like the fur trade, the settlement of the prairies by newcomers, and the Northwest Rebellion all depended on the North Saskatchewan River as a source of vital resources, transportation, and communication. The canoes, York boats, and steamships that navigated the river created a unique naval culture in the middle of the prairies and shaped the leisure, business, and commercial activities of the region. In addition, the towns, cities, and villages that grew up along the North Saskatchewan River depended on it for vital resources and their inhabitants drew inspiration from it in art, literature, and spirituality. Sculptures, gravesites, galleries, and cultural markers along the river are a record of this important heritage.

The North Saskatchewan River also satisfies almost every category identified as under-represented in the Canadian Heritage River Systems 2010 Gap analysis report.¹¹⁷ This includes agricultural extraction, architectural responses to river locations, human consumption, Aboriginal-European conflict, and interprovincial-territorial boundaries and land-based touring.

The Canadian Heritage Rivers Systems integrity guidelines from *A Canadian Heritage Rivers: 2nd Editions, 2000* outline the criteria for determining if a river qualifies for designation. The below assessment clearly outlines the outstanding significance of the

North Saskatchewan River and its influence on the development of Canada as a nation and its importance to Canadians.

Guideline 1: [The river environment] is of outstanding importance owing to its influence, over a period of time, on the historical development of Canada through a major impact upon the region in which it is located or beyond; this would include its role in such significant historical themes as Native people, settlement patterns, and transportation.

The North Saskatchewan River was an important component to the development of Canada. It holds a significant cultural history that shaped the establishment of the province and nation.

There were many First Nations that used the river and its valley system for sustenance, transportation and medicine. Though they left little evidence of their presence, their history is captured in the many First Nation communities that still thrive close to the River and the region.

The developing nation of Métis peoples also had significant ties to the River. Their skills flourished on the swift waters and later, as documented, the uprising occurred close to its shores.

The River was key for the establishment of major communities as well as the vein that brought many new comers to the prairies. Sprouting communities on or within close proximity to its waters. It was a staple resource for survival and success, for food and resources.

Not only did the River provide an important route of transportation but supported a diverse means of transportation. From the rudimentary bullboat, to the mighty steamship, York Boats and canoes, all saw the perpetual waters of the North Saskatchewan River.

Guideline 2: [The river environment] is strongly associated with persons, events, movements, achievements, ideas or beliefs of Canadian significance.

Notable people who were recorded to travel the River include early explorers Henry Kelsey and Anthony Henday. Chiefs Poundmaker, Little Pine, Wandering Spirit, Big Bear, Thunderchild, Moosomin and Mistawasis all would have quenched their hunger and thirst at the River. General Middleton used steamships to march up and down the river to bark his authority. Artists Alan Sapp and Augustus Kenderdine also achieved their success near the banks of the river. These are a few of the many notable people who would have paused to appreciate the beauty of the river as well as the value, opportunity and challenge it embodied.

A pinnacle event that shaped the country and its relationship of with First Nations was the signing of Treaty 6. This occurred in close proximity to the River, accounted for the land area that encases the river and surrounding landscape.

The Northwest Rebellion marks a significant chapter of the Nation. The North Saskatchewan River played an important role in the drama that unfolded during those volatile times. The River witnessed Canada's largest execution at the hand of the Federal Government. These events were significant Aboriginal-European conflicts and events that shaped the country.

The vast distribution of Oblate Missionaries was facilitated by the River, allowing them to reach many remote First Nation communities and posts. Their hand in shaping community culture would not have been as far reaching and influential (both good and bad) had it not been for the ease of travel on the North Saskatchewan River.

Lesser known, are the important First Nation beliefs of the water spirits and the Memekwesiw: the mischievous little people who resided in the river valley. It is these lesser known traditions and beliefs that give the North Saskatchewan River an outstanding significance.

Guideline 3: [The river environment] contains historical or archaeological structures, works or sites which are unique, rare or of great antiquity.

There are many significant sites that mark the history of the North Saskatchewan River. The high concentration of archaeological sites along the river, with greater than 400 other archeological sites in close proximity to the River's region demonstrate the outstanding significance of the North Saskatchewan River to Canada's cultural heritage.

Guideline 4: [The river environment] contains outstanding examples or concentrations of *historical or archaeological structures, works or sites* which are representative of *major themes* in Canadian history.

For this guideline, major themes in Canadian history are assumed to be the themes as identified in the Cultural Framework for Canadian Heritage Rivers. Throughout this background report there are many structures, works and sites that denote outstanding examples of each major theme. The North Saskatchewan River also satisfies many under represented values in the Canadian Heritage River System.

Given the demonstrated weight of the historical and cultural influence of the North Saskatchewan River, both regionally and nationally, it is the conclusion of this report that it qualifies for Heritage River designation.

End Notes

- ¹ “Map of North Saskatchewan River,” Credit: Public Domain.
- ² Ted J. Brasser, “Indigenous People: Plains,” *The Canadian Encyclopedia* (2009), URL: <http://www.thecanadianencyclopedia.ca/en/article/aboriginal-people-plains/>. Accessed: March 29, 2017.
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- ⁸ “Big Bear Trading Furs at Fort Pitt” Credit: O.B. Buell / Library and Archives Canada / PA-118768
- ⁹ Friesen, *Where the River Runs*, 148.
- ¹⁰ The Bresaylor Heritage Museum Association Inc. *Bresaylor*, 439.
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- ¹² “Partially constructed La Colle Falls hydroelectric dam (1916) View from South Bank,” Credit: Public Domain, Wikimedia
- ¹³ The Bresaylor Heritage Museum Association Inc., *Bresaylor: Between the Battle and the North Saskatchewan Rivers*, (Battleford, Saskatchewan: Marian Press Ltd., 1992), 441-442.
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- ¹⁷ Friesen, *Where the River Runs*, 300.
- ¹⁸ Bruce Peel, *Steamboats on the Saskatchewan*, (Saskatoon: Western Producer, 1972), xv.

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- ¹⁹ Friesen, *Where the River Runs*, 298.
- ²⁰ *Ibid.*, 286.
- ²¹ *Ibid.*, 287.
- ²² "Northcote Before its involvement in the Northwest Rebellion docked at Fort Carlton," Credit: Frederic Hatheway Peters / Library and Archives Canada / e011156618_s3 ; C-003447.
- ²³ Friesen, *Where the River Runs*, 291.
- ²⁴ *Ibid.*, 288 & 292.
- ²⁵ Blair Stonechild and W. A. Waiser, *Loyal till Death: Indians and the North-West Rebellion* (Calgary: Fifth House, 1997), 193.
- ²⁶ Friesen, *Where the River Runs*, 289.
- ²⁷ Peel, *Steamboats on the Saskatchewan*, 206.
- ²⁸ Friesen, *Where the River Runs*, 299.
- ²⁹ Waiser, *Saskatchewan: A New History*, 155.
- ³⁰ "Sketch of "Steamboat on the North Saskatchewan River" by Sydney Prior Hall, Aug. 30, 1881," Credit: Library and Archives Canada, Acc. No. 1984-45-157
- ³¹ Peel, *Steamboats on the Saskatchewan*, 208.
- ³² Friesen, *Where the River Runs*, 293.
- ³³ Angélique Tardivel, translator and researcher, "Translation and Examination of Oblate Annual Reports for References to the North Saskatchewan River, Pre-1910", 4 & 7.
- ³⁴ Friesen, *Where the River Runs*, 30.
- ³⁵ "Hidatsa (Hiraacá) bull boat in North Dakota (ca. 1911)," Credit: Public Domain, Wikimedia.
- ³⁶ Myrna Kostash and Duane Burton, *Reading the River: A Traveller's Companion to the North Saskatchewan River* (Regina: Coteau Books, 2005), 17.
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- ⁴⁰ *Ibid.*, 43.
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- ⁴³ Tardival, "Translation and Examination of Oblate Annual Reports...", 1.
- ⁴⁴ Bill Waiser, Saskatchewan, 42.
- ⁴⁵ Tardival, "Translation and Examination of Oblate Annual Reports...", 1.
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- ⁴⁷ Kostash and Burton, Reading the River, 7; Friesen, Where the River Runs, 27.
- ⁴⁸ Friesen, Where the River Runs, 27.
- ⁴⁹ Ibid., 36.
- ⁵⁰ Ibid., 34-37.
- ⁵¹ Ibid., 37.
- ⁵² Waiser, Saskatchewan, 22.
- ⁵³ Edward Ahenakew and Ruth Matheson Buck. Voices of the Plains Cree, (Toronto: McClelland & Stewart, 1973), 50.
- ⁵⁴ Friesen, 153-155.
- ⁵⁵ Kostash, Reading the River, 243.
- ⁵⁶ Site of Settler's First Landing in Prince Albert, Saskatchewan," Credit: Canadian National Railways/Library and Archives Canada/PA-
- ⁵⁷ Waiser, Saskatchewan, 59.
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- ⁶⁰ The Bresaylor Heritage Museum Association Inc. Bresaylor, 10-14, 18, 439.
- ⁶¹ David McLennan, "Battleford," The Encyclopedia of Saskatchewan, <http://esask.uregina.ca/entry/battleford.html> accessed January 15, 2017; "Former Prince Albert City Hall National Historic Site of Canada," Canada's Historic Places, <http://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=7536&pid=0> accessed January 15, 2017; "Battleford Land Registry Office," Canada's Historic Places, <http://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=2216&pid=0> accessed January 15, 2017.
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⁶⁵ “Ferry Crossing the North Saskatchewan River, c.1936,” Credit: Canada. Dept. of Interior / Library and Archives Canada / PA-044574.

⁶⁶ Current bridge information obtained from Google Earth.

⁶⁷ “CNR Bridge at Prince Albert, c. 1909,” Credit: John Woodruff/Library and Archives Canada/PA

⁶⁸ Kostash and Burton. *Reading the River: A Traveller's Companion to the North Saskatchewan River*.

⁶⁹ “Borden Bridge, a project designed to create jobs during the Great Depression,” Credit: Bruce Guenther, Flickr, Creative Commons License

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⁷⁵ Battlefords Chamber of Commerce, “The Battlefords,” map.

⁷⁶ “Shilo Baptist Church The first African Canadian church in Saskatchewan.” Credit: RM of Eldon No. 471.

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- ⁷⁹ "Artist Allen Sapp (1928-2015)," Credit: Wikipedia.org, Public Domain.
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- ⁸⁸ Doukhobor Dugout home. Photo Credit: Government of Saskatchewan, Bernard Flaman, 2008
- ⁸⁹ Merle Mary Muriel McGowan Massie, "At the Edge: The North Prince Albert Region of the Saskatchewan Forest Fringe to 1940," (Phd. diss., University of Saskatchewan, 2010), 221-2; Kostash, Reading the River, 192.
- ⁹⁰ "James Carnegie, illustration from Saskatchewan and the Rocky Mountains, 1875," Credit: British Library, Public Domain
- ⁹¹ Kostash and Burton, Reading the River, 192.
- ⁹² Merle Mary Muriel McGowan Massie, "At the Edge: The North Prince Albert Region of the Saskatchewan Forest Fringe to 1940," (Phd. diss., University of Saskatchewan, 2010), 221.
- ⁹³ Waiser, Saskatchewan, 167.
- ⁹⁴ Edward Ahenakew and Ruth Matheson Buck, Voices of the Plains Cree, 123.
- ⁹⁵ "'Indian Chiefs Medal' Presented to Commemorate Treaties 3-8," Credit: Library and Archives Canada, Acc. No. 1964-1-1M

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- ¹⁰⁰ "Poundmaker and wife, c. 1884." Credit: Library and Archives Canada/PA-066596
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- ¹⁰² "Guard on duty outside a sentry box at Camp "B," Prince Albert, during the Northwest Rebellion, 1885," Credit: James Peters/Library and Archives Canada/e011156626_s2 ; C-010485
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Chapter Three: Natural Values

Introduction

A river system can be likened to that of a biological corridor, linking diverse ecosystems not only within local reaches, but also larger regional ecosystems found across the watershed. This corridor functions as a dynamic and valued crossroad in the landscape which provides critical functions essential for maintaining life. Such functions include cycling nutrients, filtering contaminants, absorbing and releasing floodwaters, maintaining wildlife habitats, recharging groundwater, and maintaining stream flows. This natural corridor also plays an important role in the quality of life of urban residents. This becomes especially true as the North Saskatchewan River flows right through two major cities in Saskatchewan, and many smaller communities. Healthy natural ecosystems have been documented for providing improved air quality, stabilizing temperatures, preventing soil erosion, improving water quality, and increasing aesthetic and spiritual relief for residents.¹

The purpose of the Natural Values framework is to assist in the Canadian Heritage Rivers System in creating a balanced representation of the natural heritage of a river for any future management and interpretation from a national perspective. This section can provide governments and other organizations with a method of assessing how rivers can best contribute to the Canadian Heritage Rivers System; encourage a standardize approach; and provide a tool which can be used to enable an efficient use of government resources. All themes represented in this report have an underlying concept of the hydrological cycle of the North Saskatchewan River and the interactions of many different features within it, both biotic (living) and abiotic (non-living). Abiotic features include the hydrology, physiography, and morphology of the North Saskatchewan River; while the biotic factors are the flora and fauna species that interact with the river.

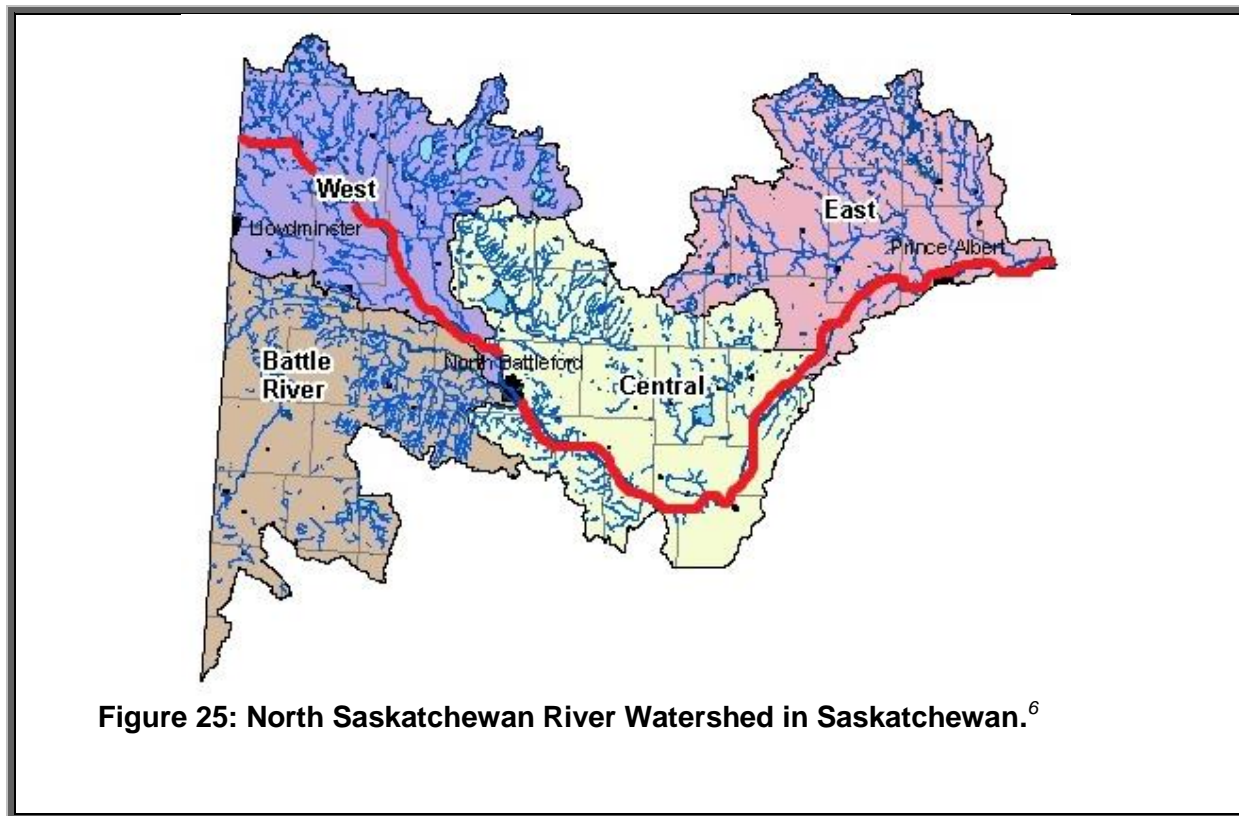
Theme One: Hydrology

1.1 Drainage Patterns

The headwaters of the North Saskatchewan River begin in the Rocky Mountains. The Western Cordillera region of Canada, which is a series of mountain belts in western Canada, is divided into three main sections: The Coast Mountains, the Interior Plateaus, and the Eastern Mountains. The Eastern Mountains are made up of the Rockies, the youngest mountain chain in Canada, and the Columbian Mountains, which are slightly older and more weathered. It is the ice fields contained in these ranges that feed the North Saskatchewan River.² Canada comprises five major drainage basins: Atlantic, Arctic, Pacific, Hudson Bay, and the Gulf of Mexico. The North Saskatchewan River finds its end in the Hudson Bay, which drains around 38% of Canada's total land surface.³

The North Saskatchewan River system is the eleventh largest river system in Canada.⁴ This river, along with the South Saskatchewan, are significant rivers to the Saskatchewan-Nelson River system, where its expansive drainage basin influences the Hudson Bay drainage area.

The entire drainage of the North Saskatchewan River is approximately 80,000 km², and of that, around 41,000 km² reside in Saskatchewan (Figure 25). The River is classified as a number two system as the waters empty into Lake Winnipeg before making the final journey into the Hudson Bay. The major tributary to the North Saskatchewan River in the Saskatchewan side is Battle River which merges with the North Saskatchewan at the Battlefords. Other tributaries to the North Saskatchewan include the Big Gully and Eagle creeks, and the Monnery, Turtle, Jackfish, Sturgeon, Little Red, and Garden rivers.⁵



1.2 Seasonal Variation

The main drive in the creation and destruction of fluvial features occurs during seasonal high flows. A river's commercial utility, ecology, visual appearance, and recreational value change in the course of a year due to the seasons. There may also be some influence of dams constructed along the river, but these do not have the same impact as seasonality.

While the Saskatchewan section of the North Saskatchewan River does not contain any dams, there are two in the Alberta section which can have influence on flows into the province. The Bighorn Dam, located in west central Alberta, lies on the North Saskatchewan River and is Trans Alberta's highest performing hydro plant, producing an average 408,000 megawatt hours a year.⁷ The Brazeau Dam is located on the Brazeau River, which is an Alberta tributary to the North Saskatchewan, and is Trans Alberta's largest hydro plant, generating an average of 397,000 megawatt hours per year.⁸

The North Saskatchewan River volume is primarily influenced by seasonality (Figure 26). During the winter months, the River is either partially or completely covered by a layer of ice. This restricts any water runoff from land, and flow remains fairly steady. During spring, when melting occurs both at the headwaters and the lands surrounding the river, the North Saskatchewan is at its peak flow, receiving substantial meltwater throughout its course. The headwaters, and their tributaries, contribute the greatest amount of volume in runoff, while the runoff from the plains and their tributaries are significantly less, 900 mm compared to 10 mm, respectively. Those numbers increase in April due to the melting of the snow packs in the mountains, and the melting of snow accumulated over the winter in the lowlands.⁹

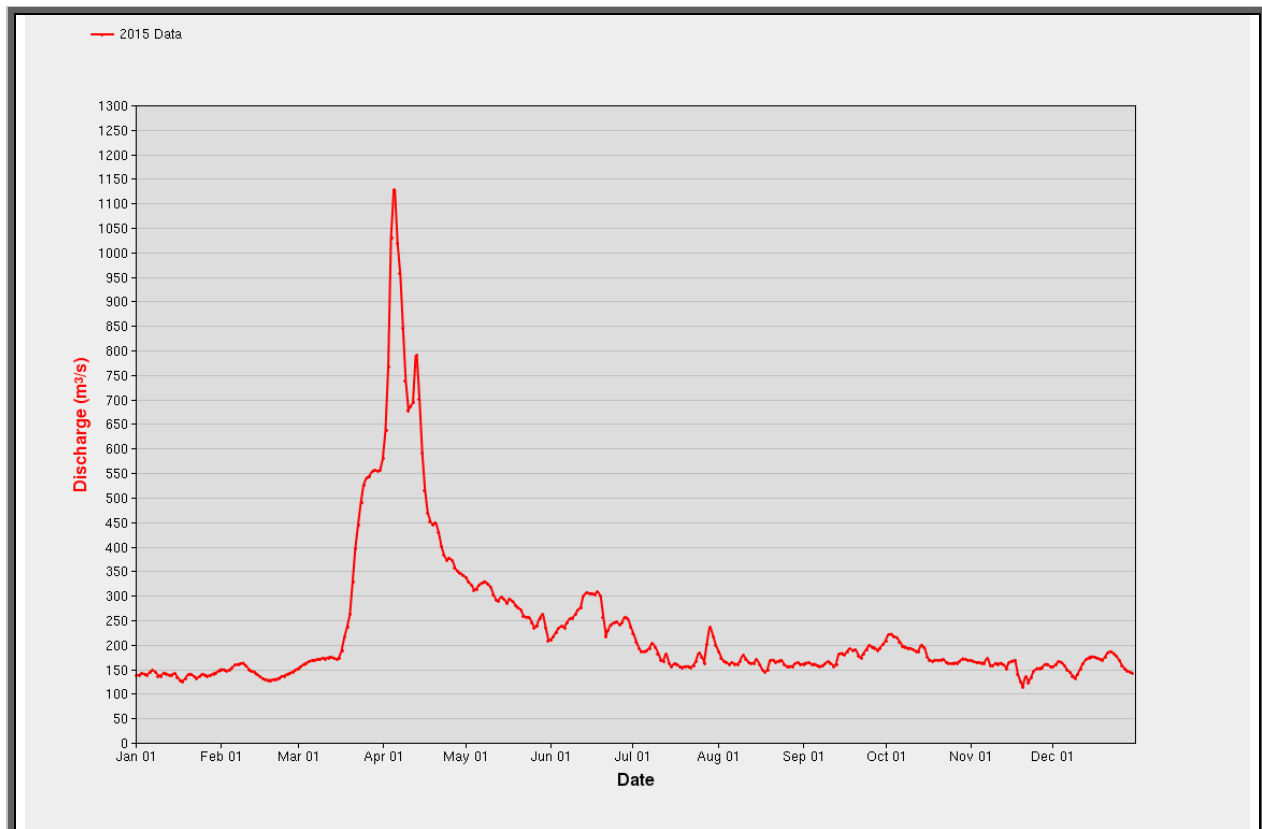


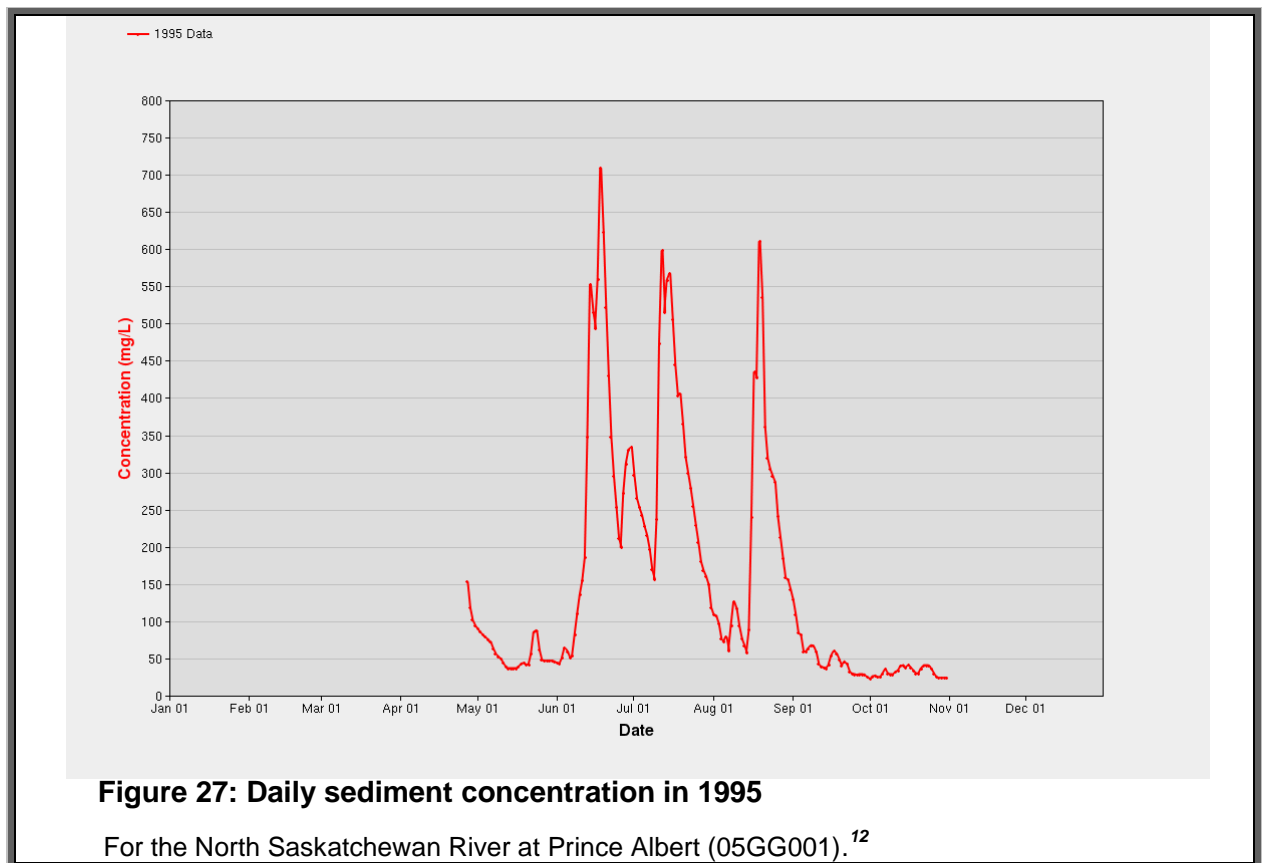
Figure 26: Monthly discharge data

For the North Saskatchewan River at Prince Albert for the year 2015.¹⁰

1.3 Water Content

Water content is split into two sub-categories: physical and chemical properties. The physical properties describe matter suspended in the water: Total Suspended Solids (TSS) and Turbidity/ These values also influencing how well light can penetrate the water. Chemical properties refer to matter dissolved in the water: Total Dissolved Solids (TDS) which includes chemicals, nutrients, and minerals that bond with water molecules. Both properties are influenced by the landscape through which the river flows; as well as human factors such as industry, municipal, and agricultural activities.

The North Saskatchewan River is very turbid by nature from the glacial till left behind as the ice sheets receded. Glacial clays and sands are easily eroded and cause the river to have a high turbidity range, from 10 Nephelometric Turbidity Unit (NTU) to greater than 2000 NTU in some areas (Figure 27). These changes can occur quite rapidly.¹¹



From Edmonton, Alberta to the Forks, Saskatchewan, the North Saskatchewan River has been classified as mesotrophic in nature, or from fair to good in layperson's terms.¹³ Mesotrophic by definition means to have moderate amounts of dissolved solids which make it the most desirable state for a water body to be in. The moderate dissolved solids content allows for a wide range of flora and fauna to thrive comfortably in both aquatic and terrestrial ecosystems. Spring runoff also makes the waters vulnerable to contamination as the melting snow can transport many nutrients and chemicals from the surrounding landscape.¹⁴ From 1987 to 2002 the river was rated as good by the Water Quality Index standards. From 2003 to 2007 the river showed stress at the eight sites assessed, mostly attributed to man-made activities.¹⁵ The tributaries entering the North Saskatchewan River often border the line between mesotrophic and eutrophic (high amounts of dissolved solids).¹⁶ As most of these tributaries are smaller, and are influenced by human activity, the TDS content is on the higher side.

Of the two lakes that feed into the North Saskatchewan River, Jackfish is a eutrophic lake. Lakeside communities along Jackfish Lake are expressing concern over the quality of the water and the increasing presence of algae on the surface. Jackfish has been battling water quality issues for decades, and the government of Saskatchewan was regularly monitoring the water from 1997 to 2007. Over the course of the ten year study the government performed, seven parameters had consistently exceeded water quality index scores (WQI); although, the overall quality of the lake scored a fair ranking. Sodium, phosphorus, sulfate, and ammonia were among the seven parameters that exceeded WQI standards.¹⁷

1.4 River Size

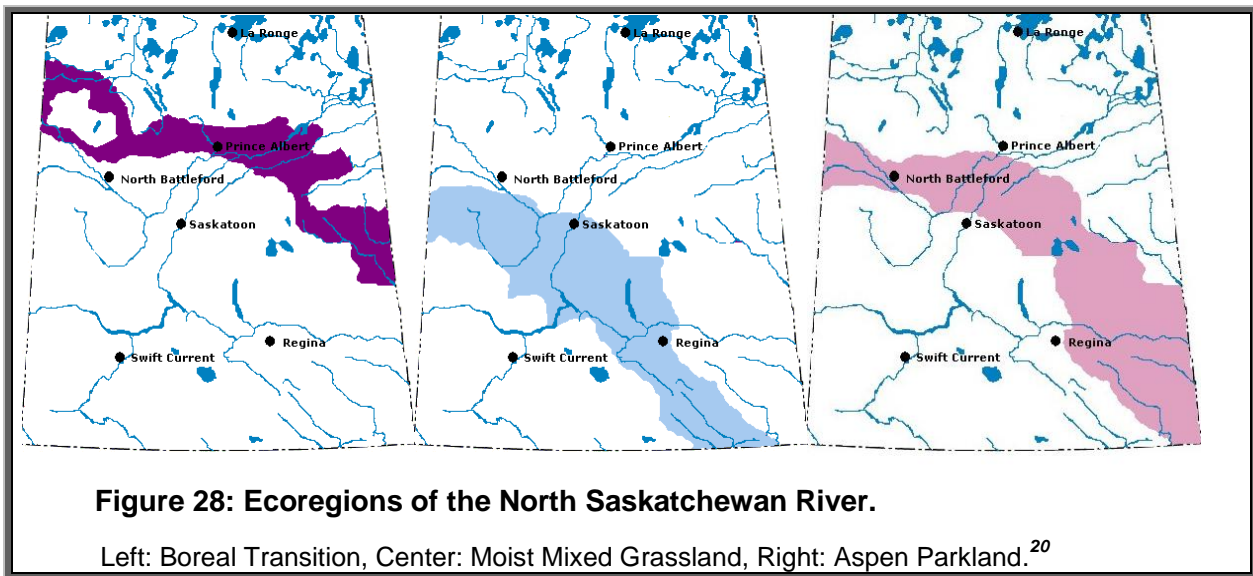
River size is determined by two variables: average flow volume, and the total length the river travels. Flow volume is measured as an average annual flow at its lowest section in m³/s. The river length is the length of the river from its headwaters to the ocean. From Edmonton to the Forks, the volume/year flow can range from 7,036,695,030 m³ to 7,712,950,440 m³. Calculations put the mean annual flow between 223 m³/s and 244

m³/s, which makes it a medium river. The total length of the river is 1287 km which deems it a large river.¹⁸ The North Saskatchewan River borders the boundary between a medium or a large river classification.

Theme Two: Physiography

2.1 Physiographic Region

The North Saskatchewan River exists primarily in the Interior Plains physiographic region of Canada. It expands 1.8 million km² or 18% of Canada's total land mass which is composed of sedimentary bedrock consisting of poorly consolidated shales, siltstones, and sandstones of limestones and marine origin.¹⁹ Within Saskatchewan, the river flows between three ecoregions: Aspen Parkland, Boreal Transition, and Moist Mixed Grassland (Figure 28).



From the Alberta border to near Prince Albert, the river is within the Aspen Parkland Ecoregion. This region extends a broad arc from southeastern Manitoba to northwestern Saskatchewan. While most of the region has been transformed into farmland, the native state was characterized by trembling aspen, oak groves, mixed tall

shrubs, and intermittent fescue grasslands. This area is considered a transition between the boreal forests of the north and the grasslands of the south.²¹

Just north of Saskatoon, the North Saskatchewan River briefly passes through the Moist Mixed Grassland ecoregion encompassing a portion of southern Saskatchewan. This is the northern most extension of the open grasslands and its local saline soil areas support alkali grass, wild barley, red samphire, and sea blite. The upper cretaceous sediments of the area are almost totally covered by hummocky to kettled glacial till.²²

As the river reaches Prince Albert, and until the Forks, it traverses the Boreal Transition ecoregion. This region extends from southern Manitoba to central Alberta and is characterized by a mix of forest and farmland. Over 70% of this ecoregion is farmland, and is met with a cover of tall trembling aspen, balsam poplar, mixed herbs, and tall shrubs.²³²⁰

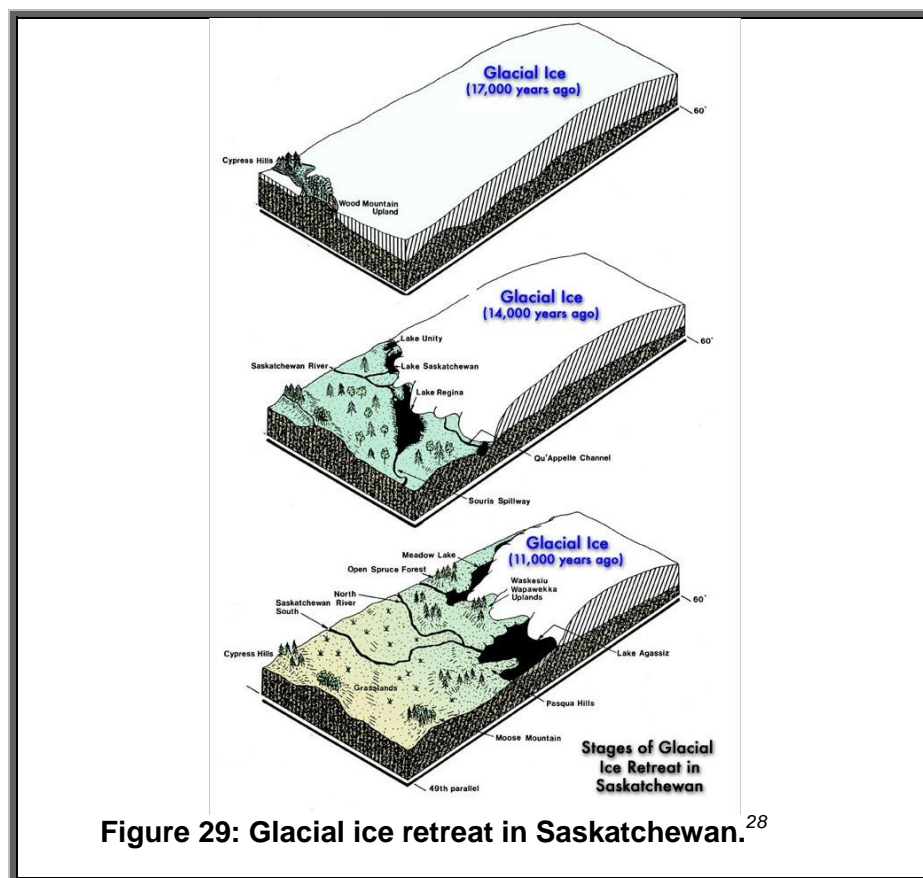
2.2 Geological Processes

The Early Precambrian Era, which marked the beginning of earth formation around 4.5 billion years ago, was a time of intense mountain building, tectonic movement, and volcanic activity. All of this activity was from the collision of two supercontinents, the Superior and the Churchill. This Era marked the last time that igneous and metamorphic rocks formed in Saskatchewan. During the Later Precambrian times, block faulting west of the mountains created rift valleys that filled with sediments. During the Palaeozoic Era, 542 to 251 million years ago, Saskatchewan was covered by a series of warm, shallow seas and water levels fluctuated multiple times over this period.²⁴

The Cretaceous Period of the Mesozoic Era had most of Saskatchewan covered by the Western Interior Seaway, a large shallow inland sea. The formation of the Rocky Mountains in the west intensified during this time, causing the interior sea to shift eastward. This exposed the land underneath as the sea shifted. During the beginning of the Tertiary Period of the Cenozoic Era, Saskatchewan was covered by moist rainforests. Over time, the changing climate shifted the province from a rainforest, to a more savannah landscape. The Quaternary Period saw five separate ice sheets

advance and retreat across North America, shaping the landscape as they went. The last of the ice had retreated from Saskatchewan around 7,000 years ago and was called the Laurentide ice sheet.²⁵

Most of Saskatchewan owes its surficial landscape to glacial erosion and deposition (Figure 29). As the glacial ice sheets advanced over the terrain, they eroded bedrock materials and transported them southward; areal scouring, roches moutonnées, and striae are all common landforms of glacial advances.²⁶ As glaciers retreat, the material that they eroded is deposited as the ice melts. Eskers, drumlins, deltas, kettle lakes, and moraines are common depositional features.²⁷ The North Saskatchewan River area does not display the erosional characteristics of glaciation as frequently, but has many depositional features.



2.3 Hydrogeology

Hydrogeology describes the geological materials that make up the river bed and surrounding valley. The property of these materials defined their interaction with water and the degree to which they retain, contain, and erode. Hydrogeology also includes groundwater aquifers: a major source of water that can influence rivers.

The entire province of Saskatchewan is underlain by crystalline Precambrian rocks of the stable North American Craton, and the southern two-thirds portion is then overlain by unmetamorphosed younger Phanerozoic Sedimentary rocks.²⁹ Most sections of the North Saskatchewan River were formed in the Upper Cretaceous Era consisting of both the Montana and Colorado groups. This puts the time frame of these rocks between 65 and 99 million years ago.³⁰

Rock types are predominantly shale (Figure 30) with the inclusion of some sandstone shale.³¹ Soil types within the river reach range in size from sub-microscopic clay particles, through silts, to sand types of up to two millimeters in diameter. Stone and gravel sized particles are also present sporadically throughout the river channel. The texture of most soils within the North Saskatchewan River are classified as loam to silt loam. Defined as a medium texture, these soils have equal portions of sand, silt, and clay sized particles (

Figure 31).³² Some portions of the river may also experience a sandier texture type of soil as well.



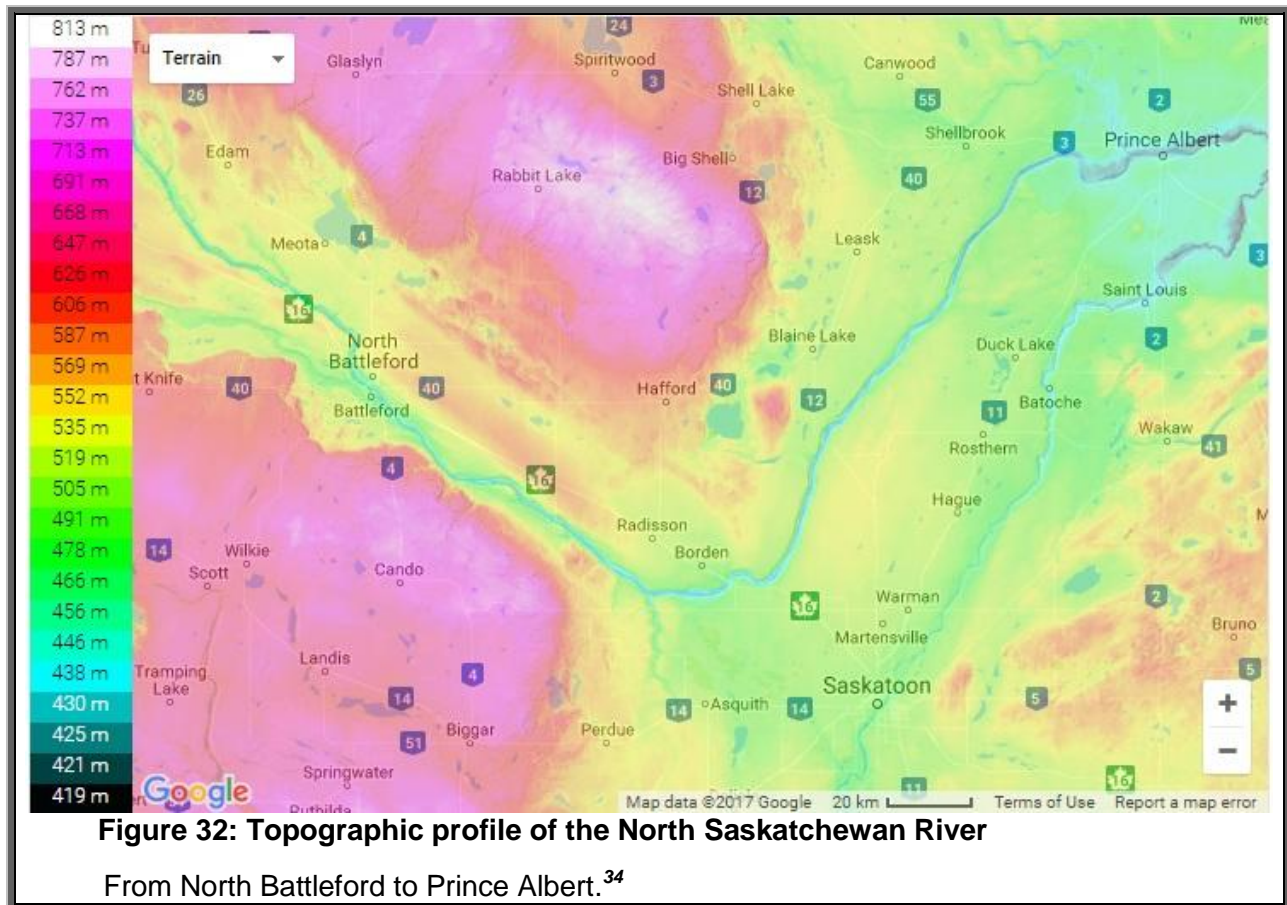
Figure 30: Different types of shale rock.³³



Figure 31: Different soil particle sizes. Photo taken from Google Images.

2.4 Topography

Topography is the general configuration of a land surface (Figure 32). There are two main factors when defining the topography of an area: relief and slopes. Relief is best defined as the extent of the river above sea level, while slopes determine a river's personality which manifests itself from the velocity of the water as it travels down its course. Gradients help determine a river's velocity, and its aesthetic qualities and recreational uses.



The Saskatchewan side of the North Saskatchewan River for both relief and gradient will be divided into four sections: from the Alberta border to North Battleford; from North Battleford to the Borden Bridge; from the Borden Bridge to Prince Albert; and from Prince Albert to the Forks where the North Saskatchewan meets the South Saskatchewan. Relief measurements were taken from an online topographic map of the North Saskatchewan River,³⁵ and distance measurements were taken from Google Earth.

From the Alberta Border to North Battleford the relief of the section ranges from 520 meters to 460 meters above sea level (a.s.l.). The length of this section is 179 kilometers which equals a gradient of 0.33 m/km

From North Battleford to the Borden Bridge the relief ranges from 485 meters to 440 meters a.s.l.. The distance is 97 kilometers and the gradient is 0.46 m/km.

The Borden Bridge to Prince Albert section has a relief range of 450 meters to 420 meters a.s.l. with a length of 157 kilometers and a gradient of 0.19 m/km.

Prince Albert to the Forks has a relief range from 420 meters to 375 meters a.s.l. and a river length of 61 kilometers. The gradient of this section is 0.74 m/km.

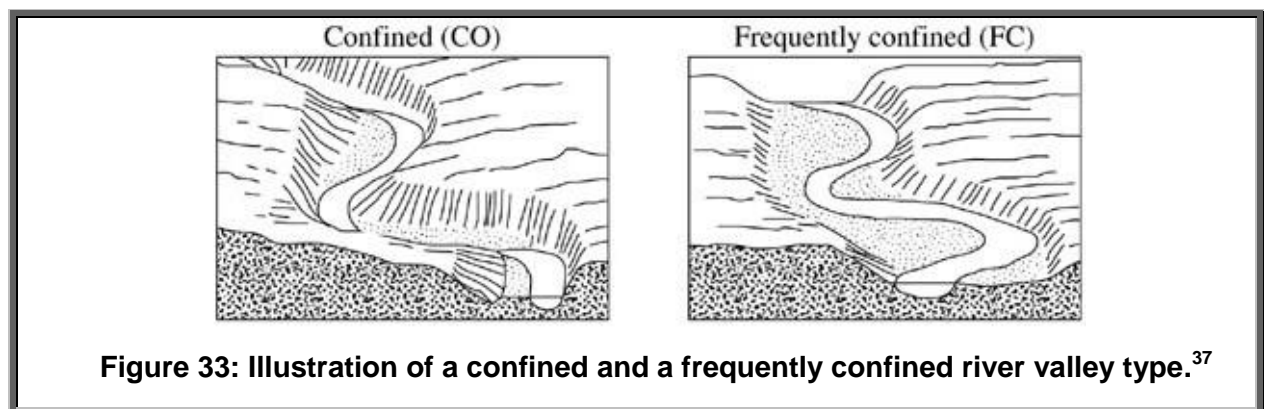
As the reliefs of the river never reach above 520 meters and the gradient always falls below 1 m/km, the North Saskatchewan River in Saskatchewan is of a shallow nature.

Theme Three: River Morphology

3.1 Valley Types

The valleys of a river reflect the geological history of its system. There are three key elements when considering the valleys of a river: valley walls, which may be concave, convex, or straight formations; valley floors, which may be non-existent or have wide flood plains; and interfluvies, which can be peaked, rounded, or flat.

The valley walls also influence the degree to which a river can move laterally.³⁶ The North Saskatchewan River has concave to straight valley walls with rounded to flat interfluvies. This leads to a confined or frequently confined river channel pattern which limits the North Saskatchewan River to lateral movement (Figure 33).



3.2 Channel Patterns

How a river travels when viewed from above can be characterized by the different patterns it has throughout its course, as well as the frequency of natural impoundments, such as lakes and ponds (Figure 34). These identifiers are primarily a reflection of the underlying geology, climatic conditions, and topographic variations.

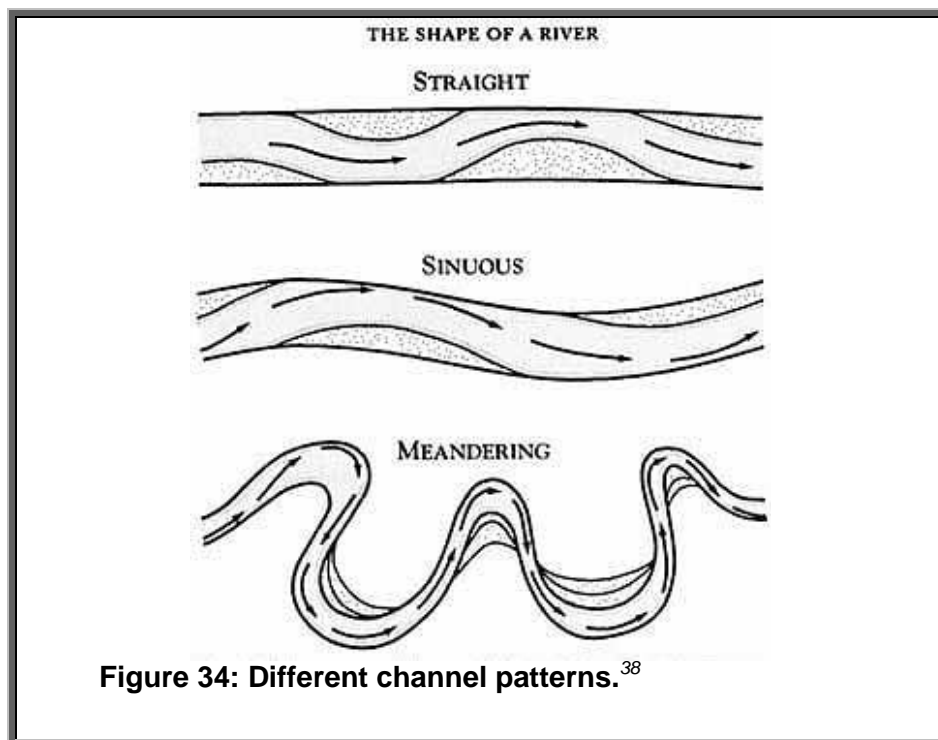


Figure 34: Different channel patterns.³⁸

The North Saskatchewan River displays several channel patterns over its course from the Alberta border to the Forks. From the border until North Battleford, the channel flows in an irregular meandering pattern, becoming sinuous as it reaches the City. After the Borden Bridge it changes from a sinuous pattern to a straight pattern as it travels to Prince Albert. It becomes sinuous again as it reaches the City of Prince Albert again displaying a classic meandering pattern as it nears the Forks.

There are two lakes that feed into the River: Turtle and Jackfish Lakes. Both are located north of North Battleford. There are also a few small, sporadic floodplain lakes throughout the channel course, but they are few and far between (Figure 35 and Figure 36).



Figure 35: A floodplain lake

Located between North Battleford and Borden. The floodplain lake may connect during high flow times.³⁹



Figure 36: A Flood plain lake located just east of North Battleford.⁴⁰

3.3 Channel Profiles

Another dimension when considering a river channel is the horizontal profile, which is the descent of the river over its course. A river's gradient is a key component that influences its velocity and personality. The number of steps, or lack thereof, in a rivers channel is the other key factor in a channel profile and it is broken up into three categories based on the amount of vertical drop: level water; white water; and waterfalls.

As the gradient of the North Saskatchewan River is below 1 m/km throughout the entire Saskatchewan section. The channel profile is classified as a level water channel; however, there is a steep drop that occurs between the City of Prince Albert and the Forks.⁴¹ This creates two sections of rapids: the Cole Rapids down from Prince Albert; and a section of rapids preceding the Forks.

There are two areas of confluence where rivers meet: The Battle River joins the North Saskatchewan River near Battleford (Figure 37); and the Forks where the North Saskatchewan merges with the South Saskatchewan to become the Saskatchewan River.



Figure 37: Confluence of Battle River with the North Saskatchewan River.⁴²

3.4 Fluvial Landforms

Fluvial landforms are the quintessential result of river flow. There are three difference forces that influence the physiography of an area: water, wind, and glacial. The result is an ever-changing array of morphological features. Fluvial landforms are either erosional or depositional. Erosional features include meander scars, oxbow lakes, waterfalls, and glacial scouring. Depositional features include levees, drumlins, and deltas.

The most prominent fluvial landform along the North Saskatchewan River is braiding landforms (Figure 38) which create islands and sandbars within the river. Some of these landforms are ever shifting, and others are more established, such as Finlayson Island in North Battleford.



As the North Saskatchewan River reaches the Forks, there is a meander scar where the river previously flowed (Figure 39). The Battlefords district shows evidence of drumlins and ridged moraines that ran perpendicular to glacial ice flow, and glacial scouring (Figure 40). There is also evidence of sand, silt, and clay accumulations that were

deposited by receding glaciers and these deposits are found in many small glacial, or kettle, lakes (Figure 41). Between the Village Laird and the Forks, there are peculiar sand dune formations that were deposited by post-glacial winds, which are the most northerly dune formations until the sand dunes south of Lake Athabasca. From the Borden Bridge to the town of Waldheim there is an interesting soil phenomena where the soil to the west of the River is a class 5 composed of very rocky and stony material, and east of the River the soil is class 1 which is desirable for crop productions.⁴⁴



Figure 39: A meander scar.

At the location where the North Saskatchewan merges with the South Saskatchewan.⁴⁵



Theme Four: Biotic Environments

4.1 Aquatic Ecosystems

Aquatic ecosystems can be divided into four basic groups: Riverine, Lake, Estuarine, and Wetland. Each reflects the river's potential to support plant and animal species. The North Saskatchewan River, in Saskatchewan, is considered a Riverine System.

Riverine systems can be further described by three different zones: the headwaters, middle, and lowland-tidal. Given the North Saskatchewan's stable discharge levels and fine sediment substrate, in the Saskatchewan section, the lowland zone is a most appropriate description.

4.2 Terrestrial Ecosystems

Terrestrial environments impact biotic ecosystems in a river. Canada has fifteen ecozones, each one identifiable by the types of flora and fauna within the region as well as its climate. The North Saskatchewan River flows across two ecozones, the Boreal Plain and the Prairies.

The Boreal Plains occur from northern Alberta to southern Manitoba. Summers are usually short and warm and winters long and cold, with mean annual temperatures around the freezing mark and precipitation between 300 and 625 millimeters.⁴⁸

The Prairies ecozone stretches across the southern parts of Alberta, Saskatchewan, and Manitoba. Agricultural development had a major impact on this region leaving very little of the original prairie ecosystem behind. The Rocky Mountains capture a large portion of the precipitation that the prairies would otherwise receive, making this zone very dry. Due to the lack of an ocean buffer, temperatures tend to vary greatly with winter average around -10°C and the summer around 15°C⁴⁸.

Flora and Fauna Ranking Systems

Given the North Saskatchewan River, in Saskatchewan, crosses three different ecoregions, there is a wide array of flora and fauna present. Land tenure, protected areas, and other conservation lands for each of the ecoregions are summarized in the chart below (Table 1):

Table 1: Land distribution of the three ecoregions of the North Saskatchewan River.⁴⁹

Ecoregion	Public/Crown Lands and Major Water Bodies	Private Lands	Regulated Protected Area (PA)	Other Conservation Lands (CL)
Aspen Parkland	13%	87%	1.5%	2.7%
Moist Mixed Grassland	17%	83%	0.8%	3.4%
Portion of Boreal Transition	52%	48%	43.7%	0.1%

Determining the significance of flora and fauna species for the North Saskatchewan River is based on a standardize ranking system set forth by NatureServe, a non-profit organization located out of Arlington Virginia USA. This system allows the Saskatchewan Conservation Data Centre to follow a repeatable and transparent procedure for categorizing the province's flora and fauna. All species listed in this report are described using this system (Table 2).⁵⁰

Ranks are based on the geographic scale considered: global, national, or subnational (local). Number from one to five indicate the risk of extirpation. The higher the number, the more common and stable that species is. Some taxon can straddle two ranking systems and therefore have both written. A question mark may follow indicating there is some uncertainty associated with it.

Table 2: Saskatchewan Conservation Data Centre ranking system for species.

Identifier	Category	Definition
1	Critically Imperiled/Extremely Rare	At very high risk of extinction or extirpation due to extreme rarity, very steep declines, high threat level, or other factors
2	Imperiled/Very Rare	At high risk of extinction or extirpation due to a very restricted range, very few populations, steep declines, threats or other factors
3	Vulnerable/Rare to	At moderate risk of extinction or extirpation due to a

	Uncommon	restricted range, relatively few populations, recent and widespread declines, threats, or other factors
4	Apparently Secure	Uncommon but not rare; some cause for long-term concern due to declines or other factors
5	Secure/Common	Demonstrably secure under present conditions; widespread and abundant; low threat level
A		Accidental or causal in the province, including species recorded frequently that are far outside their range (birds and butterflies)
B		For a migratory species, applies to the breeding population in the province
N		For a migratory species, applies to the non-breeding population in the province
M		For a migratory species, applies to the transient (migrant) population
H		Historical occurrence of the taxon, without recent verification (e.g. 20-40 years or older)
U		Status is uncertain in Saskatchewan because of limited or conflicting information (unrankable)
X		Believed to be extinct or extirpated from the province
NR		Rank is not yet assigned or species has not been assessed
NA		Conservation status is not applicable to the species (e.g. it may have been determined to have been introduced in Saskatchewan)

Theme Five: Vegetation

5.1 Significant Flora Species

Significant flora species are found in great abundance throughout the North Saskatchewan River Watershed and are represented with the Saskatchewan Conservation Data Centre local ranking of an S5. These species are assigned a low threat levels under present climate conditions. There is limited research on aquatic plants in the North Saskatchewan River. The documented species are all ranked S4 and will be placed in this category. (Table 3, Table 4, and Table 5). Each sub-section of flora species has a few images representing random species in that category (Figure 42, Figure 43, and Figure 44).

Table 3: Significant Trees and Shrubs species^{51 52}

Plant Name	Scientific Name	Global Rank	National Rank	Local Rank
White Spruce	<i>Picea glauca</i>	G5	N5	S5
Balsam Poplar	<i>Populus balsamifera</i>	G5T5	N5	S5
Paper Birch	<i>Betula papyrifera</i>	G5	N5	S5
Trembling Aspen	<i>Populus tremuloides</i>	G5	N5	S5
Bur Oak	<i>Quercus macrocarpa</i>	G5	N5	S5
Balsam Fir	<i>Abies balsamea</i>	G5	N5	S5
Black Spruce	<i>Picea mariana</i>	G5	N5	S5
Tamarack	<i>Larix laricina</i>	G5	N5	S5
Chokecherry	<i>Prunus virginiana</i>	G5T5	N5	S5
Creeping Juniper	<i>Juniperus horizontalis</i>	G5	N5	S5
Saskatoon	<i>Amelanchier alnifolia</i>	G5T5	N5	S5
Buckbrush	<i>Symphoricarpos occidentalis</i>	G5	N5	S5



Figure 42: Significant tree species in the North Saskatchewan River Basin.

Balsam Poplar⁵³ (left), Saskatoon⁵⁴ (center), and Black Spruce⁵⁵ (right).

Table 4: Significant Vascular Plants^{56 57}

Plant Name	Scientific Name	Global Rank	National Rank	Local Rank
June Grass	<i>Koeleria macrantha</i>	G5	N5	S5
Western Porcupine	<i>Stipa curtisetia</i>	G5	N5	S5

Grass				
Northern Wheatgrass	<i>Elymus glaucus</i>	G5T5	N5	S5
Slender Wheatgrass	<i>Elymus trachycaulus</i>	G5T5	N5	S5
Prairie Crocus	<i>Anemone patens</i>	G5T5	N5	S5
Plains Rough Fescue	<i>Festuca hallii</i>	G4	N4	S5
Prairie Sage	<i>Artemisia ludoviciana</i>	G5T5	N5	S5
American Milk-Vetch	<i>Astragalus americanus</i>	G5	N5	S5
Early Blue Violet	<i>Viola adunca</i>	G5T5	N5	S5
Smooth Fleabane	<i>Erigeron asper</i>	G5T5	N5	S5
Hairy Golden Aster	<i>Heterotheca villosa</i>	G5T5	N5	S5
Low Goldenrod	<i>Solidago missouriensis</i>	G5T5	N5	S5
Pale Comandra	<i>Comandra umbellata</i>	G5T5	N5	S5
Bastard Toadflax	<i>Comandra umbellata</i>	G5T5	N5	S5
Wild Red Raspberry	<i>Rubus idaeus</i>	G5T5	N5	S5
Dwarf Milkweed	<i>Asclepia ovalifolia</i>	G5?	N5	S5
Northern Bedstraw	<i>Galium boreale</i>	G5	NNR	S5
Common Horsetail	<i>Equisetum arvense</i>	G5	N5	S5
Common Yarrow	<i>Achillea millefolium</i>	G5	N5	S5



Figure 43: Significant vascular species in the North Saskatchewan River Basin.

June Grass⁵⁸ (left), Common Yarrow⁵⁹ (center), Early Blue Violet⁶⁰ (right).

Table 5: Significant Aquatic Species^{61 62}

Plant Name	Scientific Name	Global Rank	National Rank	Local Rank
Sheathed Pondweed	<i>Potamogeton vaginatus</i>	G5	N5	S4
Sago Pondweed	<i>Potamogeton pectinatus</i>	G5	N5	S4
Richardson's Pondweed	<i>Potamogeton richardsonii</i>	G5	N5	S4
Flatstem Pondweed	<i>Potamogeton zosteriformis</i>	G5	N5	S4
Hornwort	<i>Ceratophyllum demersum</i>	G5	N5	S4

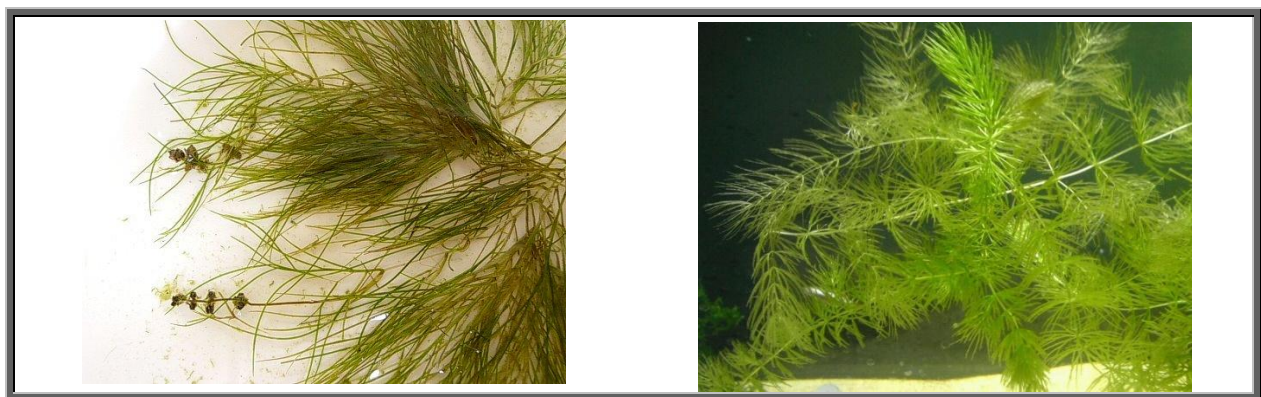


Figure 44: Significant aquatic plant species in the North Saskatchewan River Basin.

Sago Pondweed⁶³ (left), and Hornwort⁶⁴ (right).

5.2 Rare Flora Species

Rare species are plants that are uncommon in the North Saskatchewan River Watershed area due to either natural causes or by human influence. Rare species are identified by the Committee On the Status of Endangered Wildlife in Canada (COSEWIC) as being either threatened, endangered, or of special concern. They are identified as S3 or lower (Table 2) by the Saskatchewan Conservation Data Centre (Table 6). Figure 45 gives a visual representation of these rare species.

Table 6: Rare Plant Species^{65 66}

Plant Name	Scientific Name	Global Rank	National Rank	Local Rank	COSEWIC
Small Yellow Lady's Slipper	<i>Cypripedium parviflorum</i>	G5T4T5	N4N5	S3	
Indian Milk-Vetch	<i>Astragalus australis</i>	G5	N5	S3	
Slender Mouse-ear Cress	<i>Transberingia bursifolia</i>	G4	N1N2	S1	Threatened



Figure 45: Rare plant species in the North Saskatchewan River Basin.

Small Yellow Lady's Slipper⁶⁷ (left), Indian Milk Vetch⁶⁸ (center), Slender Mouse-Ear Cress⁶⁹ (right).

Theme Six: Fauna

6.1 Significant Animal Populations

The North Saskatchewan River and Basin are home to many significant fauna species.⁷⁰ Similar to the ranking system with flora species, significant fauna species are identified as those having numbers in great abundance: S5 ranking from the Saskatchewan Conservation Data Centre (Table 2). These species are very secure in numbers in the current environmental conditions. Bird species that have an S5 rank in either breeding, non-breeding, transient, or a mix of the three, are included as

significant species. Table 7, Table 8, Table 9, and Table 10 outline the different fauna groups and their significance in the Watershed. Each category of animal species has a few pictures to accompany the chart (Figure 46, Figure 47, Figure 48, Figure 49, Figure 50, Figure 51, and Figure 52)

Table 7: Significant Bird/Waterfowl Species^{71 72}

Species Name	Scientific Name	Global Rank	National Rank	Local Rank
Gray Jay	<i>Perisoreus canadensis</i>	G5	N5	S5
Sharp-Tailed Grouse	<i>Tympanuchus phasianellus</i>	G5	N5	S5
Ruddy Duck	<i>Oxyura jamaicensis</i>	G5	N5B	S5B
Great Blue Heron	<i>Ardea herodias</i>	G5	N5B	S5B
American Bitten	<i>Botaurus lentiginosus</i>	G5	N5B,N3N	S5B
Bufflehead	<i>Bucephala albeola</i>	G5	N5B,N5N	S5B,S1N,S3M

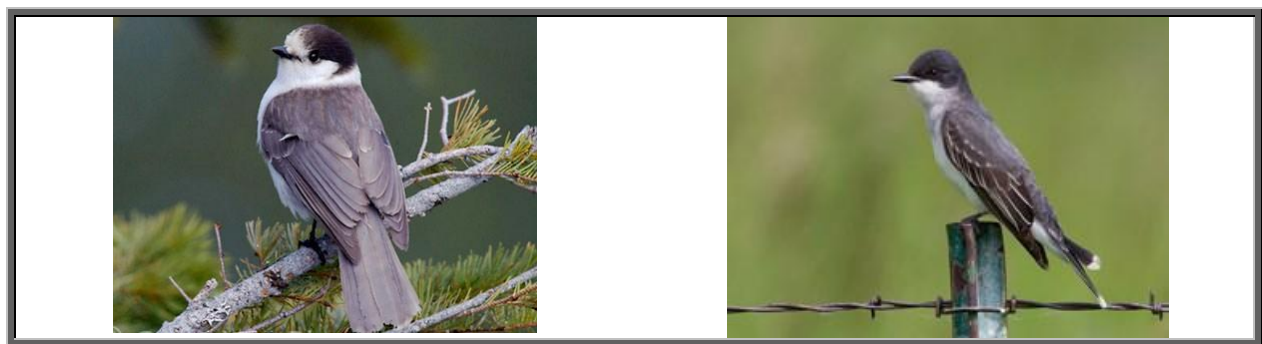


Figure 46: Significant birds in the North Saskatchewan River Basin.

Gray Jay⁷³ (left), and Eastern Kingbird⁷⁴ (right).

American Wigeon	<i>Anas americana</i>	G5	N5B,N5N	S5B,S2N,S5M
Green-Winged Teal	<i>Anas crecca</i>	G5	N5B,N5N	S5B,S2N,S5M
Redhead	<i>Aythya americana</i>	G5	N5B,N5N	S5B,S2N,S5M
Canvasback	<i>Aythya valisineria</i>	G5	N5B,N4N	S5B,S2N,S5M
Common Goldeneye	<i>Bucephala clangula</i>	G5	N5B,N5N	S5B,S3N,S3M
Lesser Scaup	<i>Aythya affinis</i>	G5	N5B,N5N	S5B,S3N,S5M

Solitary Sandpiper	<i>Tringa solitaria</i>	G5	N5B	S5B,S4M
Northern Pintail	<i>Anas acuta</i>	G5	N5B,N5N	S5B,S4N,S5M
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	G5	N5B	S5B,S5M
Least Flycatcher	<i>Empidonax minimum</i>	G5	N5B	S5B,S5M
Western Kingbird	<i>Tyrannus verticalis</i>	G5	N5B	S5B,S5M
Yellow Warbler	<i>Setophaga petechia</i>	G5	N5B	S5B,S5M
White-Throated Sparrow	<i>Zonotrichia albicollis</i>	G5	N5B	S5B,S5M
American Redstart	<i>Setophaga ruticilla</i>	G5	N5B	S5B,S5M
Ovenbird	<i>Seiurus aurocapilla</i>	G5	N5B	S5B,S5M
Hermit Thrush	<i>Catharus guttatus</i>	G5	N5B	S5B,S5M
Eastern Kingbird	<i>Tyrannus tyrannus</i>	G5	N5B	S5B,S5M
Yellow-Headed Blackbird	<i>Xanthocephalus xanthocephalus</i>	G5	N5B	S5B,S5M
House Wren	<i>Troglodytes aedon</i>	G5	N5B	S5B,S5M
American Coot	<i>Fulica americana</i>	G5	N5B	S5B,S5M
American White Pelican	<i>Pelecanus erythrorhynchos</i>	G4	N3N4B	S5B,S5M
Red-Tailed Hawk	<i>Buteo jamaicensis</i>	G5	N5B	S5B,S1N,S5M
Canada Goose	<i>Branta canadensis</i>	G5	N5B,N5N	S5B,S2N,S5M
Gadwall	<i>Anas strepera</i>	G5	N5B,N4N	S5B,S2N,S5M



Figure 47: Significant Waterfowl in the North Saskatchewan River Basin.

Northern Pintail⁷⁵ (left), Gadwall⁷⁶ (center), and American Coot⁷⁷ (right).

Black Tern	<i>Chlidonia riger</i>	G4G5	N4N5B	S5B,S5M
Ring-Billed Gull	<i>Larus delawarensis</i>	G5	N5B,N5N	S5B,S5M
Pied-Billed Grebe	<i>Podilymbus podiceps</i>	G5	N5B	S5B,S5M
Red-Necked Grebe	<i>Podiceps grisegena</i>	G5	N5B,N5N	S5B,S5M
Mallard	<i>Anas platyrhynchos</i>	G5	N5B,N5N	S5B,S5M
Blue-Winged Teal	<i>Anas discors</i>	G5	N5B	S5B,S5M
Ring-Necked Duck	<i>Aythya collaris</i>	G5	N5B,N5N	S5B,S5M
Sora	<i>Porzana carolina</i>	G5	N5B	S5B,S5M
Tree Swallow	<i>Tachycineta bicolor</i>	G5	N5B	S5B,S5M
Purple Martin	<i>Progne subis</i>	G5	N5B	S5B,S5M
Savannah Sparrow	<i>Passerculus sandwichensis</i>	G5	N5B	S5B,S5M
Song Sparrow	<i>Melospiza melodia</i>	G5	N5B,N5N	S5B,S5M
Greater Yellowlegs	<i>Tringa melanoleuca</i>	G5	N5B	S5B,S5M
Killdeer	<i>Charadrius vociferus</i>	G5	N5B	S5B,S5M
Bald Eagle	<i>Haliaeetus leucocephalus</i>	G5	N5B,N5N	S5B,S5N,S4M
Red-Winged Blackbird	<i>Agelaius phoeniceus</i>	G5	N5B,N5N	S5B,SUN,S5M
Tundra Swan	<i>Cygnus columbianus</i>	G5	N5B,N3N4N	S5M
Snow Goose	<i>Chen caerulescens</i>	G5	N5B	S5M
Greater White-Fonted Goose	<i>Anser albifrons</i>	G5	N5B	S5M



Figure 48: Significant birds/waterfowl of the North Saskatchewan River Basin.

Purple Martin⁷⁸ (left), Tree Swallow⁷⁹ (center), and Sora⁸⁰ (right).

As Table 7 depicts, the North Saskatchewan River hosts a large variety of bird species, many of which use the river and surrounding areas to breed. Breeding within perimeters of the North Saskatchewan River are vital to some species (such as the Red-Tailed Hawk), as the non-breeding populations displays a very low ranking by the Saskatchewan Conservation Data Centre (Table 2). The species listed above are the ones found in great abundance. There are many other species of bird (with a ranking of less than S5) found within the North Saskatchewan River area.

Table 8: Significant Fish Species⁸¹

Species Name	Scientific Name	Global Rank	National Rank	Local Rank
Northern Pike	<i>Esox lucius</i>	G5	N5	S5
Walleye	<i>Sander vitreus</i>	G5	N5	S5
Whitefish	<i>Coregonus clupeaformis</i>	G5	N5	S5
Burbot	<i>Lota lota</i>	G5	N5	S5
Sauger	<i>Sander canadensis</i>	G5	N5	S5
Yellow Perch	<i>Perca flavescens</i>	G5	N5	S5
Brook Stickleback	<i>Culaea inconstans</i>	G5	N5	S5
Fathead Minnow	<i>Pimephales promelas</i>	G5	N5	S5
Iowa Darter	<i>Etheostoma exile</i>	G5	N5	S5
Lake Chub	<i>Couesius plumbeus</i>	G5	N5	S5
Longnose Dace	<i>Rhinichthys calaractae</i>	G5	N5	S5
Longnose Sucker	<i>Catostomus catostomus</i>	G5	N5	S5

Pearl Dace	<i>Margariscus nachtriebi</i>	G5	N5	S5
Spoonhead Sculpin	<i>Cottus ricei</i>	G5	N5	S5
Spottail Shiner	<i>Notropis hudsonius</i>	G5	N5	S5
Trout-Perch	<i>Percopsis omiscomaycus</i>	G5	N5	S5

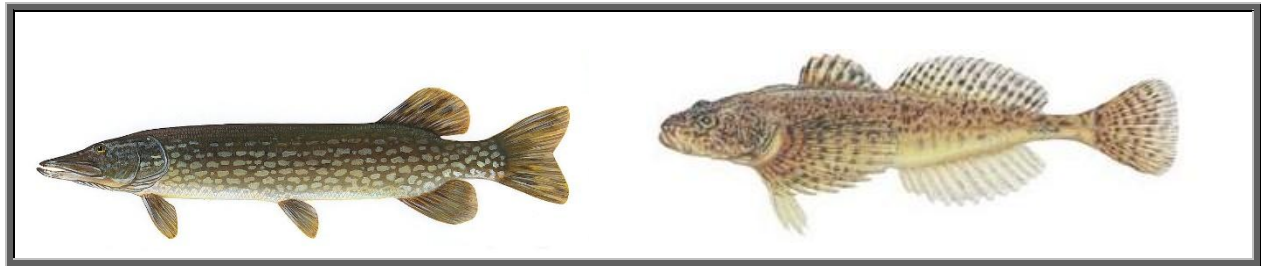


Figure 49: Significant fish species of the North Saskatchewan River.

Northern Pike⁸² (left), and Spoonhead Sculpin⁸³ (right).

The variety of fish species found within adds to the importance of the River. As with all species listed in this section, the listed fish are all ones that are found in great abundance. There are many other species with an S4 ranking or lower that can be found in the River. Given that angling is a great pastime for locals and attracts people from outside Saskatchewan, having a large variety of fish is significant to the North Saskatchewan River.

Table 9: Significant Amphibian/Reptile Species^{84 85 86}

Species Name	Scientific Name	Global Rank	National Rank	Local Rank
Red-Sided Gartersnake	<i>Thamnophis sirtalis parietalis</i>	G5T5	N5	S5
Western Plains Gartersnake	<i>Thamnophis radix haydenii</i>	G5T5	N5	S5
Wood Frog	<i>Lithobates sylvaticus</i>	G5	N5	S5



Figure 50: Significant amphibians in the North Saskatchewan River Basin.

Wood Frog⁸⁷ (left), Western Plains Garter Snake⁸⁸ (center), and Red-Sided Garter Snake⁸⁹ (right).

Table 10: Significant Mammal Species^{90 91 92 93}

Species Name	Scientific Name	Global Rank	National Rank	Local Rank
Hoary Bat	<i>Lasiurus cinereus</i>	G3G4	N5	S5B
Silver-Haired Bat	<i>Lasionycteris noctivagans</i>	G3G4	N5	S5B
Big Brown Bat	<i>Eptesicus fuscus</i>	G5	N5	S5
North American Beaver	<i>Castor canadensis</i>	G5	N5	S5
Least Chipmunk	<i>Tamias minimus</i>	G5	N5	S5
Coyote	<i>Canis latrans</i>	G5	N5	S5
Snowshoe Hare	<i>Lepus americanus</i>	G5	N5	S5
Red Fox	<i>Vulpes vulpes</i>	G5	N5	S5
Richardson's Ground Squirrel	<i>Urocitellus richardsonii</i>	G5	N5	S5
Moose	<i>Alces americanus</i>	G5	N5	S5
Northern Pocket Gopher	<i>Thomomys talpoides</i>	G5	N5	S5
Southern Red-Backed Vole	<i>Clethrionomys gapperi</i>	G5	N5	S5
Muskrat	<i>Ondatra zibethicus</i>	G5	N5	S5
Deer Mouse	<i>Peromyscus leucopus</i>	G5	N5	S5
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	G5	N5	S5
Franklin's Ground Squirrel	<i>Poliocitellus franklinii</i>	G5	N5	S5

Meadow Jumping Mouse	<i>Zapus hudsonius</i>	G5	N5	S5
Raccoon	<i>Procyon lotor</i>	G5	N5	S5
Short-Tailed Weasel	<i>Mustela erminea</i>	G5	N5	S5
Least Weasel	<i>Mustela nivalis</i>	G5	N5	S5
American Mink	<i>Neovison vison</i>	G5	N5	S5
Striped Skunk	<i>Mephitis mephitis</i>	G5	N5	S5
Black Bear	<i>Ursus americanus</i>	G5	N5	S5

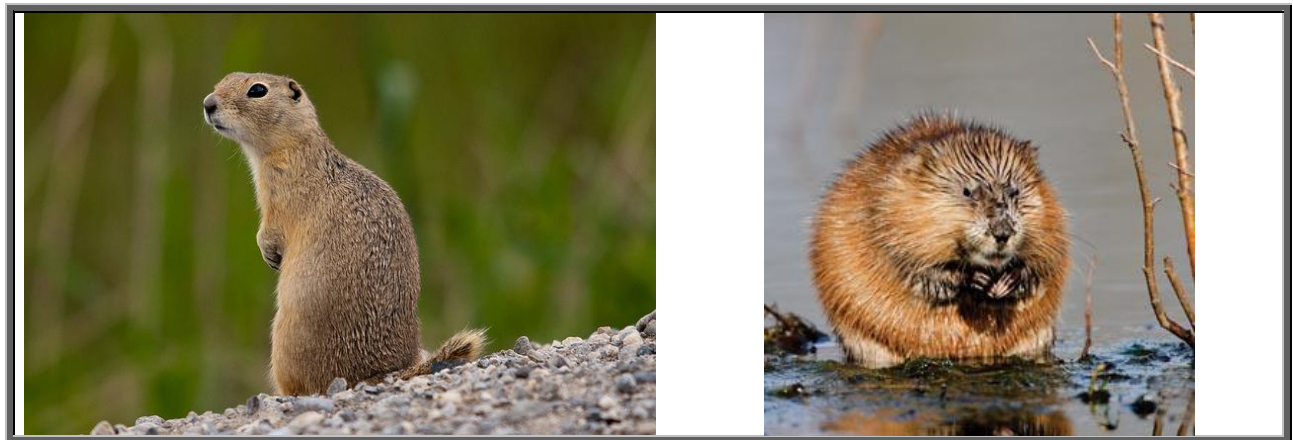


Figure 51: Significant mammals in the North Saskatchewan River Basin.

Richardson's Ground Squirrel⁹⁴ (left), and Muskrat⁹⁵ (right).



Figure 52: Significant Weasels in the North Saskatchewan River Basin.

Short-Tailed Weasel⁹⁶ (left), and American Mink⁹⁷ (right).

6.2 Rare Fauna Species

Rare fauna species are animals that are identified by COSEWIC as being endangered, threatened, or of special concern, or have a local ranking from the Saskatchewan Conservation Data Centre of S3 or lower (Table 11). Figure 53 and Figure 54 give a visual representation of a few of these rare species.

Table 11: Rare Fauna Species^{98 99}

Species Name	Scientific Name	Global Rank	National Rank	Local Rank	COSEWIC
Peregrine Falcon	<i>Falco peregrinus anatum</i>	G4T4	N3N4B	S1B,SNRM	Special Concern
Plain's Bison	<i>Bos bison bison</i>	G4T4	N3N4	S2	Threatened
Lake Sturgeon	<i>Acipenser fulvescens</i>	G3G4	N3N4	S2	Endangered
Wolverine	<i>Gulo gulo</i>	G4T4	N3N4	S2	Special Concern
Cougar	<i>Puma concolor</i>	G5	N4N5	S2	
Burrowing Owl	<i>Athene cunicularia</i>	G4T4	N2B	S2B,S2M	Endangered



Figure 53: Rare fauna species in the North Saskatchewan River Basin.

Lake Sturgeon¹⁰⁰ (left), and American Badger¹⁰¹ (right).

Woodland Caribou	<i>Rangifer tarandus caribou</i>	G5T5	N5	S3	Threatened
Pronghorn	<i>Antilocapra americana</i>	G5	N4	S3	
American Badger	<i>Taxidea taxus taxus</i>	G5T5	N5	S3	Special Concern
Mooneye	<i>Hiodon tergisus</i>	G5	N5	S3	
Flathead Chub	<i>Platygobio gracilis</i>	G5	N5	S3	

Northern Redbelly Dace	<i>Chrosomus eos</i>	G5	N5	S3	
River Shiner	<i>Notropis blenni</i>	G5	N3N4	S3	
Northern Leopard Frog	<i>Lithobates pipiens</i>	G5	N5	S3	Special Concern
River Otter	<i>Lontra canadensis</i>	G5	N5	S3	
Piping Plover	<i>Charadrius melodus circumcinctus</i>	G3T3	N3B	S3B	Endangered
Yellow Rail	<i>Coturnicos noveboracensis</i>	G4T4	N4B	S3B,S3M	Special Concern
Little Brown Bat	<i>Myotis lucifugus</i>	G3	N3	S4	Endangered
Barred Tiger Salamander	<i>Ambystoma mavortium</i>	G5	N5	S4	Special Concern
Bank Swallow	<i>Riparia riparia</i>	G5	N5B	S4B,S5M	Threatened
Barn Swallow	<i>Hirundo rustica</i>	G5	N4NN5B	S5B,S5M	Threatened
Horned Grebe	<i>Podiceps auritus</i>	G5	N5B	S5B,S5M	Special Concern



Figure 54: Rare birds in the North Saskatchewan River Basin.

Burrowing Owl¹⁰² (left), and Piping Plover¹⁰³ (right).

As Table 11 shows, there are a number of rare species that use the North Saskatchewan River and surrounding areas, whether for year-round habitat, or migratory/breeding grounds. In recognizing the importance of the North Saskatchewan River, and declaring it a national historic river, interest groups, organizations, and stakeholders can be made more aware of these species at risk and can help secure population numbers. An increase in awareness may help populations grow.

Conclusion

In order to achieve the Canadian Heritage River designation, the river being considered must satisfy a number of guidelines, as outlined in the Canadian Heritage River Systems Natural Values Framework. Not only does the North Saskatchewan River have outstanding representation of these values as identified below, but it contributes to the under-represent value identified in the 2010 Gap Analysis Report of eutrophic lakes, with the connecting tributary of Jackfish River; connecting the eutrophic Jackfish and Murray Lakes to the North Saskatchewan River.

Canadian Heritage Rivers Natural Values Framework Guidelines:

Guideline 1. Is an outstanding example of river environments as they are affected by the major stages and processes in the earth's evolutionary history which are represented in Canada.

The landscape of the North Saskatchewan River tells the outstanding story of the walk and eventual fall of the glacial ice sheets that covered the interior plains. These glaciers shaped not only the landscape but the fertile soils that support our nation and world with staple grains. It is here that the North Saskatchewan River traverses, among many other landforms that tell of times past. These formations include drumlins, moraines, and the many kettle lakes that share the story of the passing ice age. The North Saskatchewan River reflects an outstanding examples of major evolutionary processes and history.

Guideline 2. Is an outstanding representation of significant ongoing fluvial, geomorphological and biological processes.

Along the North Saskatchewan River are numerous examples of fluvial landforms. The river displays braiding, meandering scars, and post glacial sand dunes.

The channel formation which occurs in the river is also notably diverse. All three channel patterns, meander, sinuous and straight, occur throughout its course. Because of the diversity found within its length, the North Saskatchewan has significant representation of values that satisfy guideline two.

Guideline 3. Contains along its course unique, rare or outstanding examples of natural phenomena, formations or features.

One natural phenomenon found is the contrast in soil classes, from one side of the river to the other. Where downstream of the river bend is the highly productive and desired class 1 soils on the east and the stonier, poorer class 5 soils opposite on the west. A truly bizarre occurrence that speaks to the unique circumstances of glacial till deposition and sorting processes.

Guideline 4. Contains along its course habitats of rare or endangered species of plants and animals including outstanding concentrations of plants and animals of Canadian interest and significance.

Guideline 4 is met by the many representations outlined above of rare and endangered species of plants and animals as shown in Table 6 and *Table 11*. Well known at-risk species such as the lake sturgeon, burrowing owl, piping plover, little brown bat, peregrine falcon, woodland caribou, plains bison and the wolverine all rely on the habitat of the North Saskatchewan River and surrounding area to sustain their populations. At-risk flora include the slender mouse-ear cress, indian milk-vetch, and small yellow lady's slipper. The list of significant species that are of interest to Canadians makes the case for the importance of the Heritage Rivers Designation of the North Saskatchewan River.

Endnotes

- ¹ Saskatchewan Watershed Alliance. 2005.
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- ⁶ Water Security Agency. n.d.
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- ³⁹ Source: "Floodplain Lake Between North Battleford and Borden." 50°35'55.02"N and 107°49'15.24"W. Google Earth. May 12, 2011. February 2, 2017.
- ⁴⁰ Source: "Floodplain Lake East of North Battleford." 52°40'49.50"N and 108°12'46.44"W. Google Earth. May 12, 2011. February 2, 2017.

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- ⁴² Source: "Battle River Confluence." 52°42'45.36N and 108°15'01.62"W. Google Earth. May 12, 2011. February 2, 2017.
- ⁴³ Source: "Braided Landforms Along the North Saskatchewan River." 52°39'02.54"N and 108°07'30.00"W. Google Earth. May 12, 2011. February 2, 2017.
- ⁴⁴ Saskatchewan Watershed Alliance. 2002
- ⁴⁵ Source: "Meander Scar Near Forks." 53°15'05.80"N and 105°07'39.14"W. Google Earth. February 2, 2017.
- ⁴⁶ Source: "Glacial Scouring Near North Battleford." 52°49'10.88"N and 108°15'43.15"W. Google Earth. May 12, 2011. February 3, 2017.
- ⁴⁷ Source: "Kettle Lakes East of Prince Albert." 53°13'44.30"N and 105°28'57.82"W. Google Earth. April 1, 2012. February 6, 2017.
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Chapter Four: Recreational Values

Introductions

The North Saskatchewan River is one of the few remaining rivers in North America that is lightly utilized by today's society. This allows its users to enjoy the river in its natural state and provides a great demonstration of its historic heritage. The North Saskatchewan watershed also provides many opportunities for water based activities which attract large numbers of visitors to the area. While tourism is not calculated on an area basis, the West Central Saskatchewan Tourism Region, which encompasses most of the North Saskatchewan River watershed, generated approximately \$75.8 million in 2003.¹ Table 12 below gives a list as to some of the activities people can enjoy throughout the year, some directly on the river, and others in close proximity.

Table 12: Recreational activities in and around the North Saskatchewan River.²

Skiing	Canoeing
Hiking	Zip Lining
Fishing	Long boarding
Snow Mobile	Backpacking
Snow Boarding	Horse Packing
Mountain Biking	Kayaking
Camping	Sledding/Tobogganing
Bird Watching	Hunting
Boating	Swimming

Sport Fishing

One eighth of Saskatchewan is water and over 50,000 of the water bodies found in the province are fish bearing.³ There are approximately sixty-seven different species of fish identified, fifty-eight of which are native to this province.⁴ One third of the fish species found in Saskatchewan can be classified as sportfish: desired by anglers.⁵ The most common type of sportfish that are found in the North Saskatchewan River are: Walleye(*Stizostedion vitreum*), Sauger (*Stizostedion canadense*), Yellow Perch (*Perca flavescens*), Northern Pike (*Esox lucius*), Goldeye (*Hiodon alosoides*), White Sucker

(*Catostomus commersoni*), Shorthead Redhorse (*Moxostoma macrolepidotum*), Longnose Sucker (*Catostomus catostomus*), Lake Sturgeon (*Acipenser fulvescens*), Burbot (*Lota lota*)⁶. Reports from 1986 state that over 6000 anglers per day were on the North Saskatchewan River.⁷ Twenty-seven different fish species were captured in 1986 which was more than double the amount captured in 1958, This was attributed to improvements in water quality from changes to municipal and industrial effluent regulations.⁸

Fishing is an outdoor activity that attracts many tourists to the province and generates great tourism income. During the summer months, fisherman take to fishing off boats on lakes, and in the winter, ice fishing is a great pastime. Along with fishing in one of the many lakes within the North Saskatchewan River Basin, fishing can be done along the river itself, whether off boats or along the shoreline. Anglers must be in possession of a fishing licence and must follow the catch limits provided by the government of Saskatchewan. Saskatchewan provides a yearly angler's guide for more information.

Hiking/Backpacking

Most parks located in the North Saskatchewan River Watershed provide hiking trails of different intensity and lengths. There are many other options that can provide the same services as parks. The Battlefords area, including the city of North Battleford and the town of Battleford, provide an abundance of naturalized trails and walking tours along the river that are perfect for beginners or for those looking for more of a challenge. The City of Prince Albert also has walking trails adjacent to the river for people to enjoy. Other popular hiking trails include an unmarked trail hike just east of the Borden Bridge, hiking trails adjacent to the Petrofka Bridge, and the Crooked Bush just outside of Hafford which has a marvellous display of crooked trees (Figure 55). Hiking and backpacking is a great activity that allows for the enjoyment of being out in nature, combined with enough physical activity to get the heart pumping. Tourism Saskatchewan and Sask Hiker are great online websites that will provide the locations of many different hiking trails across the whole province.



Figure 55. Crooked Trees of Saskatchewan.⁹

Canoeing/Kayaking

Canoeing or kayaking down the North Saskatchewan River allows for an individual to observe the surrounding landscape from a perspective that reaches far into the past. It provides a calming atmosphere that connects one to the environment while providing physical activity at the same time. When travelling down the North Saskatchewan River, there are numerous stops for canoers/kayakers. The cities of North Battleford and Prince Albert have multiple accesses, the Glenburn Regional Park is popular and accesses at the multiples bridge crossings are attractive sites for exploration and rest. For those looking for more of a challenge there are two areas of rapids downstream of Prince Albert that individuals can enjoy. Along with the North Saskatchewan River, there are many lakes in the area where canoeing or kayaking is also encouraged to get people out and enjoying nature.

Skiing/Snowboarding

Winter should never defer the enjoyment and beauty the North Saskatchewan River and its watershed provides. Unsuspecting to newcomers to the prairies, the relief created by the river valley provides winter long enjoyment of skiing and snowboarding. Table Mountain Regional Park, just sixteen kilometers west of the Battlefords, provides valued winter fun for many across Saskatchewan.

There are also numerous cross country ski runs that fulfill the desire for fresh air and exercise, facilitating health over the winter months. Finlayson Island, also located in the Battlefords District, provides around fourteen kilometers of cleared and marked cross-country skiing trails. Other popular cross country ski sites include the Little Red River regional park, and trails that are maintained in the Nisbit provincial forest.

Camping/Parks

There are many locations throughout the North Saskatchewan River Watershed that provide camping opportunities. Most parks, whether regional, provincial, or national, offer campsites to locals and tourists alike. There are other types of campsites available to get a different type of camping experience, such as the David Laird or Eiling Kramer in the Battlefords. Most parks found in the North Saskatchewan River Watershed provide many of the activities listed in Table 12 which makes them perfect for recreation. Below are lists of the numerous parks found in the North Saskatchewan River Basin grouped by designation: Regional,¹⁰ Provincial and National.



Sandy Beach	Silver Lake	Atton's Lake
Little Loon	Glenburn	Redberry
Emerald Lake	Martins Lake	Canwood
Meota	Little Red River	Memorial Lake
Wilkie	Meeting Lake	Eagle Creek
Brightsand Lake	Morin Lake	Sturgeon Lake



Battlefords Provincial Park	Fort Pitt Provincial Park
Bronson Forest Provincial Park	Makawa Lake Provincial Park
Fort Carlton Provincial Park	Emma Lake Provincial Park



Prince Albert National Park

Horse Packing

A world renowned experience not to be missed is the Sturgeon River Ranch guided horse packing tour through the Prince Albert National Park (Figure 56). This trek connects users to the preserved wilderness of the park. The lucky ones are able to capture a glance of one of the few remaining wild bison herds that reside in the national park.



Figure 56: Sturgeon River Ranch horseback tours¹¹

Other Points of Interest

Along with all the outdoor activities, there are many historic sites and museums that tourists can visit to learn about the First Nations, settlers, and agriculture that assemble this province's history. Table 13 provides a list of most museums and historic sites found within the North Saskatchewan Basin.

Table 13: Historic Sites and Museums of the North Saskatchewan River Basin^{12 13}

Western Development Museum	Fred Light Museum
Frenchman Butte Museum	Bresaylor Heritage Museum
Langham and District Heritage Village and Museum	Borden District and Museum
Prince Albert Historical Museum	Frenchman Butte National Historic Site
Lashburn Centennial Museum	Clayton McLain Memorial Museum
Fort Battleford National Historic Site	Fort Carlton Provincial Historic Park
Fort Pitt Provincial Historic Park	

If museums and history do not appeal, there are many other recreational activities in the area. There is the Gold Eagle Casino in North Battleford, and the Northern Lights

Casino in Prince Albert. Apart from casino-like activities, both facilities host many other events throughout the year. There are also many festivals and Pow Wows in the North Saskatchewan River Basin communities throughout the year.

Just southwest of the Battlefords is the Big Rock Rubbing Buffalo Site, which was a landmark for early pioneers and Mounted Police travelling between Battleford, SK and Sounding Lake, AB.¹⁴ From August to October, tourists can enjoy the Bulldog Park Corn Maize, located in Cut Knife or the Rosthern Youth Farm Bible Camp Corn Maze (Figure 57) along with other activities for families to experience. The Cochin Lighthouse and Edam Windmill are a couple of other attractions that give spectacular views and recognition of historic events. Within the waters of Turtle Lake there is a legend of a mysterious creature that, on average, one boater a year claims to have seen. It may garner some interest to try and get a glimpse at the creature which has alluded locals for decades.¹⁵



Figure 57: Rosthern Youth Farm Bible Camp corn maze.¹⁶

Conclusion

The North Saskatchewan River and surrounding area offer an expansive range of diverse recreational activities. There are diverse physical activities that can be enjoyed from right on the river, to the immediate valley system, and the surrounding watershed.

Recreation is not only linked to physical activity but there are many other types that allow individuals to experience re-created historic events or historic natural settings. This allows people to link to the past and soak in the landscape and environments that contribute to today's society and culture. The North Saskatchewan River, being underutilized, is a rare resource that links us to the past. The many diverse and well preserved activities and spectacular destinations make the North Saskatchewan River a prime candidate for the Canadian Heritage River Systems designation.



End Notes

- ¹ North Saskatchewan River Basin Council. 2013.
- ² Ibid.
- ³ Saskatchewan Watershed Authority. n.d.
- ⁴ Ibid.
- ⁵ Ibid.
- ⁶ Ibid.
- ⁷ Merkowsky, J.J. 1987.
- ⁸ Ibid.
- ⁹ Crooked Trees of Saskatchewan.
- ¹⁰ Clancy, M and Clancy. 2006.
- ¹¹ Sturgeon River Ranch horseback tour
- ¹² Virtual Saskatchewan. 2017.
- ¹³ Tourism Saskatchewan. 2017.
- ¹⁴ Big Rock Buffalo Rubbing Stone.
- ¹⁵ Turtle Lake Monster.
- ¹⁶ Rosthern Youth Farm Bible Camp corn maze.

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