

North Saskatchewan River in Alberta, Heritage River Designation Document:

‘Living strategy’ Concept Plan

kisiskâciwani-sîpiy (swift-flowing river)

Omaka-ty (the big river)



**Canadian
Heritage Rivers
System**

**Réseau des
rivières du patrimoine
canadien**

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Acknowledgments:



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Land Acknowledgment:

In the spirit of respect and reciprocity, we acknowledge that the lands within the North Saskatchewan River watershed are in Treaty 6, Treaty 8, and the Métis Homeland. Additionally, Nations from Treaty 7 and beyond also have a traditional and enduring relationship with the North Saskatchewan River. These lands are the traditional territories and gathering places of diverse First Nations, Métis, and Inuit peoples. We recognize the contributions of Indigenous peoples who have cared for this land since time immemorial and whose rich histories, cultures, languages, and presence continue to enrich these sacred lands we all steward as Treaty People.



Treaty 6



Treaty 7



Treaty 8

Project Consulting Team:



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Executive Summary

kisiskâciwani-sîpiy (The North Saskatchewan River) in Alberta was nominated in 2021. This river reflects remarkable cultural, recreational, and natural heritage values. Designation will honour its significance to many Indigenous peoples, Albertans, and Canadians.

The Canadian Heritage Rivers System (CHRS) is a national program that acknowledges the values of heritage rivers across Canada. It supports long-term stewardship of river values for the benefit and enjoyment of Canadians. The CHRS tells the stories of Canada and rivers from coast-to-coast-to-coast, including the history of Indigenous Peoples. This story is about the North Saskatchewan River in Alberta – also known as kisiskâciwani-sîpiy ('swift-flowing river') in Cree, and Omaka-ty ('the big river') in Blackfoot.

To achieve designation, the CHRS requires proponents to submit a designation document outlining an action-oriented strategy that links a vision, principles, goals, and Initiatives. The intent is for this strategic, integrated blueprint to function for years to come, fostering greater recognition, stewardship, and promotion of the heritage of this timeless river.

Diverse, dynamic heritage values are embodied in kisiskâciwani-sîpiy, which deeply influence the identity, culture, and sense of place for many people, including First Nations and Métis, and

other Albertans Canadians, and newcomers. The river played a critical role in the fur trade for centuries, and strongly influenced settlement patterns, land use, and architecture. The cultural, recreational, and natural heritage values of this river fill many strategic gaps in the Canadian Heritage Rivers System. These include geographic gaps in the Prairies and Boreal Plain, and thematic gaps related to Indigenous-European conflict & cooperation, agriculture, and proximity to urban populations.

The heritage integrity of the river is remarkably intact and showing improving trends in recent decades. Water quality improvements, and a dramatic recent recovery of lake sturgeon populations has been observed in recent years. The number of people with easy access to the river to appreciate its heritage is also increasing rapidly, due to strong population growth in the Edmonton region, as well as the rebounding tourism industry. Although vulnerable to degradation, many remain hopeful that with collaborative stewardship, the river's conditions and associated heritage values can be improved further for future generations.

Ultimately, this report finds the heritage values of the North Saskatchewan River largely intact and growing in importance. There remains strong support for designation among Indigenous communities, the provincial government, municipalities, industry, landowners, and the public. Their collective efforts - guided by this strategic blueprint - will help strengthen and maintain the river's heritage values over time, in a more integrated, action-oriented fashion to achieve the vision that:

“kisiskâciwani-sîpiy’s diverse heritage values are recognized and stewarded, strengthening thriving communities connected by the river’s landscapes and history.”

Smoky Lake County and the North Saskatchewan Watershed Alliance (NSWA) will act as the lead organizations reporting to the Province of Alberta and the Canadian Heritage Rivers Board (CHRB) in the future. They will collaborate and gather input from many grassroots non-government organizations, municipalities, Indigenous Peoples, industries, and governments on this journey as it unfolds. ***In conclusion, it is time for the North Saskatchewan River (Alberta) to be designated as a Heritage River under the Canadian Heritage Rivers System.***

What actions will YOU or your organization take, to experience, conserve, or restore the heritage of kisiskâciwani-sîpiy?

1 Introduction and Background

The introductory section of this report summarizes the Canadian Heritage Rivers System, its role in Alberta, the purpose of this designation document (or concept plan), project background, and summary of engagement results.

1.1 Foreword

“The North Saskatchewan River has always been an integral part of our heritage since time immemorial and continues to be an integral part of our Treaty No. 6. At Fort Pitt when Commissioner Morris indicated “as long as yonder river flows” he was pointing to the North Saskatchewan River. Water is life to the Indigenous Peoples of Treaty No. 6 Territory, as a matter of fact our word for water literally means life; “Nipi” derived from “Niya” My “Pimatisiwin” Life.”

- Vernon Watchmaker, (former) Okimaw Grand Chief, Confederacy of Treaty 6 First Nations

“The North Saskatchewan River has been integral to the historical development of our Nation and to Canada’s. Our Métis ancestors paddled this river hundreds of years ago, during the fur trade, using it as a trading and transportation route to haul food, goods, and other necessary supplies to communities along its course. Our ancestors were instrumental in developing Canada’s reputation as an international trading economy.

As Indigenous peoples, the Métis Nation of Alberta remains committed to working toward preserving the long-term health of the North Saskatchewan River system and maintaining its integrity as a source of life and abundance for all Métis citizens, Albertans, and Canadians.”

- President Audrey Poitras, Métis Nation of Alberta

“Even today I get goosebumps when I think about it... for me it is a symbol of my journey... emotionally and spiritually, it is lightyears away from where I grew up. And yet, there’s that same water flowing past every day. I film it. I take pictures of it. I go to it constantly for inspiration. It’s beautiful.” (From interview with Paula Simons, Alberta Unbound podcast, 2022)

- Darrin Hagen, freelance playwright, writer, composer, performer, director & TV host

“More than two decades ago, the River Valley Alliance was born out of a collective dream to preserve, protect, enhance, and connect the North Saskatchewan River Valley in the Edmonton Region by creating the longest river valley pedestrian trail through the largest river valley park system in North America. The name for this trail, Amisko Wacîw Mêskanaw, is in nêhiyawêwin (Cree language). This trail, and its reclaimed name, invites everyone to ‘sing the song’ of this beloved river valley and foster connections with the water, the land, and the vast history within it, creating a lasting legacy for Canadians that future generations will be proud to share. It is well deserving of a Canadian Heritage River designation, and we are pleased to support the initiative being led by Smoky Lake County.”

- Kristine Archibald, Executive Director, River Valley Alliance (RVA)

“Edmonton has a rich and historic relationship with the North Saskatchewan River—the very reason for the city’s existence. This heritage designation for kisiskâciwanisîpiy is the essential green and golden thread that will focus and connection for practical planning and coordination, as well as the important symbolic value. Symbols matter: for recognition, for raising understand and awareness of the cultural, recreational, economic, and social importance of this life-giving, living being at the heart of this place.”

- David Ridley, Executive Director, Edmonton Heritage Council (EHC)

“Explore Edmonton’s 10-year Tourism Master Plan identifies a strategic goal to activate the river valley to create a more vibrant destination and gathering place. We recognize that the river valley and ravine system is Edmonton’s greatest natural asset and a significant contributor to the quality of life of Edmontonians. Long established as a gathering place for Indigenous Nations, Edmontonians continue to value the protection and celebration of the natural and cultural heritage of this area. It helps to tell the story of Edmonton and its history, and share it with the world. Edmonton provides an incredible combination of urban lifestyle with a verdant river valley and park system – the largest urban greenspace in North America – in the heart of the city.”

- Traci Bednard, President and CEO, Explore Edmonton

“Since late 2019, the County has led a collaborative Initiative of municipalities, Indigenous communities, and other recreation and stewardship groups to advance the Canadian Heritage Rivers System designation for the North Saskatchewan River across Alberta. This designation will ensure greater awareness and collaboration among jurisdictions and river-users to foster sustainable tourism, business, and recreation opportunities through the recognition and celebration of the outstanding cultural values of this iconic river.”

- Lorne Halisky, Reeve & Division 4 Councillor, Smoky Lake County

“For thousands of years, the North Saskatchewan River has been an important place of gathering and community for Indigenous peoples. By ensuring its conservation, we can continue to protect the water and honour our collective relationship with nature. Edmontonians are deeply connected to the river, and we are committed to making sure it stays clean and accessible for many generations to come.”

- The Honourable Amarjeet Sohi, Mayor of the City of Edmonton

“The North Saskatchewan Watershed Alliance is a collaborative partnership that seeks to enhance our understanding of the watershed so we can best manage our rivers, wetlands, and lakes. We began some of the early work towards heritage recognition for the North Saskatchewan River in the early 2000s, and so we are pleased to be supporting this Initiative being led by Smoky Lake County, which aims to amplify the stories and the culture of the North Saskatchewan River and its watershed.”

- Scott Millar, Executive Director, North Saskatchewan Watershed Alliance (NSWA)

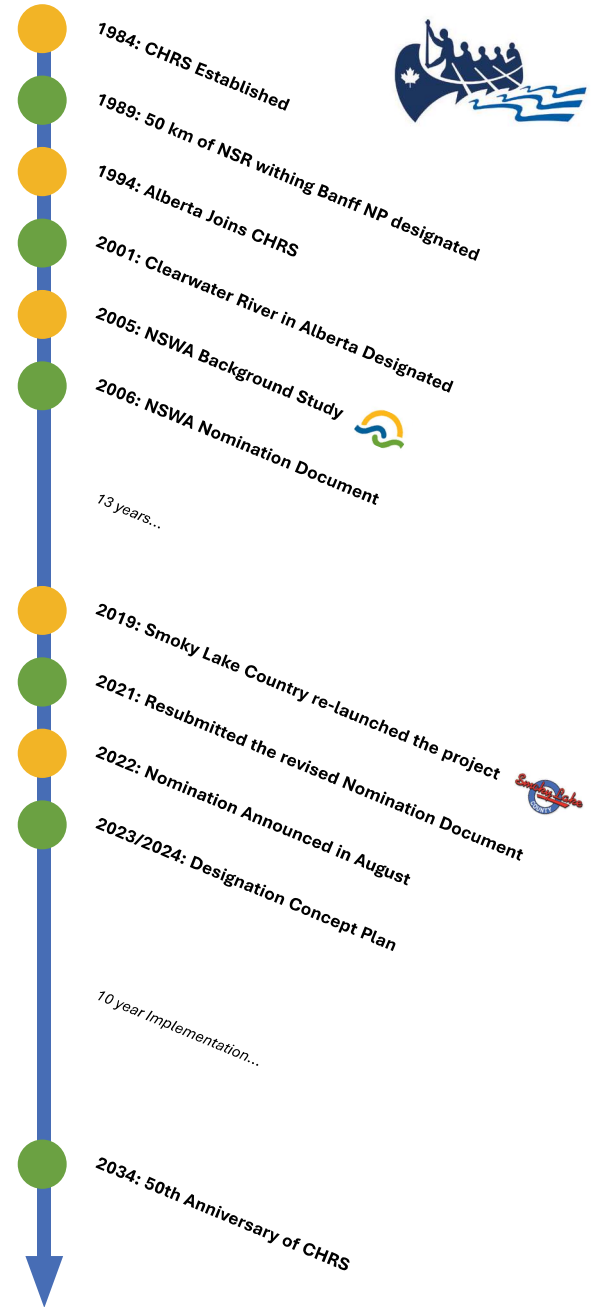
1.2 The Canadian Heritage River System

The Canadian Heritage Rivers System (CHRS) was established in 1984 by the federal, provincial, and territorial governments, to celebrate the role and value of rivers to Canadians. This collaborative program delivered in conjunction with local communities and citizens provides significant Canadian rivers with special heritage status, to recognize and promote outstanding natural, cultural, and recreational values. Today, over 10,000 km of Canadian Heritage Rivers have been designated, representing renowned national waterscapes, cultural treasures, and healthy waterways.

The CHRS has matured into a model for stewardship, cooperation, and participation. It serves as a catalyst for engaging society in valuing the natural and cultural heritage of rivers and river communities. The CHRS continues to evolve into a comprehensive system, representing a full range of natural, cultural, and recreational river values important to Canadians. Ultimately, it supports Canadian identity, health, economic prosperity, and quality of life. In 1994, Alberta joined the CHRS under then-Premier Ralph Klein.

What is Heritage?

“Heritage” describes tangible & intangible inheritances from the past, judged worthy of protecting and transmitting to future generations. Both a noun and adjective, “heritage” has in many contexts displaced the word “history”, including natural history, and the more familiar sense of human history (CHRS, 2000).



1.3 The Heritage River Nomination & Designation Process

To attain Canadian Heritage River status, a citizen-led group or government jurisdiction must propose a river to the Canadian Heritage Rivers Board, proving that it meets one or more of the natural or cultural selection and integrity guidelines defined by the CHRS. The nominated section must also be large enough to encompass these values and provide users with an appreciation of the river's resources and recreational experiences. Responsibility to collect and analyze information to determine heritage value and subsequently nominate the river, rests with the proponent(s).

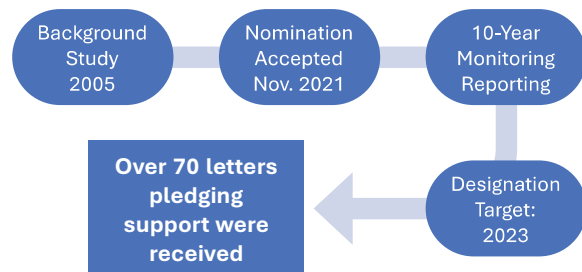


Figure 1. Timeline of Nomination and Designation Process for the NSR (Alberta)

The nomination and designation process for new heritage rivers should have broad-based support and aim to fill both thematic and geographic gap in the national system. This requires consistent use of national theme-based frameworks for natural and cultural heritage values, combined with a fair consideration of public interests and each nominating jurisdiction.

The CHRS Background Report for the Nomination of the North Saskatchewan River in Banff National

Park (November 1983) states: “It is further recommended that a detailed study of the entire North Saskatchewan River be considered in consultation with the Province of Alberta in order that a more complete representation of the river’s natural, human, and recreational heritage values might be achieved through the nomination and designation of all or part of the lower section of the river.”

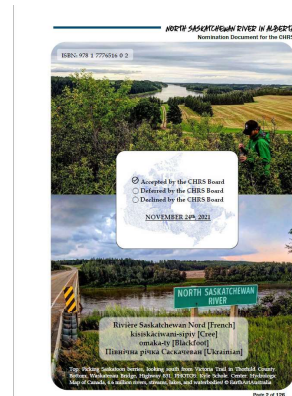


Figure 2. Endorsed Nomination Document

A 1996 Alberta study ranked the North Saskatchewan River as a “AA” top-10 candidate for the establishment of a heritage river in the province. In the early 2000s, the North Saskatchewan Watershed Alliance (NSWA) initiated the process for heritage river nomination,

producing a comprehensive Background Study in 2005. However, support to proceed with nomination was not secured at that time.

In 2019, the nomination process was renewed. Led by Smoky Lake County, the nomination document was formally submitted and accepted by the CHRS Board on November 24th, 2021, (Smoky Lake County, 2021) and jointly announced by the Government of Canada and Province of Alberta on August 3, 2022.

Designation is the formal proclamation of a nominated river to the CHRS, based on an approved designation document.

River Name throughout this Report

Under the authority of the Geographical Names Board of Canada (GNBC), the official, formal toponym for the subject river is the North Saskatchewan River (NSR). This report intends to establish the designation of the NSR in Alberta as a Canadian Heritage River, and is by no means a proposal to change the “official” name based on the GNBC toponym. Rather, in recognition of cultural heritage, as well as to provide and promote an ethical space for reconciliation, Indigenous names for the NSR are often used in this report interchangeably with the English name. All historical names for the water body in multiple languages are respected, reflecting cultural heritage pluralities. At times, the NSR is also simply referred to as “the river” as shorthand in this report.

The Cree name **kisiskâciwani-sîpiy** (“swift-flowing river”) is used frequently throughout the report. This word is directly related to the modern official name first written as “Saskatchiwine” in 1793, with the current spelling “Saskatchewan” first documented in 1882. The Blackfoot name **Omaka-ty** (“big river”) is also used in this report. Names conferred on the river by the Stoney Nakoda, the Ktunaxa, and possibly others remain unknown to the authors at the time of writing this report.

Note: There is no capitalization in Cree (nehiyawak), and therefore, this is reflected in this document.

1.4 kisiskâciwani-sîpiy’s Role in the Canadian Heritage River System

The North Saskatchewan River’s headwaters in Banff National Park was designated a Canadian Heritage River in 1989 and includes a 49 km reach of the river from the Columbia Icefields to Saskatchewan Crossing. The additional 718 km of downstream river-course in Alberta will provide an outstanding addition to the System, filling key gaps and strengthening overall program implementation and awareness of this special river’s heritage.

As a significant, mighty western prairie river, the North Saskatchewan River in Alberta connects the Rocky Mountains to the prairies, which fills a key geographic gap in the Canadian Heritage Rivers System (**Figure 3**).

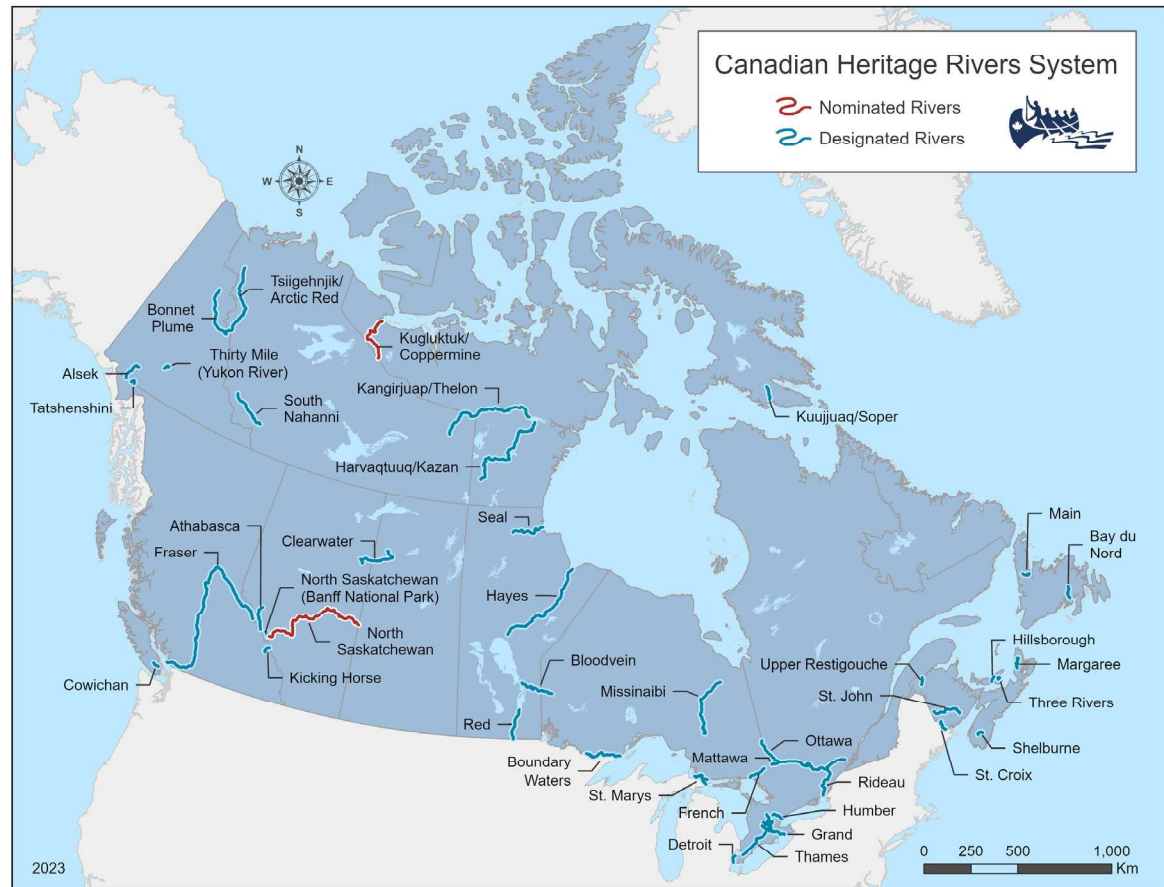


Figure 3. The North Saskatchewan River (Alberta) within Canada’s Heritage Rivers System

This river played a critical role in the history of both conflict and cooperation between various Indigenous and European populations through Canada’s history.

The river also fills several strategic thematic gaps in the national system. It has shaped the identities of many Indigenous communities since time immemorial. It also played a pivotal role in the 19th century fur trade and settlement patterns that continue to shape Alberta. A deep sense of place for many Indigenous and settler communities are associated with the river. Accordingly, cultural gaps in the national system representing both conflict and cooperation (e.g., trade) between Indigenous and European populations are extremely well represented.

The theme of agricultural extraction is also very well represented, as the North Saskatchewan River (Alberta) traverses and weaves across the breadbasket of Canada. A high density of river and land-based touring and recreation opportunities are also well represented by the North Saskatchewan River in Alberta.

In terms of natural heritage, the river provides an outstanding example of a large river in the Boreal Plain terrestrial ecozone – which is currently



underrepresented nationally in the heritage river system. Its drainage basin is nested within the Hudson Bay watershed, and uniquely links this Arctic Ocean receiving environment to the river's headwaters in the Rocky Mountains. Nominated river sections also include eutrophic aquatic lakes/wetlands of the Interior Plains, also highlighted as a national gap. Several rare, endangered, or of note, Endangered lake sturgeon make their home in the river, and have recovered substantially in numbers in recent years.



1.5 Purpose of this Heritage River Designation Document

The purpose of this report is twofold:

- Obtain national recognition of the North Saskatchewan River (Alberta) through formal designation as a Canadian Heritage River
- Function as an implementation blueprint for long-term river heritage stewardship by multiple parties

Industry, governments, organizations, and agencies can all make contributions to improve heritage conservation, increase coordination among organizations along the river, strengthen the regional tourism sector, and support thriving communities with a deep sense of place.

1.6 Recognition and Respect for Rights, Land Uses, and Activities

Designation as a heritage river is symbolic. It provides an honorific gesture of past, present, and future roles of the river in Alberta's and Canada's distinct and intertwined heritage. Designation has no legislative authority, and all jurisdictions and landowners retain existing management authorities and responsibilities. No parties will lose control over their jurisdiction, autonomy, or control over land use and development decisions - either because of heritage river designation, or heritage river implementation activities and initiatives.

A heritage river continues to recognize and respect all land and water-based rights, uses, activities, and interests of Indigenous Peoples, communities, landowners, and individuals. The heritage river designation and any future implementation activities or programs that it stimulates shall not impact any existing rights, land uses, activities, or jurisdictional responsibilities of other entities. **In summary, obtaining designation status is a symbolic gesture that promotes river heritage awareness and fosters stewardship.**

This heritage river designation is not prescriptive and does not bring about any additional legislation, policy, or development restrictions. Designation will not create 'red tape' or bureaucracy

1.7 The Designation Project Process & Context

A project to establish the designation of the NSR as a heritage river has been underway since early 2022, following the approved nomination of the river. The main deliverable of the project was to compile this heritage river Designation Document. Background research, engagement, mapping, writing, editing, communications, and graphic design were the main activities undertaken to generate the content. The goal of the project is to honour the heritage of the river, by articulating a clear, compelling narrative and path forwards that will achieve national heritage river designation. This report forms a basis for river heritage stewardship for multiple actors across public and private sectors to steward this iconic river and its watershed.

Although spearheaded by Smoky Lake County, many partners have been involved and continue to support heritage river designation and stewardship. This includes but is not limited to the North Saskatchewan Watershed Alliance, Government of Alberta, municipalities, First Nations, and Métis, as well as many landowners and citizens who live, work, and play along the river and the broader watershed. The project was led by Smoky Lake County, funded by a provincial

grant, and supported by a consulting team including O2, pipikwan pêhtâkwân, Associated Environmental, Expedition Management Consulting, Kerr Wood Leidal, and Know History. We are grateful to all who contributed input, stories, writing, review, or editing along this journey.

1.7.1 Policy Context of the Canadian Heritage Rivers System

The Canadian Heritage River System Policies, Procedures and Operational Guidelines document (PPOG) (CHRS, 2023) sets out the policy context for heritage river preservation, management, and stewardship. Each designation document sets forth a shared vision and strategic direction for the river, including measures demonstrating commitments towards stewardship that maintains or enhances the river’s outstanding heritage values according to CHRS objectives.

Schedule 3 of PPOG provides guidance on the suggested content for a document to be tabled with the Board as a basis for a designation recommendation. This includes:

- The boundaries of a river management area are described in text and map-form along with mapped information.

- Policies, strategic directions, and actions/initiatives that will be implemented to further steward, and preservation of the river’s heritage values, and system objectives.
- Strategies and activities to monitor and communicate the CHRS designation and its benefits.
- Demonstration of commitments to conserve the river’s heritage values through appropriate signatures of agency representatives, and expressions of support.

The designation of a river as a Canadian heritage river does not impose new legislation or new regulations for use of the river and adjacent lands, nor does it change jurisdictional responsibilities for river management.

Recognizing the interrelated concepts of human use of rivers and the influence of rivers on human activities, this designation document acknowledges the importance and references the contents of existing government policies in achieving broader goals of river conservation and management. For example, the water quality monitoring component of this designation document is consistent with the recently approved [NSR Water Management Framework](#).

1.8 Heritage River Designation Area & Reaches

This North Saskatchewan River (Alberta) Heritage Designation Area represents over 55% of the river’s total length.

Flowing 1,287 km from the Columbia Icefields to the ‘Forks’ in Saskatchewan, kisiskâciwani-sîpiy is Canada’s 12th longest river, and part of Canada’s second longest river system: the Nelson-Saskatchewan.

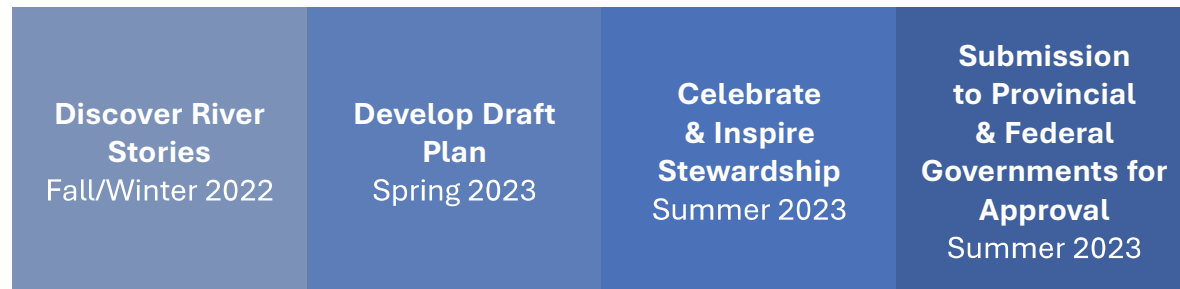


Figure 4. Project Timeline



The Heritage River Designation Area includes a 718-kilometre corridor (5 kilometers on either side of the main stem) between the Banff National Park Boundary, and the Alberta-Saskatchewan Provincial Boundary. This is, in turn, allocated into eight two-to-three-day river-float segments, or ‘reaches’ **(Figure 5)**.

However, it is important to recognize that many of the stewardship activities which contribute to the condition of this river occur outside this designation area. The broader river basin encompasses 80,000 square kilometres (which reflects approximately 12.5% of Alberta’s landmass).

Additionally, a variety of natural, cultural, and recreational values are found along each of the eight reaches of the North Saskatchewan River. Inset maps detailing the location of kisiskâciwani-sîpiy’s features and values, and detailed descriptions of each reach are provided in **Appendix A**.

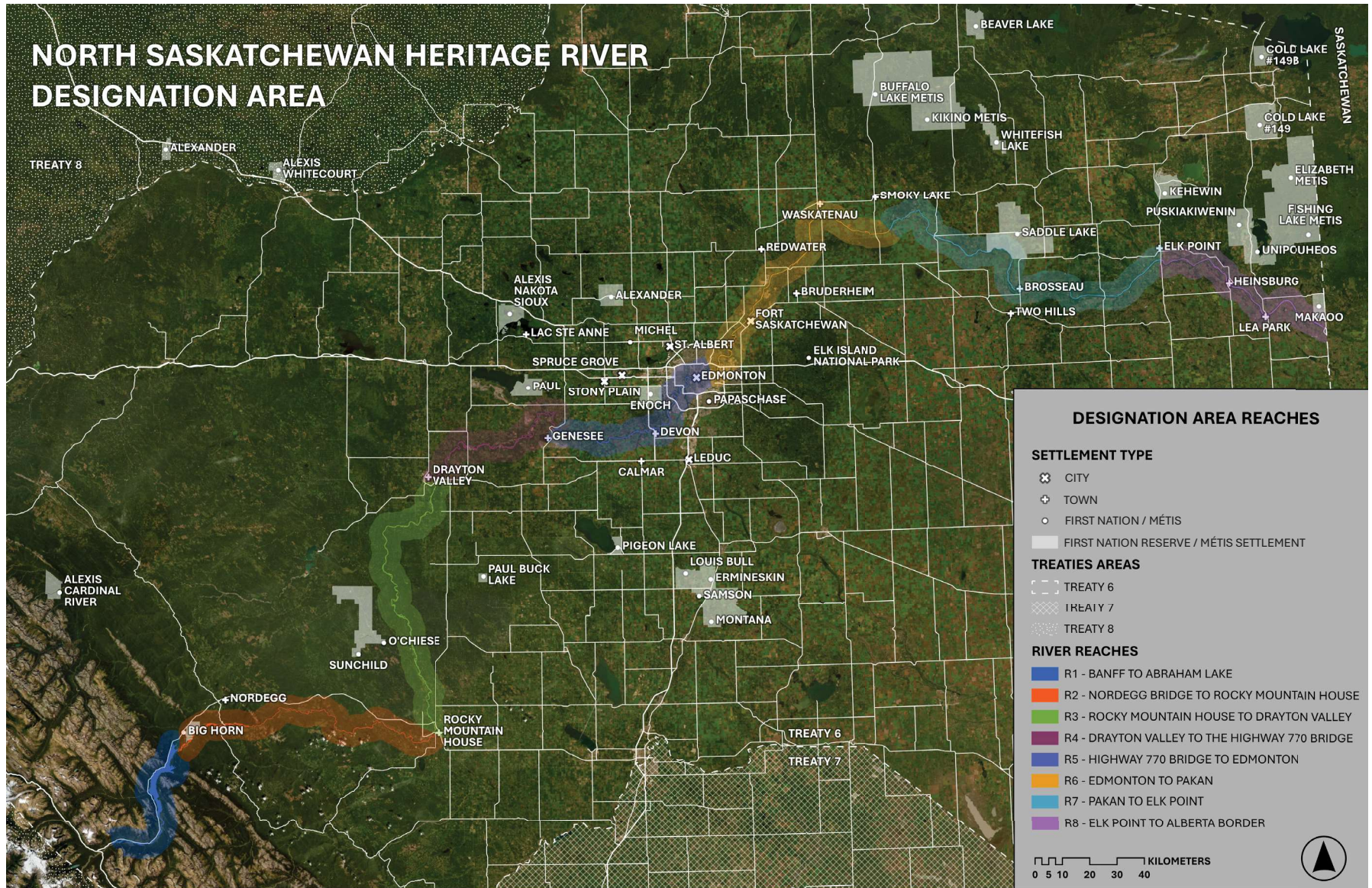


Figure 5. kisiskâciwani-sîpiy Heritage River Designation Area



Banff National Park's Designated Section

kisiskâciwani-sîpiy originates at Saskatchewan Glacier on the Columbia Icefields in Banff National Park. After tumbling through a steep-walled gorge between Mount Athabasca & Mount Saskatchewan, it is joined by waters from Nigel Creek, and the Alexandra, Howse, and Mistaya rivers near Saskatchewan Crossing. This section of the river was previously designated in 1989 due to its outstanding natural, cultural, and recreational heritage values. This portion is managed under the Banff National Park Management Plan.

1.9 Summary of Engagements

Engagement with stakeholders, Indigenous Peoples, elected officials, and local communities was carried out during the process of preparing this designation document. The scope and form of these engagements met or exceeded all the requirements in both CHRS (2023), and the nominating jurisdiction of Alberta. Engagement processes, tools, and key outcomes/ learnings from the feedback received are summarized below, including engagement with Indigenous Peoples, members of the public, and the tourism sector.

It is clear from the responses received that the North Saskatchewan River matters to Indigenous Peoples, Albertans, and Canadians. The river

is a symbol and icon for the identity of many Indigenous communities as well as of Western Canada. **What we heard has been weaved through the narrative in this report, and clearly demonstrates that this river should be designated as a Canadian Heritage River.**

1.9.1 Indigenous Engagements

An important component of the process was engaging with Indigenous communities who have relationships with the North Saskatchewan River. Using visiting as an approach for relationship building, activities were grounded in co-leading the dialogue, and prioritizing community protocol when speaking about the river. This work gathered stories, narratives, and teachings on connections with the river (past, present, and future) and Indigenous perspectives on river governance and co-governance. A circle of Indigenous Elders and knowledge keepers opened the dialogue in a ceremony in amiskwaciwâskahikan (Edmonton), on November 17, 2022. The project received a blessing, and Indigenous communities were then invited to virtual or in person visits between November 2022 to March 2023. A total of 68 people from over 10 Indigenous communities shared stories and dialogue through this process, sharing stories of the river, connections with the river, as well as river governance and the future. More information on the process is available in Appendix C.

Throughout the background research for this project, visiting was used to build and rebuild relationships first, prior to moving on to priorities and governance. Participants were also asked to think about the river through all seasons, as certain stories are shared in specific seasons to give a full and holistic perspective.

The results have been carefully interpreted

to inform and shape this designation. Efforts have been made to reflect the importance of storytelling in traditional knowledge, the role of kisiskâciwani-sîpiy / Omaka-ty in creation stories and spirituality, ceremony, trade, as a source of medicine and food, as a connection to the past, and as a beacon of hope for the future. A strong interest in the river, and a desire for greater roles and involvement of Indigenous Peoples in river stewardship, conservation, restoration, and governance was also heard clearly. The importance of protocol and starting with ceremony and providing real weight to Indigenous voices for effective river co-governance and decision-making was also heard. **The importance of language and returning original place names was also heard clearly, as a way to reflect decolonization, and to breathe a spirit into the work that cannot be done in English alone. This has been incorporated throughout this document in response, including providing the river’s name in Cree and Blackfoot.**

Many Indigenous participants also viewed this as only the start of a much longer process. They communicated that the act of heritage designation itself is symbolic unless it is a steppingstone leading to more meaningful improvements to the health of the river and our relationships with it.

All Indigenous participants are viewed as co-stewards and co-researchers in this work. The intention and hope is that they will see their voices clearly reflected, and feel some ownership over the contents of this designation document. Outputs of the Indigenous engagements, the ways they have been summarized and interpreted, and the contents of this designation document should also be viewed as a living, breathing spirit, that can grow and change with time, just like the river.








RESOURCES	DESCRIPTION	STATS	AUDIENCE	FORMAT
Inform				
	Project Webpage	The online hub for all project information smokylakecounty.ab.ca/m/nsr/-/heritage-river-chrs	Public	Online
	Direct Emails	Direct emails to 236 stakeholder organizations representing diverse communities and interests.	Stakeholder Groups	Online
Engage				
	Online Story Collector Survey	The online story collector provided participants with the opportunity to share their unique stories, perspectives, and experiences.	28 survey respondents	Stakeholder Groups Online/Print
	Interactive Portal & Online Map	This website included detailed information about the project as well as an interactive map to collect feedback on the specific reaches.	235 map pins	Stakeholder Groups Online
	Public & Stakeholder Workshops	2 virtual workshop sessions were held with facilitated small-group discussions. Open to interested groups to register.	14 workshop attendees 11 organizations	Stakeholder Groups Online/ Discussion
	Stakeholder Discussion Guide	PDF booklet with key project material and interactive form fields to provide feedback as an organization.	3 guides collected	Stakeholder Groups Online/Print
	Stakeholder Meetings	Meetings with stakeholder groups held upon request.	6 meetings	Stakeholders Online/ Discussion

Figure 6. Summary of public and stakeholder engagements

1.9.2 Public & Stakeholder Engagements

Engagement on the heritage river designation document occurred from October 2022 to February 2023. To reach a wide range of river stakeholders, several engagement methods and tools were used, ensuring multiple avenues for participants to choose from, as summarized in Figure 6.

Common themes that emerged from the engagements included:

- Aligning recreation and preservation to balance recreation with a natural river environment.
- Ecological connectivity in the river valley and connected ravines and creeks is important to facilitate wildlife movement and watershed

health.

- Improving river access was seen by many as critical along much of the river, including safe hand launches and bail-out points, emergency access and supporting facilities.
- Riverside camping opportunities have the potential to offer serene, wilderness experiences.
- The need to maintain water quality for drinking water, fishing, recreation, and other uses.
- A strong desire for stewardship, including river clean-up events and citizen science.
- Recognition of Indigenous values, sacred sites, and traditional knowledge, and a desire to learn more.
- Grassroots solutions are needed, as some

expressed trepidation that federal heritage designation might impact their way of life, ability to maintain autonomy, or self-govern their community affairs.

Reach-specific spatially georeferenced comments under various themes were also collected (**Appendix D**). The feedback received and themes heard have guided the focus and framing of this designation document.

In addition to the public engagement, an additional engagement process specific to the tourism industry was also undertaken, to gather information regarding tourism assets, visitor market opportunities, tourism development readiness, and potential growth areas for tourism along the river. The process was undertaken from February to March 2023. Overall, 256 stakeholders from across all eight river reaches were invited to participate. Engagement activities included the following:

- Online survey (22 responses)
- 3 Digital input workshops (9 participants)
- One-on-one interviews (11 participants)

Across the entire study area there are many interrelated strengths for supporting high quality recreation and tourism. These include outdoor adventure and recreation assets, cultural attractions and historic sites, paddling experiences, natural attractions, as well as gateway and hub communities. Overall, gaps include winter and shoulder season experiences, accommodations, riverside support amenities, festivals and events, culinary attractions and offerings, and visitor information. Northern lights viewing was also highlighted as a specific experience growing in importance, particularly among international tourists. There are opportunities to further grow water-based



tourism, outdoor adventure tourism, nature-based tourism, cultural tourism, and Indigenous tourism experiences. Combinations of these experiences and assets have high potential to provide authentic, unforgettable experiences to visitors.

Destination Canada resources and Explorer Quotient Toolkit provides tourism businesses with valuable insights into why and how different people like to travel by identifying 9 traveller types. Explorer Quotient goes beyond traditional market research of defining people. It looks deeper at individuals' personal beliefs, social values, and views of the world to learn exactly why different types of travellers seek out entirely different travel experiences based on demographic, social values, and behavioural research.

Overall, Authentic Experiencers and Cultural Explorers are the two recommended visitor profiles that were identified as most likely to visit and benefit from experiences associated with the river. Both target tourism markets that are interested in being immersed in local culture and history, tend to seek out deeper engagement with the destinations they visit, and are being

actively targeted by national and provincial tourism marketing campaigns. These visitor types are likely compatible and complementary to maintaining the cultural and natural heritage integrity of the river in a sustainable fashion over time.

Among both public and tourism sector engagement processes, improving river access and associated facilities was identified as a critical need along several parts of the river system. Old ferry crossings, bridges, and some private lands (with landowner permissions) were flagged as important potential areas for new and improved river access. Safe hand-launches and bail-out points were raised as an important consideration in enabling increased recreational use of the river. Balancing motorized access with the need to keep the feeling of wilderness while on the river was also highlighted. The need for emergency vehicle access was also raised. In the surrounding lands, there is a need for improved staging areas for recreational use of all types, to ensure that viewpoints, parking, and camping can be done safely and with the comfort of visitors in mind.

"I first paddled this reach (Nordegg to Rocky Mountain House) 50 years ago, and it is the premier 3-5-day canoe trip in Alberta. The water is challenging in places, the scenery spectacular, the on-stream camping is very good, and it is accessible."

-Public / Stakeholder Engagement participant

2 The Heritage Values of kisiskâciwani-sîpiy

Coursing through diverse landscapes and cultural identities, the North Saskatchewan River has always been important to Indigenous and Canadian history. The heritage significance of the river continues to increase, as population growth in Alberta remains strong, while the river's environment and water quality has shown promising signs of recovery in recent decades.

This section synthesizes and summarizes the history and resources of the nominated river, focusing on nationally significant highlights¹. Included are subsections on Indigenous heritage and values, followed by sections on cultural, recreational, and natural heritage. The heritage integrity of the river - based on national guidelines - is also summarized.

2.1 Indigenous Heritage & Values

Since time immemorial, Indigenous history has been intertwined with this river. The heritage of the Niitsitapi (Blackfoot Confederacy), nêhiyaw (Cree), Ktunaxa (Kootenay), Stoney Nakoda, Nakota Isga, Dene and Tsuut'ina, as well as the Métis peoples are all linked to these waters.

Indigenous oral histories stress the importance of the river in many ways: spiritually, as a connector

The North Saskatchewan River is also known as:

- *kisiskâciwani-sîpiy* ("swift-flowing river") (Cree)
- *Omakaty* ("the big river") (Blackfoot)



Figure 7. Cree camp, 1871, near present Town of Vermilion
(Source: Library and Archives Canada C-00518, Charles Horetzky, as shown in (Milholland, 2015))

and travel route, a gathering place, and as a source of life. This "swift-flowing", "big" river has also supported many wildlife and fish species, plants and medicines, and traditional Indigenous harvesting practices. Those who signed the Treaties were also promised the right to pursue hunting, trapping, and fishing, 'so long as the river flows'. The river played a key part in the signing, oral history, and shared understanding of Treaty No.6, both at Fort Carlton and Fort Pitt in 1876, and the Adhesion at Fort Edmonton in 1877. The river has and continues to play a vital role in the social, economic, and cultural well-being of Indigenous Peoples.

For many, physical and spiritual signs, and signals that the land and river are healthy is very important to their own individual and community feelings of health and wellbeing. It is also clear that a deep pride, sense of place, and feelings of responsibility and hope for this river continues today in multiple Indigenous communities, within and beyond the Treaty 6 and Treaty 7 territories

Past stories, current cultural connections, and future governance of river heritage and associated values were core themes heard during Indigenous engagements. There are many ways Indigenous People connect to water and with kisiskâciwani-sîpiy specifically. A summary of core themes shared is provided below under several categories. Respecting oral history, some details are reserved for those present at visits to communities. Sacred teachings are mentioned, but details remain with knowledge holders, to be shared with those who build the relationship and request that knowledge in ethical ways.



¹ Since time immemorial, Indigenous history has been intertwined with this river. The heritage of the Niitsitapi (Blackfoot Confederacy), nêhiyaw (Cree), Ktunaxa (Kootenay), Stoney Nakoda, Nakota Isga, Dene and Tsuut'ina, as well as the Métis peoples are all linked to these waters.

Creation

Water is sacred. Water has spirit. Water is life, and water has a very profound place in the nehiyawak (Cree) Creation story. During the Circle of Elders opening dialogue, many shared how Cree people are connected to all water through the creation of mother earth. The creation story is shared by those who carry that traditional knowledge. There are shorter and longer versions of this story, but each shares an important lesson, water was here first and is the source of life for humans. The Elders in this Circle shared about their spiritual connections to kisiskâciwani-sîpiy and their interactions with the river in and around amiskwacîwâskahikan. It was clear from the opening that there is a profound sense of hope in Indigenous Peoples - specifically the Elders - for repairing the health of the river in the way Creator intended it. By understanding original teachings, like the Oral Histories of Creation, we can no longer play ignorant of our kinship responsibilities to kisiskâciwani-sîpiy.

Trade

The river was a gathering place for many reasons but was also used for trade between Indigenous nations long before European settlers entered the picture. If we speak about kisiskâciwani-sîpiy and trade, we cannot remove Indigenous history before the arrival of the Hudson's Bay Company. Many nations have historic economic relationships with the river from well before this time – such as the Iron Confederacy (Nehiyaw-Pwat) alliance. Archaeological dig sites confirm that many Indigenous Peoples from the north and south converged around the river to engage in trade with one another dating back thousands of years. Indigenous People honour the water as a common connector that enables trade, not simply as a resource for economic gain.



Silas Abraham, Morley or Isaac Beaver and John House, at Kootenay Plains, 1906. (V48/NA65~472, Elliott Barnes fonds), WMCR



Samson, Frances Louise and Leah Beaver in the Kootenay Plains 1902. (V527/NG-124, Mary Schaffer fonds), WMCR

Ceremony

Indigenous communities throughout the region shared many stories of ceremonies held near the river. Water is at the heart of many ceremonies. It can symbolize purity and life. Without access to clean, healthy water, some essential ceremonies are at risk of being lost. Indigenous People now have to pray for kisiskâciwani-sîpiy, instead of through and alongside the river, as in some cases, sacred ceremonial sites (i.e., Sun Dance), have been moved to different locations as a consequence of past harm to the river. The water has become sick, and this is the time to bring healing to the river. In return, the river will help bring healing to the rest of the world.



One of Big Bear's sons, Little Bear. 1897. The strength and pride emanating from this photograph is a glimpse at how Big Bear might have appeared had he been photographed before the North West Resistance (March-May 1885).

“We had ceremonies before crossing rivers. How we do a miniaturized version because we’re traveling in cars, but we still do it. ...That water is our mother’s milk.”

- Jerry Addleback, Samson, Cree (Source: Fort Edmonton)

“What is ceremony? Ceremony keeps us in line with our environment, with the spirit world, with our relationships with all living things, including each other. ...Because we, as human beings, have a tendency to become destructive, to take too much, and to walk out of balance from Mother Earth’s embrace.

Ceremonies re-teach us how everything moves in cycles, so we can internalize this balance. ...Ceremonies become a fundamental way of doing things. We’re not talking about religion – it’s a relationship, harmony, and balance. ... And Ceremony is the renewal.”

- Lewis Cardinal, Sucker Creek, Cree (Source: Fort Edmonton)

“There are some ceremonies where you acknowledge all forms of water. Water that comes in the form of rain, snow, water that comes off the glaciers, water that comes out of the ground.

We always pray that we’ll keep the water safe for our grandchildren.”

- Wilton Goodstriker, Kainai, Blackfoot (Source: Fort Edmonton)

*As our hearts beat
over and over,
ê-pâh-pahkahokoyahk kâh-kîhtwâm.
As we take in
the clean air of life,
ê-yâ-yêhyêyahk kâh-kihtwâm.
The way water washes
thirst from our lips.*

*ê-mâ-minihkwêyahk nipiy kâh-kîhtwâm.
Just as the North Saskatchewan River
courses continually
through the carotoid of the prairies,
ê-pâ-pimiciwahk kisiskâciwani-sîpiy kâkikê.*

- Mc Ilwraith, Naomi L. Kiyam: Poems. AU PRes, 2012

The Role of Women

Grandmother Moon controls the tides in both women and the waters. With such a powerful connection, women are given the responsibility to be protectors of the water. This means that women are protectors for kisiskâciwani-sîpiy, and in return, kisiskâciwani-sîpiy supports the swimmers, the crawlers, the legged ones, the winged ones, and the plants. It is more than a spiritual relationship between women and the river, this is an all-encompassing relationship; it is an ethical one, an ontological one, a kinship one, a reciprocal one, and a holistic one, that goes well beyond the defined parameters of the English language. For example, in Cree there are unique words to describe water around a Beaver dam. Indigenous Peoples - and women in particular - need to be involved with this Canadian Heritage River, as Western worldviews, language, and connections are too limited.



Bull boats, made from hide wrapped branch frames, were used primarily by women to cross rivers in Blackfoot territory. Source: Fort Edmonton.



Rat Root, Also Known as Sweet Flag

Plants and Medicines

Many traditional medicines can be found along the banks and land of kisiskâciwani-sîpiy. In some cases, these medicines are needed for sacred bundles, such as the Beaver Bundle of the Blackfoot. Indigenous People across Alberta shared stories about medicines that were found near the river before but have been lost over time. Rat root, a healing medicine, was once easily found near parts of kisiskâciwani-sîpiy closest to the O'Chiese First Nation. Today, this community must travel a long distance to find this medicine. Communities often expressed that despite the legal duty of developers to consult about the land and medicines, land restoration plans are often inadequate. kisiskâciwani-sîpiy has given life to many medicines and has moved them further away to protect them. However, in doing so, Indigenous communities have lost proximity and access to traditional medicines. Berries were also harvested in great abundance along the river. For example, Saskatoon berries were used for making prized dried Pemmican.

Hunting & Fishing

Just as the medicines have left, so have the animals. Lands that were once plentiful with moose, elk, and deer are now sparse. The animal world speaks to other societies in a language that humans don't understand. Animals learn from kisiskâciwani-sîpiy and have retreated to water further away from settlements. The impact has been harmful to Indigenous communities who depend on hunting. Parts of the moose are also sacred and needed for specific ceremonies. Without the ability to hunt, Indigenous People will go more than hungry, their spirits will starve. The river brings the animal world closer to the human world. Without a healthy river, we also lose this healthy kinship. Fishing has also been impacted by the river, with parts of kisiskâciwani-sîpiy once providing a major source of food for communities. Now, many communities shared that they wouldn't even think of eating the fish from these waters. Other animals harvested for centuries from along the river's shoreline can no longer be found, including bison, pronghorn, and trumpeter swan.



Indigenous Archaeological Sites & Artefacts

Archaeological surveys have revealed evidence of human activity along the river for about 13,000 years. Numerous important Indigenous cultural and archaeological sites are found along the river. These include ancient campsites, sweat lodges represented by broken rock piles, fire pits, and stone cairns, and Sun Dance lodges. Artifacts found at the sites have included paleo materials including evidence of harvesting megafauna, cracked bison bones, spear and arrow points, pottery, and possibly an effigy. Some coulees and steep areas associated with the river valley and tributaries near the easternmost reaches of the river are good candidates for possible historic buffalo pounds and jumps. Many sites are relatively dense with found artifacts, including but not limited to the Kootenay Plains / Lake Abraham areas, and several of the Whitemud, Blackmud, and Rundle Park sites in the City of Edmonton. Ancient burial sites have also been located along and near the river. Together, the range of sites provide exceptional representations of many cultures and Indigenous histories over time, including but not limited to the nêhiyaw (Cree), Niitsitapi (Blackfoot), Ktunaxa (Kootenay), Stoney, and Métis

Post Contact

The advent of the fur trade, followed by colonial settlement brought about dramatic changes in the traditional lifestyles of Indigenous Peoples, including their seasonal migrations and economic activities. Indigenous Peoples transformed from traditional subsistence hunting, to hunting furs for trade. Cree and Assiniboine peoples in the lower parts of the watershed often acted as a bridge or intermediaries between European and Blackfoot peoples in the upper North Saskatchewan. European explorers and settlers

also brought disease, which devastated First Nations communities, including outbreaks of smallpox in 1780, 1838, 1856 and 1869. These outbreaks killed a significant percentage of First Nations people, with lasting impacts on social and economic well-being.

Many riverside locations were also sites for traditional Sun Dances, while a multitude of oral stories, narratives, and legends directly or indirectly refer to the river. Several stories shared

during the recent Indigenous engagements are included below to reflect this cultural heritage. Interestingly, these stories span and integrate across several heritage themes of culture, nature, recreation, and spirituality and do not necessarily conform under a single CHRS value. These stories also weave together deep moral teachings on the connections between water, land, animals, people, spirituality, history, sustainability, and stewardship that we can all learn from if we take the time to slow down and listen deeply.

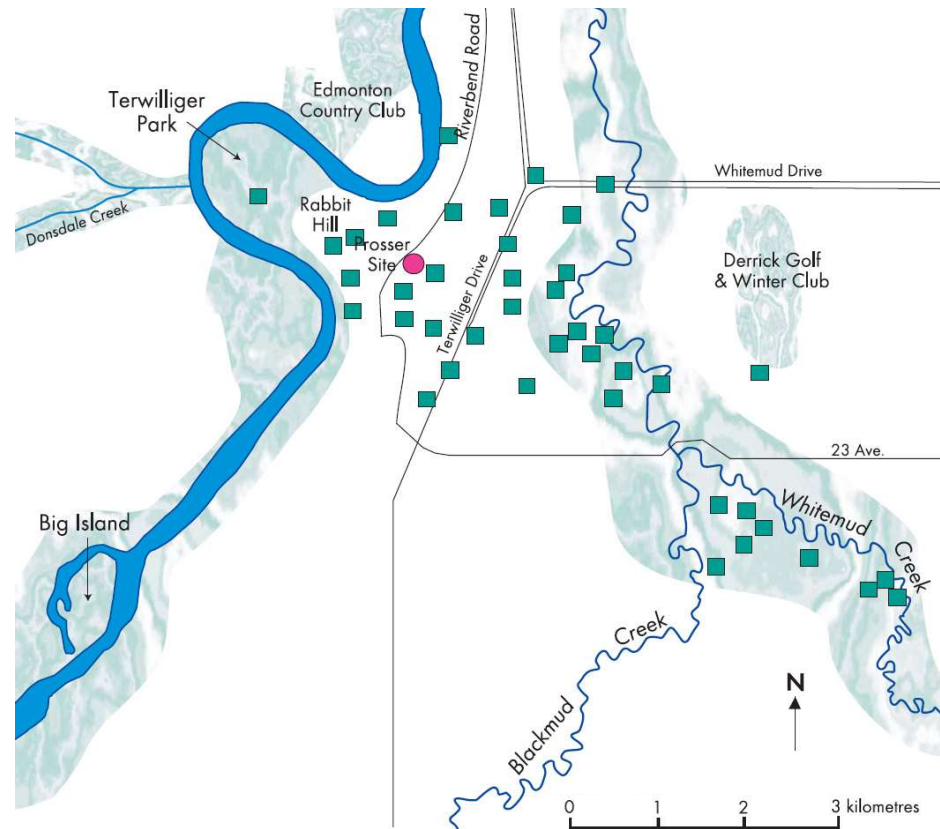


Figure 8. Archaeological sites in Riverbend & Whitemud Creek
(from Ives, 1985) Adapted from *Archaeology: Guide And Tour Of Greater Edmonton Area*, page 8

The Jackfish's Catch



Jackfish was hanging out in the cold, rocky water, thinking about what she could get up to today. She was surrounded by other Jack and never really spent a day alone. She dreamed of what it might look like to be alone for a while. Not competing for food. Not defending herself against other Jack who tries to take her napping space. Most importantly, not worrying about her eggs.

Jackfish was getting hungry though and decided that it might be time to get a snack. She heard rumblings about a great spot that was filled with smaller fish that day. She headed over and scoped out a good place to wait. She was very fast, but she knew that in order to get the burst of energy needed to catch the fish, she would have to be patient.

There were other Jackfish everywhere! She saw others get fish after fish, but there were too many of them, and not enough to eat. She groaned to herself again and thought how great it would be to be alone. All of a sudden a fish landed quite close to her! Jackfish locked her focus, and without thinking twice she launched herself at her lunch. She took a hard bite and felt a little pinch. Ouch!

All of a sudden Jackfish was being dragged by her mouth to the surface of the water. She pulled and pulled, trying to get away. Her heart was racing and her mouth was being torn. She knew that

she had no chance, but her mind started thinking about her children. She thought about all her friends and family.

She wasn't going to give up that fast! Jackfish broke the surface but she kept fighting. She zoomed left, she zagged right! She pulled herself downward, even though it was hurting her mouth. No matter how hard she worked, Jackfish kept getting dragged up to the surface. Eventually, she looked around. There was a young man, he wasn't quite a child, but he wasn't an adult either. She didn't know much about humans, but she heard that sometimes they pull you out of the River. Sometimes you come back, sometimes you don't. The young man was double her size but she decided to keep fighting. As soon as she got close to him, she tried again. Zoom left, zag right. she told herself.

She caught him off guard and pulled so hard he almost fell in. He brought her up to him and she froze. He hooked his hand in her mouth and pulled out the pinching object. The pain was still there, but she felt relieved. He put his fingers under her gills and held her on his side. She was at eye level with his chest.

She wondered if she would be one of the Jackfish to go back home or not. And if not, where was she going? At this point, she was struggling to breathe.

The young boy had her out of the water for a while and she was starting to think it was the end. He laid her on the ground, and she wondered if she could jump all the way back into the River. Before she could act, everything went black.

Jackfish gave her life to feed the young man. In the beginning, she struggled with the idea, but after a while, she softened. She knew Creator asked her to help the humans by giving her body for food. She was happy to live her responsibility and her spirit stayed watching over her home, the River.

It was about 30 years later, and Jackfish visited the River. She looked around, but she did not see any other Jackfish. The water was lower, and there wasn't much room left. Either way, 'Where did all the fish go?', she thought. Jackfish thought back to her wish. She wished to be alone, she wished for the water to be quiet. She felt guilty. What if this was her fault? What if her wish made all the fish disappear and the water shrink?

Jackfish asked the water, "Water, what can I do to heal you? You need the fish back. The young boy and his family will be hungry". Water said to her, "Pray for me. Things are not okay. But they can be, as long as the sun shines, the grass grows, and I flow".



The Snake's Vibrations

Rattlesnake had just finished finally shedding his skin. Three days before, he had slithered over to the bank of the river and rubbed his head on a large bolder. He knew he needed the rock's help to renew and start regenerating himself again.

As he moved around his prairie landscape, trying to let go of his old skin, he made a few stops to visit friends. His first visit was to Caribou. Rattlesnake and Caribou were sharing stories and laughing. They had a very playful relationship. All of a sudden, Caribou looks down at Rattlesnake and jokes, "Rattlesnake, you are always walking on the ground, I can never see all of you. Do you have tiny legs down there?". Rattlesnake playfully hissed his tongue at Caribou. He then smiles softly and explains, "There are two sides to me. One always touches the land, and one always faces the sky". He then laughs at Caribou and says "Unlike you, your belly floats somewhere in the middle". The two finished their laughs and Rattlesnake continued on his journey.

On his next visit, Rattlesnake decided to visit his friend Eagle. The two had a different relationship than Rattlesnake and Caribou. Eagle was more wise, and Rattlesnake enjoyed talking about deep, meaningful things in his life. Rattlesnake began sharing with Eagle that sometimes he felt alone. He wished that he could shout, like their friend Wolf. Anytime Wolf feels alone, he can howl and his friends come find him. Eagle took Rattlesnake under his wing and told him, "Rattlesnake,

you have a tail that makes beautiful music". Rattlesnake sighed. He knew he had a tail, but it always scared others away, it didn't bring them closer. Eagle whispered sweetly, "It doesn't scare me". Rattlesnake smiled and gave his tail a little wiggle. Eagle told him, "If you ever feel alone, you just have to rattle your tail. Remember, I can see a lot from up here, and you are not alone". Rattlesnake was warmed inside. He began making his way, but he knew that he could always hear his friend through his vibrations if he just rattled his tail.

Rattlesnake had time to visit one more friend. He made his way to Muskrat's place. Muskrat was pretty tired, but he welcomed Rattlesnake in. Muskrat explained that he hadn't done much visiting all winter. He told Rattlesnake he was getting excited for the spring! The ice was shifting and melting, the water would start flowing, and that would make it easier for him to find food. Rattlesnake was excited for his friend and asked him what he likes the most about spring. Muskrat thought for a moment, trying to remember last spring. It felt so far away, but he could imagine it because it was right around the corner. Muskrat said, "I like seeing the land wake up. It's beautiful to take something old and make something new".

Rattlesnake, almost finished shedding his skin thought about his experience. He said to Muskrat, "Muskrat, I think I am like the spring. I shed my skin and I start new. My tail comes off and grows

bigger". Muskrat was curious about Rattlesnake. He never hung out with other animals who shed their skin like this. He said, "Rattlesnake, can I ask you a question about your skin?". Rattlesnake loved questions! It gave him a chance to think about his journey. He nodded at Muskrat and allowed him to ask his question. Muskrat tilted his head and asked, "What happens to your skin when you leave it?". Rattlesnake never thought about that before. Usually, he just slithered away and never really saw it again. Thinking deeply, he answered, "I think when I shed my skin it just stays where I left it. It becomes a part of my history. Sometimes it's not straight, or clean, but it stays there, the trace of my connection between the land and the sky; my lifeline on the path to starting new". Muskrat nodded to show his understanding. He said to Rattlesnake, "My friend, I think you are just like the spring".

Ultimately, this river reflects multiple, rich Indigenous histories and cultural values. For these reasons alone, it represents an outstanding addition to Canada's heritage river system.

"The story of this river is the story of the west"

-James Gordon, 'Roll on North Saskatchewan' chorus

2.2 Cultural Heritage

In addition to Indigenous cultural heritage, the modern development of Western Canada is also written into the history of this river. There are a multitude of outstanding cultural heritage values, represented by a considerable concentration of nationally and provincially significant heritage sites.

This river played critical roles in the fur trade and history of the Hudson's Bay Company (HBC), as well as early scientific expeditions, and strongly shaped human settlement patterns. It is also associated with the establishment of Edmonton as Alberta's provincial capital, and considerable agricultural and industrial heritage. The river also continues to be a source of inspiration for art, music, literature, and stories.

In the spring of 1795, Angus Shaw of the North West Company built Fort Augustus near the confluence of the Sturgeon and Saskatchewan Rivers. William Tomlison of the HBC builds rival Edmonton House in the fall "within a musket shot of the Nor'Westers" (Milholland, 2015)

-
- Pre-Contact:** Iron Confederacy between Indigenous Nations
 - 1730s:** Métis Joseph La France traverses the river
 - 1778:** One of the first Fort-des-Prairies is established in the Greater Edmonton Area by the French
 - 1787:** Explorer and fur trader David Thompson (Koo Koo Sint - 'one who looks at stars') winters with the Blackfoot along the North Saskatchewan River
 - 1792:** Fort George and Buckingham House built near present-day Elk Point
 - 1795:** Fort Augustus and Edmonton House first established
 - 1796:** Peter Fidler has the first York Boat built at Buckingham House
 - 1800:** Fur trader Duncan McGillivray explores west of Rocky Mountain House to the headwaters, and David Thompson arrives at Rocky Mountain House.
 - 1801:** Fort Augustus and Edmonton House are relocated to the present-day City of Edmonton site
 - 1806:** Jaco Finlay builds a supply post on the river in the mountains above Kootenai Plains
 - 1807:** David Thompson, guided by the Kootenays (K'tnaxa) and accompanied by seven French Canadians, his wife Charlotte Small, and children, follows the route of the NSR valley to Kootenay Plains. Thompson later reached what he named Howse Pass on June 25th (Andra-Warner, 2010).
 - 1812:** HBC establishes Fort Edmonton as a permanent location, in part because it was the furthest point west of Hudson Bay a canoe brigade could reach before freeze-up.
 - 1858:** James Hector, geologist from the Palliser Expedition, reaches the Saskatchewan River Crossing area
 - 1874:** The North West Mounted Police make their long march from Eastern Canada to Fort Edmonton
 - 1875:** The North West Mounted Police establish Sturgeon Creek Post, later renamed as Fort Saskatchewan
 - 1885:** The Northwest Resistance and Frog Lake Massacre event

The Fur Trade

The fur trade along this river was a critical part of early contact history between Indigenous and European populations. kisiskâciwani-sîpiy was a key location for many early contacts, reflecting the start of a period of trade and cooperation with numerous tribes across a vast inland trading network. The first European traders plying the river with canoes were French Canadian coureurs de bois based out of Montreal, followed by British fur traders several decades later (Milholland, 2015).



York Boak. Photo by Billie Milholland

For centuries afterwards, the river’s core role as part of a vast transportation network facilitating the international fur trade cannot be understated. It linked rich, wildlife-bearing Boreal Forest, Plains, and Rocky Mountain landscapes to trading posts as far as York Factory on Hudson Bay. The most luxurious pelts highly fashionable in Europe tended to be found in colder, northerly regions of Canada, and for a long period, Fort Edmonton was the collection and logistics depot for prime furs transported out of the Peace/Athabasca delta, prior to shipment east (Milholland, 2015). York boats - first built at Buckingham House in 1796 – were the primary means of transportation and trade along the river, until they started to be replaced by steamships in 1875.

The fur trade period also included intense rivalry and competition between the Hudson’s Bay Company and the Montreal-based North West Company. Rival fur trading networks between various Indigenous and European traders played a large role in establishing trading posts and settlements further and further west, following the course of the river upstream (Andra-Warner, 2010).

“The country bordering the river in this part of its course is very beautiful, as the high banks of the river retire and form by combining with a still higher table land, undulating hills that rise to a height of 300 to 400 feet. On the north side are thus formed the Snake Hills which are free of wood except in ravines.”

- Dr. James Hector, Palliser Expedition, 1858, describing the North Saskatchewan River 8 km upstream of Saddle Lake Creek (Milholland, 2015)

Early Expeditions

kisiskâciwani-sîpiy figured prominently in shaping and facilitating travel for the expeditions of many early explorers, including those of David Thompson - the famous explorer and fur trader. His explorations were funded by both the Hudson’s Bay Company and the North West Company, as he left the former for the latter partway through his career (Andra-Warner, 2010). Thompson’s impressive explorations of the North Saskatchewan River between 1787-1807 also relied on Indigenous guides who knew the land, including Peigan guide Old Bear, a Cree named He Dog, and various Kutenai guides (Andra-Warner, 2010).



Thompson is considered one of the world’s greatest geographers. He accurately mapped the main travel routes through over 4.3 million square kilometres of Canadian and American West, in the process journeying some 80,000 kilometres by canoe, horse, and foot. The story of Thompson would not be complete without acknowledging his remarkable Métis wife, Charlotte Small. It is likely that she also traveled over 42,000 km by canoe, foot, and horseback (Andra-Warner, 2010).

Later, the Palliser expedition (1857-1860) explored and mapped areas south of the North Saskatchewan River to the un-surveyed American boundary, and west to the Rockies. They collected detailed notes on flora and fauna and meteorological, geological, and astronomical observations, as well as transportation and settlement potential. Notably, a ‘fertile belt’ in the vicinity of the North Saskatchewan River was identified as well suited for agriculture, in contrast to the more arid lands southeast in the ‘Palliser Triangle’ (Spry, 1963).

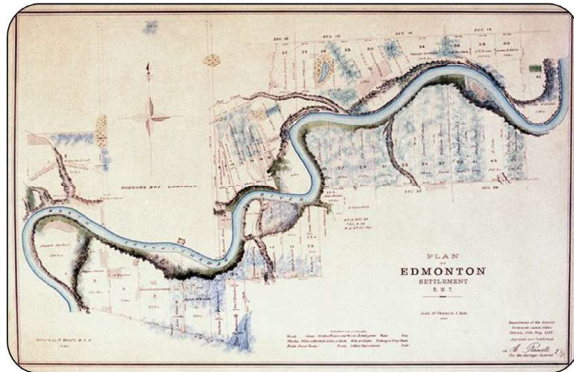


Figure 9. Early Plan of Edmonton

Settlement Patterns

The river provided a natural, geographically convenient corridor for generations of explorers and settlers accessing western Canada, right up until the bridge-building boom after the Second World War. Many settlement patterns including the siting of dwellings, lot arrangements and design, spacing and arrangements were a direct result of the influence of the river on economic and social activities. Often built near existing Indigenous settlements or trading routes, a chain of fur trading posts and associated settlements were built directly along the North Saskatchewan River, beginning in the late 1700s. Many of these have since evolved into the modern urban areas known today as the City of Edmonton, Fort Saskatchewan, and Rocky Mountain House.

At many locations, irregularly shaped lots and transportation networks followed the riverbanks. For example, in several places, the river determined how agricultural land was divided through land surveys. The 'River Lot' method of surveying was adopted for the early communities of Victoria Settlement, Fort Saskatchewan, and Fort Edmonton. Long, narrow river lots are particularly evident along a 12 km length of the

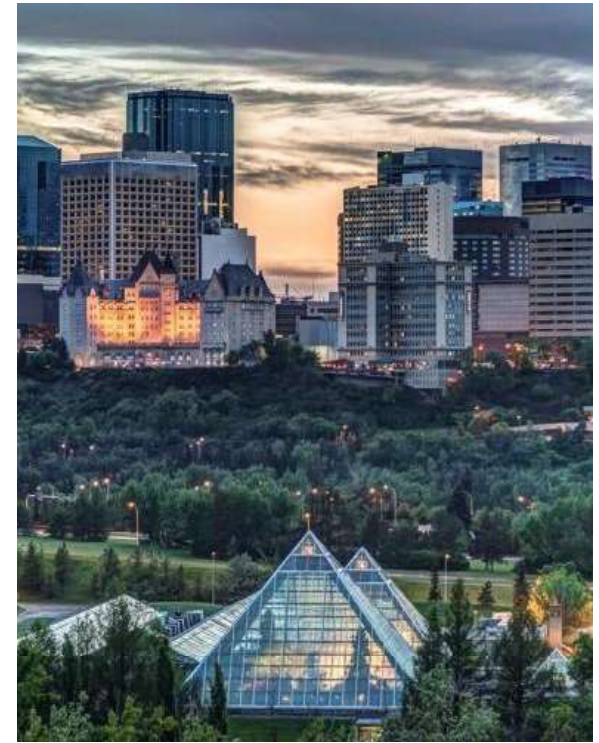
river at Victoria District – now a national historic site. River lot patterns are also evident at Lobstick Settlement – an early Métis settlement of 18 river lots. The river's path is also strongly reflected in streetscapes and lot patterns within several of Edmonton's river valley neighborhoods (**Figure 9**).

The river also played a role in the designation of Edmonton as the provincial capital in 1906 after the birth of the Province of Alberta. Interestingly, the river hill vantage point of the Alberta Legislature was chosen, in part, due to the prior decision of the Hudson's Bay Company to move its main fort to this location, retreating from the floodplain following the severe floods of 1825 and 1830. The majestic, historic Alberta Legislature grounds today includes views to the North Saskatchewan River and valley below. The centre of democracy in the province of Alberta, the Legislature is also considered an architectural jewel of downtown Edmonton (LAA, 2023).



Figure 10. The Alberta Legislature

Source: [Portraits and Panoramas of the Alberta Legislature on its 100th Birthday | Ryan Jackson/Edmonton Journal \(punkoryan.com\)](#)



Today, interesting residential and municipal architecture overlooking the river valley abounds in Edmonton. The iconic former Hotel MacDonalD (now the Fairmont Hotel) has been a fixture on the city skyline since its completion in 1915. The unique construction of the Shaw Conference Centre seems to rise right out of the river against the dramatic backdrop of pink glass and steel of Canada Place towering behind it. The Muttart Conservatory in the river valley also provides evidence of cultural expression within the river environment. Several historic churches also are in Edmonton and surrounding areas including the 1874 Anglican Diocese. The incised river valley and its sinuous corridor helps create one of the most unique, intriguing urban skylines in North America.

The river, its associated floodplains and valley slopes create a spectacular “Ribbon of Green” bisecting the Edmonton Capital Region. This has framed the city’s efforts towards preservation and stewardship of the river valley in recent decades. The river valley is the most distinctive feature of Edmonton, shaping land use patterns, open spaces, urban design, and architecture in ways that give the city and region its sense of place. This includes the contrasting juxtaposition of skyscrapers in downtown Edmonton at the top of the river valley edge with the forested river valley below.



Figure 11. Edmonton’s River Valley is referred to as the Ribbon of Green, a key part of the City’s Breathe Green Network Strategy

Further upstream, at Rocky Mountain House, the first trading post was built in 1799. Over the next 76 years, forts here were abandoned, rebuilt, and re-opened at this site. Rocky Mountain House National Historic Site was established for its role in the fur trade, association with the great mapmaker David Thompson who launched expeditions seeking passage to the west coast from here, and the site’s relationship with the Blackfoot peoples and Piikani peoples.

Settlement along the river was also facilitated by one of the most complex networks of interconnected overland trails in the west, linking the various inhabited regions of the North Saskatchewan watershed and beyond. The most prominent was the Saskatchewan Trail, also called, at various times, the Old Saskatchewan Trail, Edmonton Trail, the Hudson’s Bay Trail, the Company Trail and in more recent times, the Carlton Trail. Smoky Lake County has also designated surviving portions of this trail as a Municipal Historic Area under the Alberta Historical Resources Act (Smoky Lake County, 2021).

Over the centuries, the origin of various settlers who came to the region from abroad included:

- Early fur traders from New France, Britain, and the British Colonies including the Yankee south
- Explorers and researchers on scientific expeditions (e.g., George Simpson, David Thompson, Palliser)
- Presbyterian, Methodist, Anglican, and Roman Catholic missionaries from western Europe
- Early entrepreneurs looking for gold and adventure
- The Métis (‘children of the fur trade’)
- Early European tourist adventurers
- The North West Mounted Police
- River-boat and ferrymen
- Early Ukrainian settlers of the early 1900s– represented particularly well at the Victoria District National Historic Site
- Early Moravian and German settlers

Immigration to Canada and Alberta has increasingly diversified the local population—a trend which continues today. Virtually all cultures are now represented, including, for example,

Syrian and Ukrainian refugees who have fled conflict in their home countries in recent years.

“My paternal Grandmother’s family was Métis - her maiden name was Coutu. Her family history was documented by Hector Coutu of Two Hills in 1980. My 4X Great Grandmother, Marie Ann Gabourey Lagimodiere, had the first ‘European’ child in Fort Edmonton. They then moved to Manitoba and were founders of the Red River Settlement - there she became the grandmother to Louis Riel. My family goes back generations along the N.Sask River and subsequently the Carlton Trail. These pathways were how my kinfolk traveled, earned their living, and where they settled. I did not learn I was Métis until very recently - it was a secret kept by our parent’s generation, who were able to pass for being Caucasian, and did not want to suffer the discrimination that followed the Northwest Resistance. In the early 1950’s they moved to Vancouver and started a new life.”

- Public/Stakeholder Engagement Participant



Figure 12. Source: [The Fort Heritage Precinct - Fort Heritage Precinct](#)

Steamships and River Transport Heritage

In June 1871, Hudson’s Bay Company Governor Sir Stafford Henry Northcote announced that “Where possible, the brigades of York Boats would be replaced by steamers.” By 1875, the first North Saskatchewan River sternwheeler, the S. S. Northcote, reached Edmonton from Grand Rapids. These wide, flat-bottomed motorized boats were designed to float on the surface and navigate shallow waters. Steamships provided the main form of transportation plying the waters of the river from the late 1800s up until 1918. In addition to cargo, they carried paying passengers. The Northcote could transport up to 50 passengers on its regular route between Edmonton and Prince Albert, Saskatchewan (Milholland, 2015). In 1882, the largest steamers to travel the river (the Marquis and the Northwest) were brought into service. The Northwest had 80 berths, two bridal suites and a piano. A brisk ferry business also operated up and down the river, such as the Belle of Edmonton ferry service run by John Walter (Milholland, 2015).



Figure 13. S.S. Northcote steamship.
Source: City of Edmonton Archives EA-10-1328.
(Milholland, 2015)



Figure 14. Gardening the fertile river flats, 1902
(City of Edmonton Archives EA-157-56)

Agricultural Heritage

The theme of agricultural extraction is well represented across the North Saskatchewan River (Alberta), as it traverses and weaves across the breadbasket of Canada. The river is in the centre of a region of remarkably fertile, productive lands, with deep, rich loamy black soils high in organic matter. Selected agricultural heritage facts directly related to the river include (Milholland, 2015):

- 1814: The garden at Edmonton House on the river flats produces two hundred bushels of potatoes, fifty bushels of turnips, eighty bushels of barley, and 2300 heads of cabbage
- 1846-1847: The flourmill at Edmonton grinds 15-16 bushels of grain per day, mostly grown on river flats
- 1919: Alberta’s first farmer-organized Drainage District is established east of Edmonton at Holden

Agriculture has a strong, proud history, has been associated in many locations with the river and drainage patterns, and is part of the legacy and future of the region (EMRB, 2021).

Industrial Heritage

A strong industrial heritage is also present along the river and its watershed. As early as 1830, coal was mined from seams exposed on the riverbanks, from



Rocky Mountain House to Edmonton. Over 10 coal mines operated in Edmonton’s river valley between 1840 up to the 1920s. The Brazeau Collieries National Historic Site near Nordegg produced over 9.6 million tons of coal between 1912 to 1955. At one point, it hosted the most productive briquette plant in North America and a thriving community of up to 3,000 people. The coal mining industry in the Wabamun subwatershed area began in the 1910s. The industry here grew into Canada’s largest surface strip mine at Highvale prior to its closure in 2021 following conversion of the Keephills and Sundance power stations to natural gas feedstock.

In the 1860s, gold mining began in earnest along the North Saskatchewan River. Gold seekers near Edmonton washed out fine gold with a machine called a “grizzly”, while prospectors could be found up and down the river from Victoria Settlement all the way to the Rockies.

The Brazeau dam and river is named after Joseph Brazeau - clerk with the Hudson's Bay Company and native linguist on the Palliser Expedition.

The Bighorn dam is named after the many Bighorn Sheep in the area.

Oil and gas industry heritage is also present along the river and throughout the watershed. The Leduc #1 well drilled in a barley field south of Devon on February 13th, 1947, turned into a veritable “gusher”, changing Alberta’s economy forever almost overnight. Its discovery started billions of dollars of investments and massive immigration into Alberta. Nearby, the Town of Devon sprung up nearly overnight at the top of the escarpment of the North Saskatchewan River valley to house Imperial Oil’s workers. (Today, Devon’s stunningly beautiful ‘Voyageur Park’ serves as a major river-access point for boaters, paddlers, and anglers.) The Pembina Oil Field is also one of the largest conventional oil fields in Alberta. Following its discovery in 1953, the Town of Drayton Valley boomed from a population of 75 to 2,000 in just one year.



Figure 15. Bighorn Dam intake head gate house

In Edmonton in the late 1800s, many industries were set up directly along the river, taking advantage of water availability and power generation opportunities. Among these were a tannery, several brickyards, sawmills and lumber yards, meat packing plants, and the coal-fired power plant and wastewater treatment plants at Rossdale. Icehouses were also built along the river, making use of winter river ice cut in large square blocks to keep animal carcasses cool.

More recent hydropower developments have been significant. TransAlta completed the Brazeau (1965) and Bighorn (1972) dams and related infrastructure, which today generate 355 MW and 120 MW of electricity.



Alberta’s Industrial Heartland is a 582 km² area directly along the North Saskatchewan River. It is home to 40 petrochemical industries, and over \$45 billion of investments, including oil refineries, bitumen upgraders, fertilizers, and polypropylene facilities. It is also the site of 2 refineries with carbon capture and storage facilities, and home to the world’s largest CO₂ pipeline (AIHA, 2023). It also hosts the Edmonton Region Hydrogen HUB – the largest hub in Canada’s developing low-carbon hydrogen economy – with a future wholesale market potential of up to \$100 billion per year (ERH2, 2023).

Conflict

Several recorded skirmishes, massacres, battles, and other hostilities have occurred on, near, or in relation to the river. There is evidence of European-Indigenous conflict during the fur trade, as well as European-European and Indigenous-Indigenous conflict during that same era, especially prior to 1821. The North Saskatchewan River played key roles in transporting the North West Mounted Police to the west in 1874 to address unrest.



Mistahimaskwa, Big Bear 1825—1888 PHOTO Canadian Heritage Archives

The river also played a role in the outcome of the North-West Resistance of 1885, and the tragic events at the Frog Lake National Historic Site in the same year. From April 30th to May 13th, 1885, General T.B. Strange at Fort Edmonton built barges to transport 224 men and one gun downriver to Fort Pitt to help quell the Northwest Resistance.

Frog Lake National Historic Site

Just inside the Alberta border, the site of this tragic event is laden with memories of lives lived and lost. Frustrated with the Canadian Government, especially the provision of food rations, Kah-Paypamhukwao, also known as Wandering Spirit, and other warriors took control of Mishtahimaskwa’s (Big Bear’s) Cree band, and came to Frog Lake on April 2, 1885, to take up issues with the Indian Agent. Tensions erupted in the small settlement and nine people were killed.

[Frog Lake National Historic Site](#)

The Arts

Stories, songs, traditions, and beliefs form part of our collective human heritage (CHRS, 2000), and there are many examples of the North Saskatchewan River directly or indirectly influencing the arts. This includes references to the river in musical lyrics and poetry.

“Roll on North Saskatchewan

*Born in the Rockies when the ice age receded,
In a Columbia glacier a mile above the sea;
Through wild canyons, the newborn river twists
and bends,
Its journey will be long before it ends.
Kelsey, La Verendrye, the Blackfoot and the Cree
All searched that river for their destiny;
Near here David Thompson,
His bride Charlotte by his side,
Felt a country stirring as he looked across the
great divide.*

*Still many miles to go before that river takes its
rest,*

The story of this river is the story of the west.

At Rocky Mountain House where

The Nor-westers built a post,

*They pushed their fur trade empire across to the
coast;*

Trading with the Peigan and the Kootenays,

*They loaded their canoes to make the long paddle
east.*

*Across the flatlands where that widening river
flowed,*

Through the territory of the buffalo,

By the time the steel rails stretched across

Saskatchewan,

*The buffalo who drank from the riverbanks were
gone.*

Roll on, roll on, roll on you North Saskatchewan.”

**“Roll on North Saskatchewan” - Words and
Music by James Gordon**



Lobstick Giveaway is a 72” by 48” work of art by Leah Marie Dorion. It was created in 2013 with acrylic mica flakes, pumice stone, and glass beads on canvas for the Gabriel Dumont Institute. The giveaway celebration and feasting was a fundamental aspect of the Lobstick pole ceremony. In this art work, Métis people of all ages, dressed in traditional clothing, make their contributions and offerings to the Lobstick pole celebration.

River Use, Environmental Regulations, Transboundary Agreements

The river and its surrounding watershed provide ample water supplies that have played an important, continuing role supporting many industries, agriculture, and municipal water supplies. It continues to provide a source of drinking water for over 1 million people. Many associated environmental regulations – past, present, and future – regulate water use and apportionment, water quality, and the health of the aquatic ecosystem. The first pollution control orders recorded related to the river were issued to the City of Edmonton by the Provincial Board of Health in the 1950s.

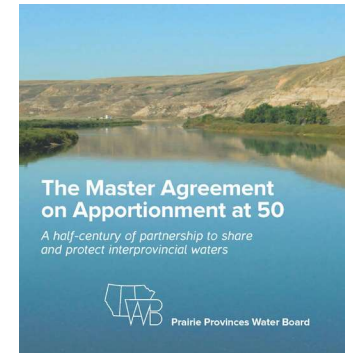
Importantly, kisiskâciwani-sîpiy flows downstream from Alberta into Saskatchewan and beyond, which has resulted in interprovincial water resource agreements. Established on

May 11, 1948, the historic Prairie Provinces Water Board administers a water sharing agreement across Alberta, Saskatchewan, and Manitoba, and hosts regular forums to discuss and resolve interprovincial water management issues. The associated Master Agreement on Apportionment specifies that Alberta must meet several requirements. Particularly relevant to kisiskâciwani-sîpiy, Alberta must allow a minimum of half of the natural flow of the river arising in Alberta to flow into Saskatchewan. There are also requirements for Alberta related to monitoring and reporting, water conservation measures, environmental flows, water quality, and consultation.

This river also provides an important legacy of lessons on flood disasters and corresponding responses. In 1825 and 1830, severe spring high water covered

the floodplain around Fort Edmonton. This convinced the Hudson’s Bay Company to move their buildings from Rossdale Flats to higher ground just below where the Alberta Legislature sits today (Milholland, 2015). This may be the first written example of a strategic retreat from a floodplain in Canada’s history.

A flood in 1899 caused serious damage to the Riverdale flats area and damaged the main power plant west of Low Level Bridge. In response, engineers raised the piers of the Low Level Bridge piers by eight feet, providing an early example of engineering infrastructure to improve flood resilience.





In June 1915, the most destructive flood in modern times along kisiskâciwani-sîpiy occurred, demolishing the communities of Walterdale, Rossdale, Cloverdale, and Riverdale. A phone call from Rocky Mountain House was all the warning they had: “My God, Edmonton, look out; the river’s up 20 feet [6 metres] and still jumping!” At least 50 homes at Edmonton were swept away, 500 more were partly or completely submerged,

Experience Métis Crossing

Built on the original river lots of Métis settlers to this region in the late 1800s, Métis Crossing is home to Canada’s first and only major Métis cultural interpretive centre. This 512-acre site is designed to engage and excite visitors. Programming encourages active participation of visitors in activities that promote an appreciation of Métis people, customs, and celebrations.

“Along the North Saskatchewan River, the songs and stories of Alberta’s Métis and the voyageurs paddle along, just as they did many years ago.”

- Source: [Métis Crossing Promotional Video](#)

2,000 people were homeless and 35 city blocks were under water (Milholland, 2015). The aftermath of land use responses after this flood event is one of the key factors explaining how Edmonton’s Ribbon of Green came to be, and why the downtown core is outside of the river valley.

The 1916 General Regulations of the Department of Education in Alberta created in the immediate aftermath of the 1915 flood restricted school uses in floodplains. It stated that to obtain approval for any new school site by the Alberta Department of Education, the site will “as far as possible” be “in a dry, elevated position, admitting of easy drainage” (2c) and “removed from stagnant water” (2d) (Milholland, 2015).

Such examples of early efforts to plan, manage, and regulate land uses and infrastructure along rivers for flood resilience are part of Canada’s national river heritage history, and could have important lessons for climate resilience nationwide in the 21st century.

2.3 Recreational Heritage

kisiskâciwani-sîpiy provides many river and land-based tourism and recreation opportunities. The river can provide outstanding experiences for many diverse users and activities in wilderness, rural, and urban settings. The character of the river, adjacent lands, nearby communities, and tourism potential varies significantly along the length of the river in different reaches. Each reach provides river-based recreation opportunities commensurate with the local character of the river and surroundings.

The entire river affords countless, diverse opportunities for river travel and adventure – in Rocky Mountain, Boreal, and Prairie settings. River-related activities are numerous and

include hiking, backpacking, horse packing, mountain biking, kayaking, canoeing, rafting, paddleboarding, river boating, rafting, competitive rowing, nature tours, fishing, camping, gold panning, riverside picnicking, cross-country skiing, dog sledding, tobogganing, winter hiking, and camping. There is an abundance of natural, quiet camping spots along the river and on river islands that help to facilitate multi-day canoe trips.

Benefits of River Recreation

Recreational activities provide many health, spiritual and intrinsic values and benefits for river users.

It also helps bring people closer to the river, stimulating awareness, education, and stewardship.

The wildest and most adventure-oriented reaches are in the west, closest to the river’s headwaters and along the eastern slopes of the Rocky Mountains. The central reaches, those in and around Edmonton, are the most developed and offer a mix of urban and rural visitor experiences. The experience of entering the urbanized reaches around Edmonton at the end of a multi-day river trip can feel like stepping out of the past into modern-day civilization. The reaches in the east are home to more pastoral and cultural landscapes and attractions.

Linked high quality cultural tourism activities such as historic wagon train reenactments, historic sternwheeler adventures, and historical voyageur canoeing are also present within and along kisiskâciwani-sîpiy. At some locations, snowmobiling and all-terrain vehicles are popular activities with locals and tourists. Northern

lights viewing along the river is also a specific experience growing in importance, particularly among international tourists (EMC, 2023)

Many river-related recreational facilities along the river have been spearheaded by provincial, municipal, and private interests. These include walking and hiking trails, foot bridges, nature observation sites, land and river touring, and amenities for seasonal river competitions and riverside entertainment.

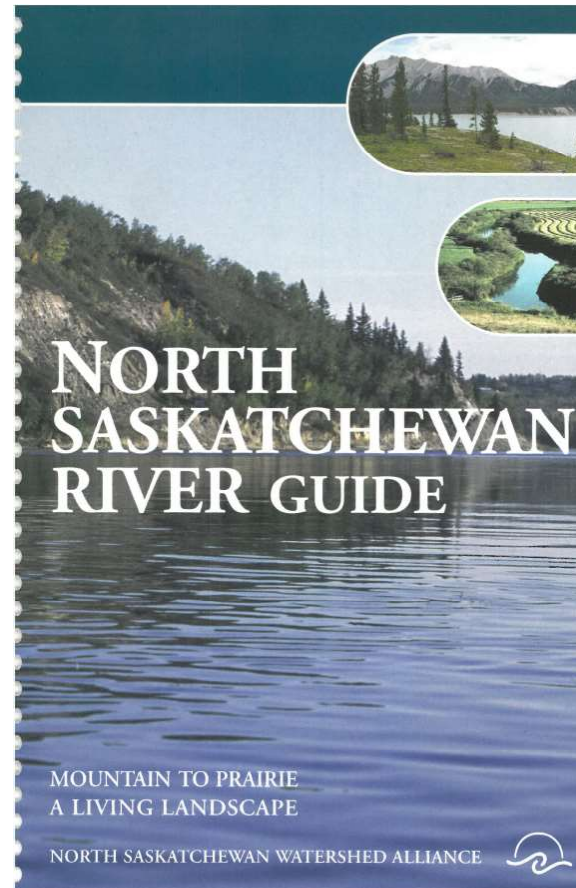
The rich natural and cultural history of the river ties all the reaches within Alberta together and provides the foundation for compelling stories and unique destinations on and off the water. The story of the river, adjacent lands, and the people connected to it can be told along each reach, leveraging local assets, benefiting local communities, and helping visitors and locals alike understand the significance of the river. The river has always been a key travel route, first for Indigenous People through their traditional territories, then for fur trade and settler exploration, and later for recreation and industry.

Recreation and tourism along the North Saskatchewan can carry forward this long-established role of the river as gateway, and usher in a new role of river as a destination.

Boating

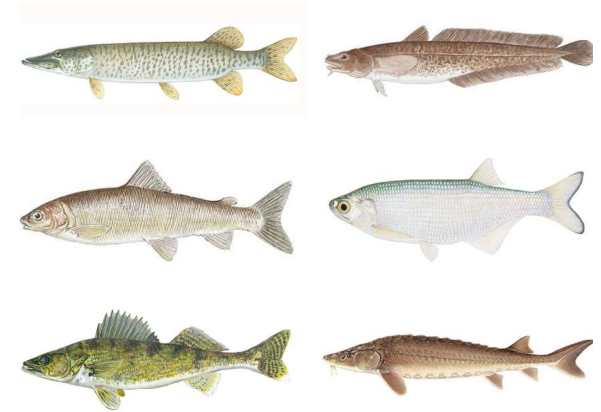
The North Saskatchewan River provides opportunities for recreational activities such as canoeing and kayaking through a natural riverine landscape. There are places to launch canoes and other watercraft at river crossing sites. There are large stretches of the North Saskatchewan River that contain no dangerous rapids or waterfalls which makes the river ideal for novice paddlers to gain experience before tackling more challenging wilderness canoeing opportunities in other regions.

While most of the nominated river could be considered ‘flatwater’, there are class II rapids on the reach between Nordegg and Rocky Mountain House. More commonly, there are riffles where shallow swift running water crosses submerged sand and gravel bars.



Overall, the river provides a spectacular and varied wilderness and recreation route – navigable in the upper reaches with good white-water skills, and with opportunities across all reaches to experience a variety of boating and wilderness in remote, yet accessible locations.

The City of Edmonton is also home to the Edmonton Queen riverboat which offers tourists and locals the opportunity to sail on the North Saskatchewan River during warmer summer weather. It started to sail on the river in 1995 and has been an emblematic attraction in the heart of the city ever since. Edmonton also hosts an annual dragon boat festival on the North Saskatchewan River.



Fishing and Hunting

The river has long been used for recreational fishing. The river and its associated watersheds are home to spawning and fishing grounds for bass, walleye, perch, and sturgeon. Angling occurs mainly at river-crossing sites due to the lack of public access and difficult terrain along most sections of the river. Fish species popular with anglers include mountain whitefish, northern pike, burbot, goldeye/mooneye, lake sturgeon, and walleye.

The river also supports a wide diversity and variety of waterfowl. Hunting, within the regulated hunting season, is a popular recreational activity in the river valley, including waterfowl, deer, and pheasant, outside of urban areas.

Natural Heritage Appreciation

Even in the most urbanized reaches, the river valley continues to provide feelings of a relatively intact riverside forest and valley system that is highly accessible to over a million residents. In fact, Edmonton's "Ribbon of Green" anchored by the river provides the largest system of contiguous urban parklands in Canada, covering over 160 km of maintained pathways, 20 major parks, and 18,000 acres which is 12 times larger than Central Park in New York City. There are also plans to create a continuous trail network of over 100 km from Devon to Fort Saskatchewan. This provides an urban oasis of nature and recreation, and an extensive network of trails, boat launches, and amenities providing a wide range of high-quality experiences.

The North Saskatchewan River valley provides opportunities for outdoor education and chances to study native vegetation, birds, and mammals. Ongoing initiatives include habitat enhancement, naturalization, and riparian restoration of the river valley. These activities also demonstrate a commitment to improve the quality of the North Saskatchewan as a recreational and educational resource.

The biologically diverse, species abundant riparian and river valley ecosystems along the river is worth protecting. The river supports a diversity of wildlife habitat and is home to several fish species, waterfowl, raptors (including eagles, hawks, and falcons), and other bird species including warblers, songbirds, herons, and egrets. The region is also noted for its species rich parkland and mixed wood habitats.

The river itself, and its surrounding riparian habitat, are important for connectivity throughout the landscape, contributing to the enhancement of biodiversity.

Cultural Heritage Appreciation

Special events, festivals, landmarks, and museums reflect the significance of the river in the history of the communities along the North Saskatchewan River. Parks along the riverbank host many events and festivals that are major tourist attractions for the city of Edmonton. These events include the dragon boat festival and fireworks. The programming at historic sites such as Fort Edmonton is especially noteworthy.

Tourism is a multi-million-dollar industry in the region and a major economic engine in many communities. Local sightseeing tours in Edmonton offer spectacular views of the river by boat, in addition to providing opportunities for wedding ceremonies, receptions, galas and meetings. Eco-tourism, or nature-based tourism, is a growing industry which makes use of the natural landscape along the river. Annual running competitions, fundraising events, and various riverside festivals also occur, including the Edmonton Folk Music Festival, Heritage Days Festival, and Canada Day events, that allow for community celebration and contribute to Edmonton being well known as a "Festival City".



Edmonton Folk Fest, 2013



Edmonton Dragon Boat Festival, 2013



River Safety

Before You Leave Home:

- Tell someone about your trip plans, including your route, companions, and scheduled return
- Check the weather
- Figure out the river depth/flows at rivers.alberta.ca
- Pack safety equipment

Before Entering the Water:

- Evaluate the water conditions and make sure your boating and swimming abilities are compatible
- Put on your personal flotation device – it doesn't work if you're not wearing it

Did You Know?

Anything that floats is considered a vessel. Canoes, Kayaks, paddleboards, inflatables (eg. floating islands), air mattresses, and any inflatable device as well as a rowing shell six metres or less **MUST** carry a:

- ◇ Personal flotation device of appropriate size for each person on the vessel
- ◇ Buoyant heaving line fifteen metres in length

2.4 Natural Heritage

kisiskâciwani-sîpiy was nominated based primarily on cultural values. However, the river also reflects many interesting, significant natural heritage values. As it descends from mountain to prairie, kisiskâciwani-sîpiy includes a remarkable variety of interesting, unusual, and rare natural features. An outstanding array of biological, evolutionary, fluvial and earth history processes are reflected, as the river cascades through the Rocky Mountains and Foothills, and meanders across parklands, settled regions, and prairie landscapes.

Key Natural Heritage Gaps Filled by kisiskâciwani-sîpiy in the Canadian Heritage Rivers System

- The nominated section is an outstanding example of a large river in the Boreal Plains as well as the Prairies - filling a key gap underrepresented in the national system (CHRS, 2016).
- Associated water bodies include eutrophic (high nutrient) aquatic lakes and wetlands of the Interior Plains identified as a national gap in representation (CHRS, 2016).
- Uniquely provides a link from its Rocky Mountain headwaters to Hudson Bay.
- Contains many outstanding examples of river environments, including significant, unique, or rare biotic and abiotic natural features and processes.
- Contains habitat for many rare or endangered plants, wildlife, and fish, including lake sturgeon.

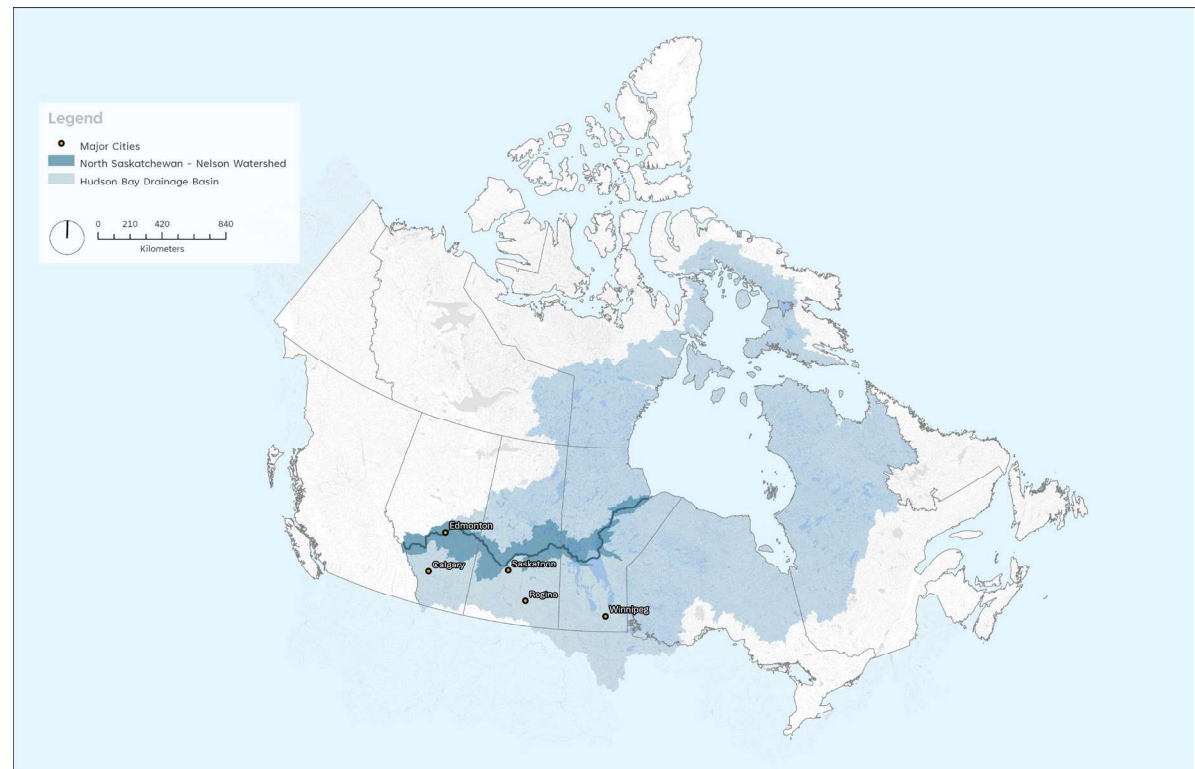


Figure 16. Location of the river in the Hudson Bay Drainage

Hydrology and Water Quality

kisiskâciwani-sîpiy uniquely links the headwaters of the Rocky Mountains to Hudson Bay (Figure 16). Downstream from Alberta, the river's main stem joins the South Saskatchewan River near Prince Albert. kisiskâciwani-sîpiy then flows across Saskatchewan and Manitoba, before emptying into Hudson's Bay via the Nelson River. The North Saskatchewan River watershed covers over 122,800 km² – an area almost as large as New Brunswick and Nova Scotia combined. The Hudson Bay drainage basin - within which the river is nested - covers almost 40% of Canada (Figure 16).

The average annual flow of the river at Edmonton is approximately 210-240 m³/s, based on data from the Water Survey of Canada. Seasonal daily average flows during the open water period from April-October range 550 m³/s in the spring to 150 m³/s in the fall, with peak flows typically occurring between May and July. Winter flows are typically lower. Most of the water in the river originates in the headwaters of the Rocky Mountains and the Foothills, with over 87% of the average annual flow at the Saskatchewan border generated upstream of Drayton Valley (Golder, 2008).

Water quality in the river varies seasonally and has improved in recent decades. The river tends to be very turbid, carrying high suspended sediment loads - especially in early summer. The river's water is also relatively 'hard' as well, with high inorganic solids dissolved in the water.

Pollution from municipal wastewater, industry, agriculture, and other sources has been an issue since at least the 1940s. A 1951 water quality report noted elevated bacteria, extremely low dissolved oxygen, odour problems, visible garbage, grease, and oil in and around Edmonton (EPCOR, 2020). However, many wastewater treatment improvements made since then have improved water quality in the river. This includes several recent municipal wastewater upgrades completed in Edmonton and the Capital Region from 1997 to 2005 – which include the introduction of UV disinfection and biological nutrient removal processes. Water quality monitoring since 1987 shows marked reductions in bacteria, Cryptosporidium, phosphorus, and nitrogen in recent decades, especially downstream from Edmonton (NSWA, 2005; EPCOR, 2020; PPWB, 2016; Anderson, 2012). Water quality upstream from Edmonton at Devon also improved slightly from 1987 to 2011 (Anderson, 2012; EPCOR, 2020).

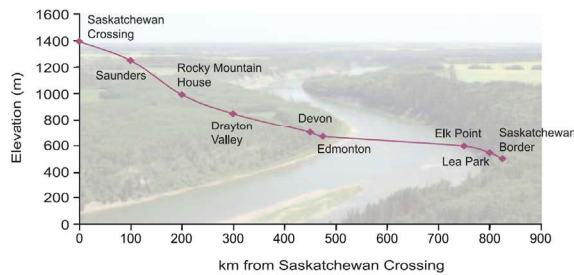


Figure 17. Elevation across the North Saskatchewan River (NSWA, 2012)

Physiography and River Morphology

Physiographic regions / subregions along the river's length includes the prairie Interior Plain / Alberta Plain, and a portion of the Cordillera / Eastern Range (Bird, 1980; Bostock, 1964). Westernmost reaches of the river range from 1200 -1400 m above sea level in the Rocky Mountains, dropping to 850 m near Edmonton, and 580 m at the border with Saskatchewan.

The river's valley has a wide floodplain base, with concave walls typical of post-glacial meltwater channels. In some areas, the river valley has only narrow floodplains between high embankments. The river's channel patterns vary, alternating between branching and meandering, with some portions taking on braided forms. In areas where glacial till is coarser and less prone to erosion, the channel takes on a more sinuous pattern. Artificial elongated lakes have formed behind both the Bighorn Dam and Brazeau Dam. The Abraham Lake reservoir behind the Bighorn Dam is Alberta's largest constructed reservoir, with an area of 54 km².

Many features of kisiskâciwani-sîpiy reflect key sediment transport, deposition, and erosion processes. Surficial geology includes a mix of unconsolidated materials varying in size from fine silt to large boulders. In the riverbed, water action creates sandy flats and gravel bars, and carries finer materials downstream to be deposited in slower moving reaches downstream. Bedrock consists of interconnected sandstone bodies, surrounded by mudstone, siltstone, and coal. Areas of abundant clay and silt layers deposited in post-glacial lakes are often overlain by more recent sand and gravel deposited by flowing water. High sediment loads, variable discharge and high species diversity in the river indicate that this is a middle order riverine system. Within the



Meandering channel of the North Saskatchewan River as it enters the Edmonton area.



Braided channel of the North Saskatchewan River

river valley, associated wetlands are often former remnants of abandoned channels that have been infilled as the channel migrated over time. The water balance in these wetlands is affected by spring runoff, river floods, as well as subsurface groundwater seepage from the main channel.

Whirlpool Ridge in the uppermost reach, the river cuts through ancient Precambrian rock at least 600 million years old. Extensive braided channels and snyes can be found in the upper reaches, while middle to lower reaches include wide meander bends, tall sandstone cliffs, and low gravel shores. Fossilized plants can also be found in shale upstream of Edmonton.

Galcial Lake Edmonton

When the last glaciers stopped advancing, melting ice formed a large lake over 15 m deep in the vicinity of Edmonton and further south. There is evidence that this huge lake drained abruptly, carrying a thousand times the average volume of the river today, and huge icebergs up to three stories high (Milholland, 2015). Former oversized abandoned channels of the main river stem represent an outstanding, significant example of the geological processes of surficial material formation through inundation and glacial melting.

Air Quality

Air quality in the region surrounding the North Saskatchewan River is monitored and reported on by three organizations: Alberta Capital Airshed, Fort Air Partnership, and West Central Airshed Society. Wildfires, industrial activities, and vehicle emissions can contribute to periodic air quality issues (AAC, 2022). Along the river and the broader region, poor air quality events - such as the record number of wildfire smoke days during summer 2023 - can present risks to both natural heritage integrity, and the quality of river recreation experiences.

Biotic Environments

In addition to traversing the Boreal Plains and Prairie ecozones of Canada, the river also flows through the Lower Foothills, Central and Dry Mixed wood, and Central Parkland natural ecoregions of Alberta. The North Saskatchewan River valley displays excellent representative examples of the natural features of these distinct ecozones and ecoregions.



Metasequia

Natural flora and fauna supported by the North Saskatchewan River's environments are many and varied and include confirmed populations of species at risk. The river's largely undeveloped riparian ecosystems and river valley corridor supports abundant plant and animal species connecting diverse natural regions, through an extensive, relatively intact natural river valley corridor. It forms part of a bioregional conservation network of core wild areas, buffer zones and corridors of suitable habitat including the river itself, and associated wetlands, forests, and shrub/grass ecosystems. Despite over 100 years of human development this vast corridor



Burtonsville Island Natural Area

still retains significant biodiversity and natural phenomena, formations and features that are often compromised in other river systems.

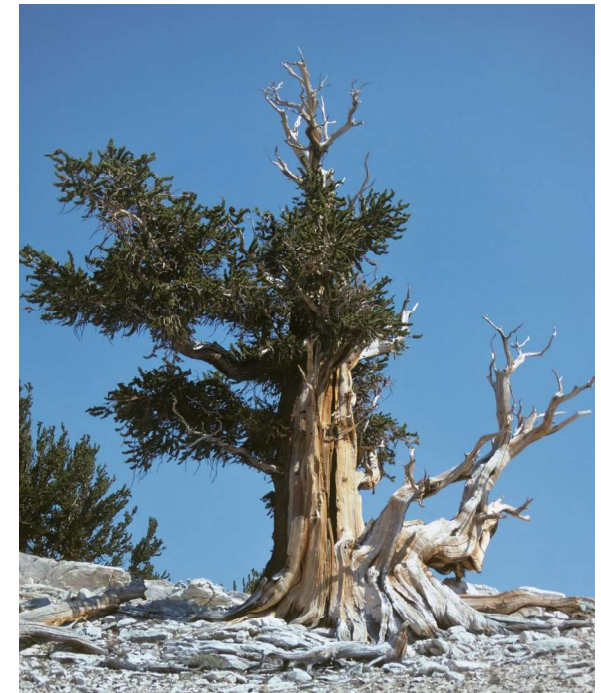
The river immediately bisects or is near at least thirty Provincial Environmentally Significant and Protected Areas, including but not limited to: Kootenay Plains Ecological Reserve, Mill Island Natural Area, Pembina Field Natural Area, Buck Lake Natural Area, Eagle Point Provincial Park/ Blue Rapids Provincial Recreation Area, Modeste Saskatchewan Natural Area, Burtonsville Island Natural Area, Genesee Natural Area, Big Island Provincial Park, Strathcona Science Provincial Park, Redwater Provincial Recreation Area, and Victoria Settlement Natural Area. Habitats for a diversity of native plant species are represented. While the landscape surrounding the river in middle and downstream reaches is often dominated by crop production and livestock grazing, there are remnants of more natural vegetation along steep slopes in the North Saskatchewan River Valley.



Yellow Lady's Slippers - Orchid Species

Vegetation and Rare Plants

River and riparian environments along kisiskâciwani-sîpiy are home to plants such as sedges, grasses, rushes, shrubs, and trees. Tree and shrub species include white spruce, balsam poplar, trembling aspen, paper birch, willows, wolf willows, chokecherry, pin cherry, low bush cranberry, dogwood, bracted honeysuckle, Saskatoon berry, buffaloberry, and prickly rose. Forb and grass species include showy aster, wild lily of the valley, northern bedstraw, Canada anemone, wild strawberry, goldenrod, slender wheatgrass, and rough fescue. Whitebark pine and limber pine are two endangered tree species whose range overlaps the upper reaches of the North Saskatchewan River. One limber pine near the river is over 1,000 years old.



1,000 Year Old Limber Pine

Rare plants found along the river include mosses, lichen, ferns, orchids, and grasses. Specific rare plant species supported by the river and its adjacent lands include the dwarf Canadian primrose, slender neck fern, small yellow lady's slipper, Indian milk-vetch, and slender mouse-ear cress which is listed as Threatened. *Miehllichhoferia macrocarpa* (Hook) is a rare moss found in the upper reaches. The river's riparian environment also supports a disjunct population of wood anemone flowers near Nordegg, with the nearest similar population found in eastern Saskatchewan.



White-Tailed Jackrabbit

Fauna

The North Saskatchewan River provides a significant wildlife corridor for the movement of animals between the prairie and the boreal forest, especially as it traverses through urban areas. Most of the nominated section of the river has been classified as a [key wildlife and biodiversity zone](#) by the Province of Alberta. Key wildlife and biodiversity zones as identified are intended to prevent loss and fragmentation of habitat; prevent short and long-term all-weather public vehicle access; prevent sensory disturbance during periods of thermal or nutritional stress on wildlife; and prevent the development of barriers to wildlife corridors. This designation is a consolidation of previous Key Ungulate Areas,

Key Ungulate Winter ranges, and Class C – Key Wildlife and Watercourse areas.

Wildlife habitats supported by the North Saskatchewan River and adjacent river valley lands are also unique, since some species are located at the southernmost part of their range, while others are found at the northern limits of their range. Wildlife supported includes large mammals such as wolf, cougar, and bear, as well as moose, elk, mountain goats, and bighorn sheep. Other species supported include fisher, fox, jackrabbit, badger, beaver, coyote, mule deer, white-tailed deer, and numerous waterfowl and bird species.

Many species of birds call the North Saskatchewan River valley home. Bird species of note observed along the river include regionally sensitive bird species such as the harlequin duck, alder flycatcher, least flycatcher, pileated woodpecker, whooping crane, barred owl, short-eared owl, common nighthawk, loggerhead shrike, great blue heron, bank swallow, sharp tailed grouse, piping plover, and American white pelican. The house wren, western kingbird, and western meadowlark can also be found. The river is also close to regionally sensitive raptor range for the golden eagle and peregrine falcon. There are hibernation sites for regionally sensitive garter snakes, especially in the lowermost reaches, and regionally sensitive wetland species such as northern leopard frogs and boreal toads.

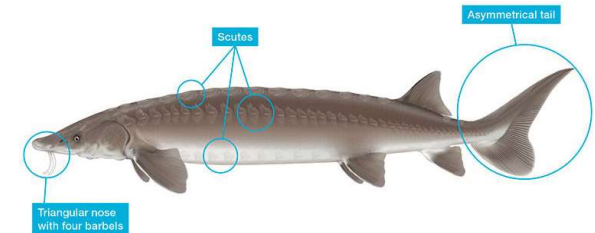


Whooping Crane

Downstream prairie reaches of the North Saskatchewan River are home to over 37 fish species, such as northern pike, walleye, goldeye, yellow perch and lake sturgeon. Regionally sensitive fish species include sauger, spoonhead sculpin, bull trout, and lake sturgeon. Bull trout can be found in the portions of the river associated with the Brazeau and Bighorn dams, Brazeau Reservoir and Abraham Lake, which is listed as a threatened species via the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Lake sturgeon, which is listed as threatened under the Alberta Wildlife Act, has also been found in the North Saskatchewan River. Sturgeon spawning habitats occur in several areas upstream from Edmonton, most notably at “sturgeon hole”.

Sturgeon In The North Saskatchewan River

The prehistoric lake sturgeon can live up to 150 years in the wild and weighs up to 400 pounds. According to provincial estimates, up to 5,000 Sturgeon live in the watershed. Numbers have rebounded significantly in recent years, due to improving water quality and fisheries management initiatives (CBC News, 2016; Government of Alberta, 2023).



In conclusion, the natural features of the river remain relatively intact, and are growing in importance. Opportunities for natural heritage appreciation and stewardship are extraordinary, due to proximity to large, growing, diverse populations and major tourism destinations.

2.5 Heritage Integrity Assessment

Appendix F of the CHRS Principles, Procedures and Operational Guidelines (CHRS, 2023) outlines the basis for evaluating heritage ‘integrity’. The assessment provided in the tables below asserts strongly that the North Saskatchewan River in Alberta fully meets most of the integrity requirements of the CHRS, and substantially meets all the integrity requirements. Furthermore, the act of designation itself is likely to contribute to maintaining or enhancing the river’s heritage integrity.

The river remains vulnerable to change and degradation. Cultural heritage integrity could be vulnerable to the loss or attrition of historical knowledge, cultural fragmentation, loss of social cohesion, and lack of education and awareness. Natural heritage values remain vulnerable to habitat fragmentation and loss, pollution, dams and hydropower generation, invasive species, wildfires, and climate change. The quality of river recreational experiences could also deteriorate as the river environment changes. However, many remain hopeful that with collaborative stewardship, continued improvements can be achieved.

Cultural Integrity Guidelines

Guideline (CHRS 2023)	Assessment and Notes / Justification
<p>CI.1. The nominated section is of sufficient size to include significant representations of all of the features, activities or other phenomena which give the river its outstanding cultural value</p>	<p>Fully met – Designation will enhance, promote, and conserve river-associated cultural integrity, by linking together multiple national and provincial historic sites and resources in a linked thematic framework.</p>
<p>CI.2. The visual character of the nominated section enables uninterrupted appreciation of at least one of the periods of the river’s historical importance</p>	<p>Substantially met – the vast majority remains largely uninterrupted and provides for extensive appreciation of multiple periods in the river’s history.</p>
<p>CI.3. The key artifacts and sites comprising the cultural values for which the river is nominated are unimpaired by impoundments and human land uses; and</p>	<p>Substantially met – impoundments at the Bighorn and Brazeau dams have not significantly affected key artifacts and sites along the extent of nominated river.</p>
<p>CI.4. The water quality of the nominated section does not detract from the visual character or the cultural experience provided by its cultural values.</p>	<p>Fully met – Water quality trends have been improving, and seasonally high turbidity events are a natural feature of the river.</p>

Recreational Integrity Guidelines

Guideline (CHRS 2023)	Assessment and Notes / Justification
<p>RI.1. The river possesses water of a quality suitable for contact recreational activities, including those recreational opportunities for which it is nominated.</p>	<p>Fully met in most reaches, most of the time/substantially met throughout entire river - The North Saskatchewan River’s water quality is sufficient for many recreational activities, including canoeing, kayaking, and fishing.</p>
<p>RI.2. The river’s visual appearance is capable of providing river travelers with a continuous natural experience, or a combined natural and cultural experience, without significant interruption by modern human intrusions.</p>	<p>Fully met – even within Edmonton city limits, the river valley largely remains a natural oasis with few intrusions, allowing travelers to “paddle into the past” and get a sense of what early travelers experienced. Work should continue to provide space for ceremony, spiritual, and traditional relations with the river. Naturalization and restoration work along the riverbank also demonstrates a commitment to improve and conserve the quality of the river and river valley.</p>
<p>RI.3. The river is capable of supporting recreational uses without significant loss of, or impact on, its natural and cultural values or its visual character.</p>	<p>Fully met – This is an extensive river with many different recreational settings and experiences. Although the nature of experiences differs by reach, visual character of river landscapes and associated experiences will largely remain intact for the foreseeable future.</p>



Photo credit: Kevin Wirtanen



Natural Integrity Guidelines

Guideline (CHRS 2023)	Assessment and Notes / Justification
<p>NI.1. The nominated section is of sufficient size to include significant representations of all of the natural processes, features, or other phenomena which give the river its outstanding natural value.</p>	<p>Fully met – captures diverse ecozone types including the Rockies and foothills, boreal plains, and transitional parkland and prairies.</p>
<p>NI.2. The nominated section includes those ecosystem components which contribute significantly to the provision of habitat for species in need of protection.</p>	<p>Fully met – The river, adjacent wetlands, oxbows, and riparian forests provide habitat for many rare bird, animal, plant, and fish species (e.g., critical habitat for lake sturgeon).</p>
<p>NI.3. There are no human-made impoundments within the nominated section.</p>	<p>Not met – The Bighorn Dam is located within the nominated section. However, most nominated reaches have no impoundments. In addition, higher winter water flows due to the dam help to dilute wastewater effluent downstream.</p>
<p>NI.4. All key elements and ecosystem components are unaffected by impoundments located outside the nominated section.</p>	<p>Substantially met – Brazeau Dam is located on a tributary and likely has some negative impacts, but also contributes to improved water quality downstream, particularly in winter.</p>
<p>NI.5. The water in the nominated section is uncontaminated to the extent that its natural aquatic ecosystem is intact.</p>	<p>Substantially met – Water quality is within provincial water quality standards and has improved over recent decades. Fish and aquatic benthic invertebrates indicating ecosystem integrity are also present.</p>
<p>NI.6. The natural aesthetic character of the nominated section is free of, or not adversely affected by, human developments.</p>	<p>Substantially met – The natural aesthetics of most reaches of the river corridor are intact, with little development visible from the river, and formal protections in several provincial and municipal parks. Even in urbanized reaches in and around Edmonton, the River Valley Conservation Coalition and Ribbon of Green Plan help to maintain natural aesthetics in most locations.</p>

2.6 Overview & Summary of kisiskâciwani-sîpiy’s Heritage Values

The river played a key role in Indigenous cultures, including creation stories, ceremonies, gathering places, trade and transport, medicines and foods

- Associated with a long history of interactions between different peoples and cultures, including periods of cooperation and conflict
- A major historic fur trade and travel route to the heart of North America, reflected by historic figures such as David Thompson and the John Palliser, and historic sites such as Buckingham House, Victoria District, Fort Edmonton, and Rocky Mountain House
- The 718 km river segment represents 55% of Canada’s 12th longest river, and 28% of Canada’s 2nd longest river system (Nelson-Saskatchewan)
- Representation of Edmonton as the capital of Alberta, whose history and land use patterns were shaped directly by the river
- The North Saskatchewan River Valley and Ravine System is the largest urban park in Canada, with over 160 kilometers of maintained pathways and trails
- A spectacular and varied wilderness and recreation route – navigable in the upper reaches with good white-water skills, and opportunities across all reaches to experience a variety of boating and wilderness in remote yet accessible locations
- A wide range of recreational activities and experiences within wilderness, rural and urban settings
- Reflects many outstanding, unique natural heritage features, including rare/threatened plants, mammals, birds and fish including lake sturgeon

This designation will complement the upstream river section in Banff National Park that was designated as a heritage river in 1989. It may also catalyze future additions downstream into Saskatchewan and Manitoba.

In conclusion, the heritage significance of this river is important and growing. Designation as a heritage river will fill critical national gaps in the Canadian Heritage Rivers System and help provide a blueprint for coordinated actions across many groups into the future.



Figure 18. Photo option – Sunrise on the NSR – Ceyana Canoe Club, 2021 Source: Smoky Lake County Strategic Plan 2023-2025



Figure 19. Contemporary river view east from Fort George & Buckingham House Provincial, Historic Site, near Elk Point. Kyle Schole photo.

3 A Heritage Strategy for kisiskâciwani-sîpiy

This **strategic framework** includes a **vision and principles, program area goals, and implementation initiatives** that provide a blueprint to guide ongoing and future implementation efforts. Through coordinated initiatives, negative risks can be minimized, and heritage benefits achieved.

3.1 Stewarding the River as a Canadian Heritage River: Vision and Principles

VISION: kisiskâciwani-sîpiy’s diverse heritage values are recognized and stewarded, strengthening thriving communities connected by the river’s landscapes and history.

PRINCIPLES

At the heart of this heritage strategy are seven principles, that largely echo the Canadian Heritage Rivers System strategic plan, but are adapted to a “made-in-Alberta” approach.

Recognition: kisiskâciwani-sîpiy is celebrated as a designated Canadian Heritage River in Alberta. Existing jurisdictions, rights, authorities, and responsibilities are fully recognized.

Respect: Rivers are for everyone, and respect for kisiskâciwani-sîpiy’s diverse users is critical. All Indigenous, community, landowner, and individual rights, concerns, and perspectives will be respected.

Reconciliation: The heritage strategy for kisiskâciwani-sîpiy recognizes and honours the special relationships between Indigenous Peoples and rivers and cultivates respectful spaces for dialogue and reconciliation between Indigenous and non-Indigenous citizens for our common future.

Integrity: kisiskâciwani-sîpiy is stewarded over time to meet integrity guidelines for cultural heritage, natural heritage, and recreation, while leveraging Indigenous ways of knowing and understanding.

Sustainability: A healthy river is essential to deliver cultural, recreational, and ecological services. Stewardship by all is essential to the long-term sustainability of kisiskâciwani-sîpiy, benefiting both current and future generations.

Voluntary Participation: Local citizens, communities, and grassroots-driven volunteer organizations are the core champions taking actions to promote, steward, and care for kisiskâciwani-sîpiy.

Collaboration & Partnerships: Strive to inform, inspire, and involve residents and visitors to connect with kisiskâciwani-sîpiy’s heritage and share in its safekeeping. Education, awareness, and action are critical, interrelated components of successful river stewardship and wise management.

GOALS AND INITIATIVES

Succinct goals and key implementation actions and initiatives have been developed for each heritage theme. The initiatives listed are not a complete inventory and should be seen as a sample and a blueprint providing guideposts. In addition, the list of Initiatives and lead agencies is not intended to be exclusionary. Stewardship partners will include many governments, Indigenous Peoples, interest holders, landowners, industries, citizens, and other groups, who will all play a role in stewarding and promoting the heritage value of this special river.

3.2 Cultural Heritage Goals and Strategies

GOAL: Recognize and steward the diverse cultural heritage associated with kisiskâciwani-sîpiy.



“This is our mosque, this is our temple, this is our cathedral. Our walls are these river banks. Our elders remember stories from their grandparents stopping here, picking berries and harvesting plants with medicinal value.”

- Lewis Cardinal (from [CBC news story](#))

What actions will YOU or your organization take, to experience, conserve, or restore the cultural heritage of kisiskâciwani-sîpiy?

KEY INITIATIVES	Lead / Partners
Unveil a commemorative Canadian Heritage Rivers System plaque during a joint public ceremony in Smoky Lake County, as well as other interpretive signages throughout the designation area.	Province of Alberta, Parks Canada, municipalities
Create and support places for ceremony and Indigenous heritage celebration along the river. E.g., ceremonies, sweat lodges, cultural camps, and inter-generational learning at Métis Crossing and Victoria Settlement Provincial Historic Site in Smoky Lake County, and kihcihkaw askî (Sacred Land) in Whitemud Park in Edmonton.	Indigenous organizations, municipalities,
Promote, steward, and enhance diverse cultural heritage attractions and interpretive opportunities, linked in a river-wide thematic framework. A variety of locations may contribute to this initiative, including numerous former ferry crossings (many of which are now legal road allowances), as well as Brazeau Collieries National Historic Site at Nordegg and Rocky Mountain House National Historic Site in Clearwater County, North Saskatchewan River Park at Rocky Mountain House, Constable Chelsea Robinson and Prospector Point Parks in Parkland County, Voyageur Park in Devon, Fort Edmonton Park and many municipal parks in the City of Edmonton, Strathcona Regional Park in Strathcona County, Fort Augustus and Fort Edmonton National Historic Site in Sturgeon County, Victoria District Provincial/National Historic Site and Fort White Earth in Smoky Lake County, Fort George and Buckingham House Provincial Historic Site and the Elk Point River Park Campground in County of St. Paul, and Frog Lake Provincial/National Historic Site in County of Vermillion River.	Municipalities, site managers, and local heritage organizations, NSWA, Province of Alberta, Parks Canada, etc.
Continue to assess possible intersections between heritage river designation and other projects such as the potential National Urban Park designation for portions of the Edmonton River Valley, possibly including cultural heritage interpretive displays.	City of Edmonton, Confederacy of Treaty Six First Nations, Métis Nation of Alberta, Parks Canada, and other partners
Research opportunities for hands-on historic site rehabilitation and associated educational opportunities.	Academia, Education sector
Provide educational opportunities for communities to learn about river heritage and stewardship opportunities.	Smoky Lake County
Create new and accessible digital learning tools such as ‘ArcGIS Story Maps’ for the river.	NSWA, Smoky Lake County, Parks Canada

3.3 Recreation and Tourism Goals and Strategies

GOAL: Promote kisiskâciwani-sîpiy as a diverse recreational amenity and destination, compatible with the natural and cultural heritage values of the river.

There remain many opportunities to enhance and grow cultural and Indigenous tourism, ecotourism, and adventure tourism, as well as specific experiences such as northern lights viewing along the river.

What actions will YOU or your organization take, to promote the recreation and tourism potential for high quality experiences associated with kisiskâciwani-sîpiy?

KEY INITIATIVES	Lead / Partners
Seek to convene a river tourism development working group for kisiskâciwani-sîpiy, focused on the core areas of water-based tourism, outdoor adventure tourism, nature-based tourism, cultural tourism, and Indigenous tourism. This group should also identify river access/egress points to improve safe and flexible use of the river and ensure market-ready tourism and recreation products to promote.	Travel Alberta and Alberta Tourism Information Service (ATIS), Regional destination marketing organizations (DMOs), emergency response organizations
Study, inventory, and invest in new or improved river access points, while promoting safety	Province of Alberta (including Alberta Transportation), municipalities, landowners
Encourage tour operators to develop signature/epic multi-day river heritage tours.	Local tour operators
Tell the story of the river in both hard copy and digital formats, linked to updated river guides and trip planning resources	NSWA, independent authors
Promote the river as a sport fishery, coordinated with the GoA's Fisheries Education Plan, and including urban settings	Province of Alberta Department of Environment and Protected Areas, Government of Canada Department of Fisheries and Oceans (DFO)
Complete current and subsequent phases of remaining trail sections linking Devon to Fort Saskatchewan along the recently named Amisko Waciw Mêskanaw (Beaver Hills Road)	River Valley Alliance (RVA) & partners
Complete the planned Rocky Mountain House to Nordegg Trail (Reach 2)	Clearwater County, Province of Alberta
Travel Alberta has embarked on a new mandate of product development, including implementation of Ten 'Tourism Development Zone Plans', several of which encompass the North Saskatchewan River.	Travel Alberta, partners
Encourage development of new and existing riverside campsites across a range of settings and access types, which avoid sensitive ecosystems	Province of Alberta, landowners
Continue to assess possible intersections between the heritage river designation and the potential National Urban Park designation for portions of the Edmonton River Valley, including potential recreation and tourism components compatible with natural and cultural heritage values.	City of Edmonton, Confederacy of Treaty Six First Nations, Métis Nation of Alberta, Parks Canada, and other partners
Implement opportunities for maintaining dark skies	Royal Astronomical Society, municipalities, others

3.4 Natural Heritage Goals and Strategies

GOAL: Recognize and steward the diverse cultural heritage associated with kisiskâciwani-sîpiy.

What actions will YOU or your organization take to experience, conserve, or restore the natural heritage of kisiskâciwani-sîpiy?

KEY INITIATIVES	Lead / Partners
Implement the Integrated Watershed Management Plan (IWMP), including monitoring, evaluating, and reporting on progress.	NSWA
Complete the update of lake sturgeon population status throughout the river (GoA, 2023).	Province of Alberta Fish and Wildlife Stewardship, Department of Fisheries and Oceans (DFO)
Complete & implement the Ribbon of Green, Watershed Management Framework, Greener as We Grow, etc.	City of Edmonton
Establish, maintain, and enhance the ‘Healthy Rivers Ecosystem Assessment System’ (THREATS™) platform.	EPCOR
Implement the Beaver Hills wetland inventory, rural residential stewardship program, etc.	Beaver Hills Biosphere Reserve
Continue to assess possible intersections between heritage river designation and the potential National Urban Park designation for portions of the Edmonton River Valley, which could include for example, potential restoration activities.	City of Edmonton, Confederacy of Treaty Six First Nations, Métis Nation of Alberta, Parks Canada, and other partners
Canadian Aquatic Biomonitoring Network (CABIN) on the Eastern Slopes.	Living Lakes Canada
Complete the reclamation of the Wabamun – Highvale coal mine.	TransAlta
Collaborate with partners to enhance education, applied research, and engagement programs.	Academia, (University of Alberta, others) Natural Sciences and Engineering Research Council of Canada (NSERC), Alberta Innovates, fRI Research
Complete and implement the NSWA North Saskatchewan River Basin Wetland Strategy.	NSWA, others
Complete and implement a Riparian Health Action Plan in the watershed, building on the 2018 Riparian Web Portal.	NSWA, Cows and Fish Alberta Riparian Society
Continue monitoring and reporting on ambient air quality.	Fort Air Partnership (FAP), Alberta Capital Airshed (ACA), West Central Airshed Society (WCAS)

Over 17,000 km of riparian shoreline has been assessed for intactness in recent years in the North Saskatchewan and Battle River watersheds in Alberta

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Working together for a healthy and resilient watershed

The North Saskatchewan Watershed Alliance (NSWA) is a not-for-profit organization collaborating with a diverse range of stakeholders to find practical solutions to watershed issues.

[LEARN MORE](#)

WE PLAN
We work with others to find ways to integrate land and water planning to improve watershed function

WE COLLABORATE
We create opportunities for stakeholders to come together, share resources and explore innovative solutions to watershed management challenges.

WE SHARE
We provide information about the watershed and create forums for sharing that information



English | Français | Michif

The Beaver Hills Biosphere

People and nature - in harmony

A distinct geographic area and resilient landscape in which people work together to contribute to the environmental, social, economic and cultural well being of the Beaver Hills region.

[Learn about the Biosphere](#)



IWMP Natural Heritage Goals

Instream flow needs of the NSR watershed are met

Aquatic ecosystem health in the NSR watershed is maintained or improved

(NSWA 2012)

3.5 Water Quality Goals and Strategies

GOAL: Maintain or improve water quality in kisiskâciwani-sîpiy.

KEY INITIATIVES	Lead/Partners
WaterSHED water quality monitoring program implementation and communications	EPCOR, with NSWA, Alberta Environment and Protected Areas
Implement the Surface Water Quality Framework for the North Saskatchewan basin	Alberta Environment and Protected Areas
Implement relevant source water protection projects	EPCOR, other partners
Proactively upgrade wastewater treatment and flood mitigation systems	EPCOR, other partners
Implement the Blackmud/Whitemud stormwater release rates in development planning (3.0 L/s/ha)	Blackmud/Whitemud Surface Water Management Group
Complete a water quality trend analysis for the Sturgeon River, and pursue targeted funding for projects	Sturgeon River Watershed Alliance

Water Quality: A Key Focus Area for Ongoing Stewardship

Water quality in kisiskâciwani-sîpiy continues to be a major focus for several levels of government and many interested parties. The Government of Alberta strives to be a leader in both water resources management and heritage management. In particular, [Alberta's Surface Water Quality Framework for the North Saskatchewan River basin \(2022\)](#) is key to maintain or improve surface water quality in The River. It includes site-specific water quality objectives, triggers and limits for 21 water quality parameters (GoA, 2022). Crossing established triggers or limits requires a response from government, including specific management or regulatory actions taken as necessary.

The federal *Wastewater Systems Effluent Regulation* under the *Fisheries Act* also helps protect receiving environments and aquatic life from wastewater discharges. The PPWB also monitors water quality at the border with Saskatchewan using site-specific water quality objectives.

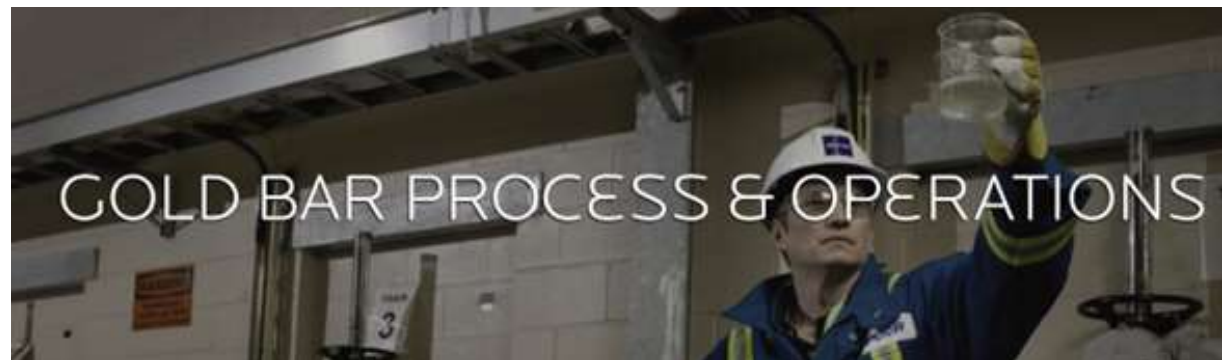
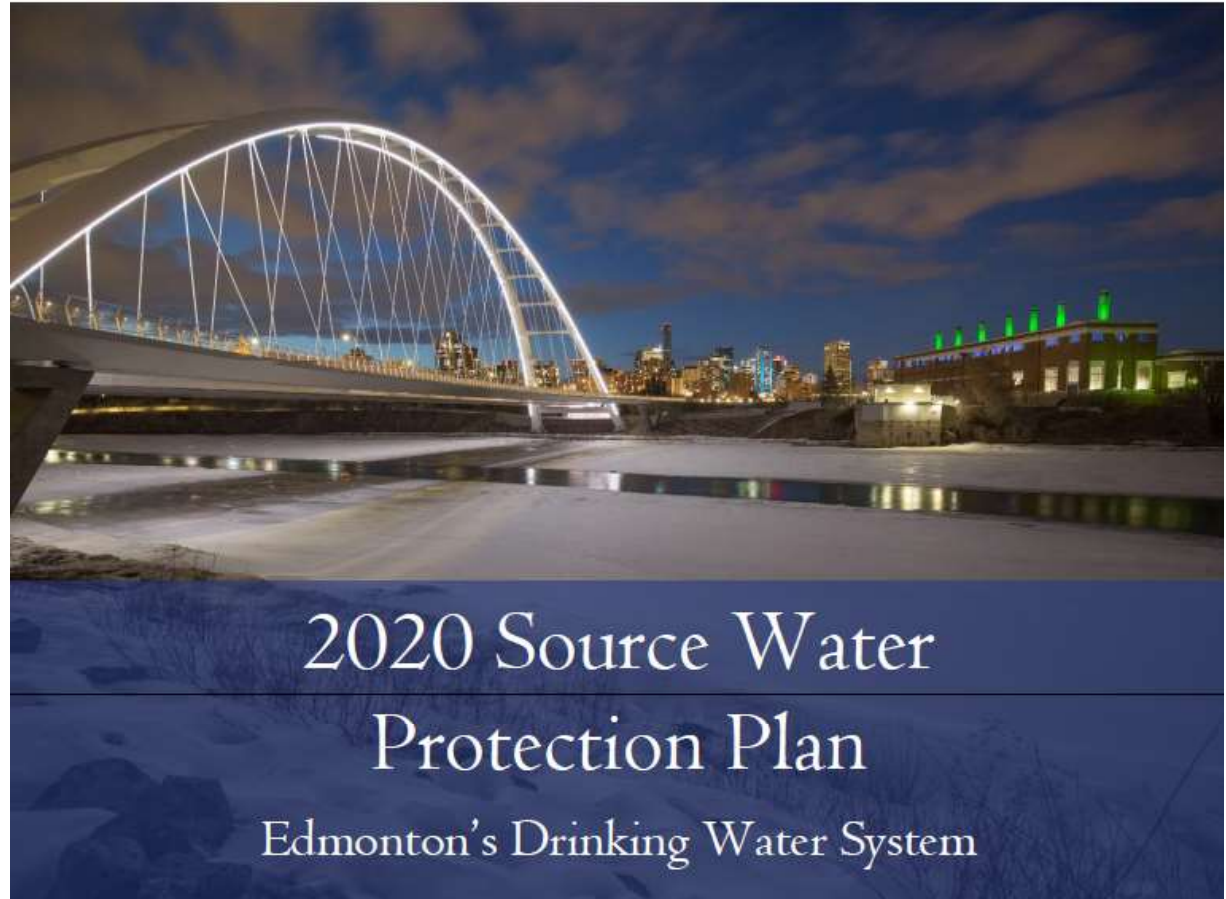
What actions will YOU or your organization take to maintain or restore the water quality of kisiskâciwani-sîpiy?

EPCOR Utilities Inc. Commitments to Kisiskâciwani-sîpiy

Source Water Protection: EPCOR's Source Water Protection Plan assesses risks and develops mitigation strategies and actions to protect source water. This is part of their multi-barrier approach to protecting public health and providing safe drinking water to their customers (EPCOR, 2020).

Stormwater Management: EPCOR Drainage plans to invest \$1.6 billion over the next 20 years through its' Stormwater Integrated Resource Plan (SIRP). Investments will include both grey and green (Low Impact Development) infrastructure to reduce local flood risk and improve water quality (EPCOR, 2020). The commitment include almost \$500 million earmarked for Low Impact Development facilities (Ancel, 2021). This is very likely to improve water quality within and downstream from Edmonton, by filtering many of the pollutants found in urban stormwater runoff as well as reducing erosion risks within watersheds.

Wastewater Management: The Goldbar Wastewater Treatment Plant is one of Canada's largest, most complex, and most innovative sewage treatment plants. Each year, it treats over 200,000 million tons of sewage, and remains at the forefront of investing in new wastewater treatment technologies, including activated sludge densification.



3.6 Cross-Cutting Theme: Climate Change

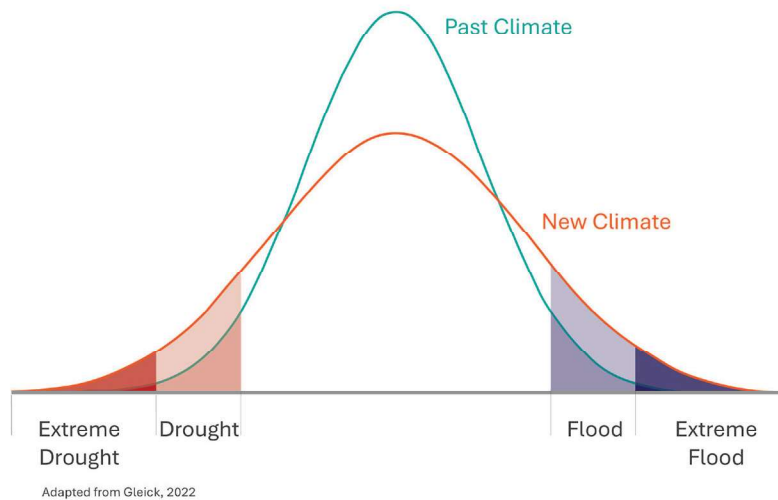


Figure 20. Flood and drought risks in a changing climate *Adapted from: Gleick (2022)*

Climate change is a ‘wild card’ influencing the heritage integrity of kisiskâciwani-sîpiy in several ways. This includes changes and risks to water flows and seasonal timing, water quality, species and habitats, historic and archaeological sites, and recreation and tourism values.

Local temperatures will increase more than global averages in kisiskâciwani-sîpiy’s northern climate. Recent projections for the City of Edmonton (CoE) show average annual temperature increases of +3.5°C to +5.6°C by the 2050s, to as high as +8°C by the 2080s (CoE, 2018). kisiskâciwani-sîpiy is responding to these changes in many ways. Higher temperatures, more intense rainfall, melting glaciers, and earlier spring melts are increasing the risk of both flood and drought (Kerr, et al., 2019). Some studies indicate the annual likelihood of floods may double due to climate change (CoE, 2018).

Risks to water quality from climate change include increased urban and agricultural runoff, pollution spikes after forest fires, heat-related algae and bacteria growth, less dilution of pollution during low flows, and low dissolved oxygen causing fish kills (Kerr, et al., 2019). Many initiatives are underway in the region advancing climate action, with a few key highlights listed below. Although climate change goals aren’t specific to this heritage designation, for consistency a goal has been provided below also.

What actions will YOU or your organization take to increase climate resilience?

GOAL: Mitigate greenhouse gases and adapt to climate change.

KEY INITIATIVES	Lead
Promote and support the hydrogen economy in the Industrial Heartland	Edmonton Region Hydrogen HUB, Industries
Support the Community Energy Transition Strategy, Change for Climate & Climate Resilient Edmonton programs	City of Edmonton
Support capacity-building and resilience	Municipalities, others

3.7 Summary of the Heritage Strategy

This Canadian Heritage River designation is centered around an action-oriented strategy, which coherently links a vision, principles, goals, and initiatives. The intent is for this strategic, integrated blueprint to function for years to come, fostering greater recognition, stewardship, and promotion of the importance of this timeless river.



Figure 21. Fort George and Buckingham House provincial historic site museum, near Elk Point
[Fort George and Buckingham House Provincial Historic site \(travelalberta.com\)](http://travelalberta.com)

VISION

kisiskâciwani-sîpiy's diverse heritage values are recognized and stewarded, strengthening thriving communities connected by the river's landscapes and history.

PRINCIPLES

- Recognition
- Respect
- Reconciliation
- Integrity
- Sustainability
- Collaboration
- Partnerships
- Voluntary Participation

CULTURE GOAL

Recognize and steward the diverse cultural heritage associated with kisiskâciwani-sîpiy.

RECREATION GOAL

Promote kisiskâciwani-sîpiy as a diverse recreational amenity and destination, compatible with the natural and cultural heritage values of the river.

NATURAL HERITAGE GOAL

Maintain or improve the natural heritage of kisiskâciwani-sîpiy, including its watershed, greenways, flora, and fauna.

WATER QUALITY GOAL

Maintain or improve water quality in kisiskâciwani-sîpiy.

4 Implementation and Monitoring

4.1 Stewardship and Collaboration

Implementation of the Canadian Heritage River Designation will require collective accountability for cooperation, collaboration, and stewardship from many Indigenous communities, individuals, organizations, and governments, with a variety of worldviews, perspectives, areas of expertise, and authorities. The Canadian Heritage River designation is non-binding and honorary in nature, which means it is primarily a means to “brand” the existing natural, cultural, heritage, and recreational stewardship work already occurring along the river. This is seen to enhance and support existing and potential future stewardship activities, so they may collectively be more effective in celebrating kisiskâciwani-sîpiy.

The vision for implementing the heritage designation is one where individuals, communities, and organizations continue to act individually to advance watershed stewardship and can voluntarily collaborate on future stewardship actions. The vision requires that a foundation, or “roots”, are developed and maintained to sustain the co-created outcomes, or “growth”, they aim to achieve. While the branches and canopy are not yet defined, they will be identified and co-created with all those who participate. The foundation includes:

1. Relationship building among and between people and organizations with differing worldviews and areas of expertise so that other ‘roots’ can grow.
2. Sharing and learning among the many differing perspectives so there is a basis for understanding across perspectives.
3. Co-create stewardship model that serves

Co-Created Outcomes

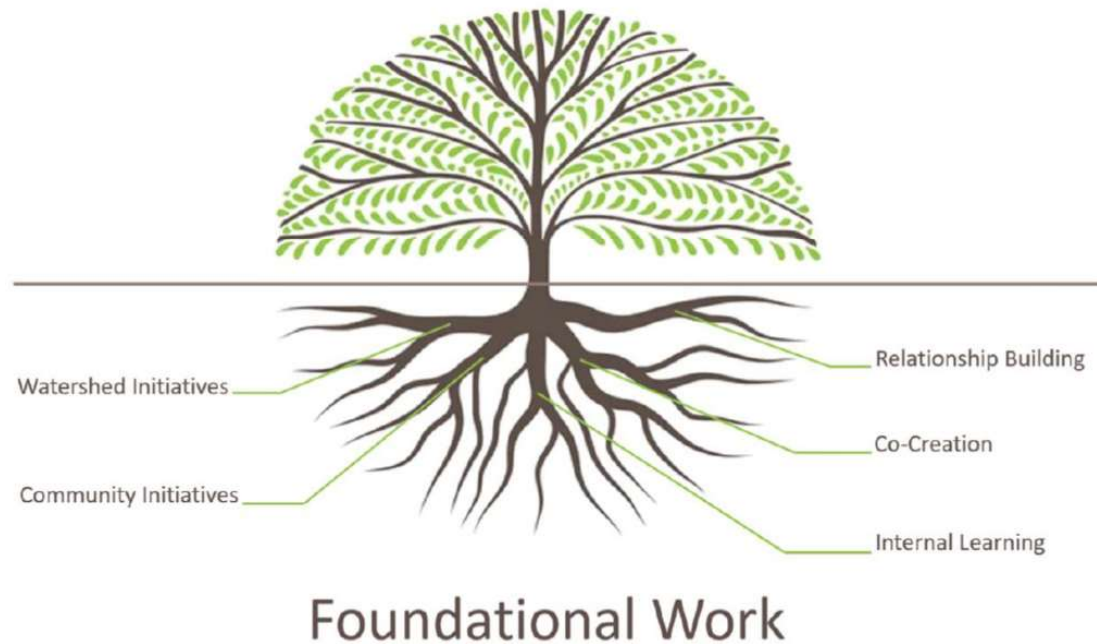


Figure 22. Source: NSWA (2023)

the specific needs of advancing stewardship through the Canadian Heritage River designation banner.

4. Co-create initiatives that can bring together worldviews and perspectives in on-the-ground stewardship actions.

The following pages summarize some key ways that several key groups will contribute towards this framework over time, including Indigenous communities and organizations, nonprofit organizations, and government agencies. In addition, a core group of reporting partners established to meet the CHRS’ ongoing monitoring, review, and reporting requirements is also described and visualized.

Reporting Partners, Governance and Communications

A core group of reporting partners has been established, which meets the CHRS’ ongoing monitoring, review, and reporting requirements. At a minimum, the reporting partners at the outset will include the NSWA and Smoky Lake County, who have already confirmed their roles. However, other parties are welcome to join the reporting partners in the future, if they have the capacity and a desire to be more directly involved with the reports. The reporting partners will compile and produce annual reports on events, actions, and activities that were taken to support river heritage. The reporting partners will also

undertake the 10-year monitoring requirements and report submissions to the CHRS – as further detailed in **Section 4.5**.

Many other groups, agencies, and industries will also have opportunities to communicate their stories and successes in implementing various river heritage stewardship initiatives and actions as they occur. These implementation partners will be consulted by the reporting partners and may contribute information on their initiatives to the reporting partners to include within the CHRS submissions. As visualized in **Figure 23**, these additional partners include - but are not limited to - provincial government agencies, federal government, the City of Edmonton and other municipalities, the local water utility industry (e.g., EPCOR), as well as the tourism industry, other industry representatives, and Indigenous groups. We anticipate and welcome Indigenous involvement throughout this process, so that Indigenous-led initiatives and/or Indigenous contributions to projects led by others related to river heritage are captured in the reporting. (**Figure 23**).

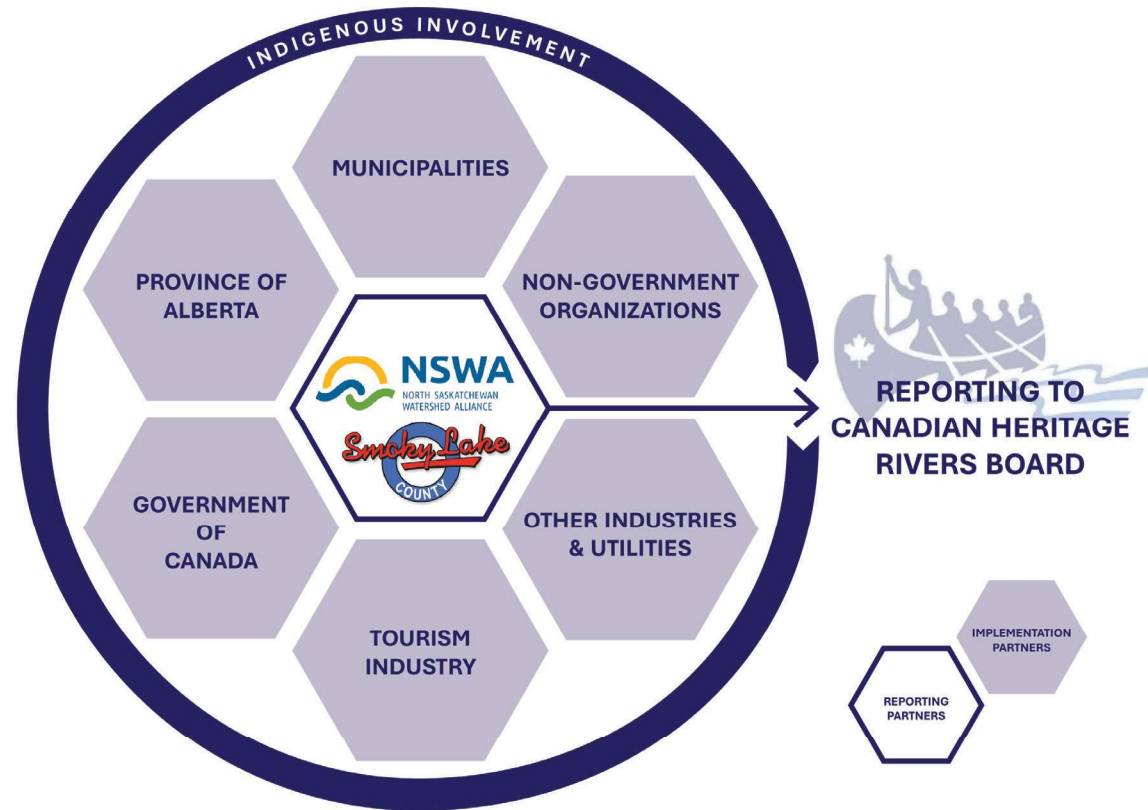


Figure 23. Governance and Reporting Framework

Indigenous Involvement with River Heritage

Indigenous Peoples, ceremonies, and protocols are critical for this river, and any river stewardship initiative is not fully complete without Indigenous input and participation. The work done to engage Indigenous Peoples for this Canadian Heritage River System nomination and designation process shows Indigenous communities clearly want to be involved with kisiskâciwani-sîpiy / Omaka-ty and want these types of conversations to continue and deepen. Importantly, Indigenous Peoples expressed a view that heritage designation is steppingstone towards more meaningful actions, leading to clear, tangible results such as visible improvements to river conditions and health.

The authors of this report have taken care to reflect what was heard but acknowledge this is just an initial starting point and a moral compass. This heritage river designation is a living and breathing stewardship model. Like the river, it will change over time in response to continued sharing and learning from Indigenous communities and other partners. Over time, Indigenous Peoples may increasingly take leading roles in co-creating and implementing components of this heritage designation, as part of decolonizing governance processes and advancing reconciliation.

“Once we understand each other a bit more clearly, we can tell the rest of the people, this is what’s happening to our water and how to take care of it – because it’s taken care of us up till now”

-Violet Poitras, Nakota/Cree Elder, Paul First Nation
Source: Alberta Water Council [Guide to Source Water Protection Planning 2020](#)

“The heritage river designation should walk hand-in-hand with protection, like two canoes travelling together down the river, this journey should be taken side by side”

-Indigenous engagement participant

Non-Profit Organizations and River Heritage Stewardship

Many diverse non-profit organizations are working towards similar goals that overlap with river heritage stewardship and promotion, including but not limited to:

- The NSWA, as well as the closely related more local watershed groups including the Headwaters Alliance, Sturgeon River Watershed Alliance, and Vermilion River Watershed Alliance. These include collaborations of 33 municipalities, 11 non-governmental groups, and 5 government agencies.
- The North Saskatchewan River Valley Conservation Society (NSRVCS), who seeks to engage people and influence the planning and future direction of Edmonton's River valley by taking a leadership role in educating and connecting people and ensuring decisions are made based on conservation values (NSRVCS, 2023).
- The Edmonton River Valley Conservation Coalition, who strive to "ensure preservation of the natural character and environment of the North Saskatchewan River Valley and its Ravine System" (ERVCC, 2023).
- The RiverWatch Institute of Alberta is the largest not-for-profit river rafting group that leads citizen science, river-based school field trips, and water monitoring through river rafting experiences promoting education and awareness (RWIA, 2023).
- The Alberta Industrial Heartland Association is a non-profit municipal collaboration that promotes responsible development in the Industrial Heartland region (AIHA, 2023).

- Lake management partnership organizations in the NSRB (Wabamun Watershed Council, Mayatan Lake Management Association, Wizard Lake Watershed and Lake Stewardship, Hubbles Lake Stewardship Society, Big Lake Environmental Support Society, Alberta Lake Management Society).

4.2 Communicating the Benefits of Designation



Figure 24. North Saskatchewan River at Highway 831
(Steve Ricketts)

Designation will help protect and improve the North Saskatchewan's cultural, recreational, and natural heritage values for the enjoyment and benefit of current and future generations and provide a link to the rich history and stories contained and associated with these waters.

The designation of kisiskâciwani-sîpiy as a Canadian Heritage River will be influential in

capturing the public's imagination, drawing them in to learn more about all components of river heritage. Benefits arising from heritage river designation are likely to include more high-quality recreation opportunities and related health and spiritual benefits, tourism development and related economic opportunities², and a greater appreciation of the river, its values, and history.

Processes to steward and govern the river also bring citizens and communities together, spark conversations and improve relations. It also may help stimulate or encourage additional community-based or individual actions that add to the protection, care, and love for this remarkable waterway. Increasing awareness has been noted to attract more people along the river to act and contribute towards the realization of benefits (FBC, 2021).

This also helps with reconciliation between Canada's diverse peoples, as acknowledging river heritage and repairing our relationship with the river is seen by many as critical to repairing relationships between ourselves, as part of the process of reconciliation. We hope and expect that many of these benefits will deepen and accumulate over time.

4.3 Framework / Sequence for Implementation

The NSWA, Smoky Lake County, and any potential future reporting partners will lead and produce annual reports on events, actions, and activities undertaken to support river heritage values. Additional implementation partners, such as the Government of Alberta, Government of Canada, City of Edmonton, EPCOR, Indigenous communities, and other agencies and/or

² More specific analyses of recreation and tourism opportunities and constraints can be found in Appendix E

organizations, will help support and contribute information to these reports.

More extensive monitoring reports will be prepared every 10 years, describing the status of river heritage values and integrity, and progress towards the vision, goals, and actions identified in this designation document. As needed and as grant or other funding allows, consulting support may be procured and administered by the NSWA – or as agreed upon, by other partner agencies, to complete the comprehensive 10-year monitoring report to the desired level of effort and standard of quality. Activities and tasks to be delegated to any consultant(s) procured might include, but not be limited to reporting and documentation, data analysis and synthesis, communications and engagement supports, mapping and cartography, graphic design, and document production.

The occurrence and timing of many of the implementation initiatives will vary according to various organizational priorities, resources, and capacities. However, due to the great interest in river heritage expressed by many parties and agencies, a degree of implementation is all but assured, and it is highly likely that criteria will be met in the future so that kisiskâciwani-sîpiy can continue to be designated as Canadian Heritage River for many generations to come.

4.4 Commitments to Implement

Many statements of commitments for implementation have been obtained, as shown by the quotes in the Foreword (1.1), and the many Statements/Letters of Support included in **Appendix B**. The North Saskatchewan Alliance (NSWA) in particular commits to be the key agency, along with Smoky Lake County, to meet the CHRS monitoring, review, and reporting requirements, as outlined below.

4.5 Monitoring, Review and Reporting

As mentioned above, the Canadian Heritage River System requires reporting on the progress of implementation on an annual and 10-year basis. The North Saskatchewan Watershed Alliance (NSWA) has agreed to fill this tracking and reporting role, understanding that the foundation for progress reporting requires collaboration across communities and organizations.

The heritage river reporting role builds organically from the NSWA's existing responsibility as a convener and collaborator for the North Saskatchewan River basin in Alberta. The NSWA as a Watershed Planning and Advisory Council (WPAC) under the Alberta Water for Life Strategy is tasked with gathering and disseminating information, evaluating and reporting on the state of the watershed, developing and contributing towards watershed planning, and providing information, advice, and assistance to interest holders (NSWA, 2012).

To fulfill the reporting requirements of the CHRS, the NSWA and Smoky Lake County will seek input from a broad array of implementation partners so that progress reports can reflect initiatives, progress, successes, challenges, and concerns from across the watershed. The table of implementation and reporting partners will be open to a variety of groups, and is anticipated to include Indigenous communities, municipalities, industries and utilities, watershed and lake stewardship groups, grassroots organizations (e.g., Edmonton River Valley Conservation Coalition, RiverWatch Institute of Alberta), Alberta Environment and Protected Areas, Government of Canada (e.g., Parks Canada, ECCC, DFO), and possibly members of the public at large. The

graphic in **Figure 23** visualizes the governance and communications framework envisioned to achieve this.

The identified reporting partners (NSWA and Smoky Lake County) will handle specific requirements of annual and decadal reporting, including tracking implementation progress for actions that advance the vision and goals of the heritage river designation document. It is anticipated that the two reporting partners may be augmented to include others with a desire and capacity to participate (e.g., Indigenous Nations, municipalities) (**Figure 23**).

Those involved as implementation or reporting partners are not formal decision-making bodies. They function to track implementation and seek alignment and integration of future actions for river stewardship and collaboration. In carrying out this work, care and attention will be paid towards highlighting grassroots initiatives that support the work of the local peoples who know the river best, ensuring regional efforts are transparent and well-informed, and amplifying local voices.

Monitoring, review, and reporting will occur, as outlined above, The NSWA and Smoky Lake County will lead filing:

Annual reports describing changes, improvements, and threats to the values for which the river was designated, including river-based events and stewardship actions.

Every ten years, an in-depth review of the river's values will be undertaken, and a monitoring report on the decade will be prepared and tabled with the CHRB.

Like the river, actions to protect, enhance and improve its natural, cultural and heritage

conditions are dynamic and emerging continually – annual reports are critical platforms to track significant developments.

Furthermore, decadal reporting represents an opportunity to review the efficacy of and consider updates to this designation document. If the need of update or amendment is identified, (e.g., compliance with later revisions of the PPOG) such changes must be mutually agreed to by the Canadian Heritage Rivers Board, the reporting partners, and Province of Alberta. To that end, this designation document is titled as a ‘living strategy’ or concept plan.

National Monitoring

Environment and Climate Change Canada collects water quality data at two National Long-term Water Quality Monitoring Data stations on the North Saskatchewan River (Canada, n.d.)³. One station is located near the BC-Alberta border called Whirlpool Point and the other is located near the Saskatchewan border at Highway 17. Approximately 20 years of monthly data have been collected and used to inform the Lake Winnipeg Basin Initiative and support activities of the Prairie Provinces Water Board. The publicly available data typically includes results on major ions, nutrients, metals, and physical parameters.

The national hydrometric program is a partnership between the federal and provincial governments with seven Water Survey of Canada stations that provide information for the collection, interpretation, and dissemination of surface water quantity data to help inform both water management and environmental needs (Canada, n.d.).

Provincial Monitoring

The Government of Alberta and its partners collect water quality data at five stations along the North Saskatchewan River as part of the Long-Term River Network (Government of Alberta, n.d.). There are also 13 locations in tributaries of the North Saskatchewan River which are part of the Tributary Monitoring Network. Scientists, the public, and decision makers can use this publicly available data to understand if Alberta’s water is safe for recreational, domestic, and traditional uses and to determine if it can support the health of plants and animals in the ecosystem. The Government of Alberta is also a partner in the hydrometric monitoring program, and they report on flood forecasting, high water alerts, water shortage advisories, and ice advisories (Government of Alberta, n.d.).

Local Monitoring, Review, and Reporting

A significant amount of monitoring and reporting on the North Saskatchewan River is conducted by the Government of Alberta, the City of Edmonton, academic scientists and consultants. In 2014, a large synoptic report included a report review, data compilation, data analysis, a status assessment, and synthesis and evaluation of work done from 2007 to 2012 on the North Saskatchewan River (Alberta Environment and Sustainable Resource Development, 2014). Overall, the state of the North Saskatchewan River downstream of the Industrial Heartland reach was assessed as fair to good and there were clear long-term improvements in terms of nutrients and biological responses. The report identified priority issues that may require ongoing monitoring, assessment, and management

activities. The priority issues included focusing on emerging contaminants and non-point source loadings. The latter includes stormwater which has been monitored comprehensively by EPCOR on behalf of the City of Edmonton for many years.

WaterSHED (Water: Saskatchewan Headwaters Edmonton and Downstream) is a monitoring program specific to the North Saskatchewan River Basin that helps to develop our understanding of watershed processes and changes in water quality, quantity, and ecosystem functioning (Government of Alberta, n.d.). A total of 18 tributaries were selected to represent the watershed structures within the NSR along with two stations on the main stem of the NSR. Each station monitors river flow continuously, and several water quality parameters (continuous monitoring of some physical parameters and some discrete sampling for additional parameters). The WaterSHED program also helps determine the adequacy and effectiveness of the existing and new watershed management objectives and can affect the role of modeling for future management decisions. The monitoring program is a collaboration between Alberta Environment and Protected Areas (AEPA), EPCOR, the North Saskatchewan Watershed Alliance (NSWA) and the City of Edmonton.

³ Government of Canada. [National Long-term Water Quality Monitoring Data](#).

5 Conclusion

kisiskâciwani-sîpiy; Omaka-ty; the North Saskatchewan River in Alberta. This river goes by many names, but all agree that it is one of the best available additions to the Canadian Heritage Rivers System. Implementation of this heritage designation document can help to realize the vision that “kisiskâciwani-sîpiy’s diverse heritage values are recognized and stewarded, strengthening place-based thriving communities connected by the river’s landscapes and history.”

Many organizations, jurisdictions, industries, Indigenous Nations, and citizens along the river and within its watershed will contribute towards the implementation and governance of heritage values. The lead reporting agency liaison with the CHRS in the future will be the North Saskatchewan Watershed Alliance (NSWA). The NSWA and its many partners are confident and hopeful that progressive implementation and stewardship will help minimize risks to river heritage integrity, to achieve a wide range of benefits that contribute to greater ecological, economic, and societal resilience.

Designation will promote continued awareness and initiatives on the part of the public and all levels of government, to further protect, enhance, and interpret the river’s cultural heritage, natural heritage, and recreational values for the use and enjoyment of present and future generations. ***In essence, the river provides a platform to connect to the past, enrich the present, and protect the future.***

The hope is that this strategic, integrated blueprint for action will foster greater recognition, stewardship, and promotion of the heritage of this timeless river, and continue to function for years to come, generating benefits for current and future generations.



Paddle Into the Past at Métis Crossing, Credit: Explore Edmonton

Heritage river designation is commemorative and symbolic. This heritage river designation document recognizes and reaffirms policies for river management and stewardship that influence the heritage integrity of kisiskâciwani-sîpiy and does not supplant or replace any official policy context or processes.

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List of Acronyms

ACA - Alberta Capital Airshed

ACP - Alberta Community Partnership

AEPA - Alberta Environment and Protected Areas

AIHA - Alberta Industrial Heartland Association

CABIN - Canadian Aquatic Biomonitoring Network

CAO - Chief Administrative Officer

CCME - Canadian Council of Ministers of the Environment

CHRB - Canadian Heritage Rivers Board

CHRS - Canadian Heritage Rivers System

CoE - City of Edmonton

DFO - Department of Fisheries and Oceans

DIZ - Designated Industrial Zone

EMRB - Edmonton Metropolitan Region Board

ERVCC - Edmonton River Valley Conservation Coalition

FAP - Fort Air Partnership

FRI - Foothills Research Institute

GNBC – Geographical Names Board of Canada

GOA - Government of Alberta

HPPP - Heritage Preservation Partnership Program

IWMP - Integrated Watershed Management Plan

LAA - Legislative Assembly of Alberta

LUF - Land Use Framework

NSR - North Saskatchewan River

NSRVCS - North Saskatchewan River Valley Conservation Society

NSRP - North Saskatchewan Regional Plan

NSWA - North Saskatchewan Watershed Alliance

PPOG - Principles, Procedures, and Operational Guidelines (CHRB)

PPWB - Prairie Provinces Water Board

PSRB - Partners for the Saskatchewan River Basin

RVA - River Valley Alliance

SIRP - Stormwater Integrated Resource Plan

THREATS - The Healthy Rivers Ecosystem Assessment System

WCAS - West Central Airshed Society

WPAC - Watershed Planning and Advisory Council

WSG - Watershed Stewardship Group

Appendices

Additional background information is contained in the associated Appendices to this report:

Appendix A – North Saskatchewan Heritage River Designation Map Package

Appendix B – Letters of Support

Appendix C – pipikwanpehtakwan kisiskâciwan-sîpî_Report with Record of Engagement April 2023

Appendix D – O2 NSask Engagement WWHR 20230418

Appendix E – Expedition Heritage River Tourism Planning Report

Appendix F – Know History Heritage Report 2022.11.10

Appendix G – Legislative Jurisdictional Scan