



Seal River Watershed:

The case for conservation

IISD REPORT





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Seal River Watershed: The case for conservation

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1.0

Introduction and Context





The global community has increasingly recognized the importance of nature-based solutions. The United Nations' 2020 Summit on Biodiversity launched the Leaders Pledge for Nature, which saw 91 countries committing to reverse biodiversity loss by 2030 (Leaders Pledge for Nature, n.d.). By doing so, they sent “a united signal” to step up the global ambition for sustainable development to benefit biodiversity, nature, climate, and people.

In line with this global momentum, both the G7 and G20 leaders have acknowledged the urgency to preserve marine and terrestrial ecosystems through bold, whole-of-government actions, including through nature-based solutions. As a result of the G7 2030 Nature Compact,¹ the Government of Canada has committed to supporting significant programming on nature-based climate solutions over the coming years (Global Affairs Canada, 2021). The upcoming climate finance envelope of CAD 5.3 billion will prioritize biodiversity co-benefits and the implementation of nature-based climate solutions in developing countries. In the lead-up to the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity to negotiate a post-2020 global biodiversity agreement, Canada has also established domestic and international biodiversity goals. These goals include conserving a quarter of Canada's lands and a quarter of its oceans by 2025 and working toward conserving 30% by 2030.

Canadian provinces play an important role in contributing to Canada's multilateral environmental agreements' commitments and targets. Manitoba is made up of vast expanses of intact, representative ecosystems and became the first jurisdiction in Canada to commit to protecting examples of all its diverse landscapes. In 1990, Manitoba made a long-term commitment to establish a network of protected areas. Since then, the conserved area has increased from 350,000 hectares to over 7.2 million hectares today. Significant progress was made between 2010 and 2015, when 15 new protected areas were established. Despite these milestones, only 11.1% of Manitoba's ecosystems is protected (Government of Manitoba, n.d.). In 2017, the Government of Manitoba made significant commitments under the Made-in-Manitoba Climate and Green Plan, which supports climate change mitigation by protecting peatlands and conserving other carbon stores (Manitoba Sustainable Development, 2017). To meet Manitoba's climate goals and commitment to create a protected areas network, more needs to be done.

Meanwhile, Indigenous Nations within Manitoba have been accelerating their conservation efforts to protect more ecologically and culturally significant areas in the province. As Indigenous territories overlap much of Canada's existing protected areas and the remaining intact ecosystems, Canada and Manitoba are unlikely to meet or upscale their conservation targets without the support and involvement of the Indigenous communities (Indigenous Circle of Experts [ICE], 2018). Given Canada's and Manitoba's colonial history and their renewed commitments to reconciliation with Indigenous Peoples, meeting Canada's conservation goals requires approaches that allow Indigenous nations to reclaim their power and place in order to exercise their inherent rights and decision-making authority and practice stewardship of their ancestral lands and waters.

¹ For more information on the G7 2030 Nature Compact, see: <https://www.international.gc.ca/world-monde/international-relations-relations-internationales/g7/documents/2021-06-13-nature-compact-nature-horizon-2030.aspx?lang=eng>



Supporting Indigenous-led governance is a meaningful path for reconciliation and could lead to valuable outcomes for conservation on provincial, national, and global scales.

Fortunately, Indigenous-led conservation initiatives have been in the spotlight recently as multilateral organizations, scientific bodies, and the federal government increasingly recognize their potential to safeguard the environment and advance reconciliation through conservation.

In 2021, the federal government announced the investment of CAD 166 million to support Indigenous Protected and Conserved Areas (IPCAs), which are lands, waters, and ice where Indigenous leadership is a defining attribute in the decisions and actions that protect and conserve an area. Canada has also invested CAD 3.2 million in the Seal River Watershed Indigenous Protected Area (IPA) Initiative specifically. This funding supports the alliance of the Sayisi Dene First Nation, Northlands Denesuline First Nation, Barren Lands First Nation, and O-Pipon-Na-Piwin Cree Nation in their efforts to permanently protect the watershed for future generations. These new investments will build on the successes of recent efforts and are part of Canada's national strategy to achieve its target of protecting 25x25 and 30x30 (Environment and Climate Change Canada, 2021).²

Supporting Indigenous-led governance is a meaningful path for reconciliation and could lead to valuable outcomes for conservation on provincial, national, and global scales. The Seal River Watershed IPA Initiative is an Indigenous-led conservation project that aims to establish a protected area under the active stewardship role of Indigenous Peoples. Doing so would give the local Indigenous Peoples a formal role in the stewardship of the Seal River Watershed and its rich cultural and environmental value, and would grow sustainable economic opportunities and benefit Manitobans in a variety of ways.

To support the case for conservation and the establishment of a Seal River Watershed IPA in Manitoba, the following report presents an overview of the value of the Seal River Watershed, including its environmental, social, cultural, and economic value, and discusses the significance of protecting the Seal River Watershed for future generations. The report further lays out the benefits and considerations for establishing the Seal River Watershed IPA in Manitoba based on other existing Canadian examples. Finally, it formulates specific actions that the Government of Manitoba can take to support this initiative.

² The SRWA received additional funding from ECCC to extend the project by 4 years for a total amount of CAD 1.25 million (S. Thorassie, personal communication, November 28, 2022).

2.0

The Seal River Watershed



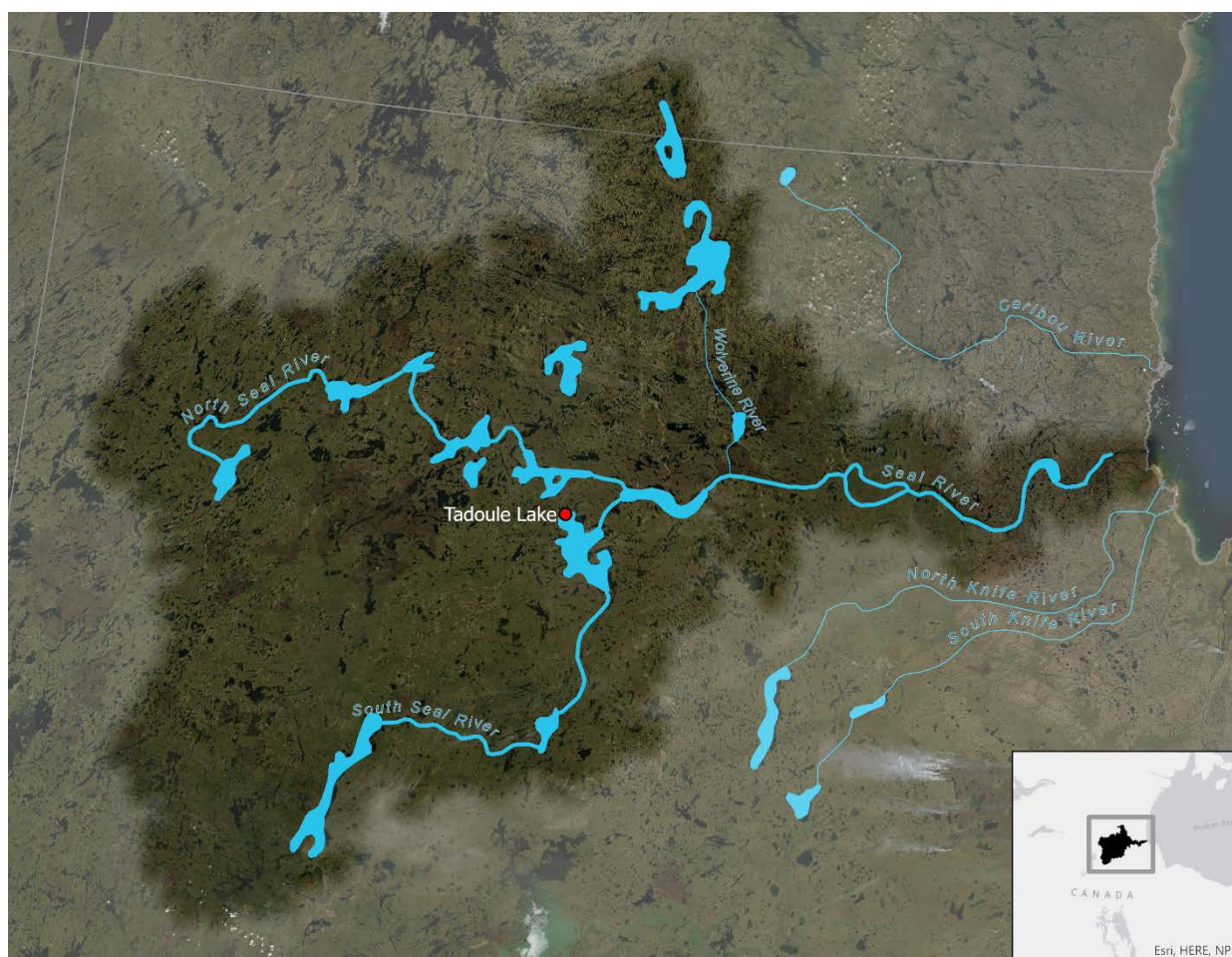


2.1 Overview

Located in northern Manitoba, the Seal River Watershed (Figure 1) encompasses an area of 50,000 km²—approximately the size of Nova Scotia and nearly 8% of the province. It is located in a transitional landscape called the Taiga Shield between Canada’s boreal forest and the Arctic tundra (International Institute for Sustainable Development [IISD], 2022). The Seal River Watershed is one of the largest remaining free-flowing, undammed drainage basins in Canada and represents a valuable but threatened habitat (IISD, 2022).

The Seal River itself has a total length of 260 km. It begins at Shethanei Lake and ends at Hudson Bay, with principal tributaries including the North Seal and South Seal rivers (Figure 1).

Figure 1. Seal River and principal tributaries



Source: IISD, 2022.



The Seal River is the largest free-flowing river in northern Manitoba. 99.97% of the Seal River Watershed is intact.

The Seal River is also one of 40 rivers designated in the prestigious Canadian Heritage Rivers System (n.d.).

The Seal River Watershed is located in the traditional lands of the Sayisi Dene, the Northlands Dene, the Barren Lands First Nation, and the O-Pipon-Na-Piwin Cree Nation (IISD, 2022). The one permanent community in the watershed is Tadoule Lake (Figure 1), which has an approximate population of 325 (Statistics Canada, 2018). The community, home to the Sayisi Dene First Nation, is only accessible year-round by air and by ice-road in the winter.

2.2 The Value of the Watershed

The Seal River Watershed exists in its pristine state—it is 99.97% intact. It is especially valuable in this unfragmented, unaltered state considering the world has been losing intact areas at an unprecedented rate (Williams et al., 2020). The Seal River Watershed sustains important cultural, social, economic, and environmental value. From providing habitats for globally threatened species to sustaining cultures of Indigenous Peoples and promoting northern tourism, this unique region provides important benefits to Manitobans and the world. Furthermore, all the categories of value of this unique watershed—economic, cultural, social, and environmental—are interconnected.

2.2.1 Environmental Value

Biodiversity

The Seal River Watershed is home to spectacular wildlife, including beluga whales, polar bears, and barren-ground caribou.

The Seal River Watershed is an area of rich biodiversity that is home to an estimated 250 bird species, of which 126 are confirmed or probable breeding species (J. Wells, personal communication, July 25, 2022). Because the watershed straddles both coastal and inland ecosystems as well as the transition between forested and open taiga habitats, it supports a fascinating mix of bird species. This includes several range-restricted species like Smith's longspur and Harris's sparrow (Wells et al., 2014). Some species in the watershed are near the southern limit of their North American breeding range, like the Arctic tern, the red-throated loon, and



the willow ptarmigan, which overlap with species near the northern limit of their breeding range, like the common tern and the common loon (Artuso et al., 2018). The Seal River Estuary is designated as an Important Bird Area (Important Bird Areas Canada, n.d.). Figure 2 shows migratory connections for 337 individual birds that were encountered within the Seal River Watershed and re-encountered elsewhere within North America. These connections illustrate that the Seal River Watershed provides an important bird habitat and supports biodiversity in regions throughout North America.

The area is also estimated to support at least 350 species of other taxa, including 48 mammal species (Bowers et al., 2004) and 26 freshwater fish species (Page & Burr, 1991). In particular, the Seal River Estuary provides a refuge for more than 16,000 beluga whales in the summer months (Matthews et al., 2017). Insects, plants, and fungi are well represented, with at least 39 butterfly species (Opler & Malikul, 1992), 25 dragonfly species (Dunkle, 2000), 11 bumblebee species (Williams et al., 2014), and 23 species of trees (Nelson et al., 2014).

Some species found in the watershed, namely the polar bear, barren-ground caribou, rusty blackbird, long-tailed duck, and horned grebe, are even at risk of global extinction, as evidenced by their designation on the International Union for Conservation of Nature (IUCN) Red List as "Vulnerable." (BirdLife International, 2018a, 2018b, 2018c; Gunn, 2016; IISD, 2022; Wiig et al., 2015).

The Seal River Watershed is an integral part of the barren-ground caribou habitat, which supports the overall well-being of the Qamanirjuaq herd. Every year, 288,000 caribou migrate south from Nunavut to winter near the Seal River; they are a crucial part of the ecosystem and the landscape.³ Barren-ground caribou migrate long distances between winter and summer ranges. They exist in an interconnected natural system: as they forage on vegetation, primarily lichen, they add nutrients to soil and water. They are also an important food source for many Arctic carnivores, including wolves and bears (Government of Canada, 2021a). Barren-ground caribou depend on large undisturbed areas for their survival and are very sensitive to human-caused threats such as increased harvest, mineral development, and the building of roads (Committee on the Status of Endangered Wildlife in Canada, 2016; Wolfe et al., 2000). Their number typically undergoes large fluctuations; however, with increased pressures from development and harvest, they might fail to recover unless their habitat is protected and sustainably managed (BQCMB, 2004; WWF, n.d.). Qamanirjuaq herd numbers have been declining by 2% every year since 2008 (BQCMB, 2020; Seal River Watershed Initiative, n.d.).

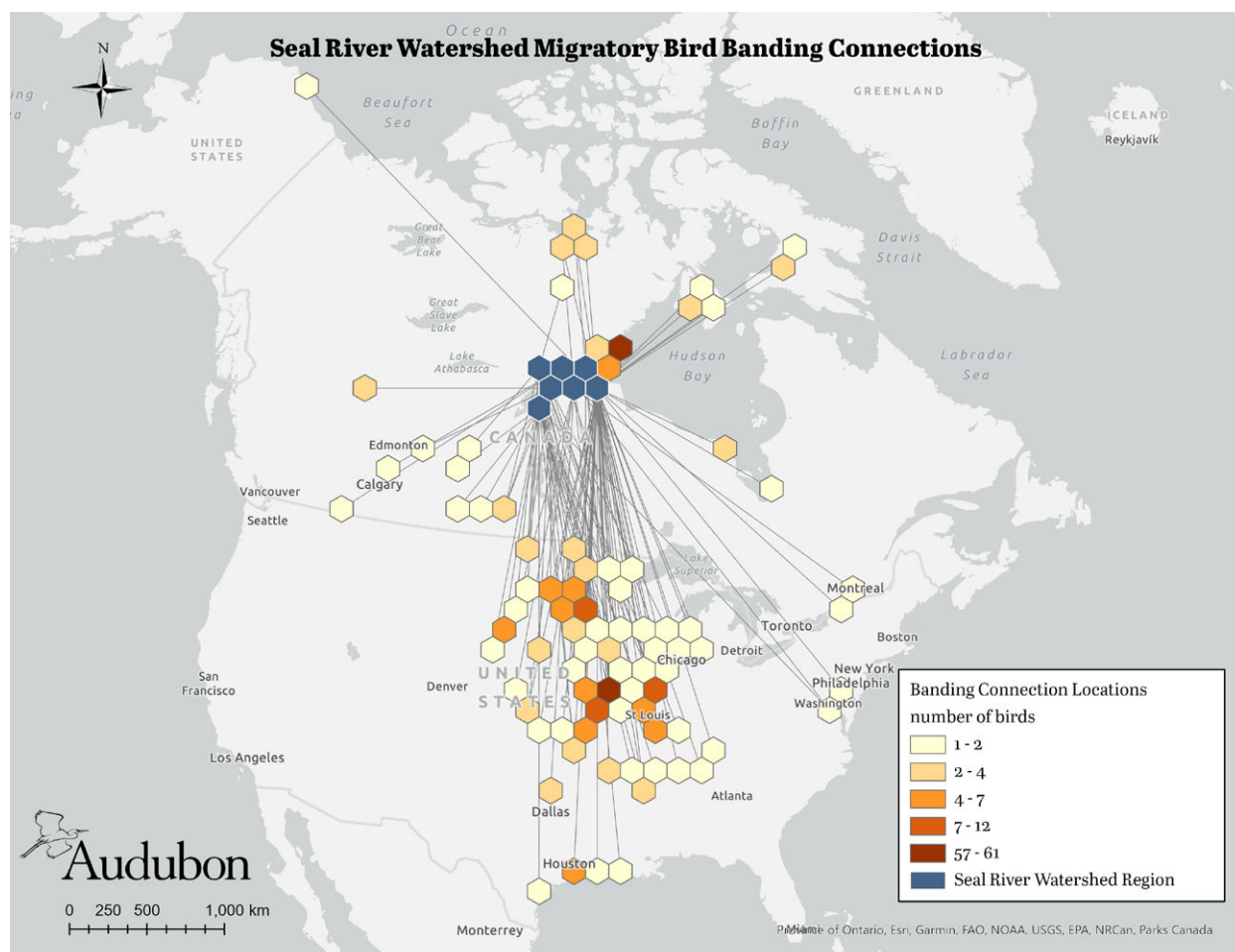
Barren-ground caribou have great cultural and spiritual significance to Indigenous Peoples living in and around the watershed. People bond with and pass down historical practices and norms to younger generations while hunting caribou (InterGroup Consultants Ltd., 2013). As the way of life is changing for many Indigenous people as the result of new technologies and products coming into their communities, the health of barren-ground caribou is especially important to sustain to ensure the traditions continue to be passed down to younger generations (InterGroup

³ 2017 estimate from the Beverly and Qamanirjuaq Caribou Management Board (BQCMB) (2020).



Consultants Ltd., 2013). Caribou also have important economic value as a source of food, bedding, various crafts, and other means of subsistence to local communities and as a signature species of the North attracting ecotourists and hunters. The availability of caribou means that the Indigenous Peoples living in the North can revitalize their strong historical connection to the land. They can share their culture with incoming visitors and promote and lead tourism activities. All of this will benefit their physical health and spiritual well-being, which will, in turn, make Indigenous communities more self-sustaining and reduce their reliance on government supports.

Figure 2. Seal River Watershed migratory bird banding connections ⁴



Source: National Audubon Society.

⁴ This map shows migratory connections for 337 individual birds that were encountered within the Seal River Watershed and re-encountered elsewhere within North America. Species represented include the Canada goose (n = 178), snow goose (n = 74), mallard (n = 41), Ross’s goose (n = 32), American black duck (n = 5), canvasback (n = 2), northern pintail (n = 2), green-winged teal (n = 1), lesser scaup (n = 1), and northern saw-whet owl (n = 1). Each bird was tagged with a leg band containing a unique series of numbers that allowed for the identification of individuals. Banding encounter histories provide important information about the places that migratory birds rely on during their annual cycle. These data are maintained by the U.S. Geological Society Bird Banding Laboratory and were generously shared with National Audubon Society for mapping purposes.

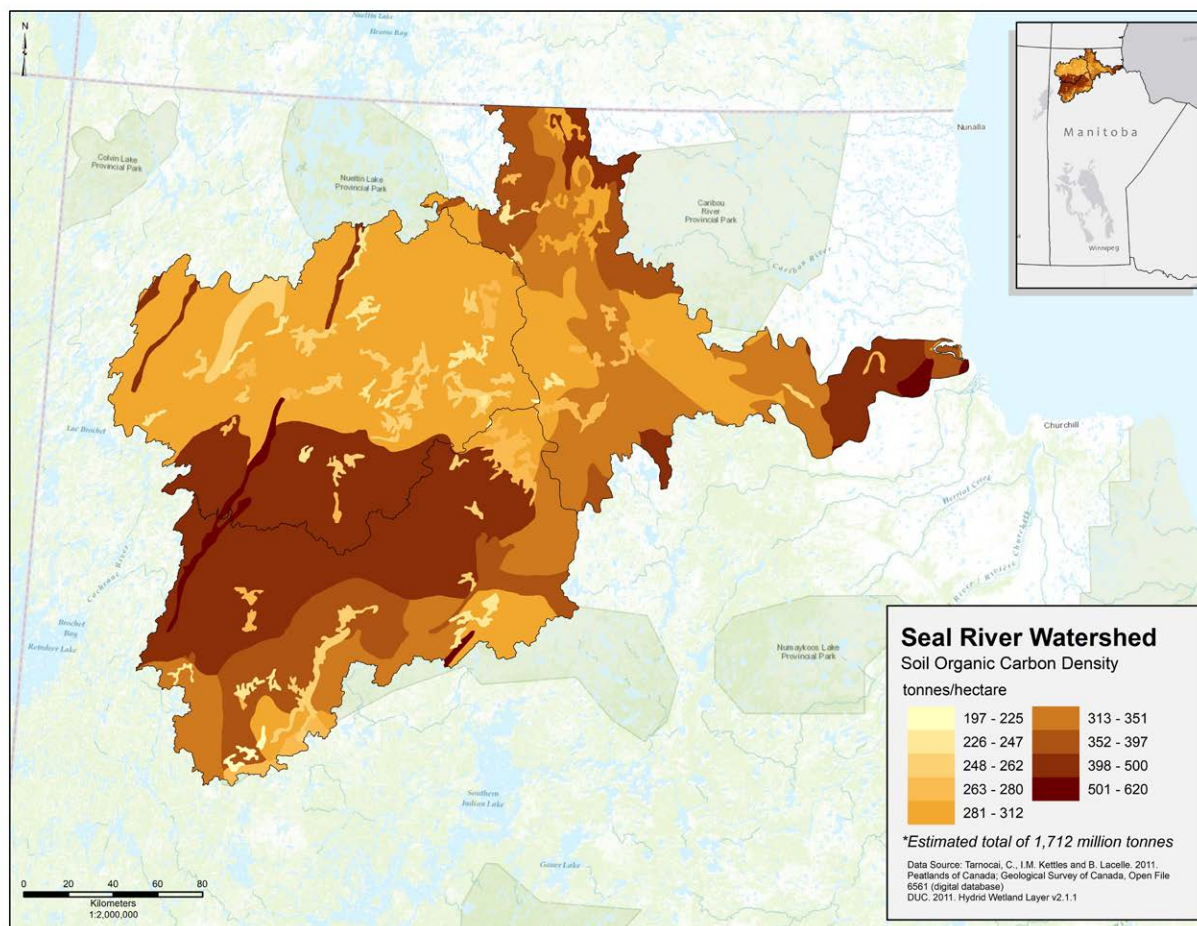


Carbon Storage

The Seal River Watershed stores approximately 1.7 billion tonnes of carbon (6.2 billion tonnes of carbon dioxide [CO₂]).

The Seal River Watershed is located in the boreal forest region of Canada, which is known to be one of the largest terrestrial carbon banks in the world (Ducks Unlimited Canada [DUC], 2021). The peatlands, mineral wetlands, and open water of the watershed store large amounts of carbon, an estimated 1.7 billion tonnes, equivalent to 6.2 billion tonnes of CO₂ (DUC, 2021). This is about 8 years' worth of total greenhouse gas emissions in Canada, as reported in 2018 (DUC, 2021; IISD, 2022). Wetlands account for approximately 63% of carbon stocks in the watershed, while open water areas and upland areas, respectively, account for 17% and 20% (DUC, 2021). Figure 3 shows the distribution of carbon stocks throughout the Seal River Watershed.

Figure 3. Distribution of carbon stocks in the Seal River Watershed



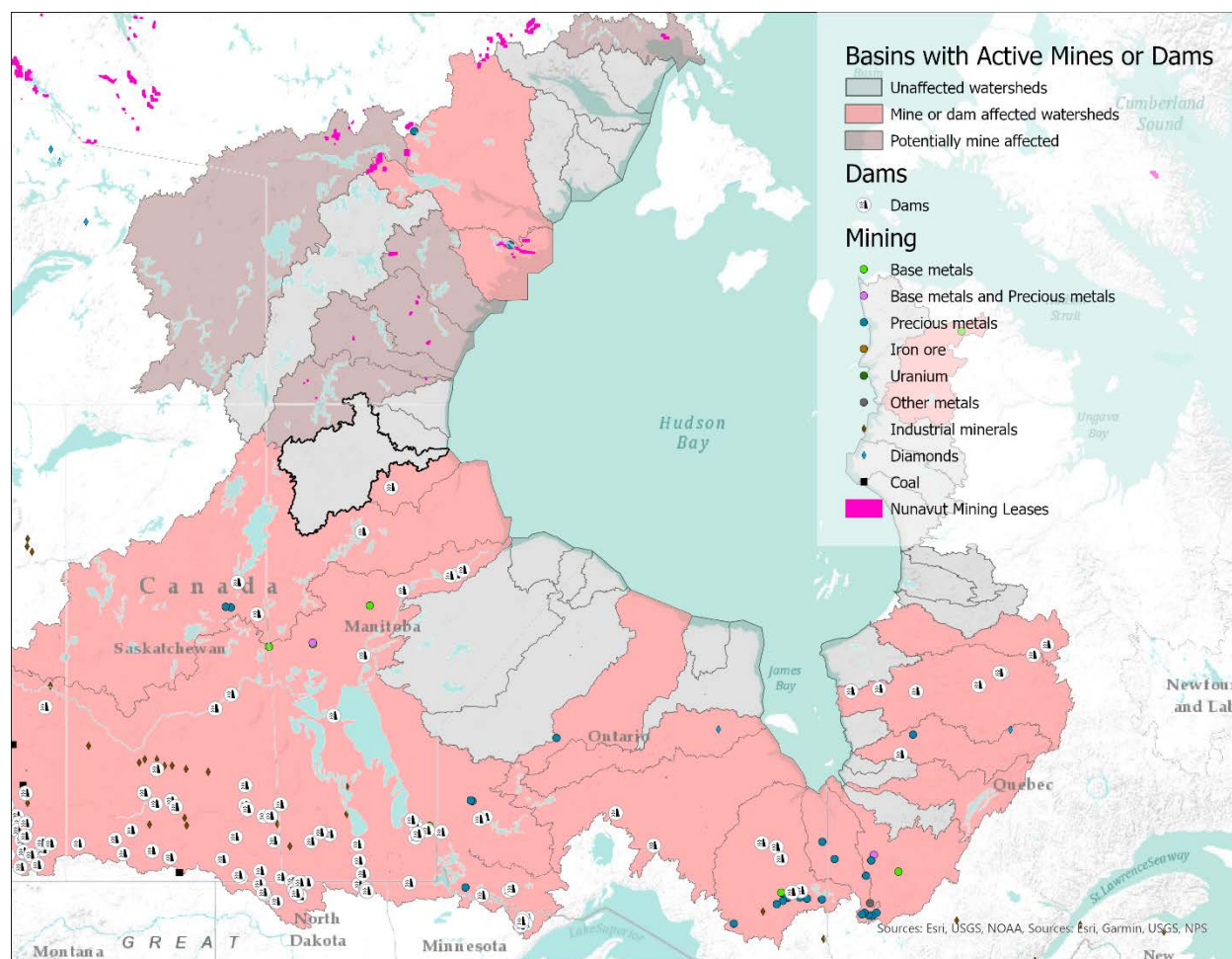
Source: DUC, 2021 (reprinted with permission).



Freshwater-Ocean Connection

The free-flowing Seal River carries life-sustaining nutrients and minerals to the Hudson Bay marine environment, supporting beluga whales, seals, polar bears, and other animals.

Figure 4. The last wild rivers in the Hudson Bay basin



Source: IISD, 2022.

As water flows from the Seal River to Hudson Bay, it carries life-sustaining nutrients and minerals and feeds the Seal River Estuary, which provides breeding and feeding grounds for beluga whales, seals, and polar bears (IISD, 2022). These connections enable natural cycles through seasonal and annual changes and are essential for a healthy biosphere (IISD, 2022).



Around the world, dams have been constructed on many rivers to hold back and control water for human needs, including agriculture and hydropower generation (IISD, 2022; Grill et al., 2019). According to the data from Global Dam Watch (n.d.), dam-affected watersheds cover just under two thirds of the total land surface of Earth (IISD, 2022). The damming of rivers disrupts seasonal cycles and stresses the natural systems that plants and animals have evolved to thrive in (IISD, 2022). These changes to river flow and course also impact land, as forests are turned into reservoirs and wetlands are drained, affecting terrestrial habitats (IISD, 2022).

As shown in Figure 4, the Seal River Watershed (the area outlined in black) is uniquely positioned as one of the largest watersheds without any current or prospective developments within the Hudson Bay basin—one of the world’s largest inland seas and one of the few subject to complete winter ice cover and complete summer open water (IISD, 2022).

2.2.2 Social Value

The Seal River Watershed provides many opportunities for knowledge exchange, community bonding, and improved well-being through the Indigenous Guardians programs.

The social value should not be overlooked in decision making over the future of the Seal River Watershed. The social value of the Seal River Watershed is strongly linked to the benefits it provides for the health, community bonding, and education for residents and visitors alike. The surrounding environment provides educational opportunities related to boreal forest ecosystems, Indigenous culture, and the sustainable harvest of local foods and medicines (IISD, 2022). This educational potential could be further realized by establishing the area as an IPA and securing support from federal **Indigenous Guardians** programs (Government of Canada, 2021b). The SRWA already received CAD 250,000 from the Land Guardians program for 2022 and 2023 (S. Thorassie, personal communication, November 28, 2022). Indigenous Guardians programs build on existing Indigenous knowledge of natural landscapes and further equip Indigenous people with skills and capacity to act as land stewards, monitor wildlife and water quality, collaborate with other researchers, and educate the public (Indigenous Leadership Initiative, n.d.-a). From an economic perspective, participation in the Indigenous Guardians programs builds skills and creates meaningful employment, reducing reliance on social assistance. From social and community perspectives, it improves access to traditional foods, preserves Indigenous language and culture, and increases Indigenous Peoples’ sense of pride and overall community well-being (Dehcho First Nations et al., 2016). The return on investment of the Indigenous Guardian programs has already been demonstrated in Canada: for an initial investment of CAD 4.5 million, the Guardians programs in the Łutsël K’ée and Dehcho regions of the Northwest Territories



generated CAD 11.1 million in social, economic, cultural, and environmental benefits, which translates into a CAD 2.5 return for every CAD 1 invested (Dehcho First Nations et al., 2016).

The careful development of tourism in the watershed that is sustainably managed by Indigenous stewards will also contribute to building relationships between Indigenous and non-Indigenous people for knowledge exchange. Similarly, those who visit the watershed as ecotourists, hunters, and fishers will also be able to receive health benefits. Spending time in nature improves physical and mental well-being (Bratman et al., 2019; Frumkin et al., 2017); the mental health benefits of protected areas have been documented and monetized (Buckley et al., 2019). This health value for the Seal River Watershed is monetized in Section 2.2.4, “Economic Value,” as part of the ecosystem goods and services (EGS) evaluation.

2.2.3 Cultural Value

The cultural value of the Seal River Watershed is strongly tied to its pristine nature and the ability of people to engage in traditional activities such as hunting and fishing.

Members of the Sayisi Dene First Nation, Northlands Denesuline First Nation, Barren Lands First Nation, and O-Pipon-Na-Piwin Cree Nation interact directly with the watershed, and in doing so maintain a connection to their culture and identity (IISD, 2022). Members include an on-reserve population of 2,922 people and 1,971 off-reserve members, many of whom return to the watershed regularly (Indigenous Services Canada, 2021). The cultural and spiritual value of the Seal River Watershed is strongly tied to its natural features (IISD, 2022)—for instance, the strong connection between local Indigenous communities and caribou. The cultural importance of caribou in the watershed cannot be overstated—caribou provide “immense and irreplaceable benefits to people across the caribou ranges” (BQCMB, 2004, p. 2).

2.2.4 Economic Value

The Seal River Watershed provides CAD 214 million worth of EGS annually.

The economic value of the Seal River Watershed is tied to its natural heritage. The tourism sector is the primary source of economic activity in the watershed—it provides visitors with a unique connection to nature due to its remote and pristine environment. The Seal River Watershed



offers spectacular paddling, fishing, hiking, and wildlife-watching experiences (IISD, 2022). Four commercial lodges operate in the watershed and welcome on average 1,450 visitors per year (IISD, 2022): Gangler's North Seal River Lodge, O-Pipon-Na-Piwin's Big Sand Lake Lodge, Churchill Wild's Seal River Heritage Lodge, and The Lodge at Little Duck. Not including The Lodge at Little Duck, these businesses generate approximately CAD 11 million in tourism revenue per year. These operations provide jobs to many local First Nation members that are aligned with Indigenous traditional livelihoods. The Big Sand Lake Lodge is a fully Indigenous-owned business. In addition, five commercial operators offer excursions into the watershed: Monroe Lake Lodge; Lazy Bear Expeditions, based in Churchill; Hudson Bay Helicopters; and paddling excursion operators Black Feather and Wilderness Spirit (IISD, 2022). The significant ecotourism industry in Churchill, Manitoba, also depends on the Seal River Watershed, which provides habitats for key attractions like polar bears and beluga whales (IISD, 2022).

The watershed has the potential for the further development not only of ecotourism and responsible hunting and fishing but also of cultural tourism, which would be best served by a pristine landscape. According to the market study conducted by Destination Canada and the Indigenous Tourism Association of Canada in 2019, 27% of travellers from Canada, 33% from the United States, and 63% from France are interested in Indigenous cultural experiences (Destination Canada & Indigenous Tourism Association of Canada, 2019). The interest in Indigenous cultural experiences from the American and European markets is important to consider since many visitors to the Seal River Watershed are from the United States, and tourism operators in the watershed are also exploring expansion into European markets (IISD, 2022).

In addition, there are economic opportunities associated with the Indigenous Guardians programs for the stewardship of the Seal River Watershed. As mentioned earlier, the Indigenous Guardian programs would build the skills and capacity of local Indigenous people as land stewards and experts in environmental monitoring and visitor engagement. This would be beneficial for future employment and for the sustainable stewardship of the region. The Seal River Watershed IPA has already created 22 jobs within the communities to work toward conservation (S. Thorassie, personal communication, July 5, 2022).

EGS Assessment

IISD (2022) reviewed the EGS provided by the watershed and estimated the monetary value of those services based on the available data and research. Calculating the EGS is a way of recognizing and valuing the contribution of ecosystems to human well-being (Costanza et al., 1997; Paul et al., 2020). EGS are the environmental benefits that humans derive from the physical, chemical, and biological functions of healthy ecosystems and include market goods produced from ecosystems, benefits from ecosystem processes, and non-material benefits (Agriculture, n.d.). EGS are typically classified into three groups: provisioning, regulating, and cultural services (United Nations, 2021).

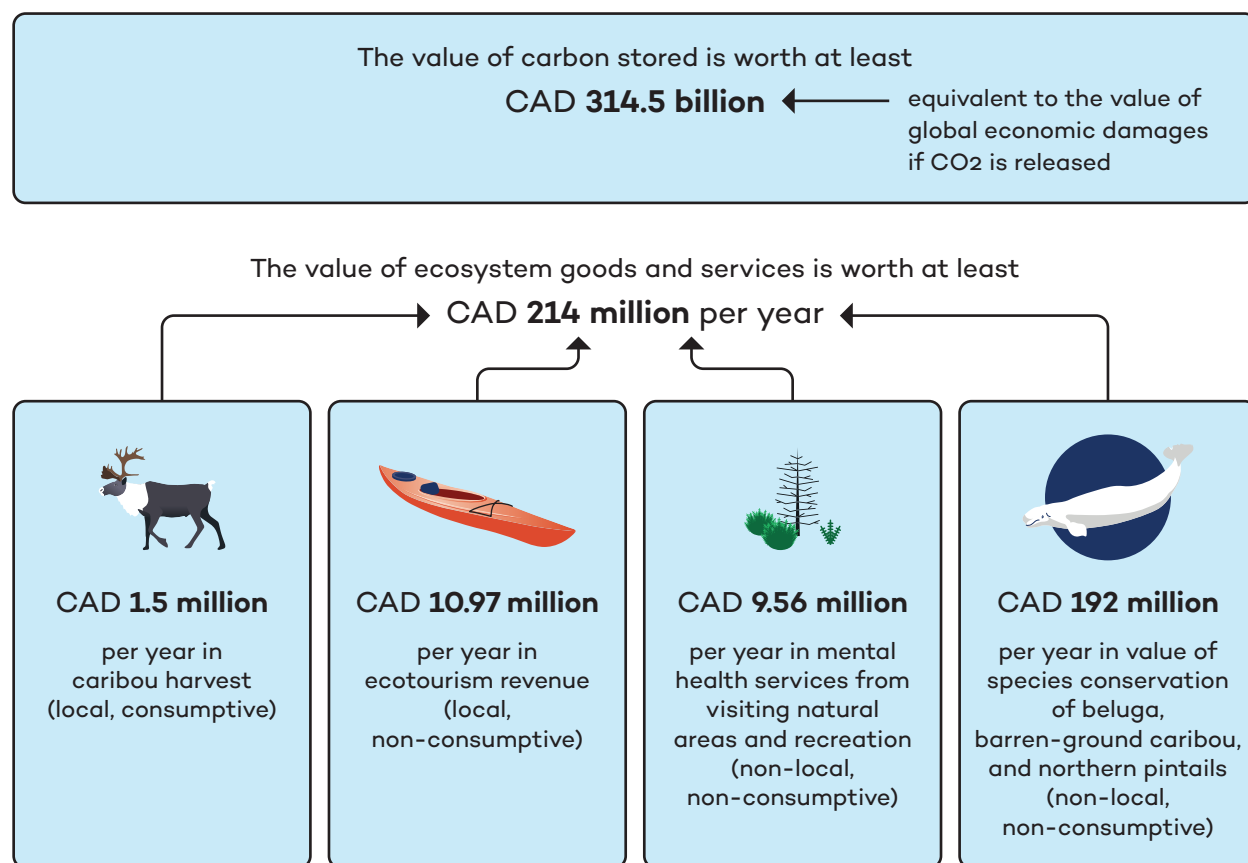
IISD (2022) estimated that the Seal River Watershed provides at minimum CAD 214 million worth of EGS annually, comprising the value of caribou harvest, ecotourism, health services, and



households’ willingness to pay for the conservation of beluga whales, barren-ground caribou, and northern pintails—species that depend on the watershed (Figure 5).

In addition to the tourism value discussed above, the study was able to estimate the value of caribou hunting as CAD 1.5 million in net annual value (IISD, 2022). While the estimates are based on the Manitoba harvest, it is important to acknowledge that the harvest outside Manitoba also depends on the healthy caribou habitat in the Seal River Watershed.

Figure 5. The value of EGS and carbon storage, in CAD 2020



Source: IISD, 2022.

Visits to nature also improve mental health (Buckley et al., 2019; Frumkin et al., 2017). The assessment included the annual value of mental health benefits for 1,449 confirmed visitors to the Seal River Watershed, an estimated CAD 9.5 million (IISD, 2022). This captures economic benefits such as reduced medical treatments, reduced caregiver costs, improved workplace productivity, and improved overall well-being (IISD, 2022).

Moreover, based on the existing studies that estimate the annual willingness to pay for the conservation of beluga whales, barren-ground caribou, and northern pintails in Canada and



beyond, IISD (2022) estimated the overall value of the protection of these three species at CAD 192 million annually.

Additionally, IISD (2022) estimated that the CO₂ contained in the Seal River Watershed is worth at least CAD 314.5 billion, which is more than four times the GDP of Manitoba (IISD, 2022).

While not entirely exhaustive, the preliminary EGS assessment helps demonstrate the significant value of this intact area, especially for limiting climate change, ensuring a healthy habitat for species at risk, and supporting Indigenous livelihoods and skills development.

2.3 Potential Impacts of Development

The value generated by the intact Seal River Watershed could be lost with the development of mining or hydroelectricity. This includes the release of carbon stored in the watershed, affecting our emissions reduction goals under the Made-in-Manitoba Climate and Green Plan and Canada's 2030 Emissions Reduction Plan, as well as reduced potential for fish and wildlife harvesting, ecotourism, clean water provision, and species conservation. Bearing this in mind, it is important to factor in the potential loss of EGS value when weighing the costs and benefits of proposed development projects. While the IISD (2022) EGS valuation report does not provide an assessment of changes in the monetary value of EGS associated with hypothetical development scenarios, it describes the likely implications as follows:

- **All-weather road:** An all-weather road connecting Churchill (Manitoba) to Rankin Inlet (Nunavut), which would pass through the Seal River Watershed, has been proposed over the years (MacLean, 2017). If constructed, the environmental risks associated with the road would include increased risk of wildfires, accidental spills of hazardous materials, and the disturbance of archaeological/sacred sites of cultural importance, as well as the disturbance of barren-ground caribou migration routes and calving areas, increased levels of hunting and fishing, and loss of human life and wildlife through road collisions (Nishi-Khon/SNC-Lavalin, 2010).
- **Transmission line:** The recently proposed Kivalliq Hydro-Fibre Link involves the construction of a 1,200 km overhead hydroelectric transmission line between Manitoba and Nunavut passing through the Seal River Watershed (Nukik Corporation, 2022; Government of Canada, 2020). The construction of this transmission line would disturb the wildlife in the Seal River Watershed with consequences for the provision of ecosystem services. The specific impacts would have to be evaluated based on the routing of the transmission line.
- **Mine development:** Mining activities often produce long-lasting negative effects on the environment and the health of local Indigenous communities, as illustrated by the impacts of uranium mining around Wollaston Lake in northern Saskatchewan on the Lac La Hache First Nation (Green & Bonacci, 2016). Documentation shows that the release of high concentrations of contaminants into the air and water from uranium mine tailings



at various times of operation had a direct negative effect on the aquatic environment, the abundance of fish and wildlife, country food consumption, and Indigenous people's health (Elias et al., 1997).

- **Water diversion:** A hypothetical hydropower development scenario of flow regulation between the Loon and Chipewyan lakes in the southwest of the basin was developed to illustrate the potential impacts of development. Such a project could divert runoff from up to 11,088 km² or 22% of the contributing area from the Seal River toward Little Sand Lake and the Churchill Diversion (IISD, 2022). An additional area of up to 39 km² could be flooded as a result, mostly replacing forest. Such a scenario would result in the loss of carbon, mostly in the form of methane, as well as the potential disruption of natural ecosystems and the services they provide (IISD, 2022).

Bearing this in mind, it is important to factor in the potential value losses when weighing the costs and benefits of proposed development projects, which are not limited to losses in economic value.

3.0

Making the Case for an IPCA



Photo: Jordan Melograna



3.1 Overview of IPCAs

ICE (2018) defines IPCAs⁵ as “lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance, and knowledge systems. Culture and language are the heart and soul of [these areas].” In Canada, IPCAs are often a partnership between Indigenous governments and federal and/or provincial/territorial governments (ICE, 2018). IPCAs can be established in currently unprotected areas, or the stewardship of existing protected areas can be changed to take an Indigenous-led approach.

According to ICE (2018), three main characteristics define an IPCA. First, they are Indigenous led. This means that Indigenous Peoples are the primary stewards of the land. Indigenous governments are the ones defining the boundaries, making stewardship decisions, and determining conservation objectives in the area. The areas are self-determined; however, several partnerships may help to support them in these initiatives (ICE, 2018). The second is that they represent a long-term commitment to conservation. This means that it is a multi-generational responsibility to protect the land for the future. The third is that IPCAs elevate Indigenous rights and responsibilities. Indigenous people have a strong physical and spiritual connection to the land. This is a mutual relationship where they benefit from the land, but also protect it. This same type of relationship exists in IPCAs (ICE, 2018).

3.2 Legal Framework for IPCAs

In Canada there are currently 55 pieces of legislation for establishing protected areas, yet there is no federal legislation for recognizing voluntary conservation actions by Indigenous Peoples (David Suzuki Foundation, 2018). In fact, there are few legal mechanisms available to formally recognize and establish an IPCA, as “for the most part, protected area laws in Canada either conflict with or do not allow the types of governance arrangements or uses that would be the basis of most IPCAs” (ICE, 2018, p. 43). Current protected area legislation in Canada focuses on conservation and protection from human impacts. This differs from the philosophy of IPCAs, which emphasize the connection between Indigenous Peoples and their land. They focus on how to conserve the land while making responsible use of resources (David Suzuki Foundation, 2018).

Although IPCAs have legal status within Indigenous laws and governance systems, many IPCAs require additional legal protections pursuant to federal, provincial, or territorial laws to achieve protected status (Parks Canada, 2019). The participation or involvement of public governments may vary in each case. Generally, existing IPCAs have been developed jointly by Indigenous and public governments, after first being proposed by Indigenous people, and are then supported by public governments. In the case of Manitoba, the provincial government recognizes the importance of the global recognition of IPCAs as encouraged by the IUCN (Environment, Climate, and Parks, n.d.).

⁵ IPCAs are also known as IPAs, tribal parks, or Indigenous and Community Conserved Areas (West Coast Environmental Law, n.d.).



3.3 The Experience of IPCAs in Other Jurisdictions

IPCAs exist in different forms throughout the world. Legislation varies from place to place; however, they are recognized internationally by the IUCN (2018). IPCAs are found in Australia, New Zealand, and Peru, as well as Canada. Currently there are several recognized IPCAs in Canada, including Edézhzié, Wehexlaxodiale, Ts'udé Niljné Tuyeta, and Thaidene Néné in the Northwest Territories, and Kitasu Lugeyks in British Columbia (ICE, 2018; Indigenous Leadership Initiative, n.d.-b; West Coast Environmental Law, n.d.). There are also a number of conservation areas under shared or co-management arrangements between Indigenous governments and public governments that are often recognized as IPCAs, including but not limited to the Bear Island Conservancy, Gwaii Haanas National Park Reserve (NPR), National Marine Conservation Area Reserve, and Haida Heritage Site in British Columbia; the Saoyú-?ehdacho National Historic Site and Anguniaqvia niqiqyuam Marine Protected Area in the Northwest Territories; and the Tallurutiup Imanga National Marine Conservation Area in Nunavut (Fisheries and Oceans Canada, 2019; Parks Canada, 2019, 2021a; Zurba et al., 2019).⁶

Box 1. Case study: Thaidene Néné

Thaidene Néné is a 26,376-km² area of boreal forest, tundra, and freshwater ecosystems located in and around the East Arm of Great Slave Lake in the Northwest Territories (Parks Canada, 2019). The word Thaidene Néné means “Land of the Ancestors” in Denesuline, and the region is the traditional home of the Łutsël K'é Dene people. This area was designated as an IPA in 2019 by the Łutsël K'é Dene First Nation. The Łutsël K'é Dene community concluded establishment agreements with Parks Canada and the Government of Northwest Territories to designate parts of the region as an NPR under federal legislation, and as a territorial protected area and a wildlife conservation area under territorial legislation (Thaidene Néné/Land of the Ancestors, 2019).

The designation of Thaidene Néné was a remarkable achievement. When a national park was first proposed in the late 1960s by Canada, it was opposed by the Łutsël K'é because it would have prevented them from hunting on their land. They began to change their views on establishing a protected area after Indigenous rights were entrenched in Canada's Constitution and following the discovery of diamonds and uranium in the area (Thaidene Néné/Land of the Ancestors, 2019). This began a surge of interest in industrial development in the region. The community acted on their concern for the land and wildlife. They began to engage in discussions with Parks Canada in 2000 to protect the area from development. Formal negotiations began with Parks Canada in 2005 and with the territorial government in 2013. The entire 26,376-km² area officially became an IPA in 2019 (Figure 6).

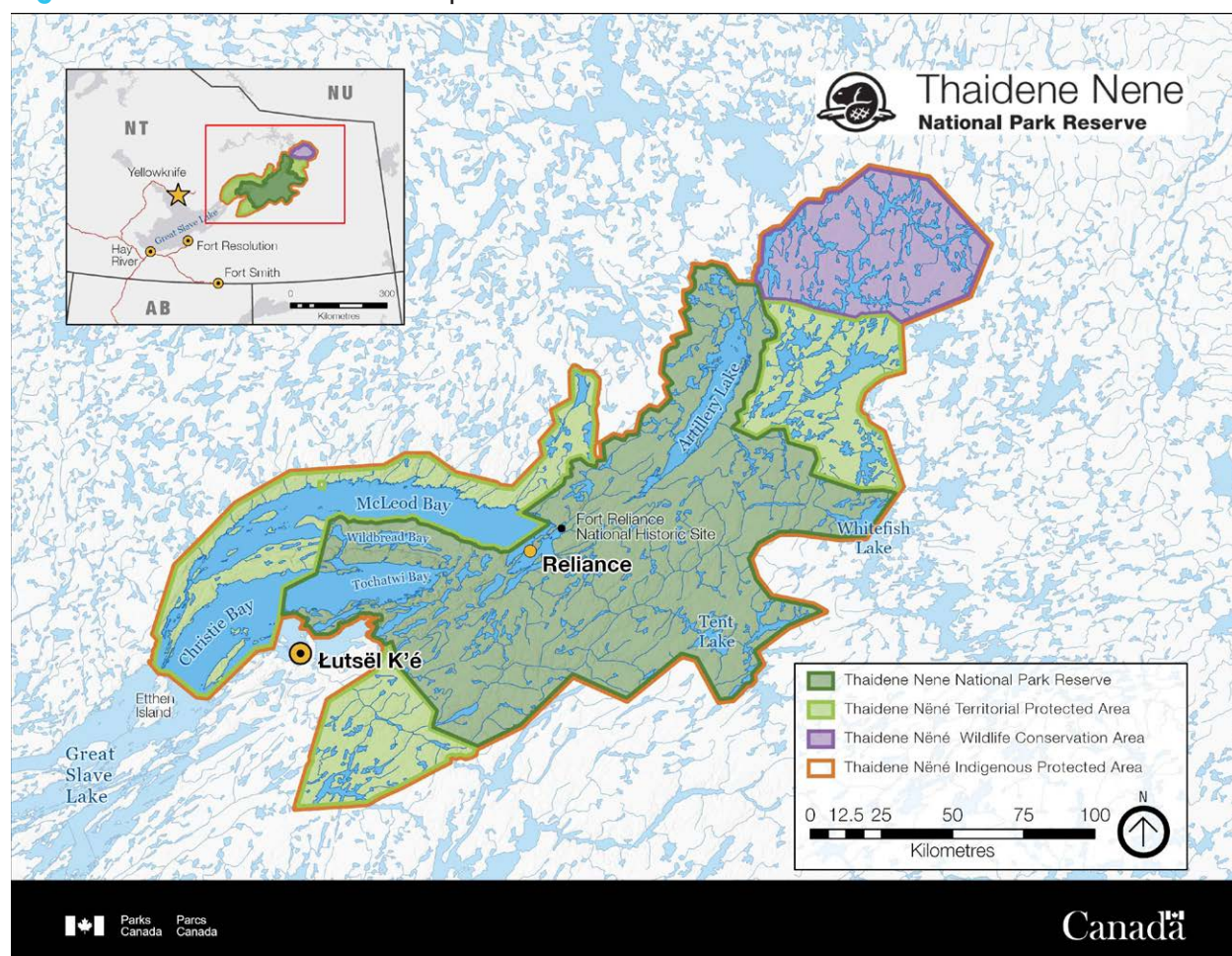
⁶ Language surrounding the interpretation of IPCAs varies across jurisdictions, and, therefore, the list of IPCAs in this section is a select group and does not necessarily encompass the full list of conservation areas under Indigenous governance or any other shared governance structure.



Thaidene Nënë protects both intact lands and a healthy vibrant culture. The hope for this region is that Indigenous people can be stewards of the land while fostering economic growth within the community. This will be done through activities like ecotourism and sport-fishing expeditions and traditional hunting and trapping (Thaidene Nënë/Land of the Ancestors, 2019). As of 2020, the Łutsël K'é Dene First Nation has created a co-management plan that reflects the Dene laws and traditions (Nitah, 2020).

The Thaidene Nënë NPR's operations are funded through a CAD 30-million trust fund that was set up prior to its establishment and that enables sizeable annual returns to fund the IPCA's operation in perpetuity. The community first raised CAD 15 million from philanthropic sources and civil society organizations. This initial commitment was an important economic incentive for the federal government to match the funding by contributing another CAD 15 million to top up the trust fund. The size of the trust fund allows for a sustainable annual return that supports local programming and governance activities, including capacity building, vehicle and capital purchases, and the establishment of conservation projects.

Figure 6. Thaidene Nënë IPA map



Source: Parks Canada (2021b)



3.3.1 Benefits

IPCAs are grounded in Indigenous self-determination, Indigenous laws, and Indigenous knowledge. They flow directly from the relationships that have been established between the Indigenous Peoples and their lands since time immemorial. Where public governments partner with Indigenous governments to establish IPCAs by agreement, they are also important achievements of reconciliation.

Research has shown that IPCAs have a high likelihood of achieving long-term conservation success (Tran et al., 2020). This is achieved because IPCAs enable Indigenous communities who want to take care of their homeland to do so, as they have done since time immemorial (Narratives Inc., 2022). They open up opportunities to build conservation measures and economic opportunities that are far more in line with the traditional lifestyles, Indigenous knowledge systems, and aspirations and goals of the local communities, and are drawn from ancestral stories and teachings. In sum, Traditional Knowledge of the land and ecosystems is a huge asset when working to meet conservation goals and protect traditional ways of life.

Indigenous communities in Canada have reiterated the important point that “reconciliation is not just needed between diverse elements of society, it is also needed between humanity and the environment” (Enns & Wong, 2018). Community members consulted in the *Seal River Watershed Indigenous Knowledge Report* believe that establishing an IPCA would bring additional benefits to Indigenous language revitalization, increased connection to the land and waters, and better accessibility to healthy food from the land, and would support the continuation of traditional practices and contribute to the overall strengthening of the Dene and Cree identities (Narratives Inc., 2022).

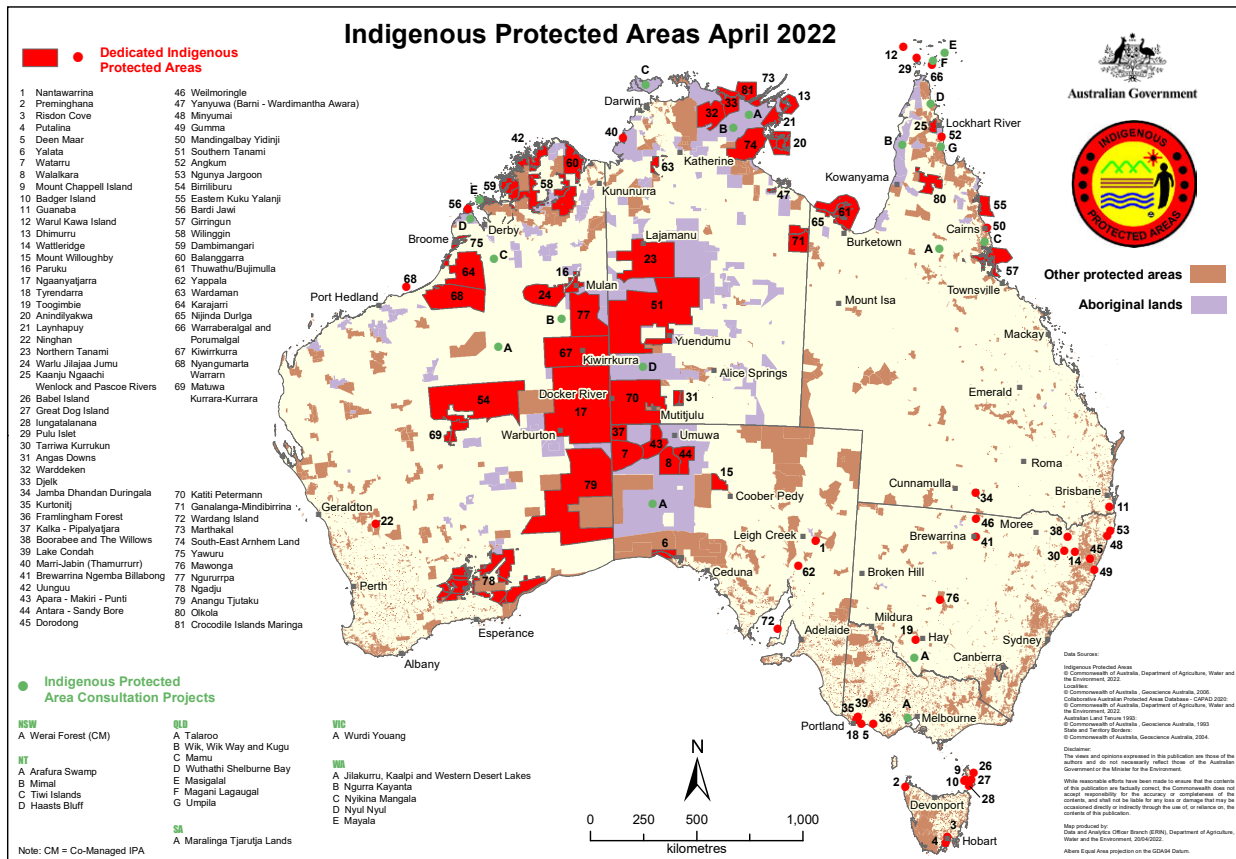
In addition, establishing an IPCA presents an opportunity to bring direct economic benefits to the local community. These economic benefits include new employment opportunities, a diversified economy, and an improved tourism industry. Specifically, IPCAs are ideal opportunities to attract federal investments in the previously underfunded community and create new jobs suitable for the local community (e.g., conservation officers, patrol officers, renewable energy officers, conservation scientists and ecologists, and stewardship professionals for the IPCA). The federal government has already invested CAD 3.2 million into the Seal River Watershed Alliance (SRWA) (Environment and Climate Change Canada, 2020). The SRWA received additional funding from the federal government to extend the project by 4 years for a total amount CAD \$1.25 million (S. Thorassie, personal communication, November 28, 2022). The designation of an IPCA would also build up the community’s tourism industry, capturing new revenues from adjacent businesses and income from leisure tourists. The local communities have expressed support for expanding ecotourism activities in the region, and this would be an additional way to bring new job opportunities and economic revitalization to the region (Narratives Inc., 2022).

Looking outside of Canada, in Australia, IPCAs account for 49% of the country’s nature reserves and cover over 85 million ha of land (National Indigenous Australians Agency, n.d.) (Figure 7). Australia sees immense value in these areas, as they lead to social, economic, educational,



and health benefits for Indigenous communities (Department of Agriculture, Water and the Environment, 2021). The stewardship of IPCAs also helps to protect Indigenous cultural value for future generations (Department of Agriculture, Water and the Environment, 2021). An analysis of five IPCAs in Australia found that the value generated for Indigenous Peoples, public governments, and other stakeholders exceeded the investment made in each case (Social Ventures Australia [SVA], 2016). **A total investment of CAD 35.2 million into five IPAs** and associated Indigenous ranger programs between 2009 and 2015 **generated CAD 96.5 million worth of social, economic, cultural, and environmental benefits** (SVA, 2016). The main beneficiaries were the Australian Government and Indigenous community members, especially those working as rangers. The value creation was driven by the meaningful employment opportunities for Indigenous rangers and the nature and extent of active land management in ranger programs (SVA, 2016).

Figure 7. Indigenous Protected Areas in Australia, April 2022



Source: Australian Government, 2022.



3.3.2 Challenges

A major hurdle to establishing an IPCA may occur when Indigenous objectives for protecting the area clash with the interests of other stakeholders over the potential economic development of the area for industrial uses, such as forestry, mining, or hydropower generation (Cox, 2020).

For some Indigenous Peoples, declaring an IPCA is a mechanism for asserting Indigenous rights and land ownership. Several existing IPCAs have been designated without the sanction or support of public governments. Often referred to as “tribal parks,” such IPCAs are often sites of conflict over resource development and declared with the express intention of asserting Indigenous rights and title. For example, the Tsilhqot’in National Government unilaterally declared their intention to establish Dasiqox Tribal Park over 300,000 hectares of land located 125 km southwest of Williams Lake, British Columbia, in 2014 (Dasiqox Tribal Park Initiative, 2018). The boundaries of Dasiqox Tribal Park were drawn to reflect the needs of the grizzly bears, moose, wolves, and other wildlife and to protect the area from mineral exploration. Although Dasiqox Tribal Park is not currently recognized by any public government, it is widely recognized and supported by many stakeholders as an established IPCA.

Another long-standing example of a tribal park is Meares Island, which was unilaterally declared by Tla-o-qui-aht First Nation in 1984 (O’Malley, 2019). It was born out of a blockade and court injunctions that put a stop to clear-cutting (O’Malley, 2019). Three more tribal parks have been declared in the area by the Tla-o-qui-aht First Nation since 1984, with the group of tribal parks collectively called Tla-o-qui-aht Tribal Parks (Tla-o-qui-aht Tribal Parks, n.d.-b). While the Tla-o-qui-aht Tribal Parks have not formally been recognized by either Canada or British Columbia, they are broadly supported by local municipalities and businesses in Tofino who have aligned themselves with the initiative as “Tribal Park Allies” and provide financial support (Tla-o-qui-aht Tribal Parks, n.d.-a; Indigenous Guardians Toolkit, n.d.). Parks Canada also maintains a collaborative relationship with the Tla-o-qui-aht, as a portion of the adjacent Pacific Rim NPR is within Tla-o-qui-aht traditional territory, and the tribal park operates in a manner that is broadly complementary to the purposes and objectives of the NPR (Parks Canada, 2021c).

However, tribal parks asserted this way face significant challenges in securing funding from or resolving resource conflicts with public governments. This is why many Indigenous governments prefer to work toward the establishment and operationalization of an IPCA that is recognized by the public governments. Such partnerships are predicated on the public governments’ willingness to recognize Indigenous self-governance, and the willingness of an Indigenous government to enter into a long-term engagement with the public government.

The experiences in both Canada and Australia demonstrate that partnerships between public governments and Indigenous communities can work, provided that they are built on solid foundations. Keys to successful partnerships include joint decision making in the management of the IPCA, as well as direct participation by Indigenous Guardians in operations.



Long-term funding is critical to an IPCA's success. The lack of sustainable financing poses significant challenges to an IPCA's operations and governance. Significant upfront commitments from all sources, including governments of all levels, civil society groups, and philanthropic communities, are needed in order to yield sustainable annual returns to fund the IPCA's activities and operations.

4.0

How the SRWA IPA Can Work in Manitoba





There are a variety of ways to establish an IPCA in Manitoba or elsewhere in Canada. As noted, many successful IPCAs involve partnerships between public and Indigenous governments and a mutual commitment to shared decision making and joint stewardship that puts a focus on Indigenous leadership, knowledge, and practices. Establishing an IPCA can mean granting protected status for a new area of land or changing stewardship objectives and leadership roles for existing protected areas. (ICE, 2018).

The SRWA has a clear goal to protect the region for future generations. The Sayisi Dene First Nation and its Cree and Dene neighbours have a unified vision to protect the region's wildlife and biodiversity, develop Indigenous capacity to advance conservation and stewardship efforts, uphold and preserve Indigenous rights and cultures, and spur sustainable economic development. The spirit of cooperation and mutual respect now translates into a demand for establishing the IPA and realizing the Alliance's vision.

The federal government has already shown strong interest in and pledged support toward establishing the Seal River Watershed IPA. In addition to the CAD 3.2 million already invested, the prospective investments from the federal government will bring additional economic opportunities, new jobs, and sustainable development outcomes in northern Manitoba. The project presents a unique opportunity for the Indigenous communities to share their traditional knowledge, history, and culture with visitors from Canada and around the world. It is also a chance to build a sustainable future for local youth by exploring new and exciting opportunities for ecological and cultural tourism. These benefits go hand in hand with Manitoba's Northern Tourism Strategy and the Made-in-Manitoba Climate and Green Plan (Travel Manitoba, n.d., Province of Manitoba, 2017).

The proposed IPA also presents a unique opportunity for the Manitoba government to advance reconciliation efforts under the principles of respect, understanding, engagement, and action, as outlined in The Path to Reconciliation Act (2016). An IPA, founded on the recognition of Indigenous self-governance and reconciliation and aiming to develop Indigenous capacity for the stewardship of traditional lands, partially fulfills Manitoba's commitment to implementing the Truth and Reconciliation Commission's Calls to Action and its commitment to Indigenous reconciliation.

As a first step, the Manitoba government could support this meaningful and beneficial initiative by

- **Interim measures** to protect the Seal River Watershed from commercial resource extraction and development. This could potentially include withdrawing the area from mineral staking and other protective measures. A Memorandum of Understanding—similar to the one between the Mosakahiken Cree Nation and the Government of Manitoba—could be used to establish common goals and to reflect a common understanding of the need to protect the area while an establishment agreement or arrangement is concluded through further discussions.



- **Establishing a Seal River Watershed IPA committee or working group** to undertake a feasibility study, identify provincial legislative options for establishing an accompanying Crown designation for the Seal River Watershed IPA, and begin the process of designing a roadmap or pathway to the full operationalization of the IPA. The composition of the committee or working group should be inclusive, with representatives from the Indigenous communities, the provincial and federal governments, and relevant civil society organizations involved.
- **Providing in-kind technical and communications support** for the SRWA and partner nations and organizations. Many community members have expressed wishes to receive more training in land stewardship and environmental monitoring in order to operationalize the Indigenous Guardians programs so the communities could have better capacity to protect their lands and waters.

Above all, this is an important opportunity to foster collaboration and innovation. It is an opportunity to further enhance the sovereignty of Indigenous communities within Manitoba and empower Indigenous nations and local communities to become the drivers of their own economic prosperity and development in line with their traditional ways of life and the teachings of their ancestors.



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