

ROAMING THE NORTH

A TOURISM STRATEGY FOR NORTHERN ALBERTA'S PEACE-ATHABASCA LANDSCAPES

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Roaming the North: A Tourism Strategy for Northern Alberta's Peace-Athabasca Landscapes

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A practicum submitted to the Faculty of Graduate Studies of
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Figure I-1: Wood Buffalo in Wood Buffalo National Park.

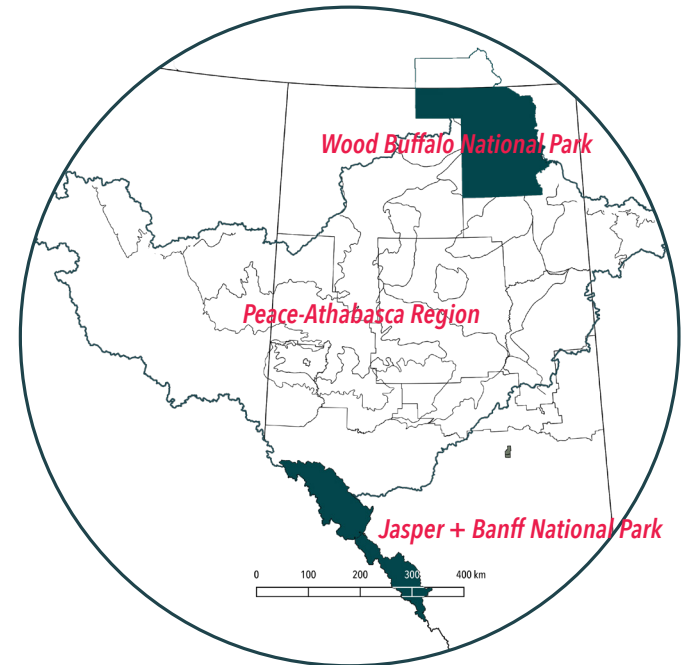


Figure I-2: Map of Peace-Athabasca region in Northern Alberta.

INTRODUCTION

Located in the north-east corner of Alberta and the North-West Territories' lower corner is Canada's largest national park. This extraordinary park is known for having the largest free-roaming bison herd globally, the largest freshwater delta in North America, and unique landscapes of the Peace-Athabasca region. In addition to its vast landscapes and diverse wildlife, the region has a rich cultural history, including thousands of years of indigenous connection to the land. The region was a significant point of interest for the fur trade credited with the opening of Western Canada to European settlement, along with the challenges and injustices of colonialism. Despite the expanse of diverse landscapes, wildlife, and cultural history, few in Canada have the privilege to experience their largest national park due to poor accessibility in terms of physical access and access to the many stories held by the land and its people.

This practicum's goal is to use landscape design to reveal the Peace-Athabasca region's cultural and historical heritage and, in doing so, increase Northern Alberta's tourism by river and road travel to Wood Buffalo National Park. This practicum intends to develop three unique design routes through Northern Alberta to Wood Buffalo National Park that reveal themes encompassing Northern Alberta's cultural and historical heritage. The objectives are to:



Designate new attractions to protect land significant to Northern Alberta's history and cultural groups to increase tourism in the northern region



Increase the number of designated rest areas and identify points of interest along each of the three designated routes to Wood Buffalo National Park



Communicate stories of the Peace-Athabasca region by increasing signage and public information along each route

The first two chapters discuss the Peace-Athabasca region's past, present and future. Investigating the Peace-Athabasca's physical, natural, social and cultural contexts reveals valued stories and voices worth hearing. The chapters highlight the region's landscape formation, the Athabaskan peoples, the introduction of European settlement, the Western fur trade, and the history of parks and protected areas. The chapters examine issues, impacts and threats to the region. The practicum describes direct and indirect threats from industrial activities, environmental and physical impacts regarding access to Wood Buffalo National Park and surrounding communities, and relevant surrounding community issues. These two chapters reveal potential stories, significant places, and tourist attractions to be encompassed in the design strategies.

The third chapter identifies guiding principles and frameworks from the provincial government's tourism and Indigenous tourism

documents. It defines how to achieve successful tourism, identifies the types of visitors, their needs, and experiences. Case studies present different approaches to and perspectives on interpretive strategies and plans, and cultural-heritage design.

The fourth chapter outlines the practicum's interpretive design strategy and the development of the design framework. This is done by uncovering key stories and categorizing them into five interpretive themes for each of the three routes to provide a balanced picture of its history. The interpretive locations on each route determine how each place will be programmed. Programming includes rest areas, points of interest, and interpretive elements keyed to each type of route.

The fifth chapter highlights sites that all three routes share. Sites classified as major points of interest are designed as new tourism destinations. Each site's design will incorporate stories learned from the previous chapters that will guide the site's programming and illustrate interpretive features with renderings, signage, and way-finding samples unique to each site.



Figure I-3: Wood Buffalo on side of highway to Wood Buffalo National Park.

ROAD TRIP

This practicum was inspired by learning that Canada's largest national park, Wood Buffalo National Park, reached a visitor count of only 3,904 in 2019. In comparison, the province's southern Banff National Park had 4.9 million in the same year (Parks Canada, 2019). To better understand why so few people were visiting such an expansive and seemingly unique national park, I planned a Northern Alberta road trip from Edmonton to Wood Buffalo National Park to better understand the current tourism opportunities and the challenges of inaccessibility.

The trip was planned for the end of summer to visit tourism sites and places of interest compiled from Alberta trip advisors, social media, Parks Canada and recreation online resources. By observing and briefly talking with tourists on the trip, I discovered that many travellers were explicitly interested in historical and cultural sites relating to Northern Alberta's fur trade history. When questioned about other tourism sites such as Wood Buffalo National Park, these travellers expressed that they chose to skip Wood Buffalo National Park on their way to Yellowknife because the park was too far of a drive with too few attractions along the way to make the extended trip worthwhile.

In my personal experience, the drive to Wood Buffalo was beautiful, with unique views and exciting wildlife sightings. Still, the view was from a window and lacked a personal connection. There were very few designated areas to stop at, and the rest areas en route lacked the necessary elements that would allow visitors to immerse themselves in their surroundings. I concluded that without these places of rest and interpretation, visitors lacked that essential connection key to providing a memorable experience.

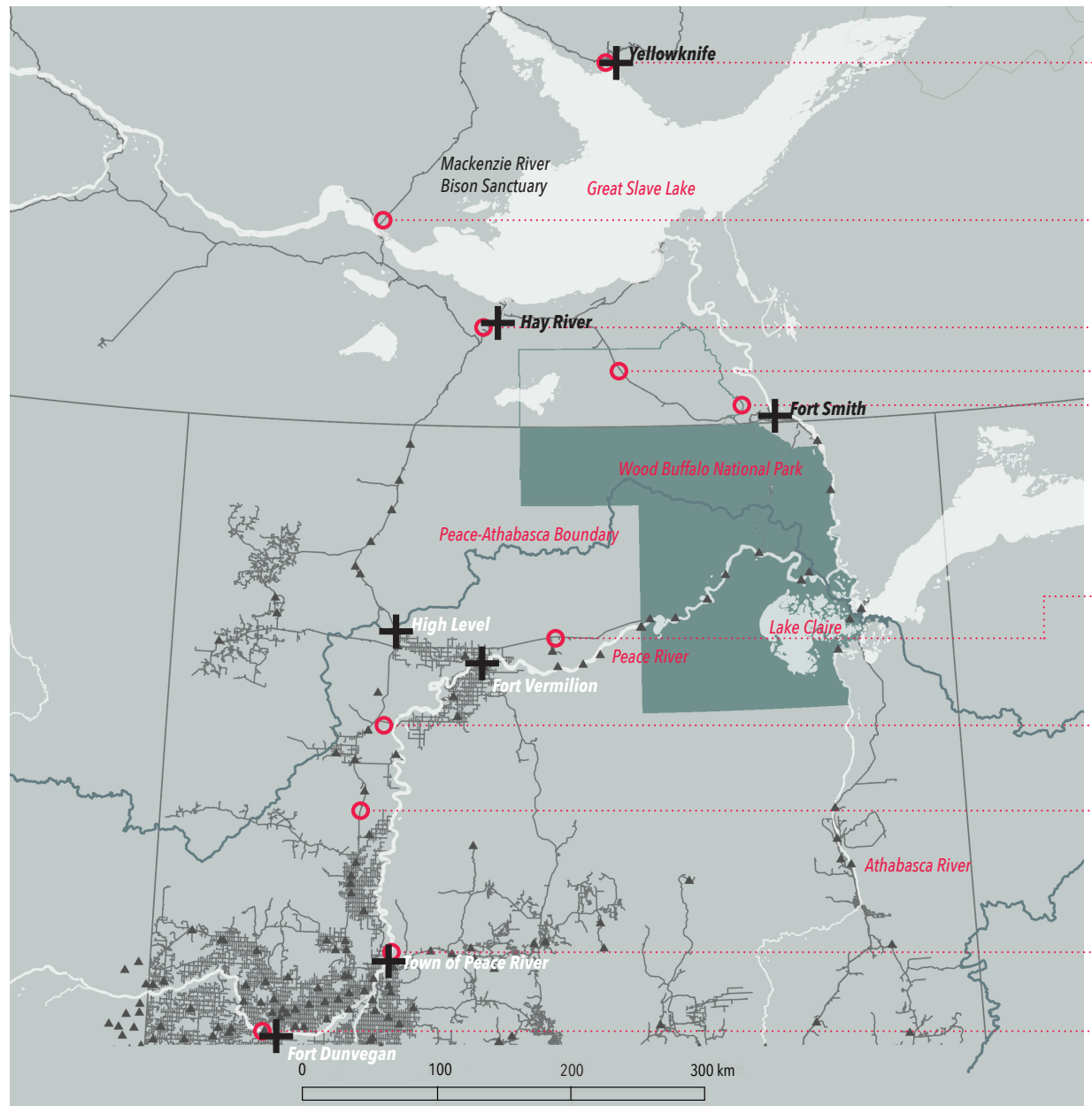


Figure I-4: GIS map of road trip route in Northern Alberta.

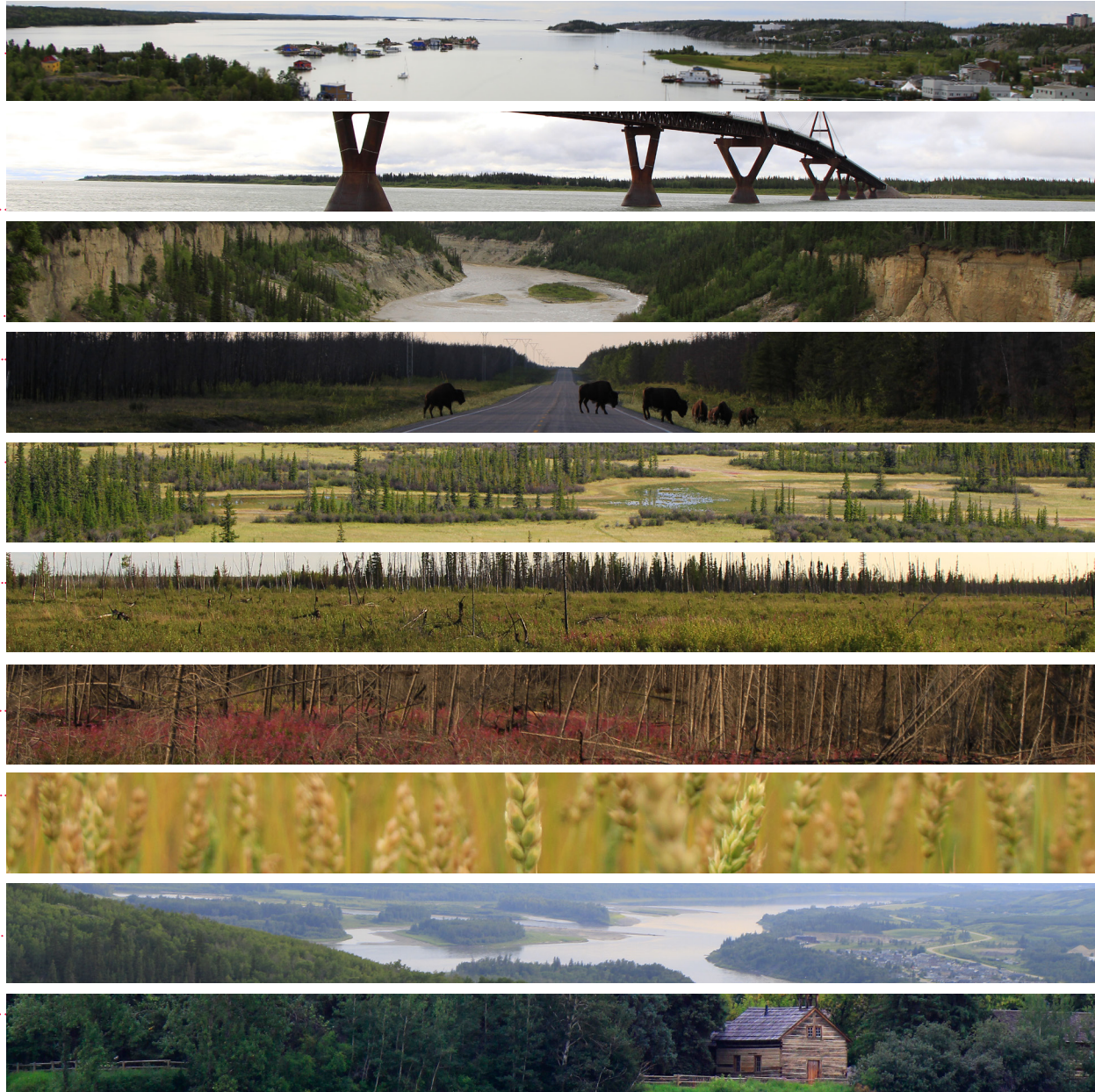
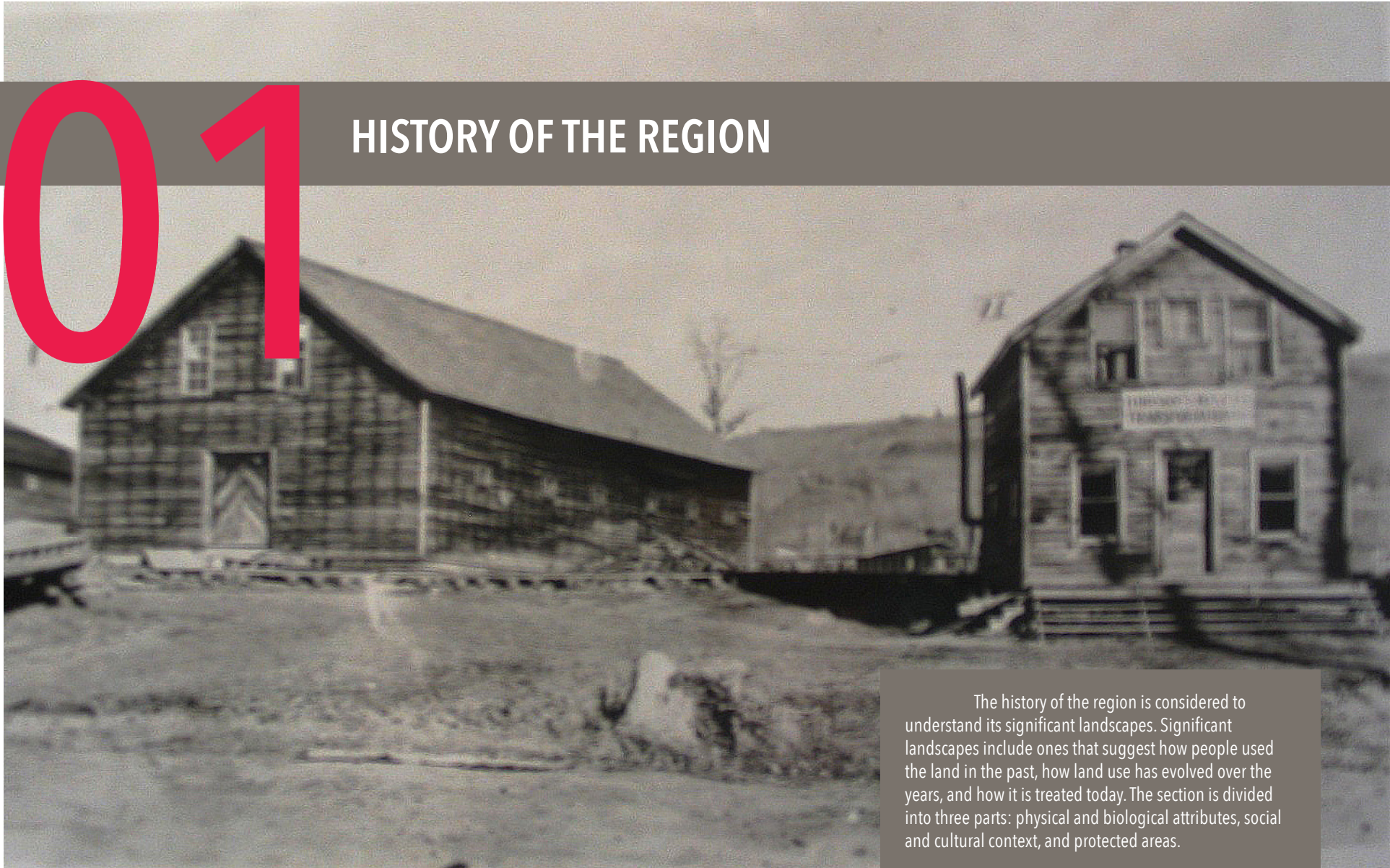


Figure I-5: Images taken on road trip in Northern Alberta.

01

HISTORY OF THE REGION



The history of the region is considered to understand its significant landscapes. Significant landscapes include ones that suggest how people used the land in the past, how land use has evolved over the years, and how it is treated today. The section is divided into three parts: physical and biological attributes, social and cultural context, and protected areas.

Figure1-1: Hudson Bay Company, Fort Vermilion (Image courtesy of Fort Vermilion Museum).

PHYSICAL AND NATURAL CHARACTERISTICS OF NORTHERN ALBERTA'S LANDSCAPES

GEOLOGICAL HISTORY

Northern Alberta's landforms are the result of geological events spanning over 600 million years. The Paleozoic Era, ending 360 million years ago, led to the creation of Alberta's oil reservoirs (RAMP, 2020). With the flooding of oceans, coral reefs absorbed what was once layers of decayed plant and animal remains. These remains turned into oil, trapped within immense limestone layers over the Canadian Shield (RAMP, 2020). Between 225 to 70 million years ago, Alberta emerged from and submerged below the ocean, shifting sediment during continental uplifts (RAMP, 2020). As the Coast Mountains formed, Alberta and what would be known as the Mackenzie River Valley, sank. This led the Arctic Ocean to migrate across Northern Alberta, depositing sediment while causing rivers to flow north. This sediment contains the Athabasca oil sands bitumen deposit (RAMP, 2020). By 85 million years ago, global sea levels rose to cause clay layers to act as caps for the oil deposits below the sand, salt and coral formations (RAMP, 2020). In the last glaciation, from 2 million to 10,000 years ago, the Laurentide ice mass covered 80% of the Mackenzie River basin, creating the Peace-Athabasca River basin's rivers and lakes today (RAMP, 2020). Before 12,000 years ago, warming temperatures caused the ice sheets to retreat in opposing directions allowing tundra-like herbs and shrubs to grow in the newly opened corridor, attracting large grazing mammals such as mammoths, mastodons, bison and caribou. Ten thousand years later, open woodlands would extend to the Mackenzie River's mouth, distributing flora and fauna present today. By 2500 years ago, Northern Archaic people migrated eastward from British Columbia into the Peace-Athabasca region and area around the Great Slave Lake. The Peace-Athabasca River system within the Mackenzie River basin is this practicum's focus.



Figure 1-2: Fur trade remnant at Fort Dunvegan.

MACKENZIE RIVER BASIN

The Mackenzie River basin is the 10th largest river basin in the world. The basin extends over 4200 km, from the Rocky Mountains to the Arctic lowlands, before draining into the Arctic Ocean (RAMP, 2020). The watershed encompasses six sub-basins, four of which fall within Alberta's boundaries: Peace, Athabasca, Slave and Liard. The Mackenzie River basin plays an important role in regulating the Arctic Ocean's circulation and climatic systems. It drains 20% of Canada's total landmass and accounts for 60% of freshwater that flows into the Arctic Ocean from Canada (BC Government, 2003). The basin is currently facing multiple threats from increasing industrial interest in Northern Alberta, which creates stressors on water quality and quantity (WWF, 2014). Industrial interests in the region include agriculture, fossil fuel energy, mineral extraction, hydroelectricity and forestry. 90% of the human population of the Mackenzie basin live within the Peace and Athabasca sub-basin, with 73% of that population residing within Alberta's borders (BC Government, 2003). More than two-thirds of the population residing in the Peace and Athabasca basins are Indigenous, including First Nations, Metis and Inuit.

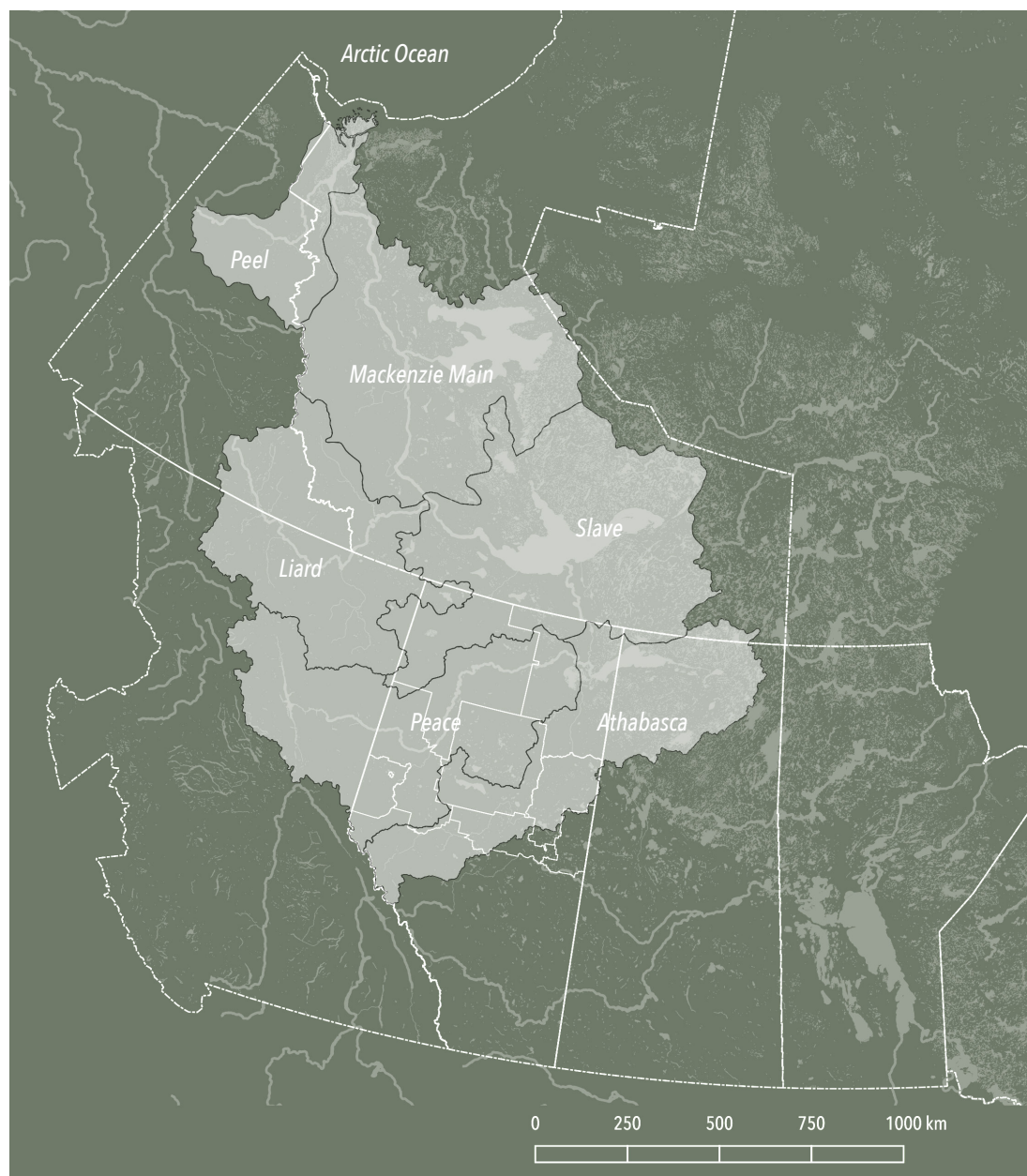


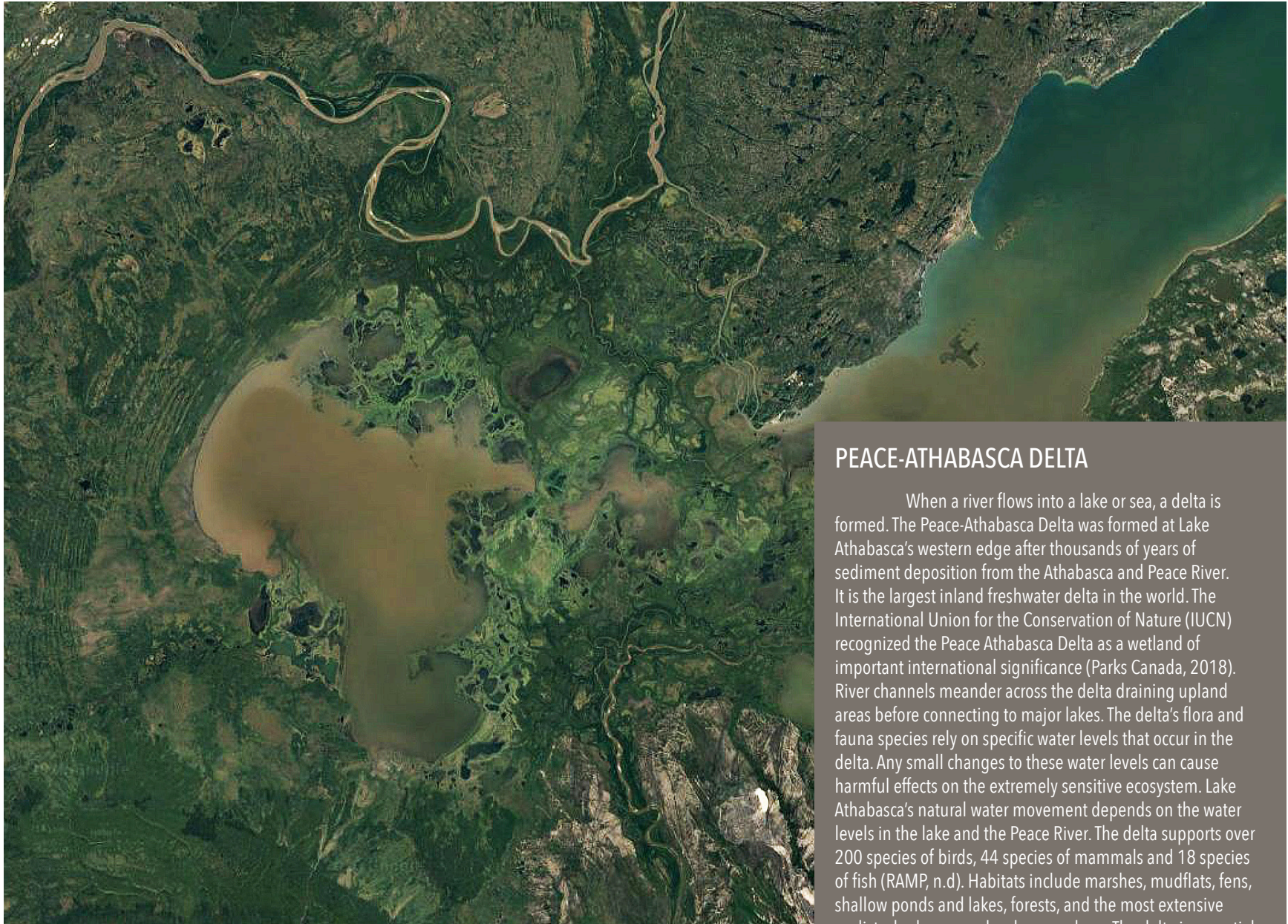
Figure 1-3: GIS map of Mackenzie River Basin.

PEACE RIVER AND ATHABASCA BASIN

The Peace and the Athabasca River are the two main rivers that flow into Lake Athabasca and the Peace-Athabasca Delta within the Peace River basin. The Peace River, just under 2000km long, and its tributaries were formed 10 to 15,000 years ago when Glacial Lake began to melt and drain towards the Arctic Ocean (Leonard, 2008). The river flows through the Rocky Mountains connecting to smaller rivers before continuing eastward into northwestern Alberta. It joins the Wabasca River before flowing into Wood Buffalo National Park, otherwise known as the Peace-Athabasca Delta. It then empties into Great Slave Lake, drained by the Mackenzie River into the Arctic Ocean. The Peace River derived its name from a settlement between two warring First Nations, the Cree and the Beaver First Nations, in the late 1700s (Leonard, 2008). The river is rich in the fur trade history that followed Alexander Mackenzie's quest to reach the Pacific Ocean. Over 20 trading settlements and five trading posts were built along the Peace River. The Peace River was also used as a significant freighting route in the 20th century. (Leonard, 2008).



Figure 1-4: GIS map of Peace River and Athabasca Basin.



PEACE-ATHABASCA DELTA

When a river flows into a lake or sea, a delta is formed. The Peace-Athabasca Delta was formed at Lake Athabasca's western edge after thousands of years of sediment deposition from the Athabasca and Peace River. It is the largest inland freshwater delta in the world. The International Union for the Conservation of Nature (IUCN) recognized the Peace Athabasca Delta as a wetland of important international significance (Parks Canada, 2018). River channels meander across the delta draining upland areas before connecting to major lakes. The delta's flora and fauna species rely on specific water levels that occur in the delta. Any small changes to these water levels can cause harmful effects on the extremely sensitive ecosystem. Lake Athabasca's natural water movement depends on the water levels in the lake and the Peace River. The delta supports over 200 species of birds, 44 species of mammals and 18 species of fish (RAMP, n.d). Habitats include marshes, mudflats, fens, shallow ponds and lakes, forests, and the most extensive undisturbed grass and sedge meadows. The delta is essential for waterfowl nesting and staging area before waterfowl migration (Parks Canada, 2018).

Figure 1-5: Peace-Athabasca Delta. (Google Earth, 2020).

PEACE-ATHABASCA BASIN ECOZONES

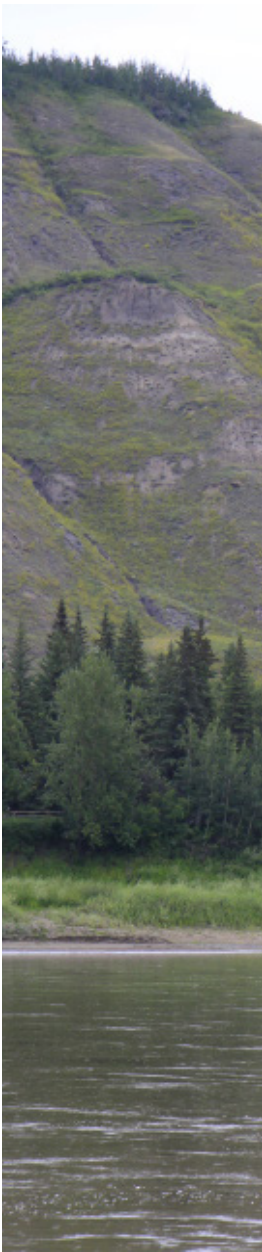
The basin comprises three ecozones: Boreal Plains, Taiga Plains and a small portion of the Taiga Shield. It contains diverse environments and habitats: mountains, foothills, parkland, boreal forest and wetlands. Peatlands are numerous in the northern part of the basin, and “brown-water lakes” are formed from the organic matter (BC Government, 2003). The Boreal Plains ecozone, which makes up most of Northern Alberta, is characterized by gentle rolling plains dotted with small lakes (EFC, 2020). Due to human activities, the ecozone has been fragmented, causing wildlife populations to diminish. Still prominent large wildlife species include timber wolves, black bears, moose, woodland caribou, deer, elk, beaver and bison. Most of the ecozone is associated with boreal forest coniferous species such as spruce, balsam, fir, pine and tamarack. Broadleaf species include aspen, poplar and birch. The ecozone can be broken down into five prominent ecoregions within Northern Alberta. These include Slave River Lowlands, Clear Hills Uplands, Peace Lowlands, Mid-Boreal Uplands and Wabasca Lowlands (EFC, 2020).



Figure 1-6. GIS map of Peace-Athabasca ecozones.

PEACE-ATHABASCA BASIN ECOREGIONS

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Peace Lowlands



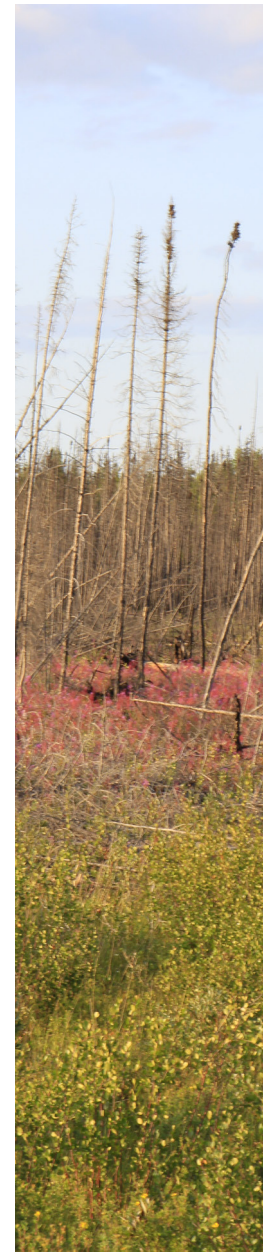
Western Boreal Forest



Clear Hills Uplands



Hay River Lowlands



Mid-Boreal Uplands



Slave River Lowlands

Figure 1-7. Images of Peace-Athabasca ecoregions.

SOCIAL AND CULTURAL CONTEXT

It is crucial to understand how people first came to the region, how they lived, their relationships with the landscape, and their interactions with other cultural groups in order to understand the traditional values and significance of places important to the people of the region. This section describes the history of Indigenous people, their interactions with the western fur trade, and how these relationships influenced social structures, transportation networks, and land designation that contribute to the Peace-Athabasca region's cultural heritage today.



Figure 1-8: First Nations Camp at Fort Vermilion (Image courtesy of Fort Vermilion Museum).

ATHABASCAN PEOPLES

By the late 1700s, Athabaskan people had resided in the Mackenzie River watershed for over 4000 years (Asch, 2018). Communities were organized into small hunting fishing bands, with big game hunted primarily in the south. The Athabaskan peoples consisted of 8 nations with a common language living south of Great Slave Lake to the lower Mackenzie River. This included the Chipewyans, the Yellowknives or T'astsat' ine, the Dogrib, the Slavey (Beaver Indians), the Nahanni, the Rocky Mountain and the Loucheux and Hare peoples (Asch, 2018). Eventually, Cree people migrated and settled in Northern Alberta, causing conflict with the Athabaskan groups. The Cree, the Beaver and the Chipewyans remained in the Peace Athabasca region. Many groups were located adjacent to the rivers, and with most of the Peace-Athabasca region in the boreal forest, wildlife and fishing were plentiful. Eventually, the fur trade would make its way across western Canada, and the Peace-Athabasca region was prized for its abundant wildlife and potential mining resources. The fur trade and colonial oppression significantly altered the lives of the First Nations peoples, depleting game and food sources and eventually leading to loss of a way of life (Government of Canada, 1986). Eventually, by the late 1880s, mineral wealth was discovered in the basin. The government made plans to sign a treaty to acquire the land with mineral wealth while improving the co-existence and sharing of land and resources (Government of Canada, 1986).

TREATY 8 AGREEMENT

Negotiations began in 1899 between the Canadian government and the Cree, Beaver and Chipewyan First Nations to sign a treaty. Treaty 8 was signed between 1900 and 1914. At the time, the treaty encompassed over 2700 First Nations peoples from the Cree, Beaver and Chipewyan First Nations and over 1700 Metis or mixed descent people across the provinces of Northern Saskatchewan, Northern Alberta, British Columbia and some of the North-West Territories. Treaty 8 Association, created in 1982 to provide advisory services and claims research to First Nations, is funded by the Ministry of Aboriginal Affairs and Northern Development Canada (Treaty 8 Association, 2020). Treaty 8 Association, 2020 describes the true spirit and intent of the treaty as “based upon principles of law, respect, honesty and acceptance, as told by the Elders past” and hails it as “a treaty of peace, co-existence and sharing of the land and resources, both renewable and non-renewable.” The treaty lands cover approximately 840,000 km and are home to 39 First Nations communities, 23

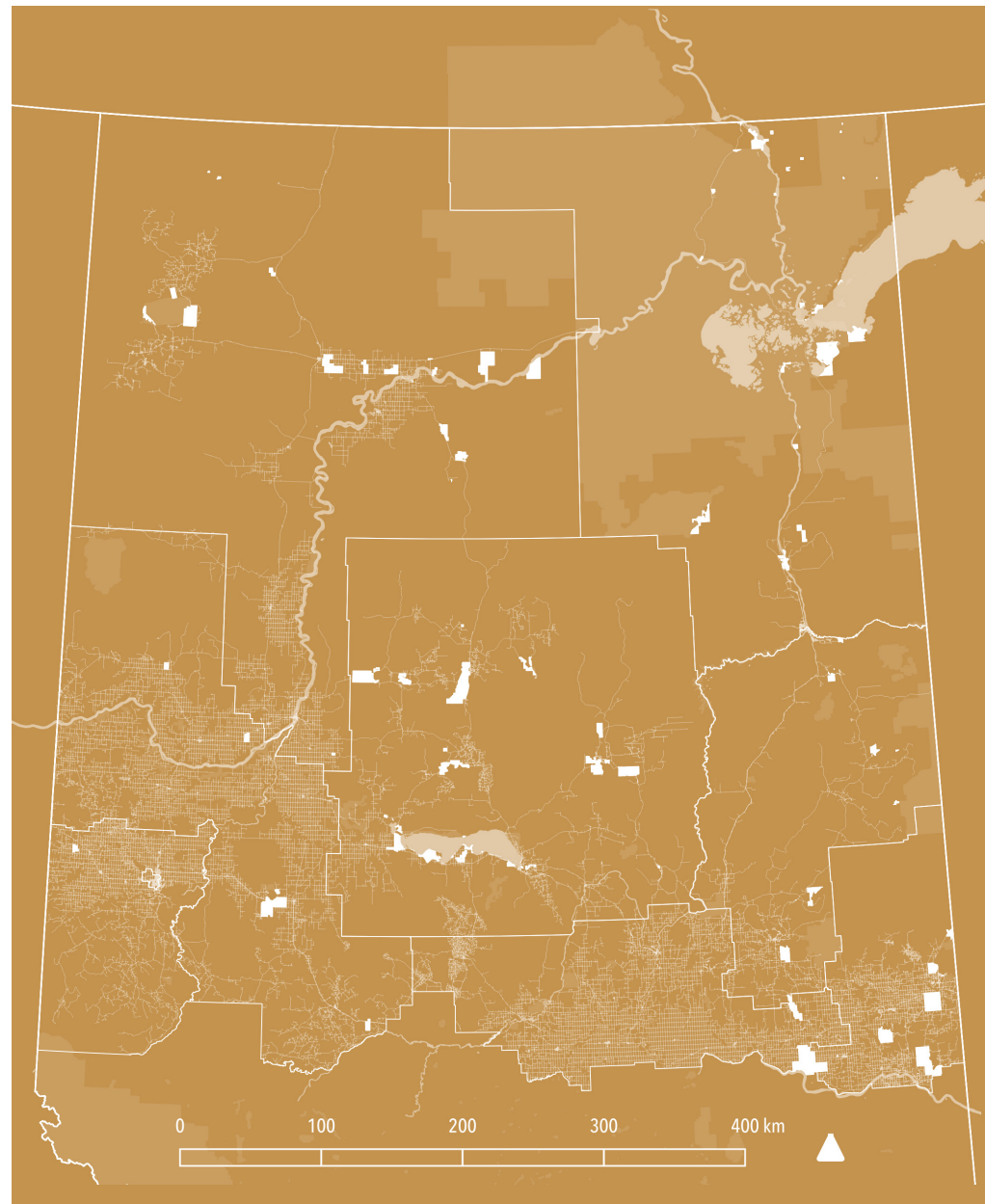


Figure 1-9: GIS map of First Nations lands in Treaty 8

of which are in Alberta. Treaty rights include rights to areas used to obtain sustenance, such as hunting, fishing and trapping, and cultural activities and burial grounds (Treaty 8 Association, 2020). The First Nations were assured that the federal government would provide education without interference in religion and that they would not be confined to reserves, but that reserve lands were land allotments for their protection and security. Annual cash payments would be provided to groups in exchange for lands acquired for mining purposes. The First Nations peoples would be exempt from military services and taxes but would adhere to Canadian law (Government of Canada, 1986).

TREATY BOUNDARIES

As mineral wealth found in the region sparked the Treaty 8 agreement's initiation, areas of considerable mining activity determined the new treaty's boundaries. The Lesser Slave Lake, the Peace and Athabasca Rivers, Athabasca Lake, South of Great Slave Lake, and all their tributaries, with the Rocky Mountains' western border were encompassed.

PROBLEMS ADMINISTRATING THE TREATY

After the signing of the treaty, the government began to fall behind on promises made to the treaty's Indigenous peoples. Promised annual cash payments that were to be exchanged for land, and other promises such as medical care were not honoured at all (Tesar, 2016). Some groups continued to struggle after the signing of the treaty with unresolved land claims and resource negotiations. The most significant detriment was the passing of the Migratory Birds Act and Game Act in 1916. This changed hunting and trapping regulations in Northern Alberta, leading to political resistance. Hunting and trapping, essential to the First Nations and Metis way of life, was limited, and Indigenous groups began to boycott government payments (Tesar, 2016). Many of these issues continue today. Today, Northern Alberta is home to 23 First Nations and Metis communities. The Little Red River First Nations, Tall Cree First Nations, Beaver First Nations and Dene Tha' in Northern Alberta continue to be affected by the Treaty 8 agreement. First Nations in the region continue to fight for land recognition, all-season community access, and fishing and hunting rights within some protected areas, and some continue to be opposed to resource development.

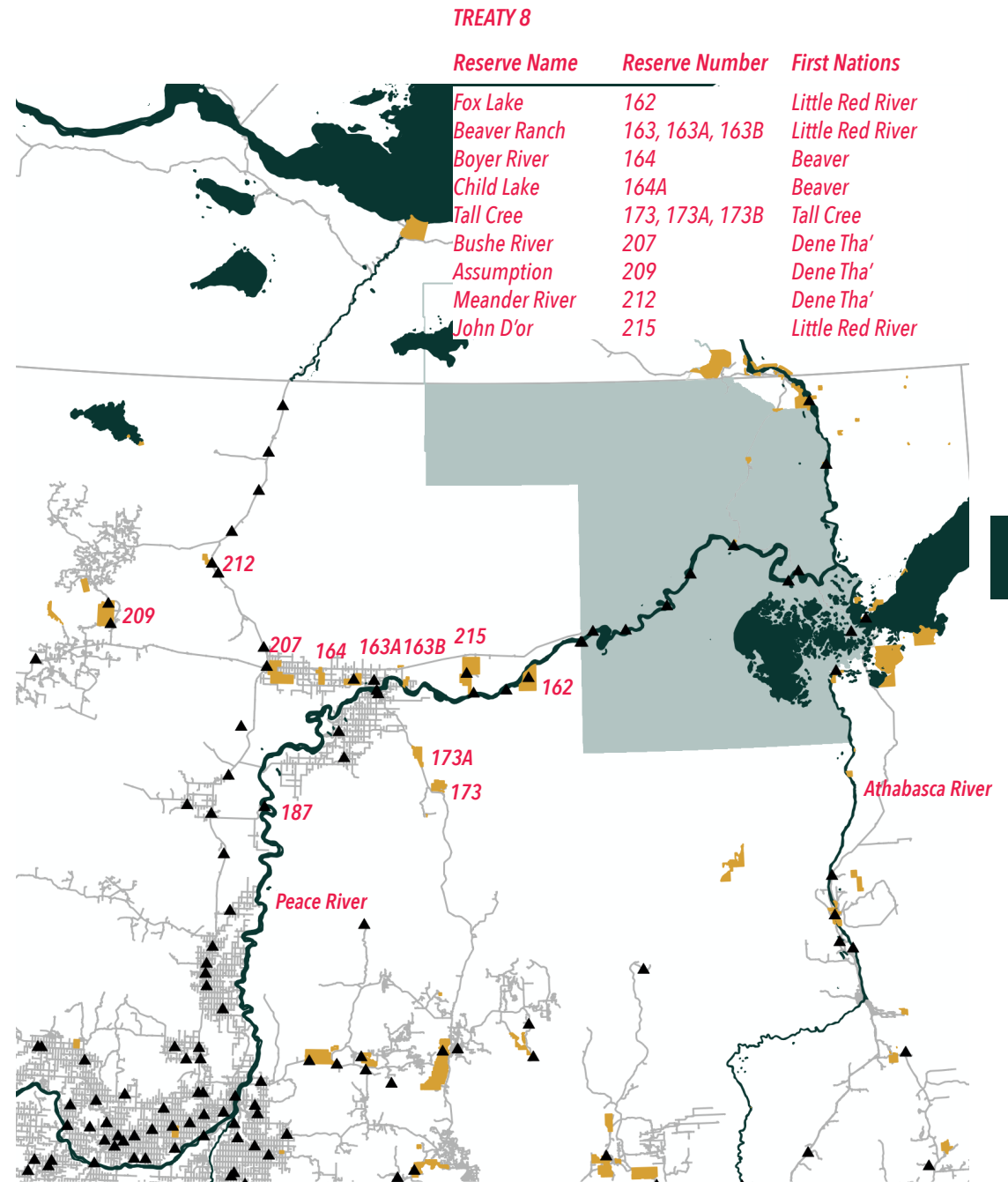


Figure 1-10: GIS map of First Nations lands in Treaty 8

HISTORY OF THE WESTERN FUR TRADE

For the first 250 years of European contact, Alberta's political, economic and social history was influenced by the western fur trade. The fur trade was active in Canada from the early seventeenth to mid-nineteenth century. The dominance of furs in specific regions helped shape Canadian boundaries and transportation routes that exist today. While the Canadian fur trade's history focuses on three leading fur trade companies and the creation of settlements, it is also about the relationships between Indigenous peoples and their alliances with these fur trade companies. This practicum focuses on the relations in Western Canada's fur trade history and its development into the Peace-Athabasca region.

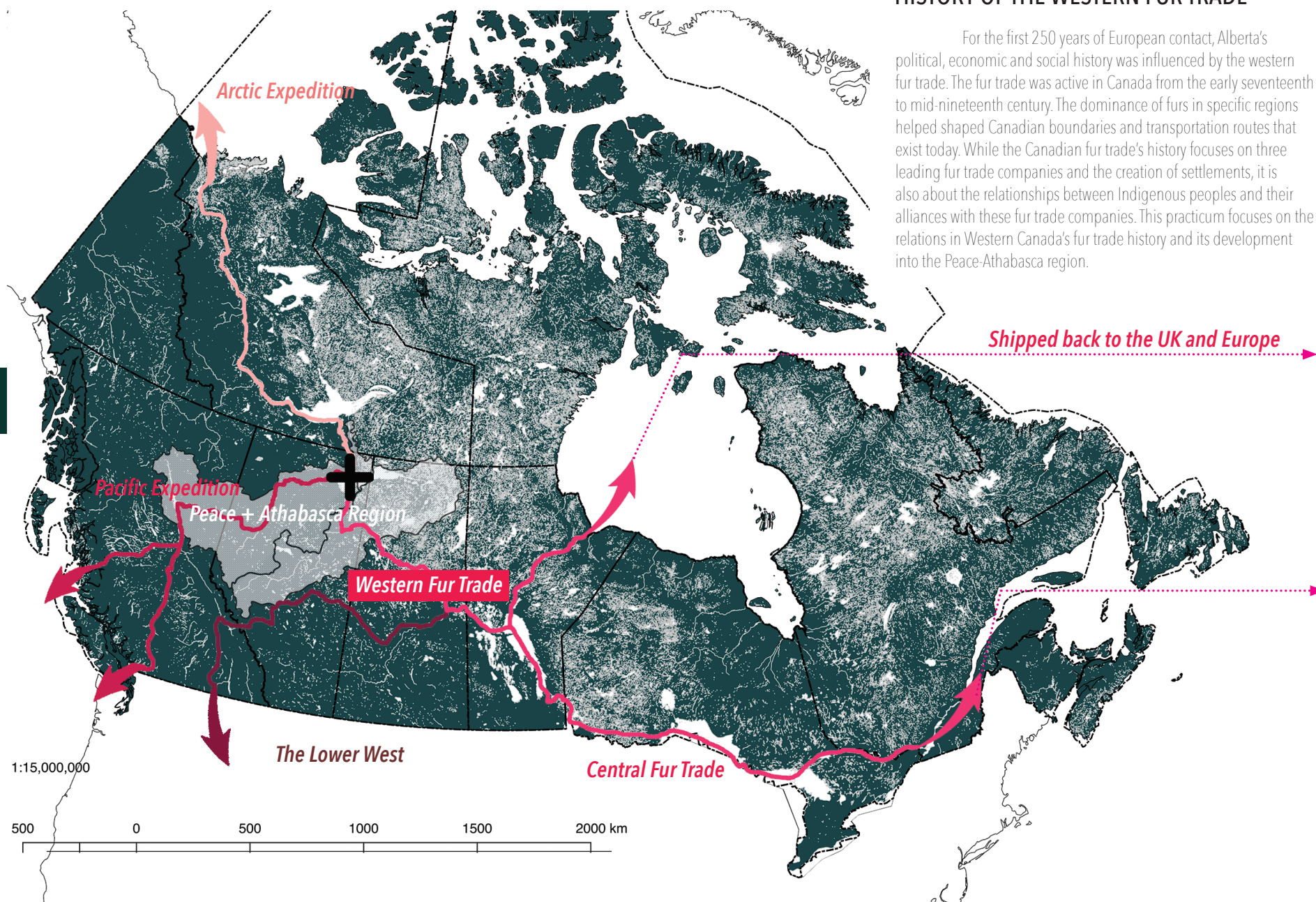


Figure 1-11: GIS map of Canadian fur trade routes.

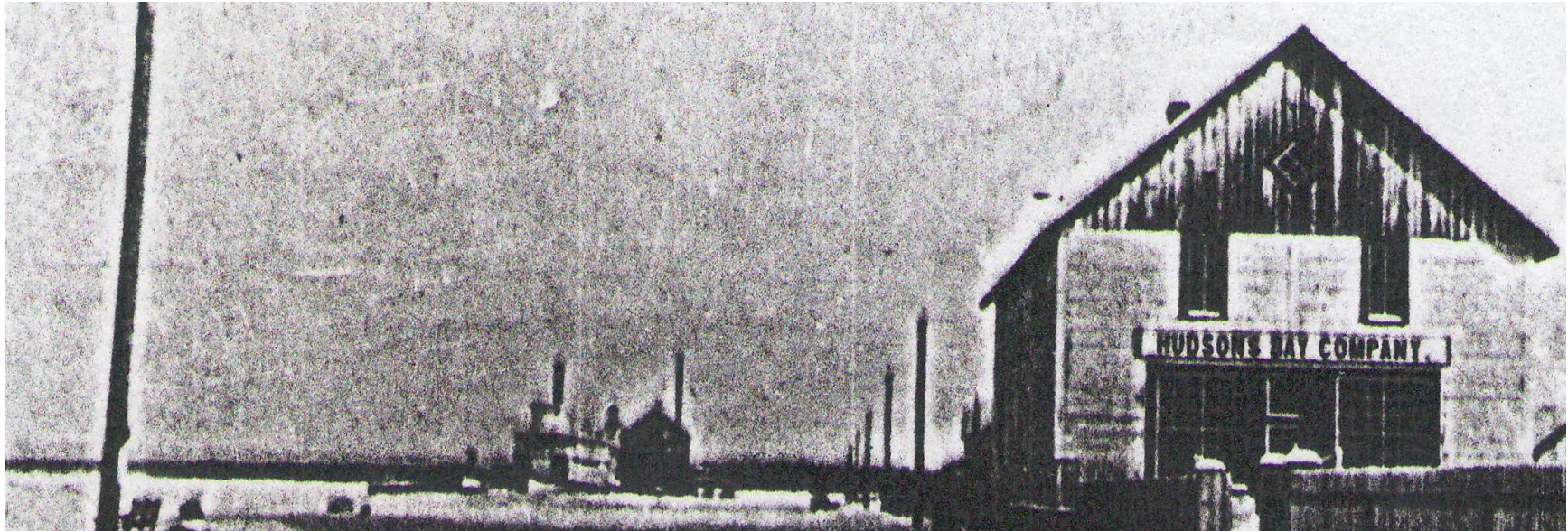
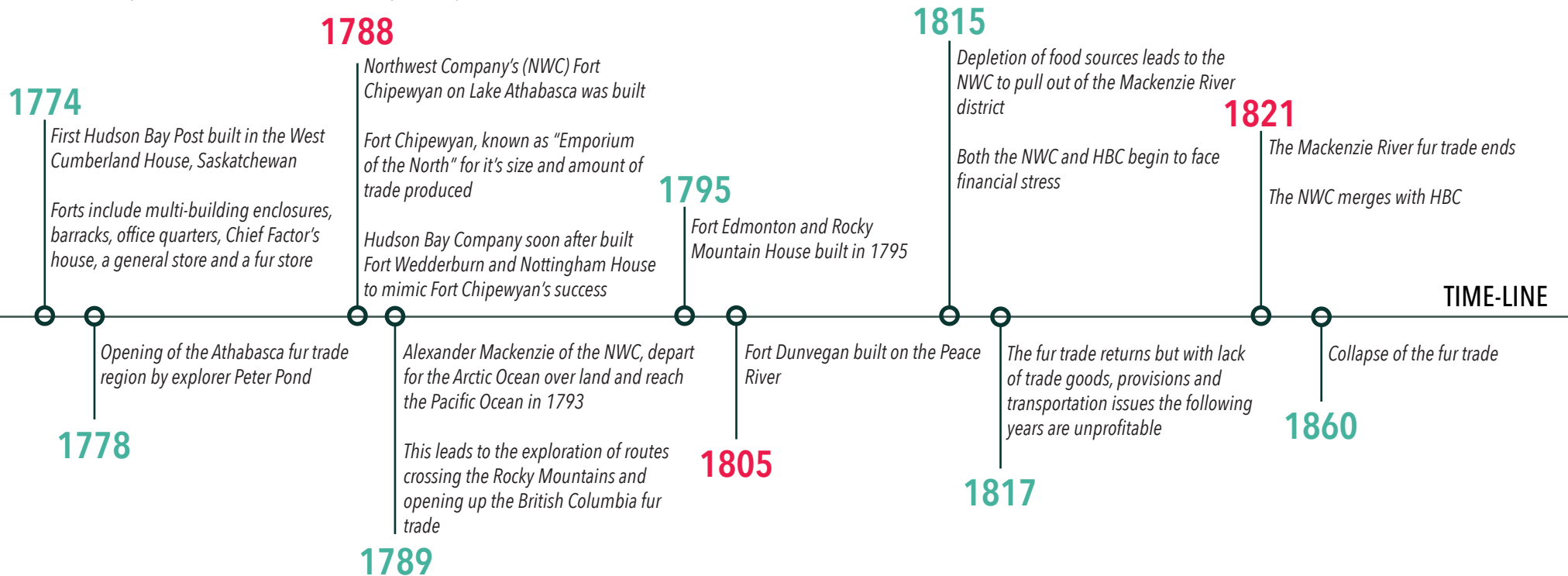


Figure 1-12: Fort Vermilion Saw Mill (Image courtesy of Fort Vermilion Museum).



MOVING INTO THE PEACE-ATHABASCA REGION

In the beginning, two companies dominated in Western Canada: the Hudson's Bay Company (HBC), and the Northwest Company (NWC) (Indigenous Peoples Atlas of Canada, 2019). At first, the First Nations of the west, especially the Cree, found profit from relationships with the HBC and NWC as First Nations peoples were trapping experts and could trade their furs for goods to the company that offered the highest price. First Nations' involvement allowed for creating and preserving alliances with the fur traders, ranging from relationships to First Nations trading captains to possible marriage alliances (Pannekoek, 1987). Marriages were vital because they provided kinship ties to local First Nations groups. The children of these unions were called Metis and were sometimes referred to as "children of the fur trade" (Indigenous Peoples Atlas of Canada, 2019). Each person in the family played a part in the fur trade. Metis women's work was especially essential as they provided food for the fur trade posts (Indigenous Peoples Atlas of Canada, 2019). As the fur trade shifted further West in the late 1700s, the Cree also moved westward but were eventually decimated in the measles epidemic (Pannekoek, 1987). It was not until 1783 that Peter Pond, trader and explorer of the NWC, began gathering information on the lay of the north's land and opened the Peace-Athabasca region (Pannekoek, 1987). New alliances with local First Nations of the Peace-Athabasca region were made, and the fur trade in this region was established.

ATHABASKAN PEOPLES IN THE FUR TRADE

The Athapaskan people inhabited the area north and west of the Cree. This included the Hare, Dogribs, Slaveys, Beaver and Chipewyan peoples. The Athapaskan peoples, who favoured forest and river over plains or tundra, generally maintained their existing cultural patterns and remained uncommitted to the trading system after the first post was established in 1778 (Pannekoek, 1987). The introduction of weaponry such as guns, the feast-and-famine cycle, changed the Athapaskans hunting patterns causing them to have to disperse further into other groups' hunting areas (Pannekoek, 1987). This caused tension between First Nations groups. Families that were employed by the fur trade would frequently gather at fur posts and be employed to gather fish or hunt caribou.

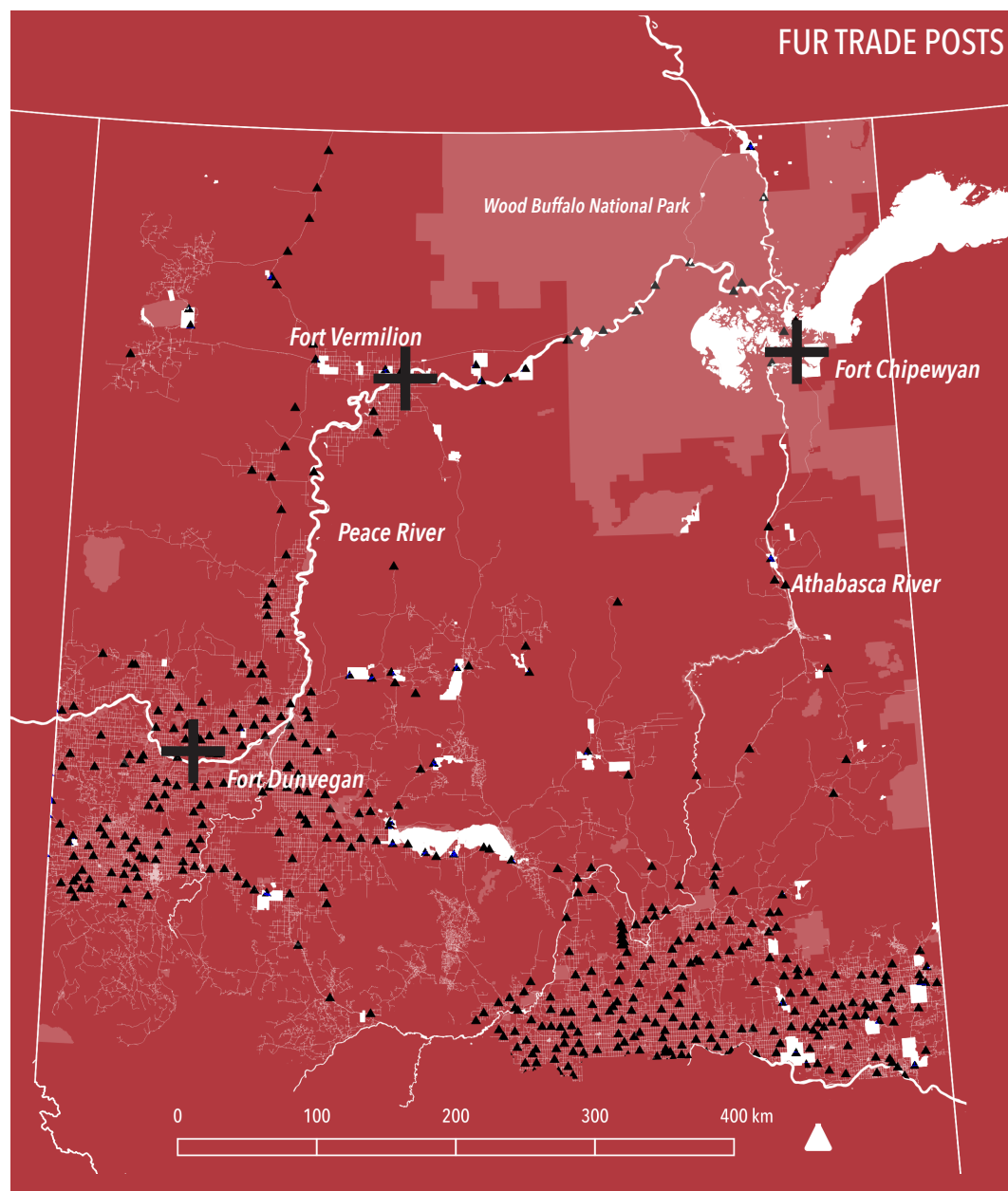


Figure 1-13: GIS map of fur trade posts in Northern Alberta.

SOCIAL DIMENSIONS AND LABOUR STRUCTURES

Marriages between the North West Company and the First Nations were formed around the fur trade posts. These posts were where furs were handled and traded and were critical to the trading structure (Pannekoek, 1987). Semi-nomadic groups would follow the buffalo hunt to gain control of the production and distribution of pemmican for the fur trade. The first trading houses were generally located around central bison regions. The NWC alone required forty to sixty thousand pounds of pemmican to provide provisions for the traders each year (Pannekoek, 1987). Many forts had successful agricultural and horticultural practices but never managed to sustain themselves without the buffalo hunt. With the Roman Catholic Church's arrival in 1818, missionaries became an external social force that opposed the fur trade and pushed for agricultural practices as a replacement (Pannekoek, 1987). Many settlements failed due to unsuitable planting varieties, early frosts and soil conditions, but other settlements located on the fur trade routes flourished.



Figure 1-14: First Nations Family (Image courtesy of Fort Vermilion Museum).

TRANSPORTATION NETWORKS AND METHODS

Before roads were built, fur traders used the river systems to haul furs and goods across the country back to Montreal (Indigenous Peoples Atlas of Canada, 2019). With the discovery of the rich, abundant furs in the Athabaskan region, the NWC's problems became evident. The "canot du Nord" was used for travel in Western Canada. It was paddled by a small group of four to six men at twenty-four feet long and four feet wide and displaced about 3700 lbs (Pannekoek, 1987). Areas of the river with rapids or where it was too narrow to pass with boats or canoes required the traders to portage and carry the packs on their backs, sometimes for several kilometres. This was a great hardship, and many fur traders worked for several months at a time. The Athabaskan region promised riches in furs, but transportation costs sky-rocketed with increased distances between fur sources and markets (Pannekoek, 1987). Unlike the Hudson Bay Company, which had a depot in York Factory that allowed the furs to be shipped to London, the NWC's headquarters was located in Montreal. This required the NWC to invest in men, provisions and transport through several river systems to deliver furs to Montreal. Before the furs could be shipped to London, they had to be sorted and cleaned in Montreal before the St. Lawrence River froze. If the furs were not ready in time, they had to be held for another year. This caused a financial delay that the NWC could not afford and eventually led to efforts to discover a northwest passage to the Pacific Ocean to target markets in China (Pannekoek, 1987).

BISON HUNTS

Between the two companies' competition, large amounts of eastern First Nations peoples were brought into the upper Peace region to help with transporting NWC fur's back to the Montreal port to be shipped back to Europe. This put an increasing amount of pressure on the bison populations (Ferguson, 1993). Processed bison meat - pemmican - provided the fur-trading posts with provisions for their journeys (Indigenous Peoples Atlas of Canada, 2019). Pre-1800, the central and upper Peace River, was considered a significant hunting ground. The Northwest Companies Boyer's Post provided seasonal provisions for the NWC that were necessary for transporting furs. (Ferguson, unknown). Between Boyer's Post and Lake Athabasca, two tons of bison provisions were brought by canoe in 1792 (Ferguson, 1993). Bison and elk were recorded to be just as abundant near Whitemud River. The second and third hunting grounds were located at the Salt Plains, west of the Slave River, and at the Athabasca River's confluence and the Clearwater River (Ferguson, 1993).



Figure 1-15: Trapper Buildings (Image courtesy of Fort Vermilion Museum).

COLLAPSE OF THE FUR TRADE

After the Hudson's Bay Company and the Northwest Company merged in 1821, profits began to diminish due to changes in Europe's fashion and depletion of local bison populations (Indigenous Peoples Atlas of Canada, 2019). Beaver pelts dropped in value as less expensive silks became more popular. This resulted in the First Nations and Metis having to do other things to support their families (Indigenous Peoples Atlas of Canada, 2019). It is argued that European technologies and the demand for furs changed First Nations' cultural habits, altered their labour structures, and caused a dependency on European commodities (Pannekoek, 1987). Posts in the Peace-Athabasca region eventually began to suffer from starvation because of lack of bison, and by the 1840s, the populations were in rapid decline. Once the Hudson Bay Company's fur trade collapsed, the West's territory was transferred to Canada in 1870. Land development pursuits shifted from the fur trade to mineral exploration. The government continued to sign treaties with First Nation's peoples to acquire lands with mineral value and traditional lands were opened to colonial settlement and development (Foster, and Eccles, 2019). The twentieth century eventually marked the end of the historic fur trade (Foster, and Eccles, 2019).

TODAY

Many Metis and First Nations in the northern parts of the province and the Northwest Territories continue to trap furs and honour their ancestral traditions (Indigenous Peoples Atlas of Canada, 2019). Bison populations have been re-introduced, and today Wood Buffalo National Park holds the largest free-roaming bison herd in the world (Ferguson, 1993).



Figure 1-16: Fur Trade Exhibit at Peace River Museum

HISTORY OF PROTECTED AREAS

This practicum focuses on national and provincial parks and critical natural areas of conservation in the Peace-Athabasca region and those who inhabited these areas. This includes the conservation areas of Wood Buffalo National Park, Peace River Parklands and the boreal forest. Special consideration is given to the protected species within these areas: the wood bison. These landscapes and their flora and fauna have the potential to become places of interest in the practicum's tourism strategy. The locations and types of protected areas are important for the practicum's site design because they show how sites are currently being used, who they are being used by, and how future sites should be treated ecologically.



Figure 1-17: Salt Plains at Wood Buffalo National Park

HISTORY OF ALBERTA'S PARK SYSTEMS

Alberta's park systems began in the late 1920s when a committee was appointed to survey the province for potential sites suitable for large parks and campsites near highways (Alberta Parks, 2018). While many of the first parks were for locals to use to relax, play and picnic, many also had areas to swim and enjoy wildlife. Eventually, priority began to shift from prioritizing recreational activities to protecting the forest's natural integrity. This led to the Provincial Parks and Protected Areas Act being officially passed in 1930 (Alberta Parks, 2018). By then, Alberta had established five national parks. Following World War 2, many Albertans had more leisure time and vehicles in which to travel (Alberta Parks, 2018). This led to increased park funding to serve the growing numbers of travellers on the highways. Not until 1955 were parks created to conserve valuable natural and historical features (Alberta Parks, 2018). In 1987, the Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act was established to conserve nature in an undisturbed state in areas that can only be accessed by foot (Alberta Parks, 2018). Eventually, parks began to include cultural and spiritual places significant to First Nations communities and designated these as provincial and national historic sites. In 2000, Alberta committed to a nationwide conservation goal to increase Canada's protected areas by 10%. Natural regions that had current low conservation representation were to be protected (Alberta Parks, 2018). This included under-represented areas of the boreal forest and the Peace River parklands in Northern Alberta. As of 2015, 15% of the boreal forest is now under protected designation (Alberta Wilderness Association, 2020).

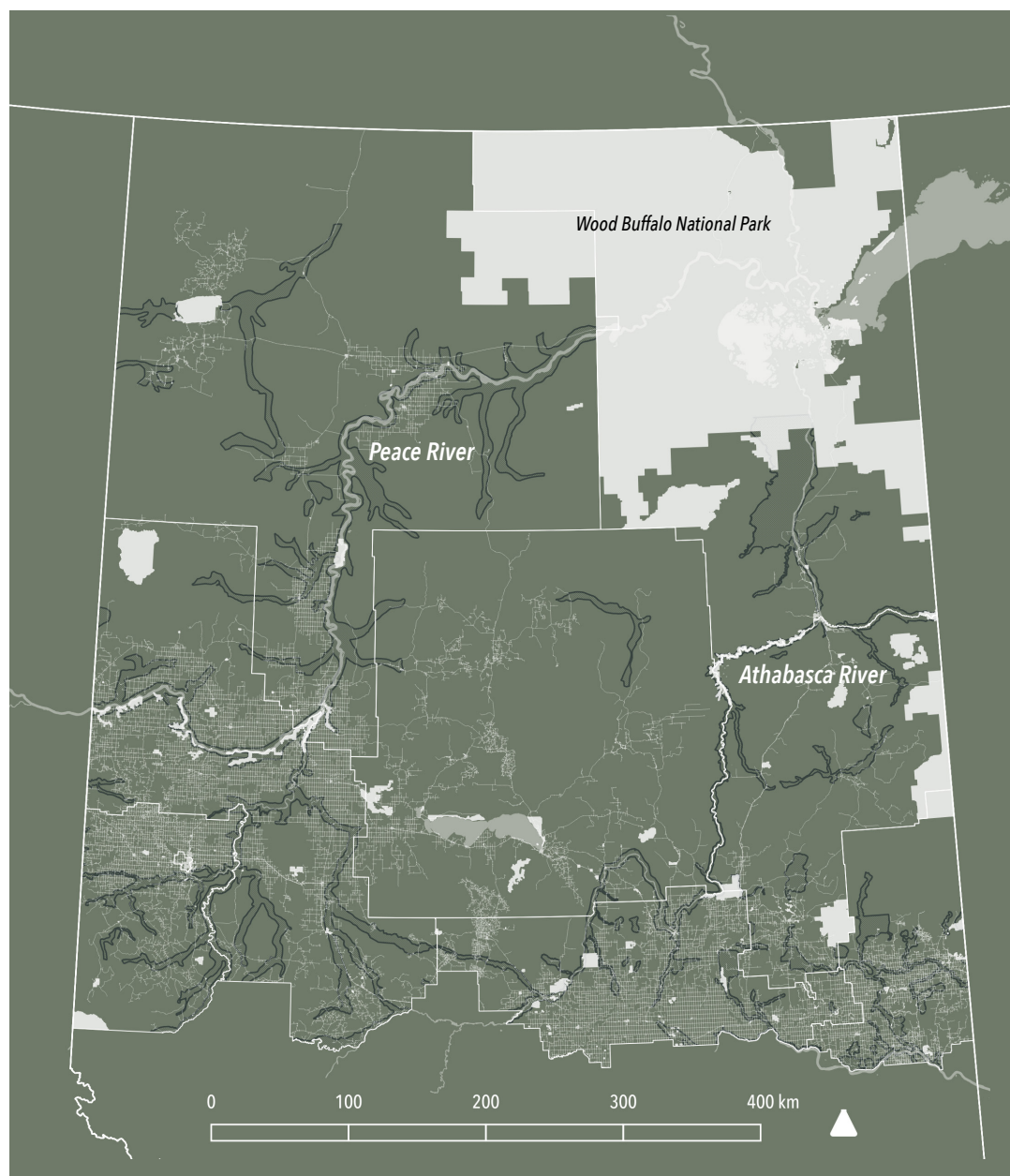


Figure 1-18: GIS map of protected areas in Northern Alberta

WOOD BUFFALO NATIONAL PARK

Wood Buffalo National Park, created in 1922, is the only national park located in Northern Alberta and is the largest in Canada, covering 44,800 sq/km of protected lands. Wood Buffalo National Park supports the largest free-roaming bison herds globally and is the world's only natural nesting site of endangered whooping cranes (Alberta Wilderness Association, 2020). It was designated as a UNESCO World Heritage Site in 1983 (Alberta Wilderness Association, 2020). Wood Buffalo includes the Peace-Athabasca Delta located at the mouth of the Peace and Athabasca Rivers. Other outstanding characteristics include unique salt plains, vast undisturbed boreal wilderness, and some of the finest examples of gypsum karst landforms in the world (Parks Canada, 2018).



Figure 1-19: Signage at Salt Plains

INDIGENOUS PEOPLES IN THE PARK

First Nations peoples have inhabited the Wood Buffalo region for more than 8000 years. Today the communities around and within the park are comprised of Cree, Chipewyan, Metis, and non-First Nations peoples (Parks Canada, 2018). First Nations and Metis rely on the park's resources to sustain their way of life and cultural traditions. Wood Buffalo National Park was the first Canadian park to allow First Nations traditional harvesting. Traditional practices include subsistence hunting, fishing and trapping. When the park expanded in 1926 further south to protect the bison migration, active harvesters were able to continue their harvesting practices (Parks Canada, 2018). These traditional practices continue to be an important part of the cultural identity of the park. Today, heritage values such as treaty rights, access to lands and resources, cultural landscape considerations and roles of First Nations in the ecosystem must be considered and recognized (Parks Canada, 2019).

BISON POPULATIONS

Wood Buffalo National Park includes boreal forests, extensive willow shrub carrs, gypsum-karst topography, remnant grasslands, white spruce and poplar forests, and the Peace-Athabasca freshwater delta. (Bison Producers of Alberta, 1998). Despite the park's establishment in 1922 to protect the bison populations, there has been a decline in herds due to human impacts. These impacts include construction of hydro-electric dams on the Peace River; fire suppression; agricultural, pulp and paper production causing pollutants in the Delta; construction of weirs to stabilize water levels; poisoning, hunting and trapping of wolves; haying to supplement bison feed; slaughter for meat production; and the introduction of diseased bison (Bison Producers of Alberta, 1998). In 1928, over 6000 bison were accidentally introduced, infected with brucellosis and tuberculosis. With the combination of disease, industrial impacts, and overhunting, bison numbers dropped from 15,000 to 2300 over 70 years. In 1995, a 5-year Bison Research and Containment Program was established to study disease impacts on the bison population and conduct hydrological, topographic and vegetation studies. (Bison Producers of Alberta, 1998).



Figure 1-20:: First Nations Camp (Image courtesy of Fort Vermilion Museum).



Figure 1-21: Wood Bison crossing road in the national park

WENTZEL LAKE BISON HERD SUBPOPULATION (GWBNP)

Located north of the Peace River below Caribou Mountains and southwest from the national park border, the Wentzel Lake herd occupies approximately 3000 km². The Wentzel Lake area last counted 200 bison in 2011, and 11 bison in the Wabasca River area west of the park (COSEWIC, 2014). Aside from the Wentzel Lake herd located outside the park, there are five distinct bison groups within Wood Buffalo National Park. These include Garden River, Nyarling, Little Buffalo (Slave River Lowlands), Hay Camp, and Peace Athabasca Delta (Alberta Government, 2017). The Wentzel Lake area is an important place to the Little Red River and Tall Cree Nation as they can monitor bison numbers through winter feeding. The First Nation groups placed mineral licks and supplemental feed to monitor the herd to initiate biological research for disease eradication in the early 1990s. Unfortunately, the research did not get implemented. Today, bison sightings continue to be reported near the Wentzel River and Buffalo River areas and the Caribou Mountain plateaus. It is noted that the bison will travel up to 14 km to use various riparian and wetland areas over 48 hours. The area now has ten groups of bison totalling over 160 bison in the area.



Figure 1-22: Wood Bison in the park.

OTHER PROTECTED AREAS: PARKLANDS AND NATURAL AREAS

Parkland Natural Regions encompass 9% of Alberta (Alberta Wilderness Association, 2020). They are the transition between grasslands and forests, but also include extensive agricultural development. The Peace River Parkland, located along the Peace River between Dunvegan and the city of Peace River, is a parkland that is 85% privately owned with the remaining as provincial public lands (Alberta Wilderness Association, 2020). The Peace River Parklands have broad rolling hills, steep river valleys, and moraine uplands. The public lands are governed by the Public Lands Act that prohibits any acts on land that may injuriously affect the watershed of the Peace River (Alberta Wilderness Association, 2020).

The boreal forest is the largest natural region within Alberta, making up over 380,000 sq/km (Alberta Wilderness Association, 2020). The boreal forest provides critical habitat for both bison and caribou species in the northern region. The diverse landscape has a significant amount of industrial activity that has resulted in forest degradation and fragmentation (Alberta Wilderness Association, 2020). Three legislative acts pertain to provincial protected areas within the parklands and the boreal forest: The Provincial Parks Act; the Wilderness Areas, Ecological Reserves, Natural Areas, and Heritage Rangelands Act; and the Willmore Wilderness Act (Alberta Wilderness Association, 2020).



Figure 1-23: Protected area of the boreal forest.

02

ISSUES + THREATS + IMPACTS

25



Figure 2-1: Peace River Flood at Fort Vermilion (Image courtesy of Fort Vermilion Museum).

This chapter examines the direct and indirect threats, impacts and issues affecting the Peace-Athabasca's physical attributes, environment, surrounding communities and Wood Buffalo National Park. These include industrial activities, climate change, and access to communities and the park. These issues and attendant restraints are considered in this practicum's tourism strategy.

INDUSTRIAL IMPACTS

Agriculture, oil sands activities and hydro-electric development have harmed biodiversity and ecosystems on both the Peace River and the Peace-Athabasca Delta. They have also caused controversy within settlements and communities.

AGRICULTURE

As of 2019, Alberta is Canada's second-largest agriculture producer. Agriculture is one of the major land uses in northern Alberta, especially the southern portion of the Athabasca basin (Crosby, n.d). Most of the Peace-Athabasca basin population lives in farming areas around the town of Peace River (Crosby, n.d). The unique microclimate of the Peace River Valley allows for the growth of crops that would not normally thrive within the far north. With up to 18 hours a day of sunlight during the summer, wheat and canola grow quickly (Crosby, n.d). The region's food production value can supply food for over a million people (PVEA, n.d).

HYDROELECTRIC DEVELOPMENT

The Peace-Athabasca region has two major hydro-electric dams, with two more proposed. The two existing dams, "Site A" and "Site B," otherwise known as the W.A.C Bennett Dam at Williston Lake and the Peace Canyon Dam, are located between the communities of Fort St. John, Taylor and Hudson's Hope in British Columbia. Two more dams - "Site C," located near Fort St. John, B.C, and the Amisk Dam, near Fort Dunvegan, Alberta - are proposed. Approximately 75% of Alberta's potential hydro capacity is located in the Athabasca-Peace and Slave water basins (Government of Alberta, 2020). Hydro-electric dams have negatively changed the natural water flow and water quality of the Peace River, the Peace-Athabasca Delta, and landscapes. Natural water levels flow seasonally based on snowmelt and rainwater, but the dams cause water to be retained and released during times it would not naturally flow. These water flow changes can cause sediment changes to the bottom and banks of the rivers, lakes, and delta. Reservoir dams, regulated through dam operation, change the flow



Figure 2-2: Agriculture fields near Fort Vermilion.

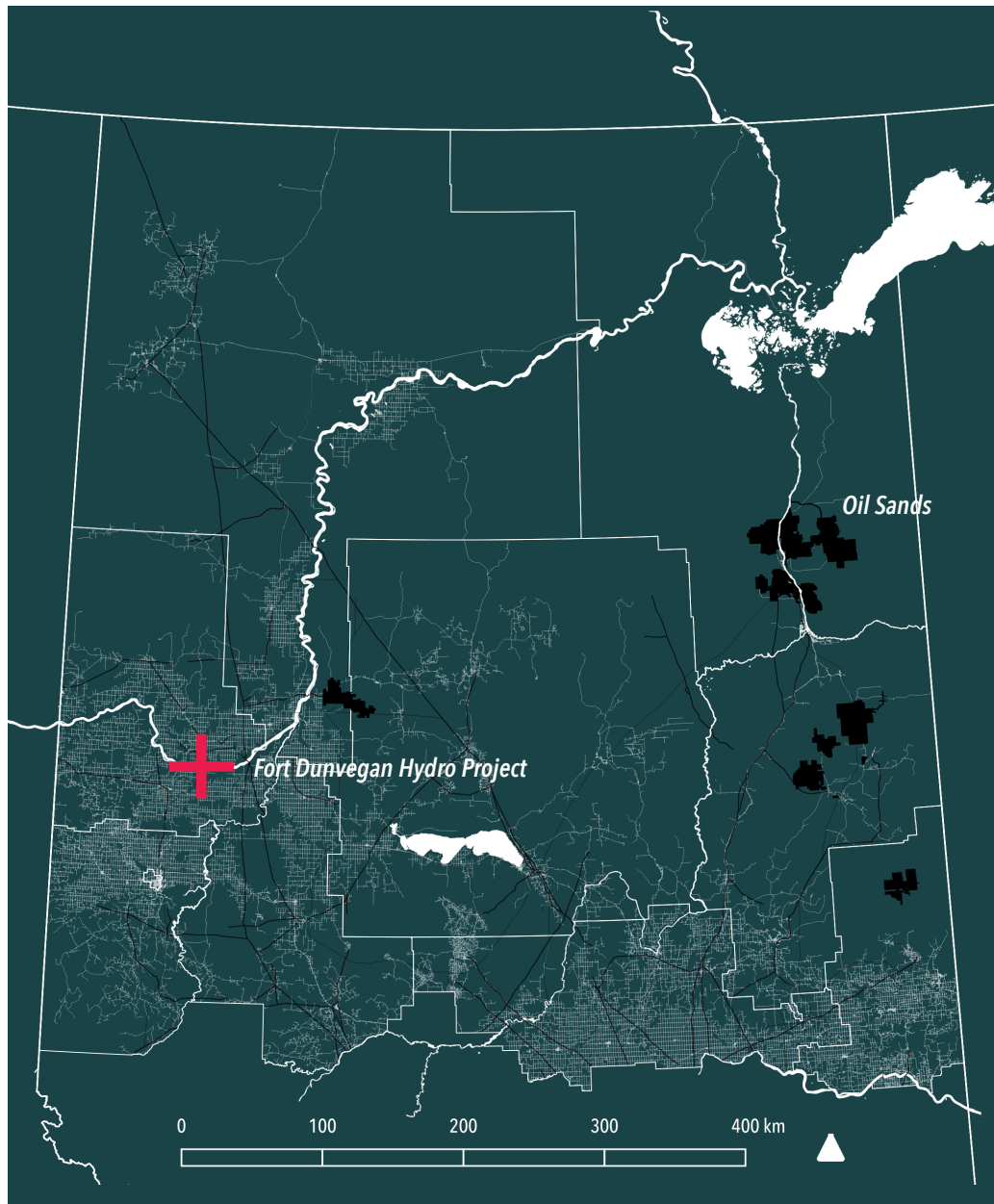


Figure 2:3: GIS map of industrial developments in Northern Alberta

of water on the Peace River regularly. This changes natural ecosystems, unable to adapt to rapidly fluctuating water flows and affects fish and bird populations, the health of the ecosystems, and the surrounding communities' livelihood and culture that rely on the river and delta (Alberta Wilderness Association, 2020). Hydro-electric infrastructure also impacts the surrounding landscape by altering adjacent habitats that are important to the ecosystem. These landscapes are destroyed to make room for roads and power lines; and do not always recover (Alberta Wilderness Association, 2020).

OIL SANDS

With the Laurentide and Cordilleran ice sheets' thawing, lakes were created 20,000 years ago from the meltwater (Alberta Wilderness Association, 2020). The banks of these lakes eventually breached, and the outflow of water tore the top off the land, revealing resources under the layers of sediment (Alberta Wilderness Association, 2020). This included high-quality sandstone and oil sands beneath sections of the boreal forest, prairie and muskeg (Natural Resources Canada, 2020). Bitumen sands are a valuable energy resource that can be turned into crude oil and refined into petroleum products (Alberta Wilderness Association, 2020). 140,000 sq/km of oil sands are within the Peace-Athabasca region, and related industries employ approximately 140,000 people in Alberta (Government of Alberta, 2020). Unfortunately, mining has many adverse environmental effects on the Peace-Athabasca region. Mining operations can take up to 3% of annual water withdrawals from the Athabasca River (Government of Alberta, 2020). The extraction of oil also requires the removal of the boreal forest. After 50 years of development, mining has impacted 895 sq/km of boreal forest; this equates to up to 15% of an actual mining operation size. The oil sands industry accounts for over 9% of Canada's greenhouse gas emissions (Government of Alberta, 2020).

COMMUNITY + PARK ACCESS

EXISTING AND PROPOSED ACCESS TO WOOD BUFFALO

With only one road in and out of Fort Smith, North West Territories, some Indigenous organizations have proposed a new road from High Level to Fort Chipewyan (Thurton, 2018). The Regional Municipality of Wood Buffalo, Fort Smith, and Indigenous organizations including, the Mikisew Cree First Nation, the Fort Smith Metis Council, and the Athabasca Chipewyan First Nation, have had an active voice in the proposal. The proposed road would create an additional travel option and easier access to daily essentials for the communities. With increasing numbers of forest fires, the one single existing road out has become a significant concern. In the past, the federal government and Parks Canada did not appropriately consult or approach the Indigenous communities (Thurton, 2018). In the proposal put forth in 2019, Indigenous organizations said they had not been pushed or been told what to do with their land. By working with the surrounding communities, the government will need to find a better way to accommodate concerns. Currently, the Athabasca Chipewyan First Nations are not opposed to the road but will not support it until they receive an apology for forcing their ancestors off the land (Thurton, 2018).

With the continuous threat of increasing wildfires, there is a big push for the road as an alternative escape route. Both Fort Smith and Fort Fitzgerald only have one road into the community, and Fort Chipewyan has no road access in the summer. There is an existing winter road between Peace Point and Garden Creek, but it has not been used in recent years, due to flooding and necessary construction work. The road requires 100 km worth of bridging for all-season access (Pruys, 2019). Challenges lie in road engineering due to the area's peat bogs, lakes, and sensitive permafrost (Thurton, 2018). A few First Nations are concerned that a new road would allow for poaching and over-fishing due to its isolation (Pruys, 2019). This could increase pressure on Parks Canada to enforce laws and maintain the highway. The new road would also allow for other opportunities such as tourism and economic development for the far reach communities. Having road access to Fort Chipewyan would allow for Indigenous cultural tourism programs in the community, which the province has been pushing for (Thurton, 2018).

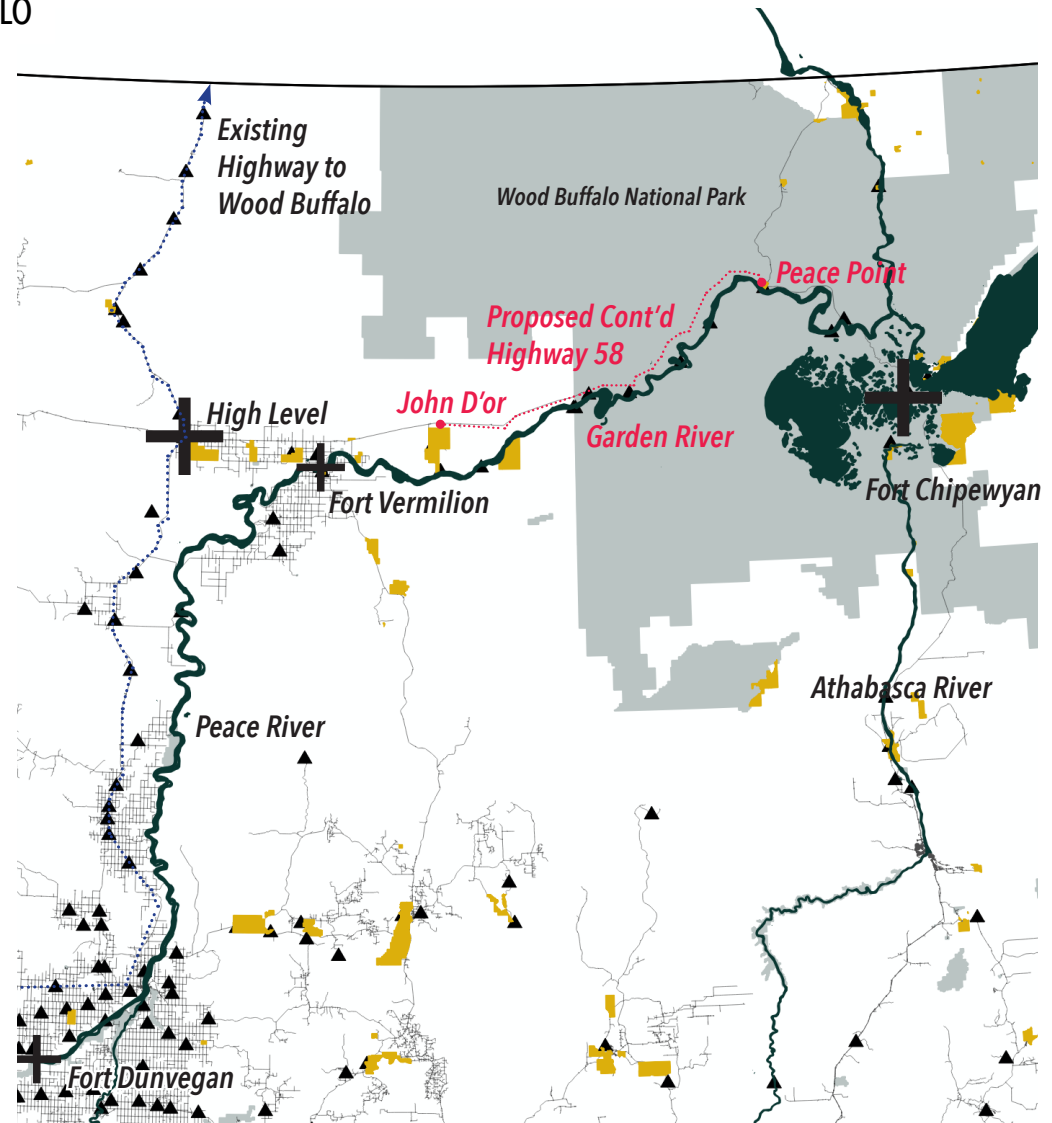
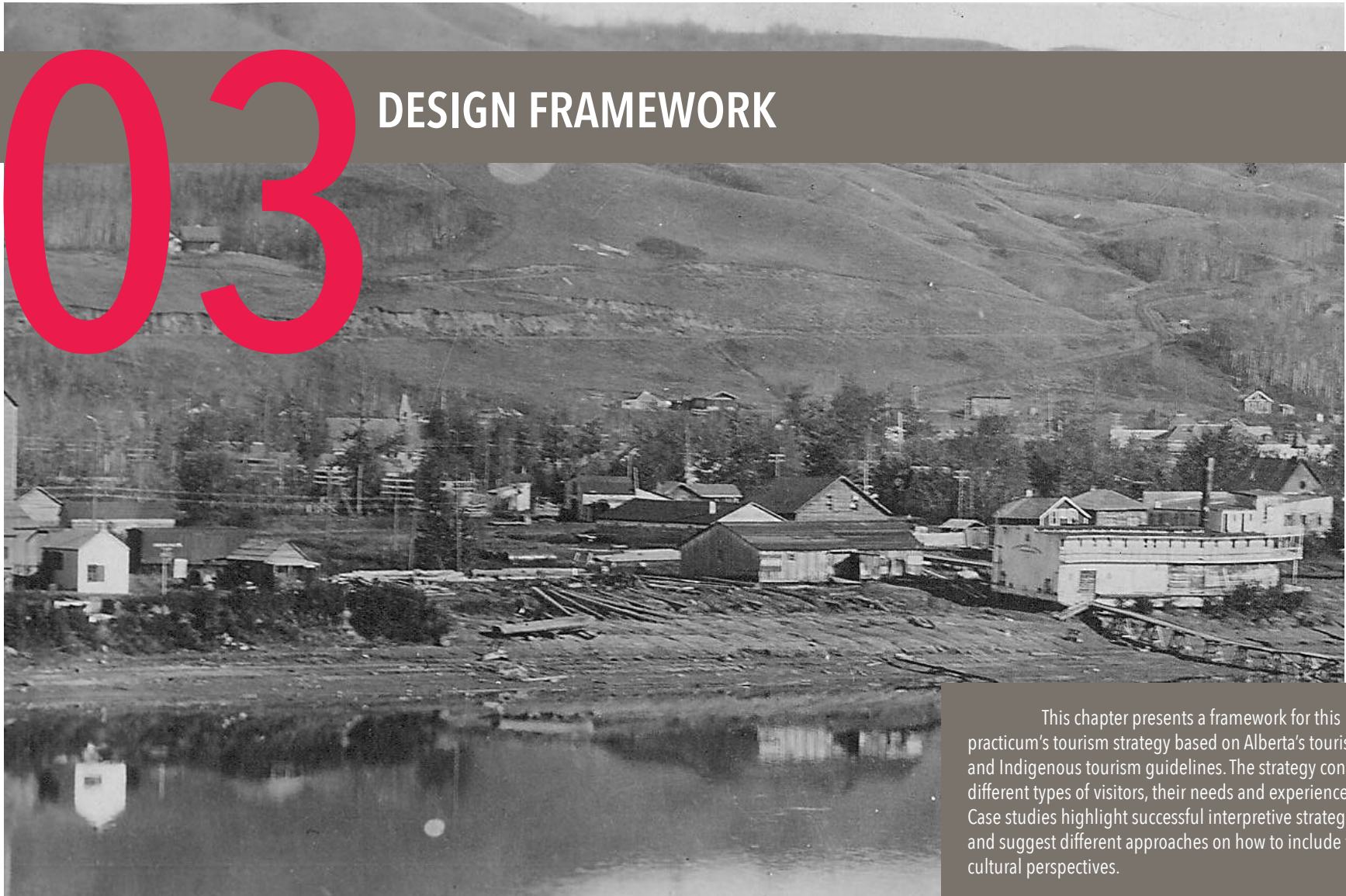


Figure 2-4: GIS map of road access and communities in Northern Alberta

03

DESIGN FRAMEWORK



This chapter presents a framework for this practicum's tourism strategy based on Alberta's tourism and Indigenous tourism guidelines. The strategy considers different types of visitors, their needs and experiences. Case studies highlight successful interpretive strategies and suggest different approaches on how to include varied cultural perspectives.

Figure 3-1: Fort Vermilion Museum (Image courtesy of Fort Vermilion Museum).

NORTHERN ALBERTA'S TOURISM FRAMEWORK

ALBERTA'S TOURISM STRATEGY + DEMAND

Government of Alberta's: A Pathway to Growth: Alberta's Tourism Framework (2013), forms the basis of the practicum's tourism strategy and treatment of potential tourism destinations. The practicum focuses on emerging tourism demands for Northern Alberta, challenges for tourism, and types of travellers that Travel Alberta has identified. Indigenous Tourism Strategies are considered for sites adjacent to First Nations reserves and how to incorporate First Nations voices in the proposed design better.

Alberta's Tourism framework's vision focuses on collaboration, traveller-focused intentions, integrated destination management, research-based decisions, tourism innovation and excellence, and economic, social and environmental benefits. Currently, Alberta's primary tourism income comes from National Parks. As parks cannot grow, there is a demand for new tourism attractions. Seasonality is a challenge as not all tourism attractions can be visited year-round. Alberta's tourism products are divided into 13 types. Northern Alberta's tourism strength and demand are in summer outdoor recreation and adventure tourism. Camping and trails are considered secondary tourism products. Other tourism experiences identified as emerging in this region include such experiences as specialty lodging, agricultural tourism, cultural and heritage tourism, special attractions and tours, and Alberta Aboriginal culture-based activities.

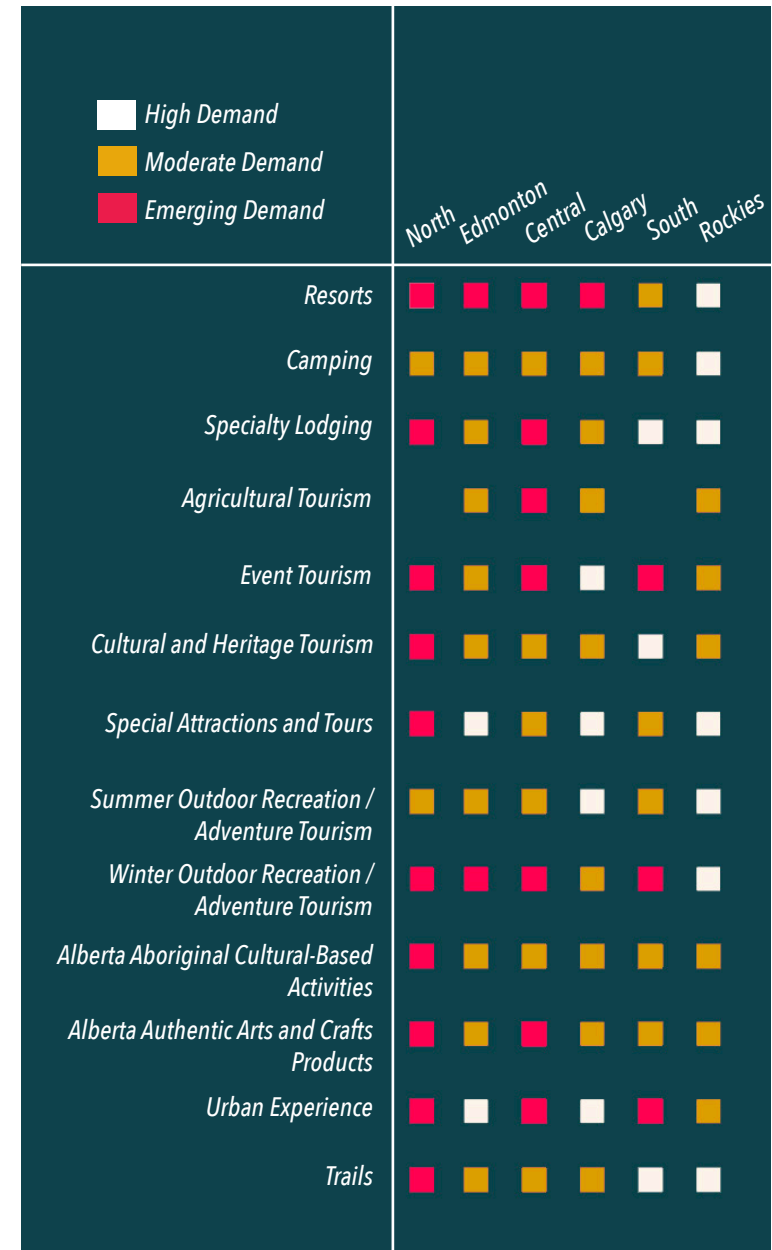


Figure 3-2: Government of Alberta, 2013. Alberta's Tourism Framework Demand.

ALBERTA TOURISM: TYPES OF TRAVELLERS

Travel Alberta identifies two types of travellers: “Free Spirits” and “Cultural Explorers.” Its primary target is free Spirits: people who are likely to visit as many locations as possible in a single trip. They represent a range of demographics. Cultural Explorers are likely to travel in groups and want to immerse themselves in cultural settings, people, and places they visit. They go beyond just seeing the tourist sites and want to explore out-of-the-way places. Authentic experiencers are an additional type of traveller I have identified: those who dare to travel by river. This travel method is the most authentic experience as it embodies the traditional forms of travel used on the Peace River long ago.

INDIGENOUS TOURISM STRATEGY + DEMAND

There is a growing demand for visitors to learn and experience Indigenous culture and history. The Indigenous Tourism Strategy is designed to create authentic, meaningful experiences by developing and marketing Indigenous experiences. There are opportunities to strengthen the quantity and quality of Alberta's indigenous tourism experiences. Increasing awareness and demand for this type of tourism, and changing the traveller's perception that all indigenous tourism experiences are the same, align with the efforts of Alberta's overall tourism strategy. The strategy's mission is to provide leadership in developing and marketing authentic Indigenous tourism experiences through partnerships between local Indigenous groups and the province. Indigenous tourism includes art, crafts, food, music and cultural experiences. Community values of respect, honour and integrity need to be respected. Tourism may provide new business and job opportunities for many Indigenous communities.

Travellers seeking Indigenous cultural experiences are most interested in immersive experiences, natural and learning experiences, authenticity, adventures, a connection to nature and Indigenous way of life, and entertainment. There are 8 Indigenous tourism products defined by the strategy: cultural experience, adventure experience, retail, accommodation, entertainment, food service, education and tourism service. The tourism's strategic priorities include leading the growth and development of Alberta's Indigenous tourism industry, developing a sustainable market-ready and export-ready Indigenous tourism products, and increasing demand for Alberta's tourism experiences.

INDIGENOUS CULTURE: TYPES OF TOURISM

One of the challenges for Indigenous cultural attractions is that there is a misperception that these cultures are homogeneous. Alberta cultures can be divided into three active treaty regions: Treaty 6, 7 and 8, plus the Metis communities and Metis regions. Each region will be marketed with storytelling, highlighting experiences and connections to the overall tourism story.

Types of tourism with the potential for expansion in Northern Alberta are considered. The design focuses on places in the categories of agriculture, cultural and heritage, and First Nations' cultural-based activities as new tourism destinations. The strategy's three routes cater to the three types of travellers identified: free spirits, cultural explorers, and authentic experiencers. Alberta's Tourism priorities provide a framework for identifying and developing new sites. These includes accessing public lands, identifying crown land for tourism development, regional signage themes, and aligning priorities with other federal, provincial and local priorities.

CASE STUDIES

CASE STUDY 1: TOP OF THE WORLD HIGHWAY INTERPRETIVE PLAN

The Top of the World Highway in Dawson, Yukon, is a good Canadian example of a successful highway interpretive plan for tourism. The Top of the World Highway connects Dawson, Yukon to Alaska. This is a historical route that the Tr'ondëk Hwëch'in have used to travel across their traditional territory (NVision Insight, 2018). The Interpretive plan was developed by NVision Insight Group Inc with Wendy Shearer Cultural Heritage Landscape Architect and released to the public in August 2019. The designer's intention for the interpretive plan was to challenge the conventional storytelling approach as it relates to interpretive design. The Interpretive Plan also received recognition of the Canadian Society of Landscape Architects Awards of Excellence in the category of Planning and Analysis in 2020.

APPROACH

The approach was based on an understanding of Indigenous and non-indigenous perspectives of the project area. The intention was to identify connections between natural and heritage resources, places, land use, people, and events of significance (NVision Insight, 2018). A 'storytelling and evidence' approach was developed for the project (NVision Insight, 2018). Each identified storyline fell in line with a cultural, historical, contemporary or geological context to a specific location or larger region.

VISION + GOALS + OBJECTIVES

The plan enhances peoples' experience, understanding and appreciation of living cultural heritage (NVision Insight, 2018). It connects the past with present-day values of the region

and celebrates the surrounding natural environment's significance (NVision Insight, 2018). NVision Insight (2018), identified three goals for the plan: the first goal was to share connections with the land and relationship to its resources, culture, and environment by interpreting unique ecological, cultural, and social relationships to share the region's accumulated traditional knowledge and contribute to cultural identity. The second goal was to communicate the past and present tense stories to share information and highlight links to the past. Lastly, the third goal was to convey information about safety and regulations, traveller orientation information and provide traveller infrastructure to provide a safe and sustainable experience.



Figure 3-3: Rest Area/ Pull Out (NVision Insight, 2018).



Figure 3-4: Features along Highway (NVision Insight, 2018).

INTERPRETIVE SITE PLAN

There are four types of interpretive locations suggested for the highway. NVision Insight (2018), identified each type as varying levels of infrastructure and signage associated with it. They are:

- Interpretive Rest Areas (A): Highway pull outs with large interpretive signage, outhouses, garbage, and picnic facilities.
- Special Places (B): Highways pull outs with interpretive signage and minimal picnic infrastructure.
- Points of Interest (C): Small information sign that is interpreted through print and digital media.
- Highway Information (D): Signs that present regulatory information for highway travel.



Figure 3-5: Interpretive Locations (NVision Insight, 2018).

PEOPLE USING THE HIGHWAY

A further investigation into the needs/desires of tourists who come to the Dawson area to travel the Top of the World Highway was conducted. Locals who travel the highway for work, for recreation, or to visit traditional lands, and harvesting activities such as berry picking and hunting were also considered (NVision Insight, 2018). The highway is closed to vehicle traffic in the winter months; however, it is possible to use the highway using Ski-doos (NVision Insight, 2018). Residents have also been known to camp informally on the pull-outs along the highway in the summer months (NVision Insight, 2018). It was noted that the highway sees an influx in the summer months when Placer Mining activities begin, as residents primarily use the highway to access the Sixty Mile Mine site (NVision Insight, 2018).

TRAIL DEVELOPMENT

The plan suggests improving access for visitors to the landscape through trail development. Such trails limit negative impacts on the landscape or sensitive resources from overuse / not directed use (NVision Insight, 2018). Specific trails were not suggested, but the plan identified areas of interest where trails should be considered in the future.

VISUAL IDENTITY

The highway was given graphic design elements for the Interpretive Plan based on themed icons for nature, water, heritage and information (NVision Insight, 2018). Types of interpretive signage that respond to different audience types were proposed. All graphic elements complement Yukon Government branding (NVision Insight, 2018).



Figure 3-6: Interpretive Signage (NVision Insight , 2018).



Figure 3-7: Branding (Nvision Insight, 2018).

SIGNIFICANCE TO PRACTICUM

This interpretive plan includes Indigenous and non-Indigenous perspectives for communicating stories to travellers. The plan's approach to the heritage landscape is inclusive. It incorporates different cultural perspectives and celebrates them. The practicum's tourism strategy follows a similar approach by developing a storyline with interpretive locations based on the physical, social and cultural significance and perspectives of different regions. The programming and placement of the interpretive locations from the project's highway strategy are useful for developing the practicum's tourism interpretive locations. The plan outlines various types of infrastructure required in a highway plan, gives insight to the spacing of interpretive locations and offers examples of how stories are communicated in interpretive elements. "Top of the World" provides good examples of interpretive elements as it develops unique interpretive signage and establishes its own branding.

CASE STUDY 2: RIVER CROSSING HERITAGE INTERPRETIVE PLAN

The River Crossing Heritage Interpretive Plan is a provincial example of a developed cultural interpretive strategy. It deals with an Alberta river and addresses social and cultural heritage from both Indigenous and non-indigenous perspectives. The "River Crossing" area is located within the North Saskatchewan River Valley in downtown Edmonton, encompassing the West Rosedale neighbourhood, the historic site of Rosedale generating station, the northern landing of the Walterdale Bridge and the northern bank of the North Saskatchewan River. City Council approved the project in July of 2017.

Edmonton City (2017), describes the project as a place of historical and cultural significance to many communities and cultural groups of the area. The purpose of the plan is to help understand the importance of the place to First Nations, Metis and other colonial perspectives, how the heritage can be told through interpretive and programming opportunities, and serve as a foundation for future development (Edmonton City, 2017).

APPROACH

The Heritage Interpretive Plan's approach was influenced by the growth of social awareness for Indigenous people's history and colonization impacts on the land (Edmonton City, 2017). The plan seeks to recognize the history of the land and convey and interpret the region's stories. Edmonton City (2017), defined the word "heritage" into 2 different types: Natural Heritage, individual landscape features to entire ecosystems; Cultural Heritage, human made concepts and works that can be further broken down into tangible and intangible heritage (monuments to complete cities vs living heritage through community knowledge and values).

VISION + GOALS + OBJECTIVES

The plan aims to define the identity of the River Crossing areas by considering heritage and culture from different perspectives, showing how heritage and culture should be reflected in future developments, and recommending methods of interpretation for the area (Edmonton City, 2017). The plan is intended to develop interpretive tools (Edmonton City, 2017). It does not identify specific interpretive projects or develop interpretive content.

SITE ANALYSIS

The plan's analysis begins by examining the context through exploration of physical and natural characteristics of the area, social and cultural context and key historical events (Edmonton City, 2017). Physical and natural characteristics of the North Saskatchewan river, climate and vegetation were researched. Social and cultural contexts of First Nations traditional territory, Metis, history of the treaty, settlement patterns, and archaeology of the area were studied (Edmonton City, 2017). A study was also conducted and examined important features of the area, adjacent features, and features with visible heritage. The site analysis findings were used to develop the thematic framework for the interpretive plan. These will be communicated in stories in the future design.

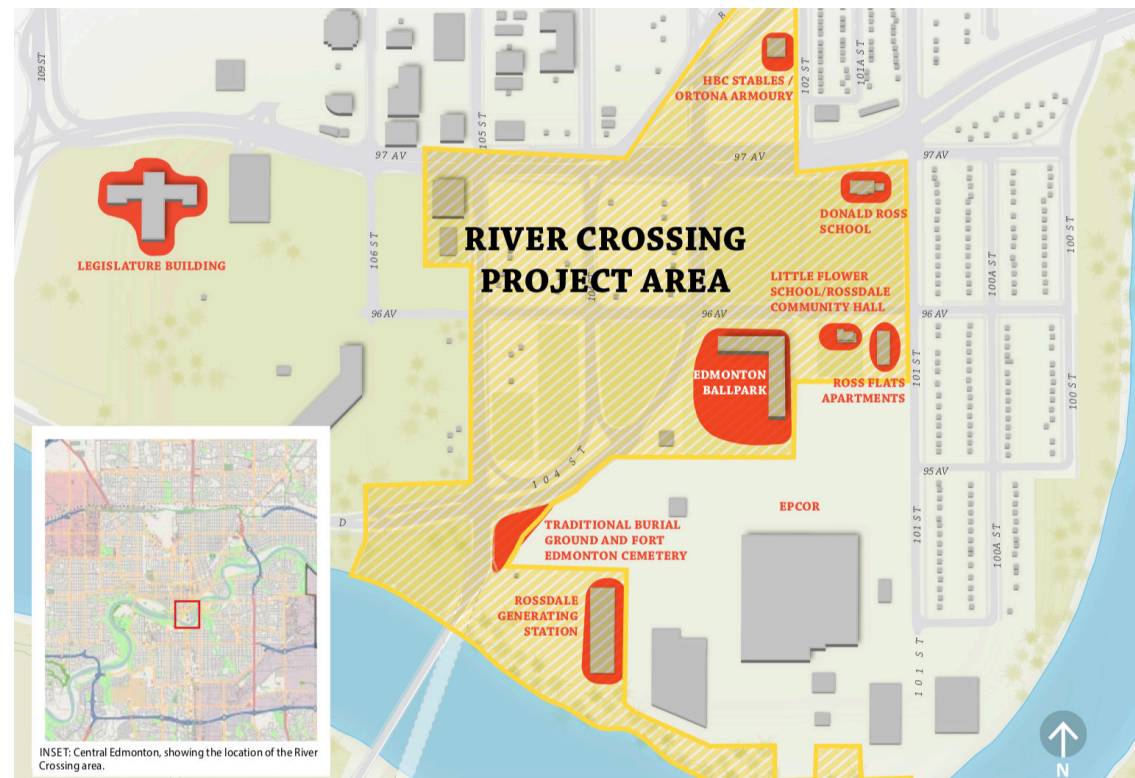


Figure 3-8: River Crossing Map. (Edmonton City, 2017).

THEMATIC FRAMEWORK

Interpretive goals established early in the project were used to develop a framework for the interpretive plan (Edmonton City, 2017). Edmonton City (2017) developed four overarching themes to guide the interpretation: "territory and land," "making and trading," "lived experience," and "connecting and understanding."

For example, the theme "Territory and Land" is defined as cultures shaping the land and how they are shaped by the territory they occupy and live (Edmonton City, 2017). While the River Crossing has been inhabited by Indigenous peoples for thousands of years and non-Indigenous people for centuries, each has had its own relationship and understanding of the land (Edmonton City, 2017). This theme aims to expose visitors to narratives about territory and land within the River Crossing areas and allow them to see how the land and territory have changed (Edmonton City, 2017).

SIGNIFICANCE TO PRACTICUM

The River Crossing is a good example of a tourism strategy that encompasses both human and natural themes. It provides a good precedent for developing a thematic understanding of a region within Alberta by categorizing important perspectives to allow both locals and tourists to understand the heritage and culture of the area. This practicum uses a similar approach for developing a thematic framework for Northern Alberta heritage. The River Crossing heritage plan did not develop interpretive material such as interpretive signage, site features and furnishings and way-finding reflective of the interpretive themes proposed. This practicum will develop interpretive material complimentary to its thematic framework.

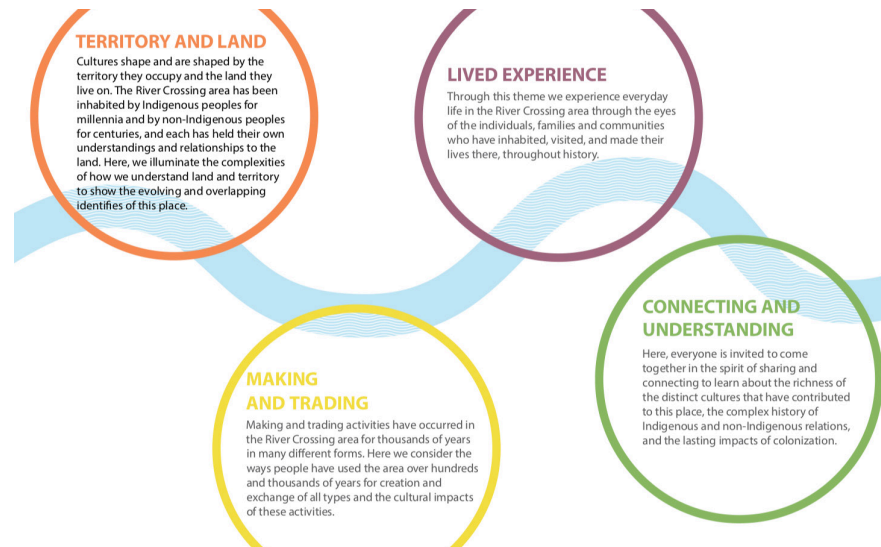


Figure 3-9: Themes (Edmonton City, 2017).



Figure 3-10: River Crossing (Edmonton City, 2017)..

04

DESIGN DEVELOPMENT + INTERPRETIVE STRATEGIES



This chapter outlines methods of determining the practicum's interpretive strategy and design framework. The development of three routes will allow for different travel experiences. Through the classification of interpretive themes and the collection of unique stories of the region, interpretive locations have been determined for each route.

Figure 4-1: Peace River, Alberta. (Image courtesy of Fort Vermilion Museum).

TOURISM ROUTE OPTIONS

Based on Alberta's tourism framework, three types of travellers have been identified: free spirits, cultural explorers and authentic experiencers. For this practicum's design strategy, three routes are proposed to accommodate all travellers to best reveal the Peace-Athabasca's physical, social and cultural history. Following the Peace River: a canoe route will embody the traditional way of travelling. This route would be appropriate for travellers deemed "authentic experiencers," who dare to travel by river.

In chapter two, issues of access to Wood Buffalo National Park and the surrounding communities due to road conditions and forest fires were discussed. A road would benefit these communities and have a positive impact on Wood Buffalo National Park's tourism. This proposed road is for the "cultural explorers." It offers a variety of interpretive locations spread through many communities abundant with cultural history.

Lastly, many travellers already drive the existing highway, but it is not a favoured route due to a lack of amenities. With the addition of new tourism destinations and points of interest, the highway route targets the "free spirit" travellers. "Free spiriters," who like to visit as many places as possible in a single trip will have plenty of places to stop and rest and learn with new interpretive locations.

A For Route A: Peace River: Canoe Route The Authentic Experiencers



B For Route B: Proposed Highway 58 Cultural Explorers



C For Route C: The Existing Highway Route Free Spirits

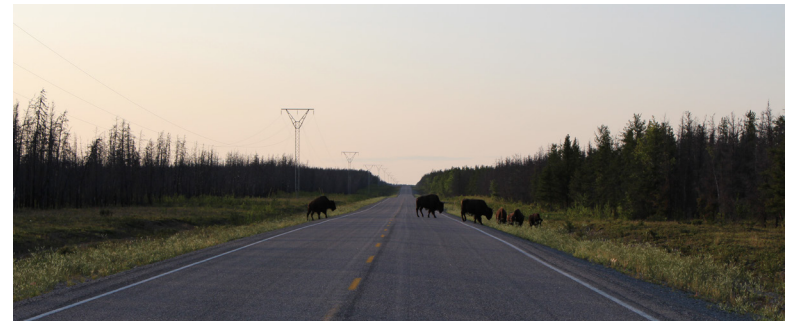


Figure 4-2-4: Images of route options

DESIGN STRATEGY

PRACTICUM TOURISM STRATEGY

The interpretive plan has storylines to reveal cultural, historical and important environmental features of the Peace-Athabasca region. The plan provides site-based interpretive information based on five described themes: colonized places, First Nations places, shifting ecosystems, wildlife and biodiversity, and extractive activities and technologies. Interpretive materials integrate Indigenous and non-Indigenous perspectives where applicable. These interpretations will allow travellers to connect to nature, heritage resources, past and current use of the land, and significant events in the region.

In developing the strategy I had three goals:



To gather information and become knowledgeable about the Peace-Athabasca region and its cultural significance



To identify and map existing and potential points of interest for each of the three routes: the Peace River, the existing highway to Wood Buffalo National Park and proposed highway from High Level to Peace Point



To identify areas of cultural importance and significance that could be established as new tourism destinations and/or points of interest

INTERPRETIVE SITE THEMES

WILDLIFE AND BIODIVERSITY



Places focused on specific species or environmental features that help enhance the overall ecosystem

INDIGENOUS PLACES



Significant places to First Nations, Metis and First Nations + Metis Culture, historical and contemporary

COLONIZED PLACES



Places significant to European settlement and expansion of Northern Alberta, historical and contemporary

SHIFTING ECOSYSTEMS



Places designated as protected areas likely to be impacted by climate change or places impacted by extractive activities or technologies that may indicate change on a large scale

ROUTE A: THE PEACE RIVER

Places of significance to each of the five interpretive site themes were mapped along the Peace River route.

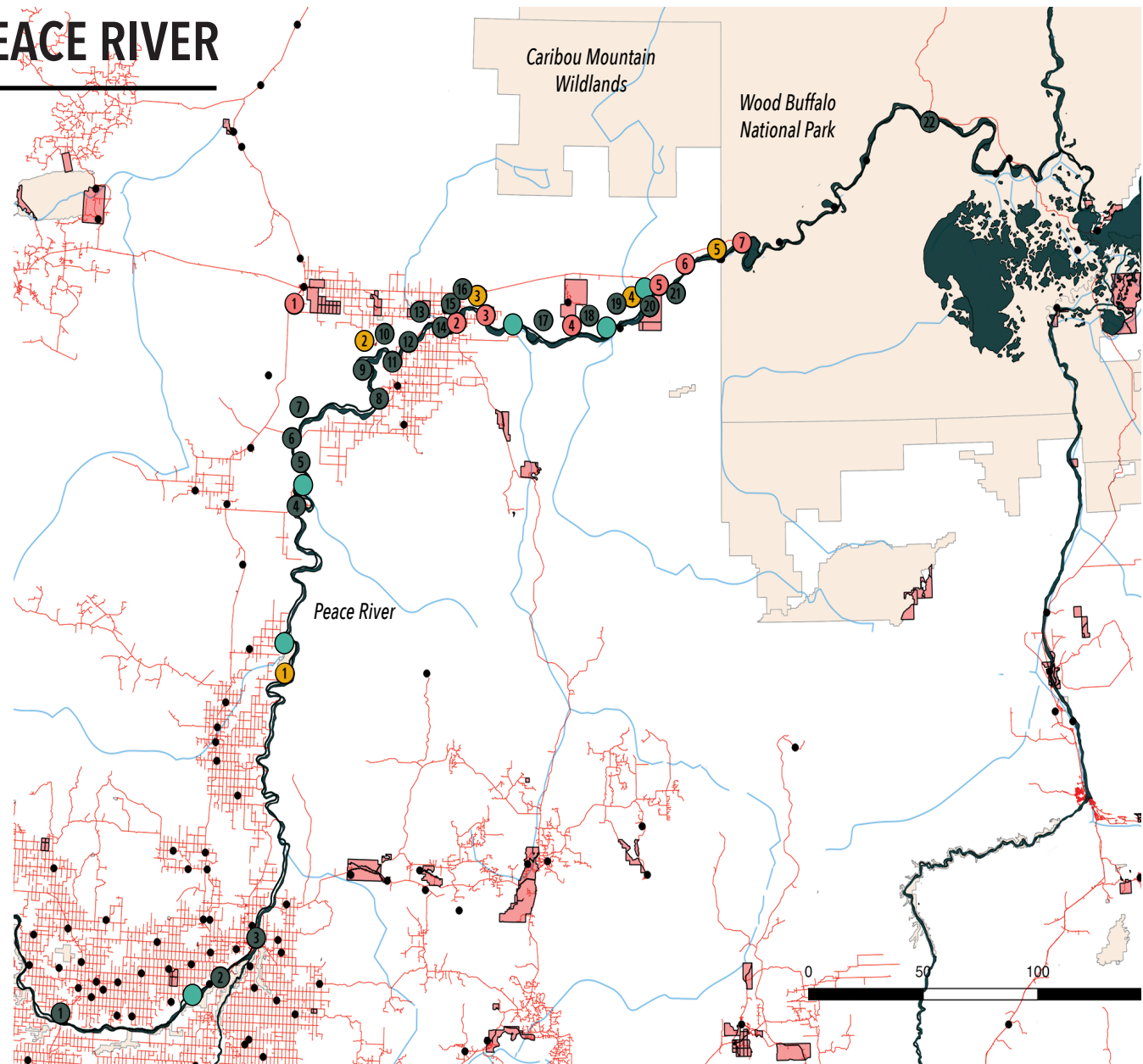


Figure 4-5: GIS map of route A option with significant places.

ROUTE A: PLACES OF SIGNIFICANCE

WILDLIFE AND BIODIVERSITY



1. Peace River Wildlands
2. White Mud River Entrance
3. Cordotte River Entrance
4. Notikewin River Entrance
5. Wolverine River Entrance
6. Buffalo River Entrance
7. Keg River Entrance
8. Steephill Creek Entrance
9. Prairie Point
10. Boyer River Entrance
11. Caribou River Entrance
12. Poplar Point
13. Wabasca River Entrance
14. Little Red River Entrance
15. Wentzel River Entrance
16. Garden Creek Entrance
17. Buchanan Lake
18. Trident Creek Entrance
19. Big Slough
20. Beaver Indian River/ Knights Creek Entrance

FIRST NATIONS + METIS PLACES



1. Paddle Prairie Settlement
2. North/South Tall Cree Reserve - Tall Cree First Nations
3. Beaver Ranch Reserve - Little Red River First Nations
4. John D'Or Prairie Reserve - Little Red River First Nations
5. Fox Lake Reserve - Little Red River First Nations
6. Fifth Meridian
7. Garden River Reserve

COLONIZED PLACES



1. Fort Dunvegan
2. Shaftsbury Ferry
3. Peace River
4. Carcajou
5. La Crete Ferry Crossing (Tompsons Landing)
6. LaFleur's Post
7. West La Crete Landing
8. Etna's Landing
9. Aspin House
10. Ward's Landing
11. Neustaeter Flat/ MacDonald's Landing
12. Burt Woods Landing
13. Sheriden Lawrence Ranch
14. Fletts and Jones Landing and Stoney Point
15. Fort Vermilion Bridge and Campground
16. Buttertown / Fort Vermilion
17. Mansfield House/ Fort Laird/ Boyer's Post
18. Wares Landing
19. Colville House
20. Adams Landing
21. Wentzels Post
22. Peace Point
23. Fort Chipewyan

SHIFTING ECOSYSTEMS



1. Notikewin Provincial Park
2. Machesis Lake Recreation Area
3. Caribou River Natural Area/ Rangeland
4. Lawrence River Entrance (Caribou Mountains Wildlands)
5. Wood Buffalo National Park

ROUTE A: INTERPRETIVE PLAN

THE PEACE RIVER: THE ORIGINAL HIGHWAY

Places of significance were classified as major points of interest, interpretive pull outs/rest areas or highway signage based on their locations and stories. The average traveller can canoe approximately 20km (up to 4 to 6 hours) a day. The "designated pull out" locations were starting and finishing points for one week long canoe trips.

A MAJOR POINT OF INTEREST NEW TOURIST DESTINATION

- Infrastructure
- Washrooms
- Rest/Picnic Area
- Designated Campground
- Provisions
- Interpretive Signage

B INTERPRETIVE PULL OUT/REST AREA **C** HIGHWAY SIGNAGE

- Informal Campground
- Rest/Picnic Area
- Interpretive Signage
- Informal Campground
- Interpretive Signage

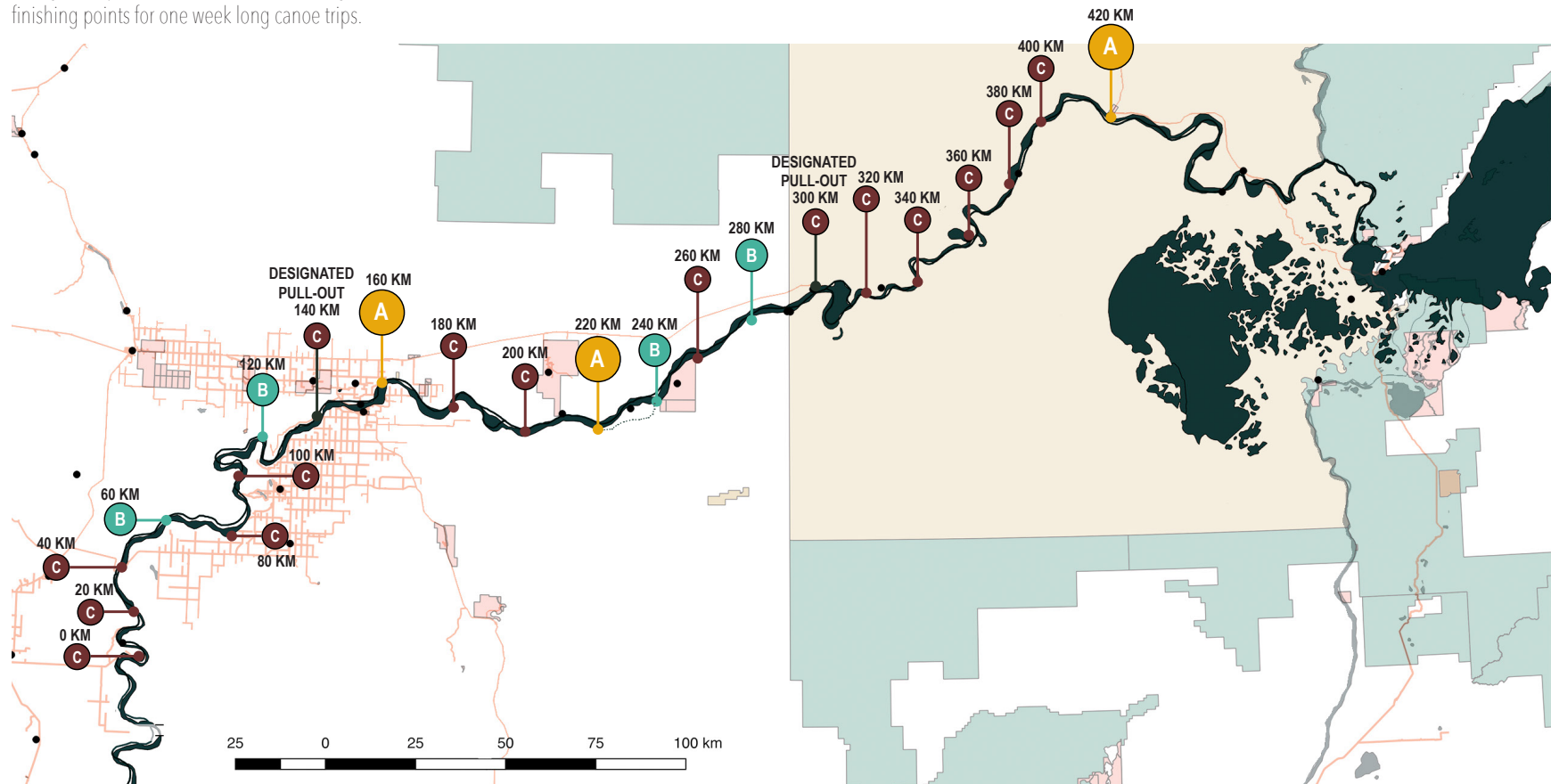


Figure 4-6: GIS map of route A interpretive plan

ROUTE A: PLACES OF SIGNIFICANCE: STORY ELEMENTS

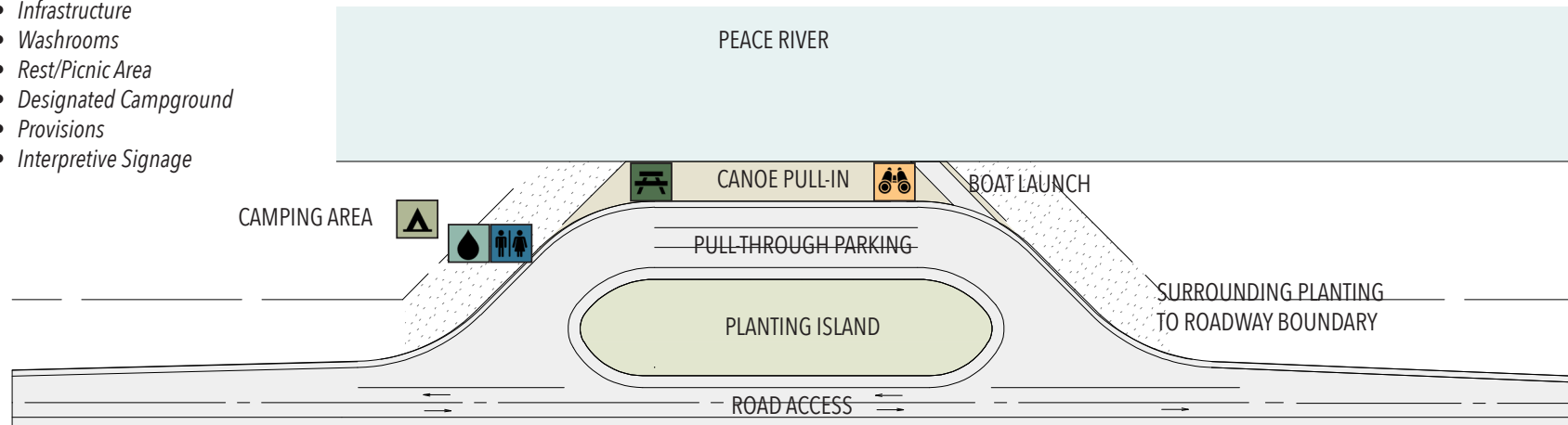
KM	DESCRIPTION	IMAGES	KM	DESCRIPTION	IMAGES
0 KM C	CARCAJOU    Otherwise known as Wolverine Point to fur traders, there were 6-7 cabins, a store and a graveyard. Today it is a small settlement of 20 people and is a popular winter road crossing for farmers.		140 KM C	SHERIDAN LAWRENCE RANCH   Registered as a historic site in 1978, the ranch included a large house, school, store, flour and lumber mills, and various farm buildings.	
20 KM C	ISLAND 		160 KM A	BOYERS POST     The first trading post on the Peace River known as the "Old Establishment" was built in 1788 at the mouth of the Boyer River. This post was one of the best sources of buffalo in the Athabasca region. The post was recorded to have agricultural gardens to support the fur traders. The post remained until 1792.	
40 KM C	LA CRETE FERRY CROSSING (TOMPKINS LANDING)   Tompkins Ferry originally used at Fort Dunvegan in the 1950's began its service at Tompkins Landing in 1961. The landing was first used by Paddle Prairie Metis Settlement by ice bridge in the winter and by ferry between break up and freeze up. Once a logging site, the site was transformed into a campground site. The landing was an essential link to the outside world for the people of La Crete before the Fort Vermilion bridge was built.		180 KM C	POPLAR POINT 	
60 KM B	LA FLEUR'S POST   Also known as Upper Fort Vermilion, La Fleurs post played an important part in trade with the Beaver Indians for both the Northwest Company and the Hudsons Bay Company between 1798 and 1821 before it was abandoned by 1830.		200 KM C	COLVILLE HOUSE  Colville House consisted of a small house for officers and a store in 1818. The house's only competition was LaFleur's post located 3 days upriver. After the union of the Northwest Company and the Hudsons Bay Company the post was abandoned due to lack of trade.	
80 KM C	MOOSE ISLAND 		220 KM A	VERMILION CHUTES    Beginning 2km above the rapids on the south bank is a landing that leads to a 14km portage route around the rapids. This allowed for transport of freight and passengers to Little Red River. Currently an old warehouse remains on site.	
100 KM C	ASPIN HOUSE   Fur trade and provisions fort for the Northwest Company in 1792. Was used to replace Boyer's Post located downstream.		240 KM B	RED RIVER POST   Located at the mouth of what is now Mikkwa River, the trading post was established around 1800. After it's people relocated to Fox Lake, the post was abandoned in the 1950's. At the time it had a school, a church, and dwellings.	
120 KM B	PRAIRIE POINT/OLIVER'S ISLAND   A point that used to capture cattle in the early 1900's. Later on a homestead, sawmill and cattle yard were located at the southwest side of the point. This island was logged for trees that were used to build the river boat, the S.S Peace River, and to build a store and flour mill in Hay River. This boat was launched in 1905. Eventually the island was hayed in the 1940's.		260 KM C	FOX LAKE  Land reserved for first nations in 1914 for the community of Fox Lake (formerly people from Red River post).	

Figure 4-7-11: Images of story elements. (Historical images and written information courtesy of Fort Vermilion Museum, all other images by author).

ROUTE A: INTERPRETIVE PLAN OPTIONS

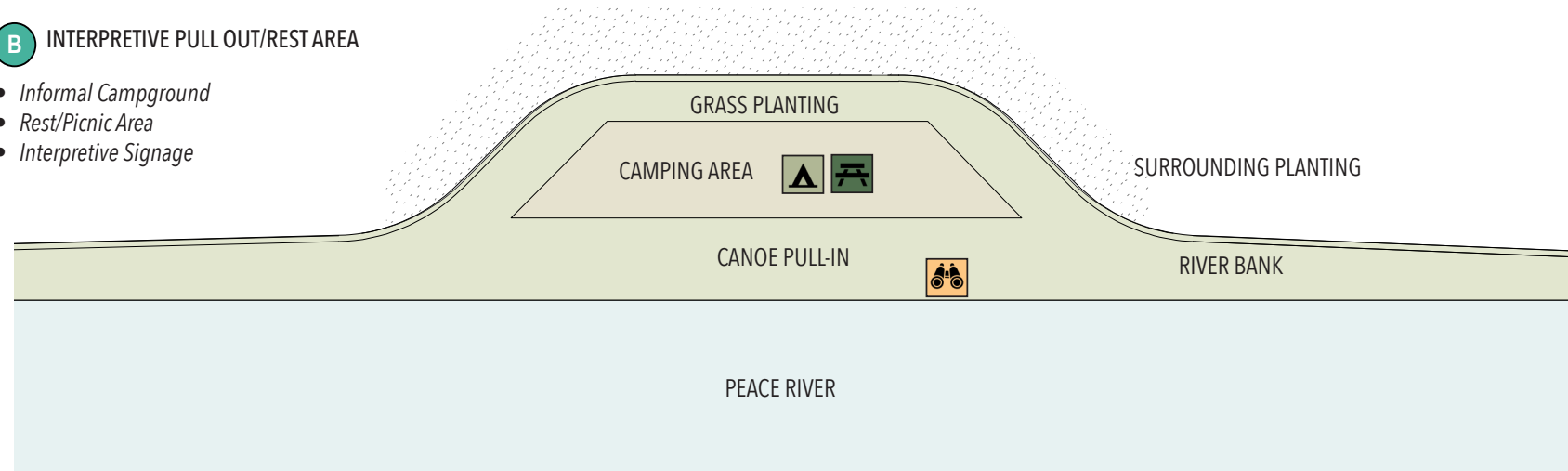
A MAJOR POINT OF INTEREST CANOE PULL OUT/ BOAT LAUNCH

- Infrastructure
- Washrooms
- Rest/Picnic Area
- Designated Campground
- Provisions
- Interpretive Signage



B INTERPRETIVE PULL OUT/REST AREA

- Informal Campground
- Rest/Picnic Area
- Interpretive Signage



C INTERPRETIVE SIGNAGE

- Historical/Cultural/Environmental Information
- Descriptive text
- Explanatory graphics and images (if necessary)
- Captures character of the site through materials and colour

Figure 4-12-13: Diagrams of major points of interest and interpretive pull outs for Route A.

ROUTE B: EXISTING HIGHWAY

Places of significance to each of the five interpretive site themes along the existing highway route.

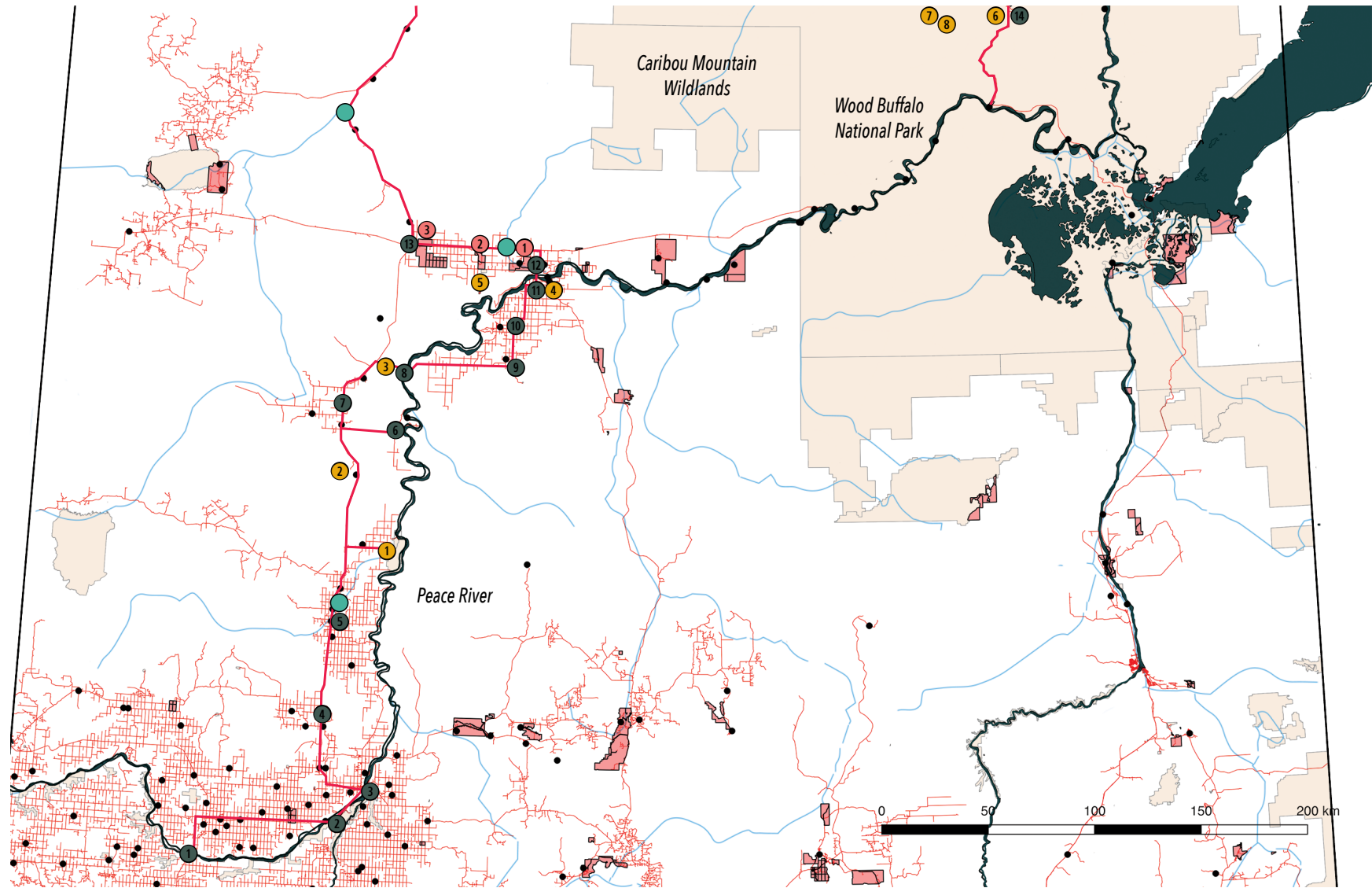


Figure 4-14: GIS map of route B option with significant places.

ROUTE B: PLACES OF SIGNIFICANCE

WILDLIFE AND BIODIVERSITY



1. White Mud River Crossing
2. Notikewin River Crossing
3. Hotchkiss River Crossing
4. Meikle River Crossing
5. Kemp River Crossing (Naylor Hills)
6. Keg River Crossing
7. Ponton River Crossing
8. Hay River Crossing

FIRST NATIONS + METIS PLACES



1. Boyer River Reserve - Beaver First Nations
2. Child Lake Reserve - Beaver First Nations
3. Paddle Prairie Settlement

COLONIZED PLACES



1. Fort Dunvegan
2. Shaftsbury Ferry
3. Peace River
4. Dixonville
5. Manning
6. Carcajou
7. La Crete Ferry Crossing (Tompsons Landing)
8. Village of Buffalo Head Prairie
9. Town of La Crete
10. Fort Vermilion Bridge
11. Buttertown/ Fort Vermilion
12. High Level
13. Fort Smith

SHIFTING ECOSYSTEMS



1. Notikewin Provincial Park
2. Twin Lakes Campground (Hawk Hills)
3. Forest Fire Rejuvenation Site
4. Fort Vermilion Bridge Campgrounds
5. Child Lake Meadows - Natural Area/Heritage Lands
6. Wood Buffalo National Park
7. Woods Bison Territory/ Whooping Crane Habitat
8. Wood Buffalo Salt Plains

ROUTE B: INTERPRETIVE PLAN

EXISTING HIGHWAY ROUTE

Places of significance are classified as major points of interest, interpretive pull outs/rest areas or highway signage based on their locations and stories. Highway signage is increased to highlight areas of interest. Interpretive pull outs are added to the highway in areas lacking rest points. A new major point of interest in the Fort Vermilion area will close the gap between Fort Dunvegan and Wood Buffalo highway travel.



**MAJOR POINT OF INTEREST
NEW TOURIST DESTINATION**

- Infrastructure
- Washrooms
- Rest/Picnic Area
- Designated Campground
- Provisions
- Interpretive Signage



INTERPRETIVE PULL OUT/REST AREA

- Rest/Picnic Area
- Interpretive Signage
- Washrooms



HIGHWAY SIGNAGE

- Interpretive Signage

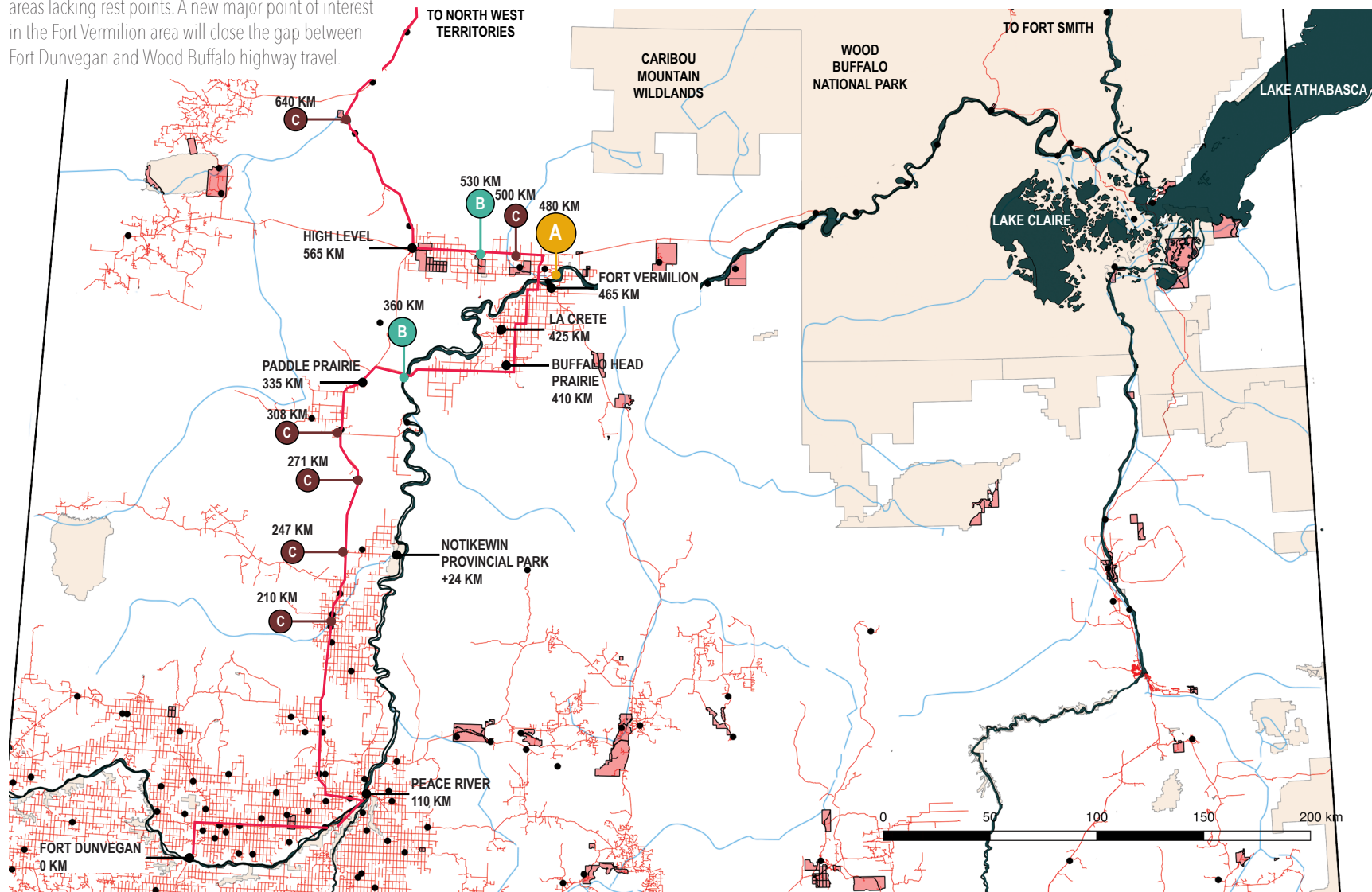


Figure 4-15: GIS map of route B interpretive plan

ROUTE B: PLACES OF SIGNIFICANCE: STORY ELEMENTS

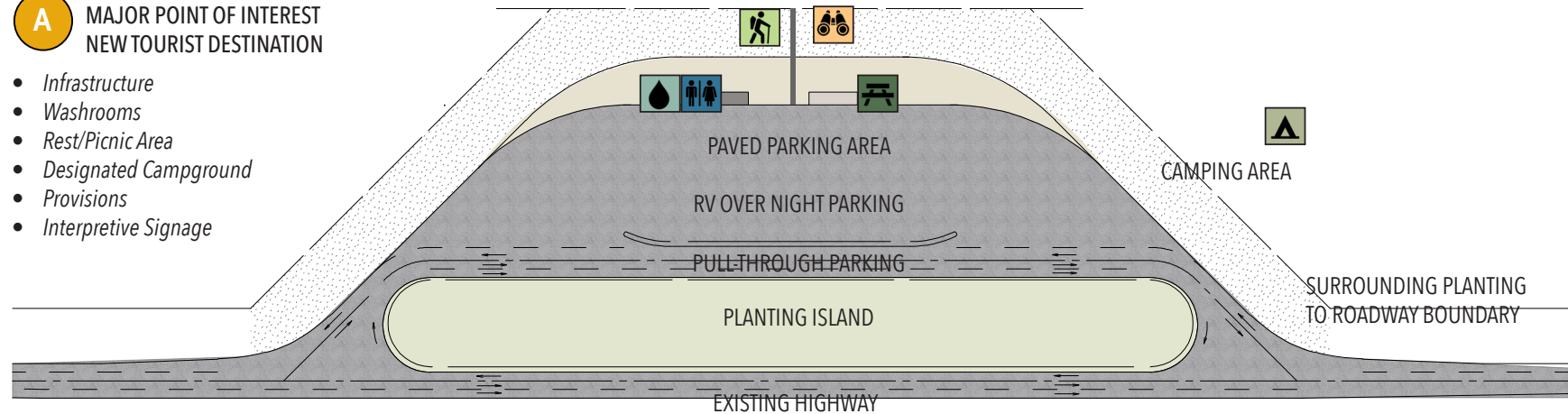
KM	DESCRIPTION	IMAGES	KM	DESCRIPTION	IMAGES
210 KM C	NOTIKEWIN RIVER CROSSING  Notikewin, the Cree word for battle, was a large battle area between Cree and Beaver.		500 KM C	BOYER RIVER RESERVE  Beaver First Nations Reserve is located 16km from Fort Vermilion. The community has a population of 1027.	
247 KM C	NOTIKEWIN PROVINCIAL PARK  Located 1km downstream from the Notikewin river, the park is the 4th largest provincial park in Alberta. Old fur trade remnants can be seen from the right bank in the form of a trappers cabin and creek.		530 KM B	CHILD LAKE MEADOWS HERITAGE LANDS  The natural area of 388 hectares under the Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act, unique for its salt meadows uncommon in the Boreal Forest Natural Region.	
271 KM C	TWIN LAKES CAMPGROUND  		640 KM C	MEANDER RIVER RESERVE  Dene Tha' First Nations Reserve near Fort Vermilion with a population of 1800.	
308 KM C	CARCAJOU  French for wolverine, it was a place known to fur traders. For 50 years it was a main stop over for river transportation and consists of an old Métis settlement with log buildings.				
360 KM B	LA CRETE FERRY LANDING  The ferry landing was home to Canada's first Hoverlift ferry. Today, it services highway 697 between the Mackenzie Highway and Buffalo Head Prairie, La Crete and Fort Vermilion. "Crete" comes from the french word for crest, hilly and rugged land.				
480 KM A	BOYER'S POST  The first trading post on the Peace River, known as the "Old Establishment," was built in 1788 at the mouth of the Boyer River. This post was one of the best sources of buffalo in the Athabasca region. The post was recorded to have agricultural gardens to support the fur traders. The post remained until 1792.				

Figure 4-16-20: Images of story elements. (Historical images and written information courtesy of Fort Vermilion Museum, all other images by author).

ROUTE B: INTERPRETIVE PLAN OPTIONS

A MAJOR POINT OF INTEREST NEW TOURIST DESTINATION

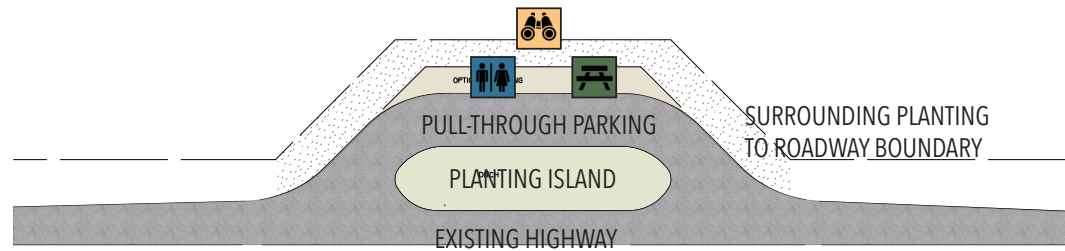
- Infrastructure
- Washrooms
- Rest/Picnic Area
- Designated Campground
- Provisions
- Interpretive Signage



48

B INTERPRETIVE PULL OUT/REST AREA

- Rest/Picnic Area
- Interpretive Signage
- Washrooms



C INTERPRETIVE SIGNAGE

- Historical/Cultural/Environmental Information
- Descriptive text
- Explanatory graphics and images (if necessary)
- Captures character of the site through materials and colour

Figure 4-21: Diagrams of major points of interest and interpretive pull outs for Route B.

ROUTE C: ALTERNATIVE ROUTE

Places of significance to each of the five interpretive site themes between main communities are shown. The connection between these spaces determines the alternative route.

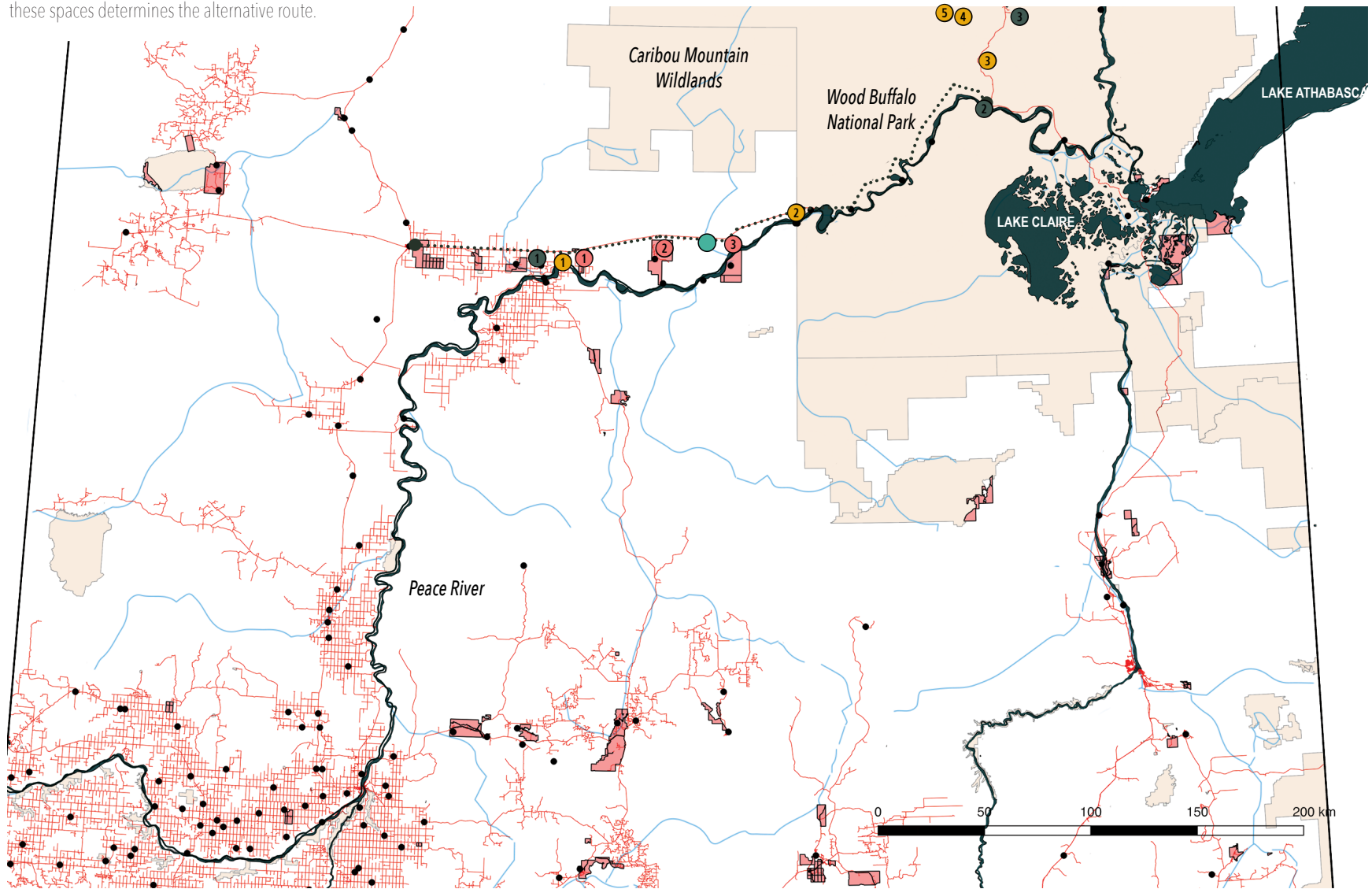


Figure 4-22: GIS map of route C option with significant places.

ROUTE C: PLACES OF SIGNIFICANCE

WILDLIFE AND BIODIVERSITY



1. Beaver Ranch Creek Crossing
2. Lawrence River Crossing
3. Wentzel River Crossing
4. Garden Creek Crossing
5. Buchanan Lake
6. Trident Creek Crossing
7. Big Slough
8. Beaver Indian River Crossing

FIRST NATIONS + METIS PLACES



1. Beaver Ranch Reserve - Little Red River First Nations
2. John D'Or Prairie Reserve - Little Red River First Nations

COLONIZED PLACES



1. Fort Vermilion
2. Peace Point
3. Fort Smith

SHIFTING ECOSYSTEMS



1. Caribou River Natural Area/ Rangeland
2. Wood Buffalo National Park
3. Pine Lake Campground
4. Woods Bison Territory/ Whooping Crane Habitat
5. Wood Buffalo Salt Plains

ROUTE C: INTERPRETIVE PLAN

PROPOSED ALTERNATIVE ROUTE

Places of significance are classified as major points of interest, interpretive pull outs/rest areas or highway signage based on their locations and stories.



**MAJOR POINT OF INTEREST
NEW TOURIST DESTINATION**

- Infrastructure
- Washrooms
- Rest/Picnic Area
- Designated Campground
- Provisions
- Interpretive Signage



INTERPRETIVE PULL OUT/REST AREA

- Rest/Picnic Area
- Interpretive Signage
- Washrooms



HIGHWAY SIGNAGE

- Interpretive Signage

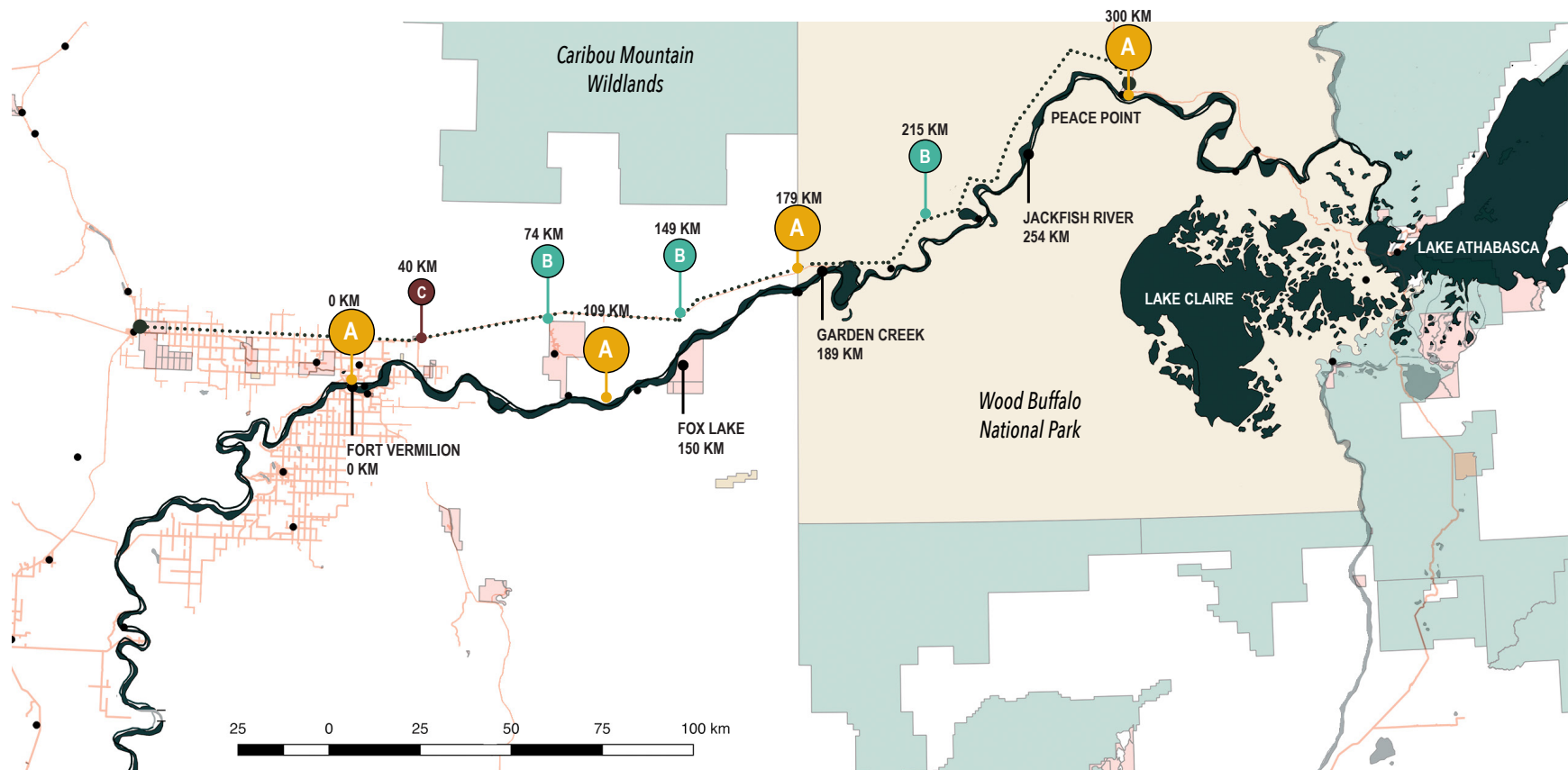


Figure 4-23: GIS map of route C interpretive plan

ROUTE C: PLACES OF SIGNIFICANCE: STORY ELEMENTS

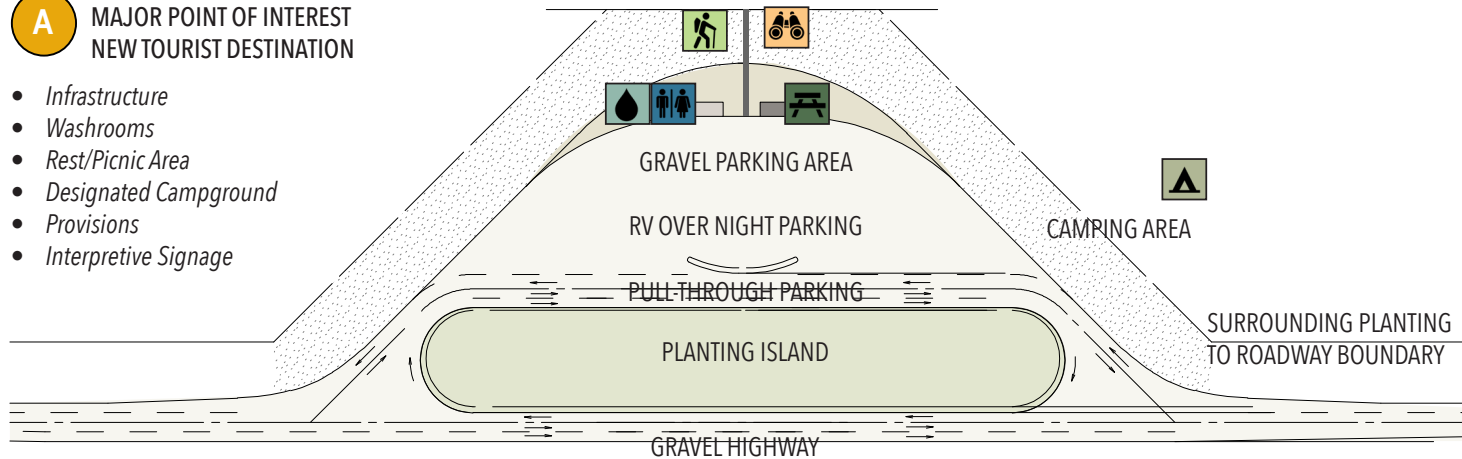
52	KM	DESCRIPTION	IMAGES	KM	DESCRIPTION	IMAGES
	25 KM	BOYER'S POST    		224 KM	LITTLE FISHERY   	
	 A	The first trading post on the Peace River, known as the "Old Establishment," was built in 1788 at the mouth of the Boyer River. This post was one of the best sources of buffalo in the Athabasca region. The post was recorded to have agricultural gardens to support the fur traders. The post remained until 1792.		 B	Cree settlement built in the early 1900's as a hunting and fishing camp. There once were 14 buildings, but now very little remains. Communities that once lived there have been moved to Garden Creek and Fox Lake.	
	40 KM	CARIBOU RIVER HERITAGE LANDS  		300 KM	PEACE POINT   	
	 C	Natural area of 195 hectares listed under the Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act. Unique for its grassland remnants of the Peace River Parkland, and its part in migration route between the Peace River and Caribou Mountains.		 A	Part of an outstanding Cree land claim for Treaty 8, it is named Peace Point because Cree and Beaver First Nations came to an agreement there that ended their previous conflict. The area has interesting geological formations. Archaeological surveys have found prehistoric stone tools, bison bones and fire pits dating back thousands of years.	
	74 KM	JOHN D'OR RESERVE 				
	 B	Little Red River Cree First Nations Reserve, including John D'or, Fox Lake and Garden River. It has a population of 5500.				
	109 KM	VERMILION CHUTES AND RAPIDS   				
	 A	The only obstruction on the Peace River, the rapids and chutes require a 14km portage. There are remnants of old cabins from the fur trade, and a landing where people and freight were transported. It has good camping spots and a large population of herring gulls.				
	149 KM	FOX LAKE   				
	 B	Little Red River Cree First Nations Reserve. It has no road access. There is a road that leads to the bank on the other side of the river for boat access.				
	179 KM	FIFTH MERIDIAN  				
	 A	Once a trading site, a few log cabins remain. It was surveyed for the Dominion Land Survey in the 1880's but is now overgrown. Today, it marks the western boundary of Wood Buffalo National Park.				

Figure 4-24: Images of story elements. (Historical images and written information courtesy of Fort Vermilion Museum).

ROUTE C: INTERPRETIVE PLAN OPTIONS

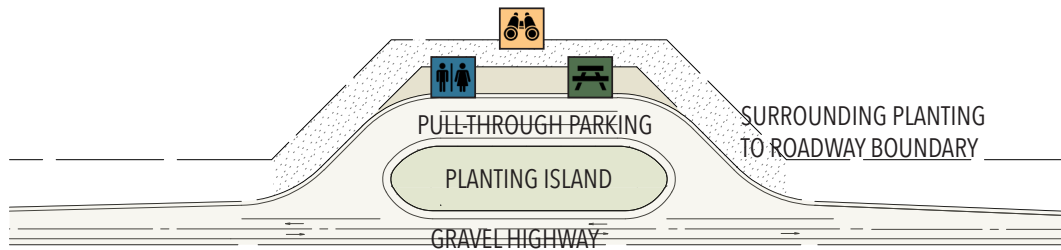
A MAJOR POINT OF INTEREST NEW TOURIST DESTINATION

- Infrastructure
- Washrooms
- Rest/Picnic Area
- Designated Campground
- Provisions
- Interpretive Signage



B INTERPRETIVE PULL OUT/REST AREA

- Rest/Picnic Area
- Interpretive Signage
- Washrooms



C INTERPRETIVE SIGNAGE

- Historical/Cultural/Environmental Information
- Descriptive text
- Explanatory graphics and images (if necessary)
- Captures character of the site through materials and colour

Figure 4-25: Diagrams of major points of interest and interpretive pull outs for Route C.

05

DESIGN PROPOSAL + SITE DESIGN



The design goal is to reveal places that have the potential to be tourism destinations. Three sites designated as major points of interest along each of the three proposed routes are designed. Each site responds to Alberta's tourism framework's "emerging demands."

Figure 5-1: Fort Vermilion, Alberta. (Image courtesy of Fort Vermilion Museum).

KEY CONSIDERATIONS

Each selected site was considered based on the following:

Protecting and Enhancing Ecosystems:

Ecological restoration is proposed throughout the designs. This will build resilience and support visitors' ecological and educational experiences. The designs will take into account both people and wildlife. Co-existence strategies are employed to protect people and wildlife from conflicts and create and preserve habitats.

Resilience and Risk Mitigation:

Some sites are prone to flooding. Bank stability, enhanced ecological resilience, and capacity to withstand flooding are considered.

Indigenous Peoples:

Surrounding Indigenous peoples will be respected. Due to practicum limitations, these communities were not engaged in the design, but it is assumed that they would be a part of any realized design strategy and help interpretive elements.

Roads and Trails:

Design plans include new roads, upgraded existing roads and established integrated trail networks. This includes access roads, parking lots, hard and soft surface trails, and boardwalks.

Interpretive Elements and Considerations:

Each site has a unique family of interpretive elements such as site furnishings and signage to communicate each route's unique story. Materials, construction and colour are considered. Narratives are integrated with landscape design and site features.

Memorable Tourism Experience:

A memorable visitor experience that connects people to nature and the cultural heritage is achieved by providing places to gather, educate, and view the site's cultural and natural environment.

Limitations:

Some of the sites are not currently accessible; therefore, I could not do a detailed site analysis for each site.

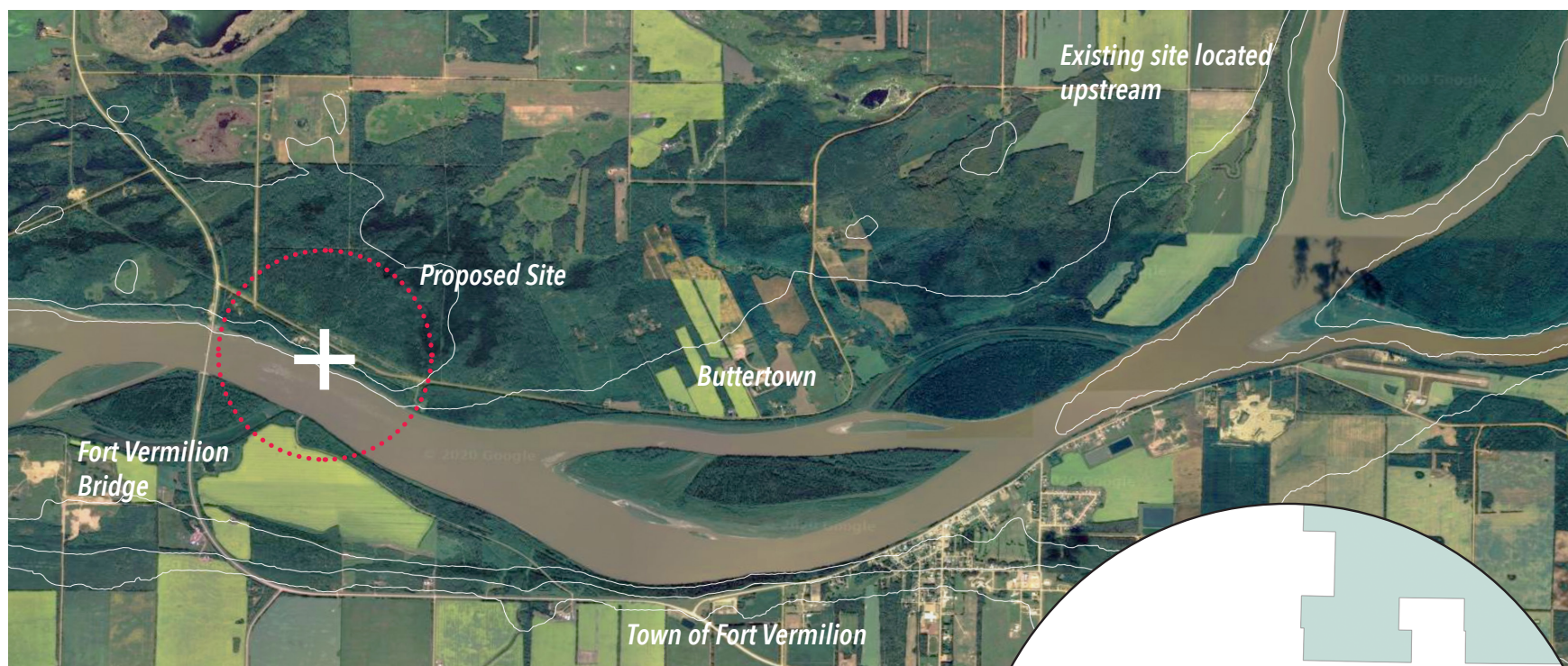


Figure 5-2: Map of proposed site. (Google Earth, 2020).

BOYER'S POST: SITE LOCATION

Boyer's Post, located within the town of Fort Vermilion was the first fur trade post on the Peace River. It will be a meeting point for all three routes and the proposed road's starting point. It has potential as a cultural and heritage site due to its fur trade history. Boyer's Post will include spaces that encourage community gatherings and trading of local stories of the fur trade.

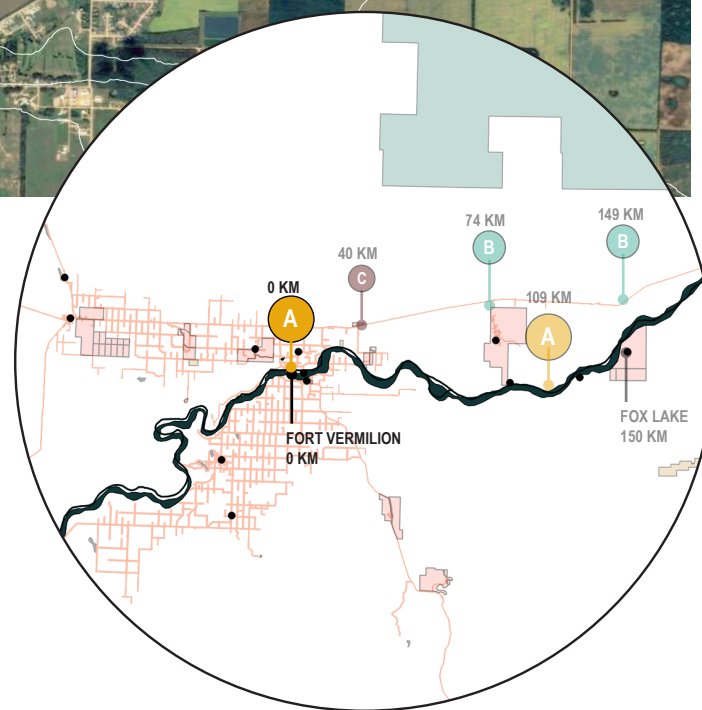


Figure 5-3: GIS map of proposed site.

STORY ELEMENTS

First Nations

- The Beaver First Nations who lived here supplied provisions and furs for the fur trade posts in this region
- Allied with the Northwest Company, they were essential to the fur trade and navigating the river



Post Location + Relocations

- Boyer's Fort first post was relocated in 1788 due to spring flooding
- The second post location remained until 1792, but the location was never found
- The locations of the posts are unmarked and on private property, but the first post has since been re-buried in the Peace River due to flooding



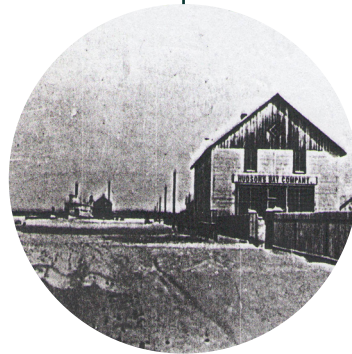
Fort Vermilion Today

- The hamlet of Fort Vermilion is an agricultural town with a population of 800
- It has preserved many of its original historical buildings with a museum and historical tour
- It has a few annual community events that celebrate its historical history



Hunting Game

- This area was one of the best sources of Buffalo in the Peace-Athabasca region
- Buffalo was important for provisions essential for long transports of furs between posts in this region
- Eventually the buffalo in the region were decimated from over-hunting



Boyer's Post

- Named after Charles Boyer, a NWC Chippewa-Metis fur trader, the first trading post on the Peace River built in 1786 by NWC before it merged with Hudson's Bay Company
- Boyer's Post was the precursor to Fort Vermilion and aided trappers in supplying furs to the European market



First Agricultural Practice

- The post was one of the first settlements in the North to have recorded agricultural gardens to support fur traders.
- This garden inspired the Experimental Farm 100 years later, now located at Stoney Point.

Figure 5-4-11: Images of story elements. (Historical images courtesy of Fort Vermilion Museum, all other images by author).

DESIGN INTENTION

The design is intended to convey how the land would have been used when it was once a fur trade post: a community gathering and trading place. The design has flexible spaces for community markets, picnic areas and open gathering spaces. Direct access from the water to the market/day-use areas is important to retain sight-lines that would have existed in the past. As the original trading post was moved several times due to flooding, several flexible spaces will be available when there are higher water levels. The design connects the existing campsite and boat launch with new gathering spaces through short paths with way-finding signage. Riparian re-vegetation will stabilize banks in areas prone to flooding.



Figure 5-12: Fort Vermilion, existing Peace River access.

SITE PROGRAMMING

Event Space

- Day use areas
- Flex space for markets
- Amenities (bathrooms, water fountain, waste receptacles, picnic tables, seating, picnic shelter)
- Parking spaces, drop off area
- Interpretive elements and site design for interpretive programming
- Amphitheatre/ gathering areas
- Planting restoration

Trail Development and Viewing Areas

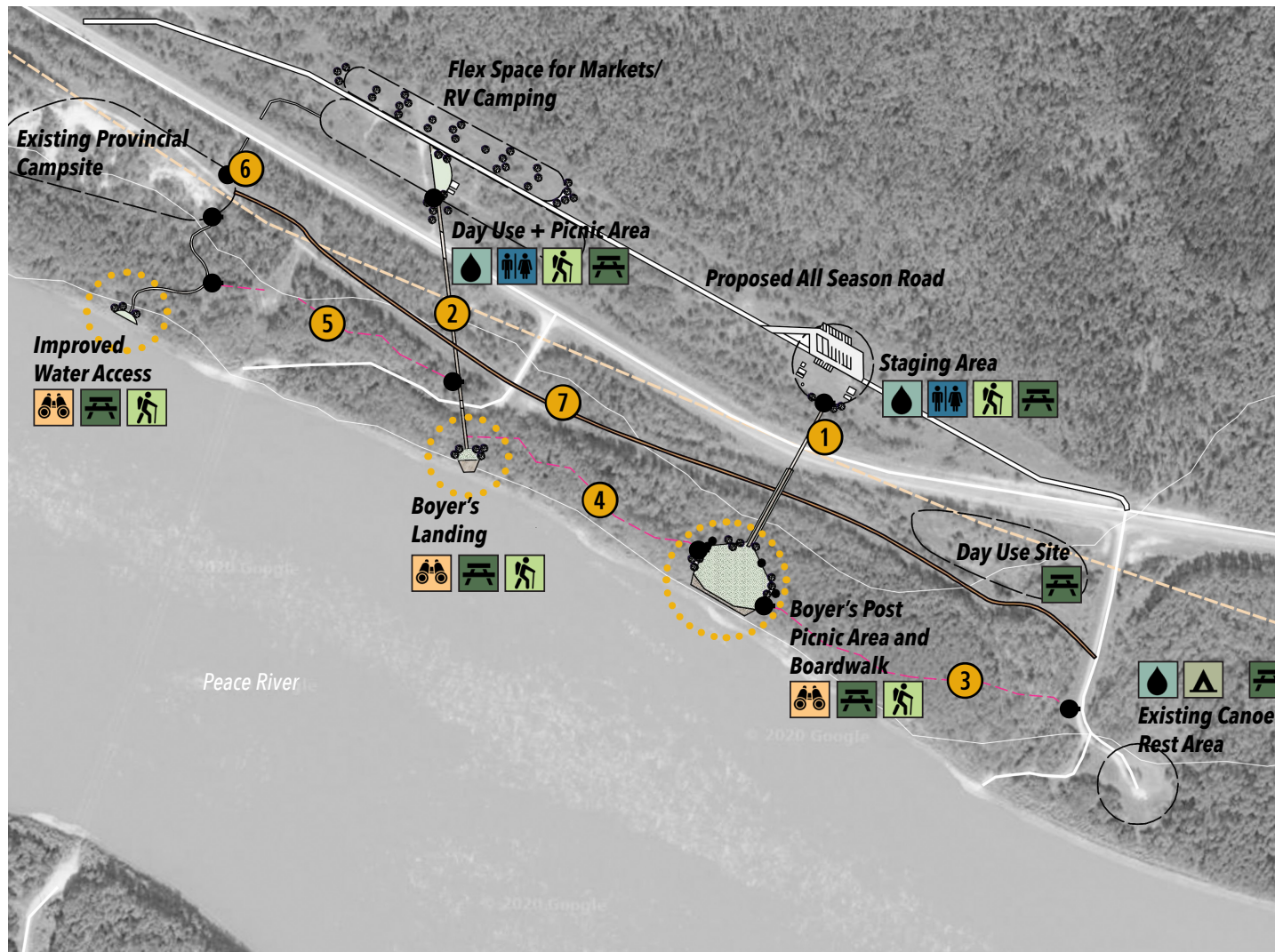
- Destination boardwalk/trail loops
- Restoration planting
- Viewing platforms
- Interpretive elements

Water Access

- Provide a rest point for paddlers
- Bank stabilization, new launch site
- Planting restoration
- Boat launch with open area and short trail for views and picnicking
- Boardwalk and view platforms
- Interpretive elements

Designated Campsite + Staging Area

- Camp site (vehicle parking, site furnishings, toilet, cooking shelter, fire ring)
- Amenities (bathrooms, water fountain, waste receptacles, picnic tables, seating, picnic shelter)
- Interpretive elements



- Semi-Developed Paths
- Developed Paths
- == Multi-Use Trail (Vehicular)
- - - Limit of Planting Restoration

① Boyer's Post Boardwalk

② Boyer's Landing Boardwalk

③ Canoe Rest Area Connection

④ Boyer's Landing Connection

⑤ Campsite Connection

⑥ Peace River Path

⑦ Motor-Vehicle Access

Figure 5-13: Map of Boyer's Post site programming (Google Earth, 2020).

TRAIL DESIGN

Visitors will have a direct sight-line to the water from the staging area via boardwalk. The boardwalk is the primary connection to the trails. There are picnic areas and open lawns for rest, and seating at the trail-heads to enjoy the views. A semi-developed path with a granular surface allows visitors to connect to other site amenities such as the boat launch and campground.



Semi-Developed Path - Granular Surface



Developed Path - Boardwalk

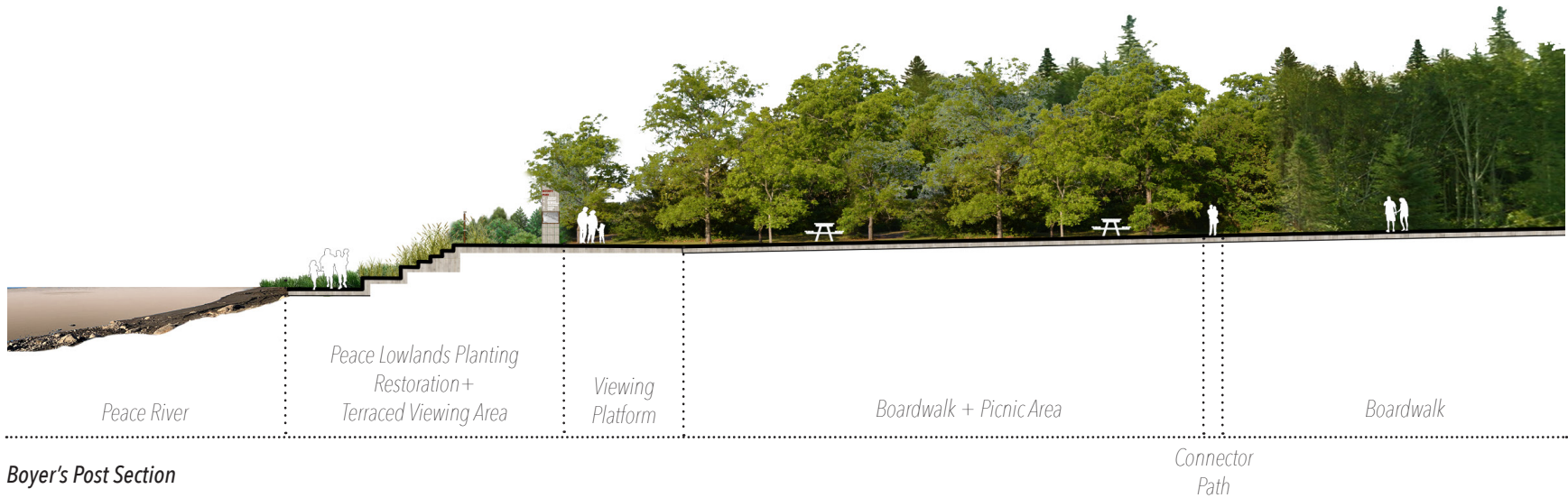


Figure 5-14-16: Boyer's Post trail sections.

INTERPRETIVE ELEMENTS

All site signage and way-finding will be made from existing wood material from the site. Wood was an important material for construction at the fur trade post and highlights the site's history. Corten steel is used to highlight features for the material's durability and attractive colour.



Figure 5-17-18: Boyer's Post interpretive signage.



BOYER'S POST PICNIC AREA + BOARDWALK

Boyer's Post will become a gathering area for visitors to view the Peace River. It will be able to be used all-season and include interpretive signage about the history of the original Boyer's Post.

Figure 5-19: Boyer's Post perspective.

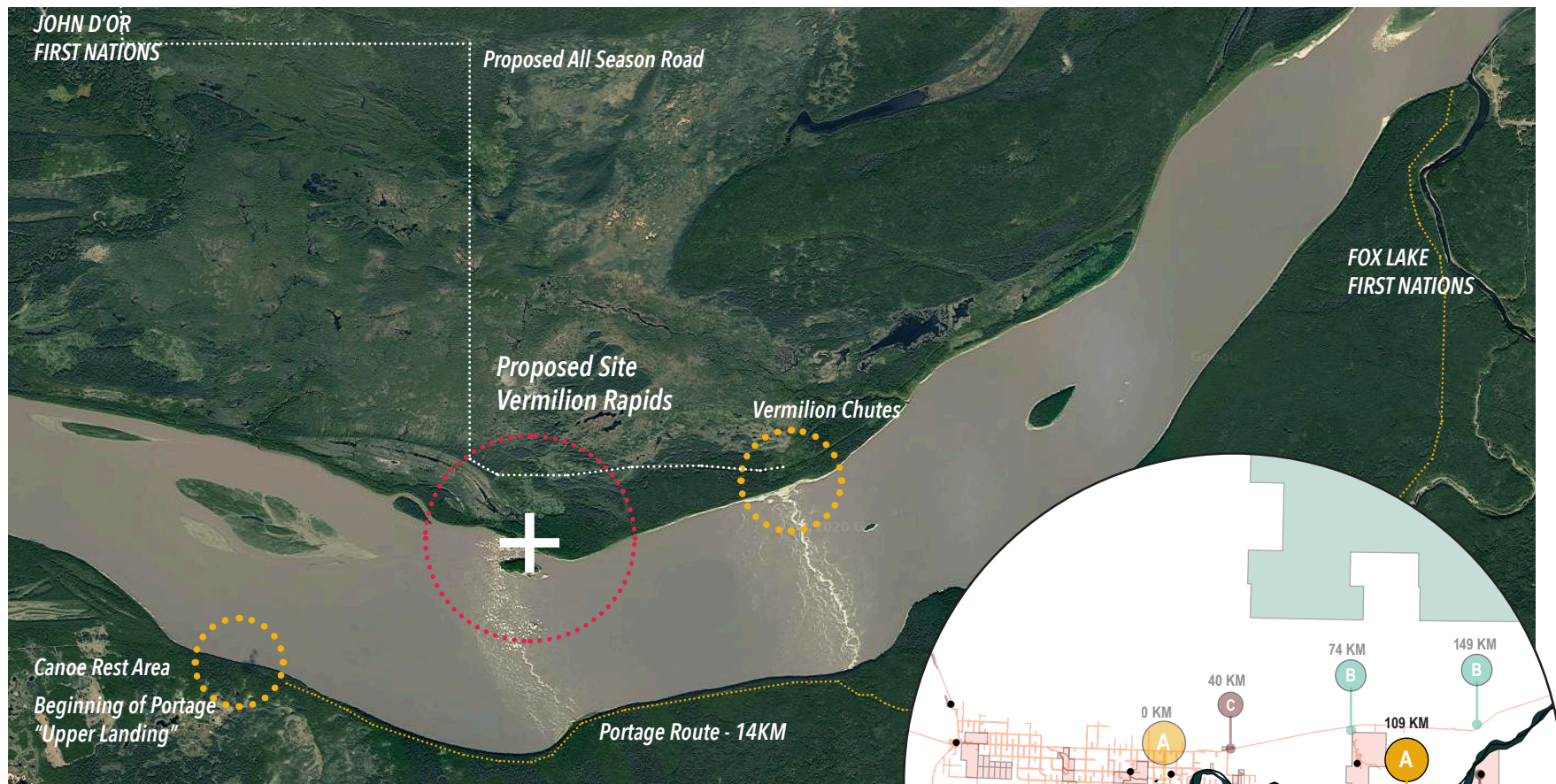


Figure 5-20: Map of proposed site. (Google Earth, 2020).

VERMILION CHUTES AND RAPIDS: SITE LOCATION

Vermilion Chutes and Rapids was chosen as a tourism destination because it offers a unique geological experience. The rapids are located 78 km downstream from Fort Vermilion and are a mile wide and half a mile in length. They're located between two First Nations communities: John D'or and Fox Lake. As the only interruption to river travel on the Peace River, the rapids require a portage route, which has been used by the fur trade, as well as local communities in both the past and present. The site can become a summer outdoor recreation site with camping and a trail network that reveals the site's history. The site's history and current use were considered in developing its interpretation.

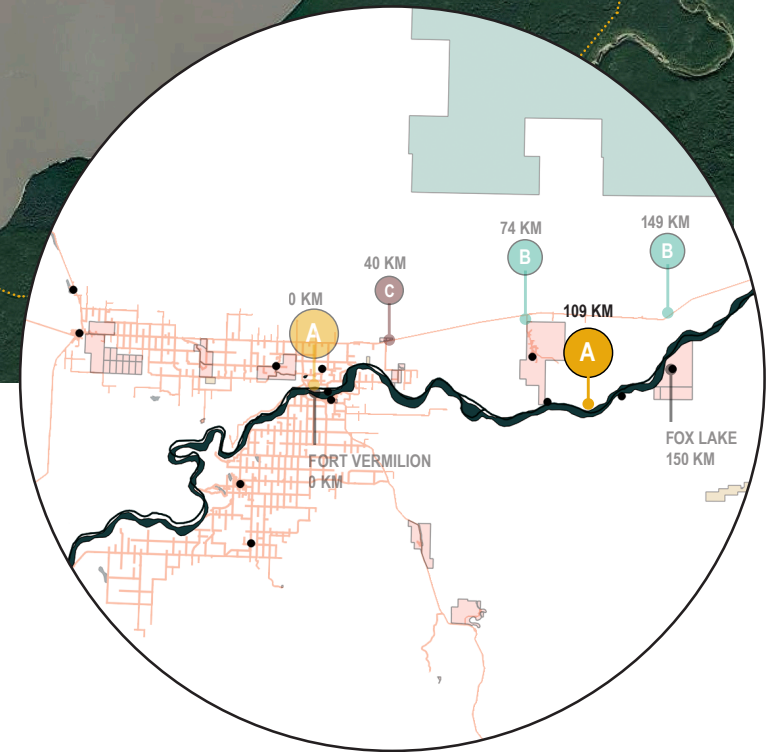


Figure 5-21: GIS map of proposed site.

STORY ELEMENTS

First Nations

- The majority of the Little Red River Cree live within Fox Lake, at the end of the portage route around the falls.
- Other Little Red River communities include John D'or First Nations

Chutes and Rapids

- With the potential to become recognized as a Canadian Heritage River, the Peace River has only one navigational interruption - Vermilion Chutes and Rapids
- Located 78 km downstream from Fort Vermilion, the rapids are a mile wide and half a mile in length, the chutes are approximately 4km below the rapids

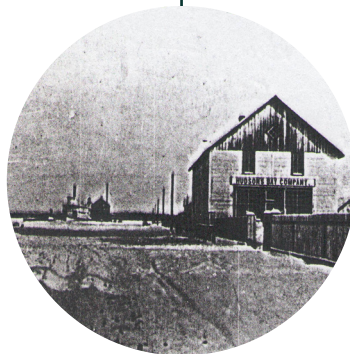
Historical Use

- First built in Fort Chipewyan in 1882, the first motorized vessel on the Peace River, the SS Grahame, was built to transport freight to the Chutes where they were then portaged and reloaded to carry goods onwards.



Geological Features

- Fort Vermilion's unique geological subsurface, the dolomitic Grosmont Formation is exposed at the upper Vermilion rapids, lower chutes and the confluence of the Mikkwa and Peace rivers



Fur Trade Settlement

- Located at the mouth of what is now Mikkwa River, the trading post was established around 1800.
- After it's people relocated to Fox Lake, the post was abandoned in the 1950's.
- At the time it had a school, a church, and dwellings.



Portage Route

- Beginning 2km above the rapids on the south bank is a landing that leads to a 14km portage route around the rapids.
- This allowed for transport of freight and passengers to Little Red River
- Currently an old warehouse remains on site.

Industrial Activity

Due to seasonal changes and hydroelectric damming controlling the rivers water levels, the chutes can range from 15 to 25ft in height

Figure 5-22-26: Images of story elements. (Historical images courtesy of Fort Vermilion Museum and Geological Survey, all other images by author).



DESIGN INTENTION

The intention of the design is to allow visitors direct access to one of the Peace-Athabasca region's unique geological formations while also offering a place of rest for travellers canoeing the Peace River. Site interpretation will inform tourists about its communities and its use in the past. Trails allow visitors to explore and provide access to the Peace River's look-outs and views.

Figure 5-27: Vermilion Chutes. (Alberta Geological Survey, 2018).

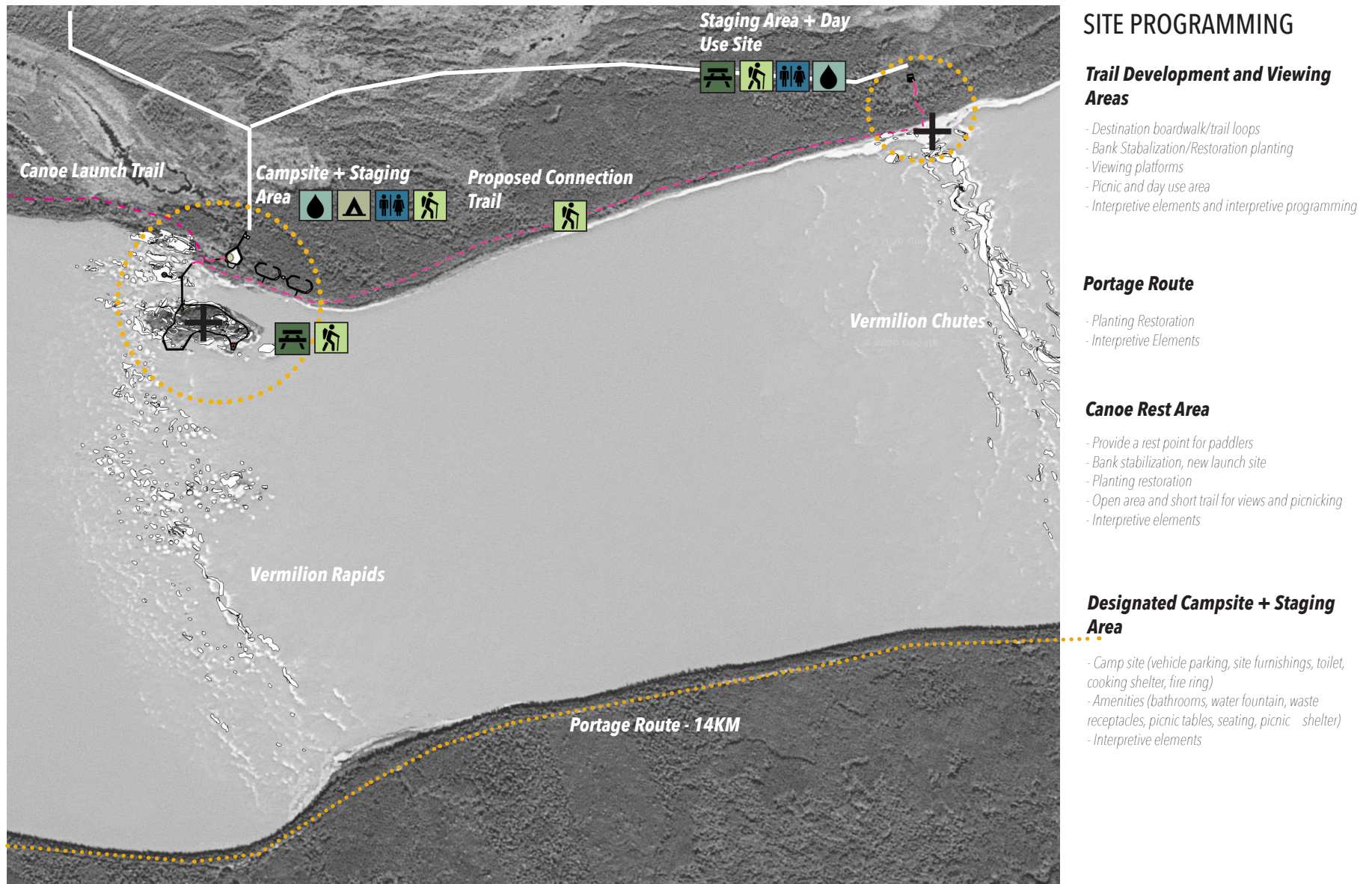


Figure 5-28: Map of Vermilion Chutes site programming (Google Earth, 2020).



TRAIL DESIGN

- ① Shale Point - 0.1 KM
- ② Portage to Vermilion Chutes - 2.5 KM
- ③ Round Island Loop - 0.9 KM
- ④ Canoe Launch Trail

Figure 5-29: Map of Vermilion Chutes trail design (Google Earth, 2020).

TRAIL DESIGN

Portage routes have semi-developed trails with a granular surface, and the island trails remain primitive to protect ecological integrity. Metal grate walkways allow visitors to have direct access to the rapids. While taking into account safety and rising water levels.



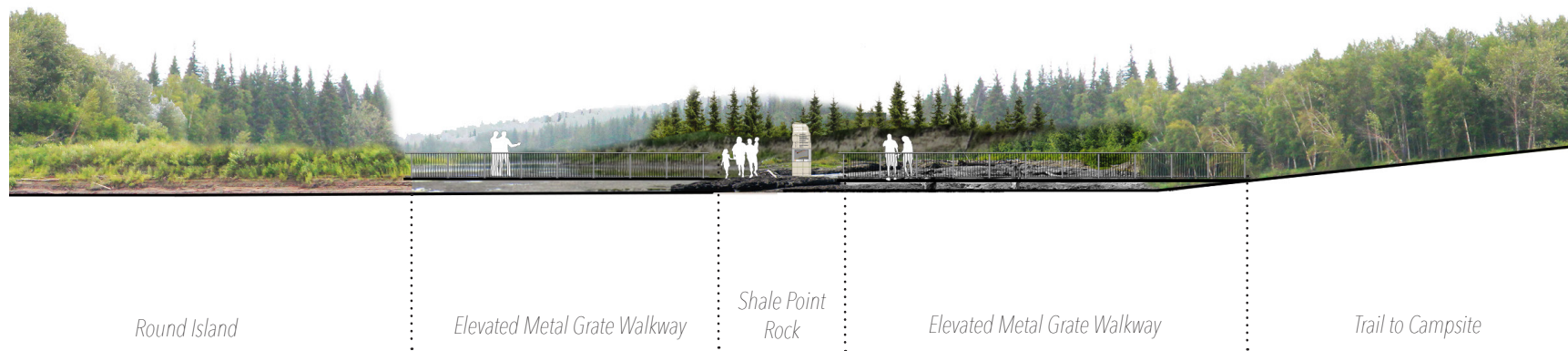
Primitive Trail - Natural Elements



Semi-Developed Trail - Granular Surface



Developed Trail - Metal Grate Walkway



Shale Point Section

Figure 5-30-33: Vermilion Chutes trail sections.

INTERPRETIVE ELEMENTS

On-site limestone will be used as the primary material for all way-finding and site furnishings, ensuring local material sourcing. Metals will be used in areas prone to flooding and where safety is a concern. This includes elements such as guardrails.



Figure 5-34-35: Vermilion Chutes interpretive signage.



ROUND ISLAND RAPIDS VIEWS

Figure 5-36: Vermilion Chutes perspective.

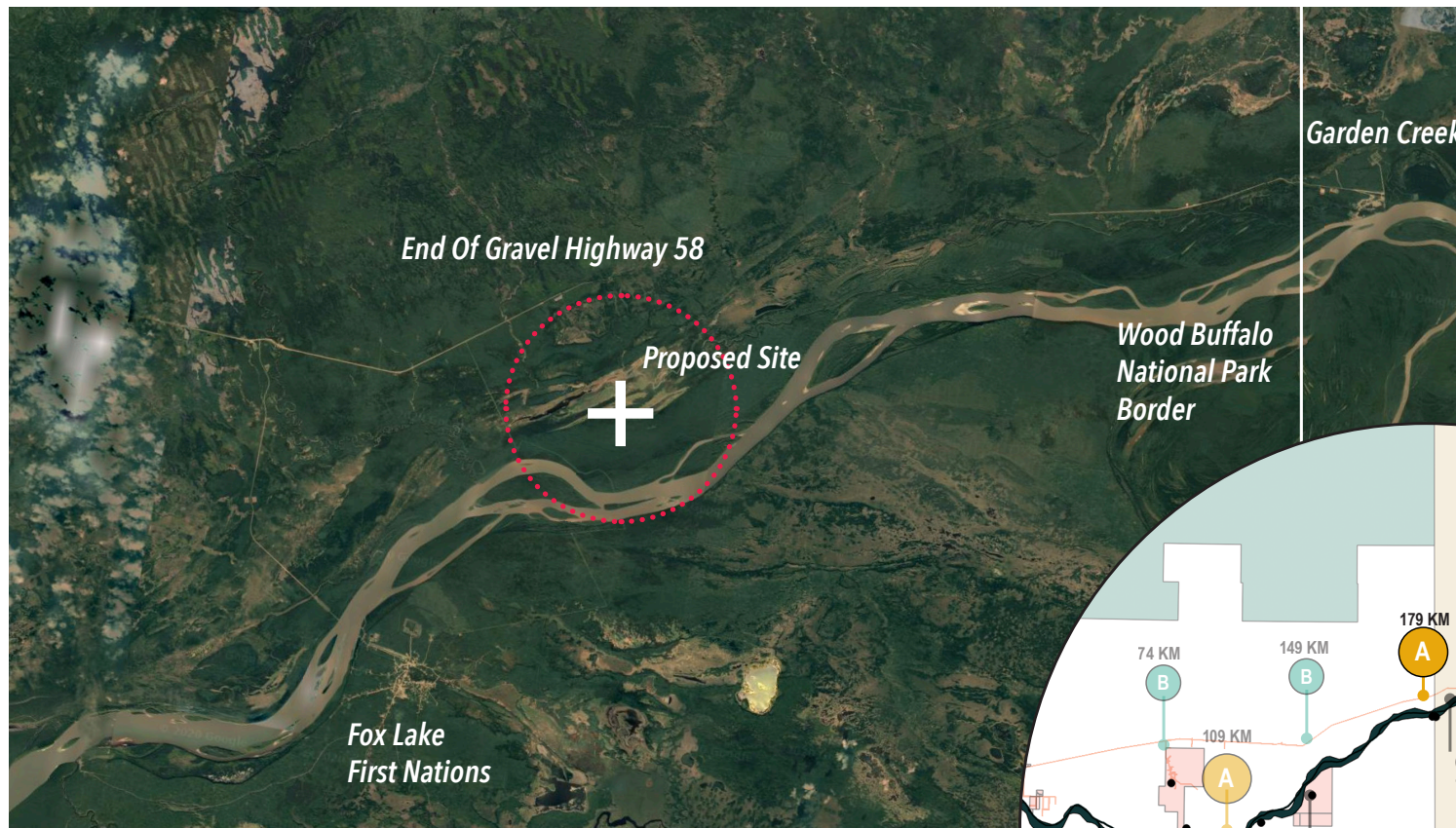


Figure 5-37: Map of proposed site. (Google Earth, 2020).

BUFFALO BOGS: SITE LOCATION

Buffalo Bogs site provides visitors with a place to view wild Wood Bison herds. It is located between Fox Lake First Nations community and the border of Wood Buffalo National Park. This is the last interpretive site proposed on the new road before entering the national park. It is to be a summer outdoor recreation site with a bison observatory, camping and access to different types of trails.

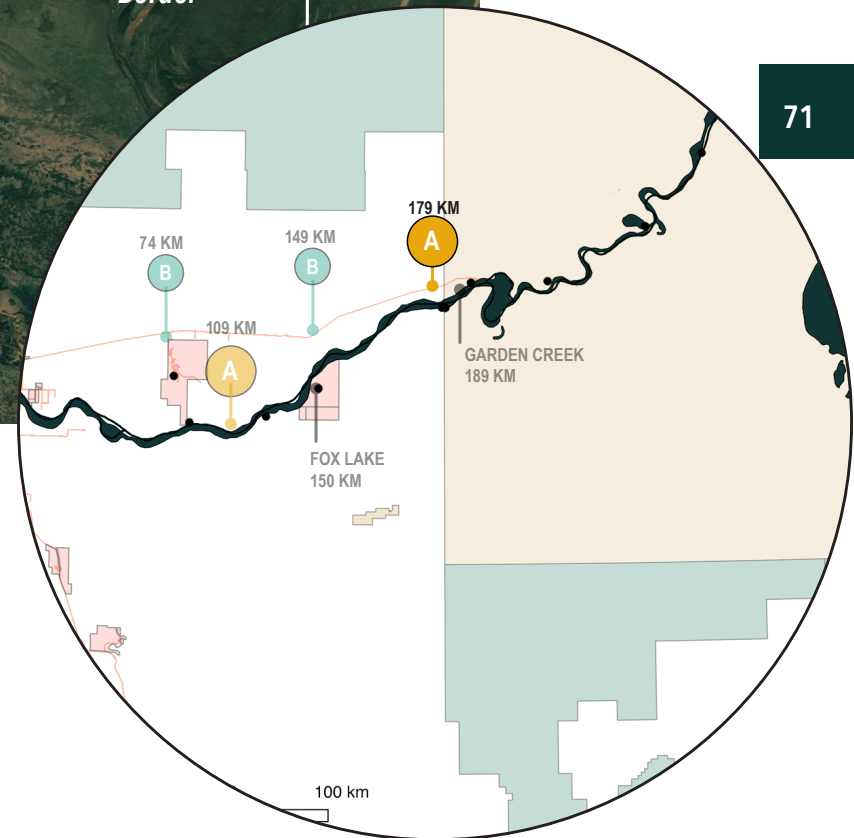


Figure 5-38: GIS map of proposed site.

STORY ELEMENTS

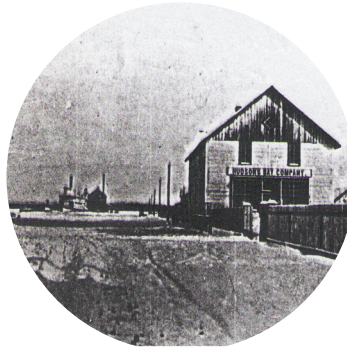
Habitat

- The bison prefer wetland and riparian areas.
- Large areas have been control burned west of WBNP to provide better forage for bison. Burns take place after snowmelt in early spring and attract bison to the dry grass meadows, while the wet understory of forests provide protection from fire.



Fur Trade

- A post located a few kilometres upstream was operated by the Northwest Company from 1799 to 1803. Due to the depletion of game, many people died at the post from starvation.



Current Bison Populations

- Wentzel Lake bison herd is located west of the Wood Buffalo National Park border and south east of the Caribou Wildlands between the Peace River.
- Issues of maintaining populations due to unrestricted hunting access and mixing of cattle causing disease. This area has one of the highest bison sightings



First Nations

- Fox Lake First Nation resides across the Peace River from the site.
- The majority of the Little Red River Cree live within Fox Lake, but have no year round road access.
- Historical sites include the traditional meeting place between First Nations and the Hudson Bay outpost (now a First Nations pilgrimage site) and Fifth Meridian trading post, traditional meeting place and camping site.



Industrial Activity

- Due to mine extraction, well sites, river flooding and climate change, much of the wet meadow habitat has been depleted and invaded by unwanted species.
- Some pollution due to Oil Sands etc, changes of water levels from hydroelectric dams



Ecoregions

- Boreal - Peace River Lowlands Sensitive Areas: On drier upland sites, jack pine forests occur.
- Mixedwood forests of aspen, balsam poplar, and white spruce occur on mesic sites.
- Non-forested, wet fluvial communities form a very complex mosaic of aquatic, shoreline, meadow, shrub and marsh vegetation.

Bison Conservation

- In the 1990's Little Red River Cree Nation placed supplemental winter feed and mineral licks for the bison, making the herd more permanent to the area, to monitor bison disease and initiate a community based biological research project and recovery strategy.

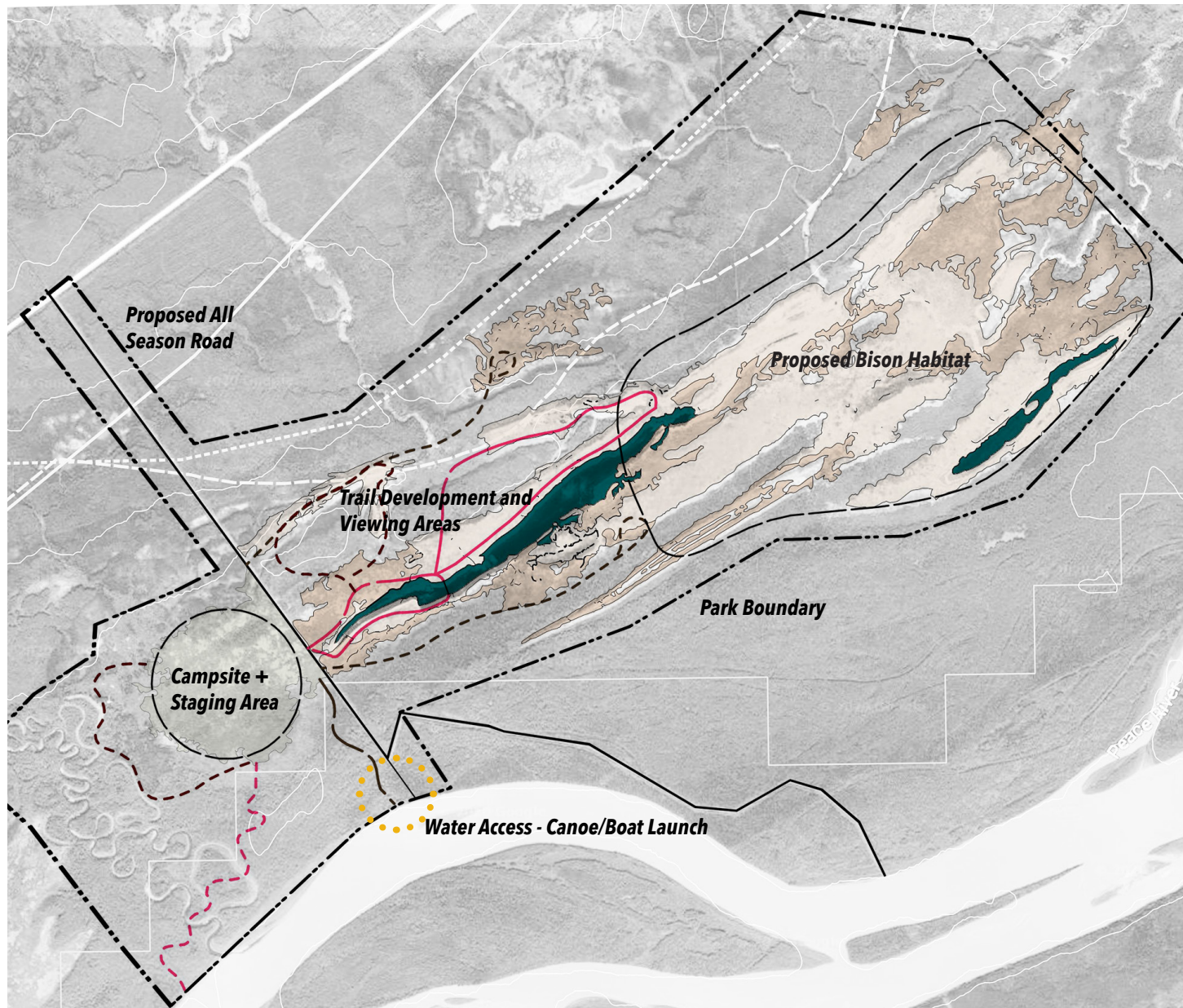
Figure 5-39-43: Images of story elements. (Historical images courtesy of Fort Vermilion Museum, all other images by author).



DESIGN INTENTION

The intention of the design is to allow visitors to view bison safely. This is not offered on the existing highway. The site will allow people to camp and explore the trails while learning about bison conservation and the unique ecoregion. The site's importance to local communities will be expressed in interpretive materials while respecting the First Nations lands adjacent to the site. A proposed all-season road will provide access for Fox Lake.

Figure 5-44: Bison habitat near outskirts of Wood Buffalo National Park



SITE PROGRAMMING

Trail Development and Viewing Areas

- Destination boardwalk/trail loops
- Restoration planting
- Viewing platforms/ Viewing tower
- Wildlife management fencing/barriers
- Interpretive elements and interpretive programming

Proposed Bison Habitat

- Placement of salt licks
- Restoration of native species key to wildlife
- Area for controlled burns

Water Access

- A rest point for paddlers
- Bank stabilization, new launch site
- Planting restoration
- Boat launch with open area and short trail for views and picnicking
- Interpretive elements

Designated Campsite + Staging Area

- Camp site (vehicle parking, site furnishings, toilet, cooking shelter, fire ring)
- Amenities (bathrooms, water fountain, waste receptacles, picnic tables, seating, picnic shelter)
- Interpretive elements

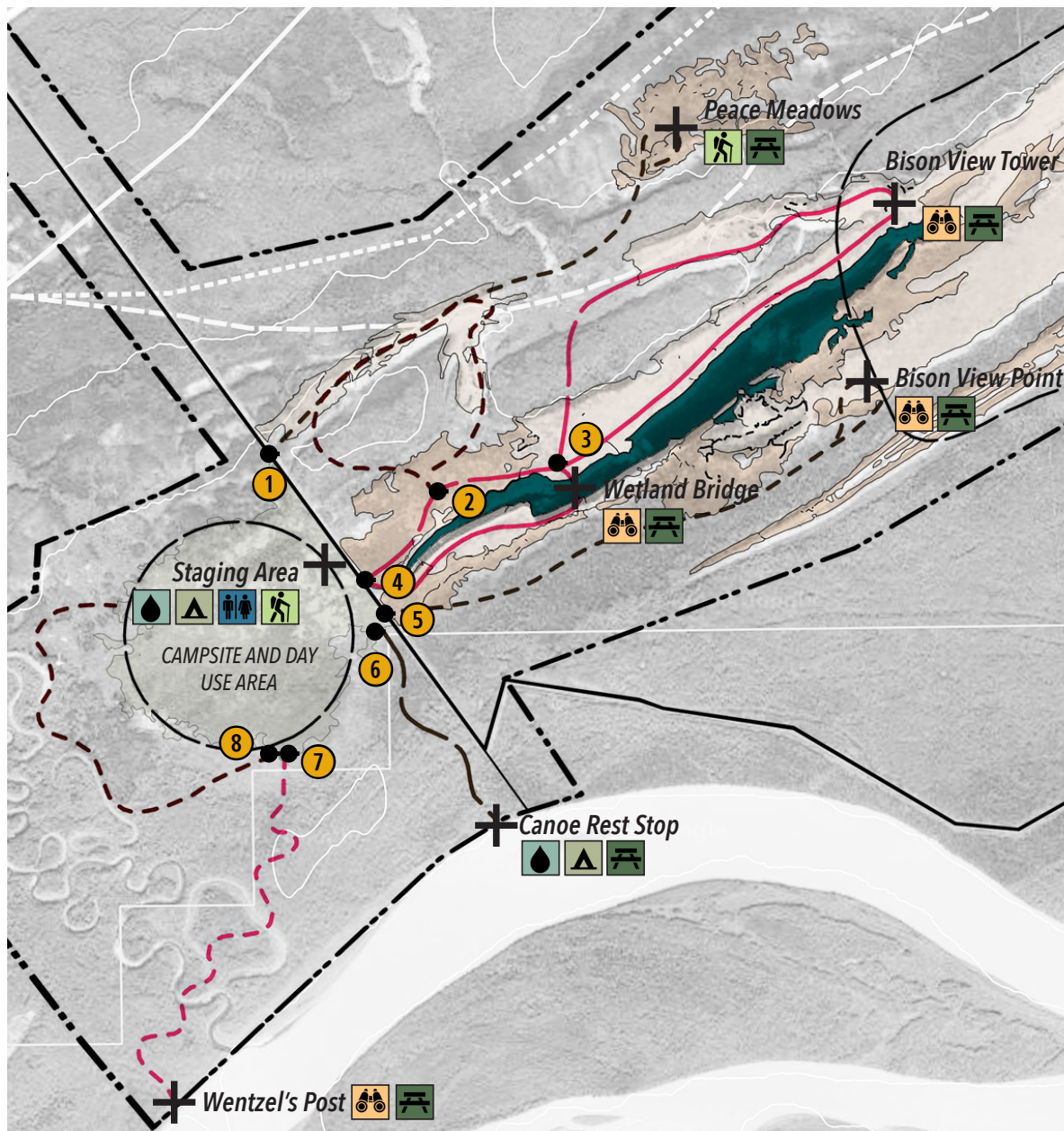


Figure 5-46: Map of Buffalo Bogs trail design (Google Earth, 2020).

BUFFALO BOGS TRAIL DESIGN

Each trail will traverse a different ecosystem or key wildlife area. Wildlife viewing areas will be equipped with safety features such as guardrails or planting to protect visitors and wildlife. Trail types will allow for different types of user accessibility.

TRAIL DESCRIPTIONS

- Primitive Trails
- - - Semi-Developed Trails
- Developed Trails

- Walking/Hiking
- Snowshoe/ Cross Country Skiing
- Horseback Riding

- ① Peace Meadows Trail - 3.6 KM
- ② Peace Lowlands Loop - 3.5 KM
- ③ Buffalo Bogs Loop - 5.6 KM
- ④ Wetland Loop - 3.1 KM
- ⑤ Slave Lowlands Trail - 3.9 KM
- ⑥ Canoe Launch Trail - 1.4 KM
- ⑦ Wentzel's Post Trail - 3 KM
- ⑧ Wentzel's Creek Trail - 2.8 KM

TRAIL DESIGN

Proposed trails that traverse in the boreal and meadow landscapes will be semi-developed trails with a granular surface. Walking trails in sensitive landscapes will remain primitive to protect ecological integrity. Metal grate walkways will allow visitors to enter the wetland and bog areas to view the bison.



Primitive Trail - Natural Elements



Semi-Developed Trail - Granular Surface



Developed Trail - Metal Grate Walkway



*Placement of Winter Feed +
Meadow Restoration*

*Elevated Metal Grate Walkway +
Wetland Restoration*

Trail back to Campsite

Wetland Bridge Section

Figure 5-47-50: Buffalo Bogs trail sections.

INTERPRETIVE ELEMENTS

Corten steel will be used for all way-finding and site furnishings because of its durability to wildlife and forest fires. Wood will be used to accent site furnishings for visitor comfort.

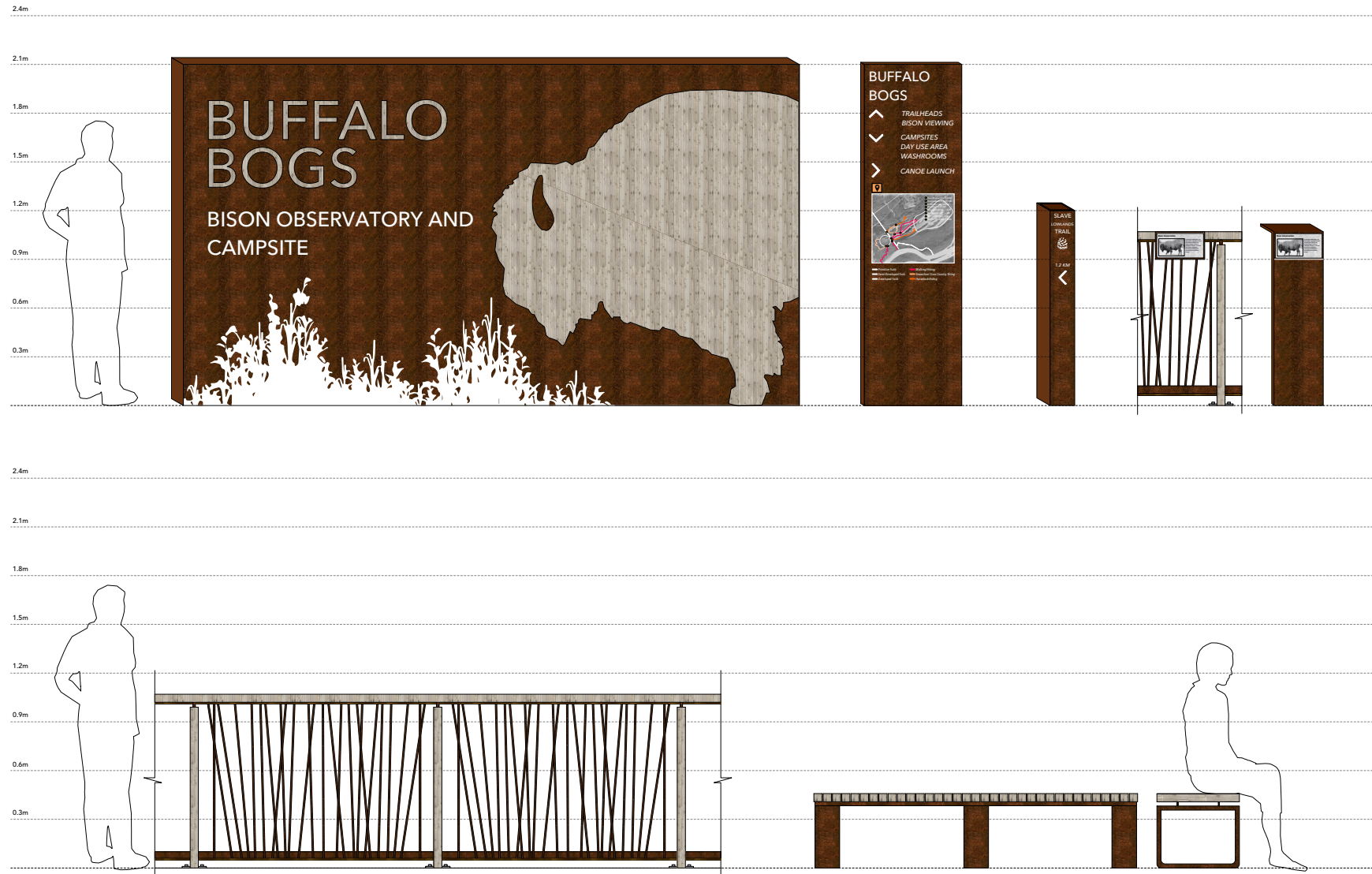


Figure 5-51-52: Buffalo Bogs interpretive signage.



WETLAND BRIDGE LOOKOUT

Figure 5-53: Buffalo Bogs perspective.

06

CONCLUSIONS

This practicum's intention is to increase northern Alberta's tourism to Wood Buffalo National Park by improving the existing highway's tourism, developing alternative tourism routes and providing additional tourism opportunities on the Peace River. New tourism attractions will allow land significant to Alberta's history and cultural groups along each route to be shared. Stories of the Peace-Athabasca region are communicated through signage and, public information has been suggested. In the process, I have:



Gathered information and become knowledgeable about the Peace-Athabasca region and its cultural significance;



Identified and mapped existing and potential points of interest for each of the three routes: the Peace River, the existing highway to Wood Buffalo National Park and proposed highway from High Level to Peace Point and;



Identified areas of cultural importance and significance with the potential to be new tourism destinations

This practicum's recommendations may be implemented into Alberta's tourism framework and positively impact local communities through increased tourism. More stops for travellers and new tourism destinations along the existing highway will encourage free-spirited travellers to dare the extra 6-hour drive to reach Wood Buffalo National Park. A highway that previously discouraged travellers due to its lack of amenities and services will now allow travellers to learn about the Peace-Athabasca region's culture and history, and allow them to immerse themselves in the beauty of the region's landscapes. The proposed route from High Level to Peace Point will increase the local economy by bringing more travellers through each community and provide an alternative route for communities during forest fire seasons. The three proposed tourism destinations along the route will allow local stories to be told and enable residents to interact with travellers. The Peace River route will provide an alternative method of travel for those seeking a more authentic experience. The tourism destinations are unique to the Peace-Athabasca region and offer various experiences for all traveller types.

Through the simple but essential steps outlined in this practicum, Northern Alberta can contribute to a more diverse Alberta tourism offering previously untold stories of Peace-Athabasca's culture and history and casting more light on Canada's biggest national park.

LIST OF FIGURES

Referencing Style Guide used in this document:

Anglia Ruskin University Library, 2019. Guide to the Harvard style of referencing [PDF] 6th ed. Available through: <http://libweb.anglia.ac.uk/referencing/harvard.htm> [Accessed 23 August 2020].

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LIST OF GIS DATASETS

Geographic Information System (GIS) mapping created in QGIS version 3.4.12-Madeira available through: <https://qgis.org/en/site/forusers/download.html>. QGIS is licensed under the GNU General Public License available at: <http://www.gnu.org/licenses>. Layers that were used in this practicum through mapping are listed as follows:

Government of Alberta, 2010. Key Wildlife and Biodiversity Zones [vector shapefile data]. Edmonton: Alberta Environment and Parks. Online Linkage: <https://extranet.gov.ab.ca/srd/geodiscover/srd_pub/LAT/FWDSensitivity/KeyWildlifeAndBiodiversityZones.zip> Available through: <<https://geodiscover.alberta.ca/geoportal/>> [Accessed 23 August 2020].

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