

# **(Re)branding Canada's National Parks**

by

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# ***(Re)branding Canada's National Parks***

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Abstract

While the notion of 'Canadian identity' tends to oversimplify the country's cultural diversity, it is frequently claimed that national identity is both reflected in and promoted by Canada's National Parks. This owes largely to the fact that the beginning of the National Parks system in the late nineteenth century, coincided with the formation of Canada as a country, and that National Parks have been established in every province since. Yet despite the mandate of Parks Canada to preserve these landscapes for future generations of Canadians, their inconsistent approach to both land stewardship and to genuine cultural inclusivity exposes the need for a new form of park management. Focusing on the proposed National Park Reserve on the Hog Island Sandhills in Prince Edward Island, this thesis project prioritizes a cooperative management model between Parks Canada and the local Indigenous communities while contributing to the site's cultural and environmental sustainability. Mobilizing design to critically (re)brand the National Park's architecture, its wayfinding and its promotional materials, this thesis project promotes the official (but inconsistently respected) mandate of Parks Canada for landscape conservation while also prioritizing Canada's stated (but not yet realized) commitment to Truth and Reconciliation.

Keywords

Canada, Parks Canada  
National Park, National Park Reserve  
Indigenous, Truth and Reconciliation  
co-operative management, landscape stewardship  
coastal resilience, Prince Edward Island  
Hog Island Sandhills National Park Reserve  
tourism, architecture  
material culture, wayfinding

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## Preface

Indigenous-led conservation is a movement that can contribute a model of positive change for Canada's National Parks. Here lies an important opportunity for allies in the design disciplines to support and work within this new framework to co-create a decolonized ethos and identity for the Parks system. Bringing together architectural and graphic design, landscape conservation, and co-management principles, this thesis project presents design interventions for the proposed Hog Island Sandhill National Park Reserve, which were informed by the strong Indigenous voices of the Mi'kmaq Confederacy of P.E.I. — Abegweit First Nation and Lennox Island First Nation. The thesis project reimagines the National Park tourist landscape in ways that reflect a sincere commitment to both landscape stewardship and Truth and Reconciliation.

**Chapter 1 – “The History of Canada's National Parks”** presents the emergence and historical relevance of the National Parks system within Canada. While Parks Canada, the federal body that manages the national parks, promotes an official narrative about the preservation of beautiful landscapes for the enjoyment of all Canadians, this conceals two troubling interconnected realities: the dark colonial history of how Indigenous peoples were expropriated from their land, and the awful treatment they experienced during the establishment of national parks; and the way these landscapes have been encroached upon in an unsustainable manner to serve the tourism industry. In exposing these lesser-known dimensions of Canada's national parks, this chapter provides the background information that informs the very different approach to the development of a new national park argued for by this thesis project.

**Chapter 2 – “Methodology”** first presents the thesis project's overarching ambitions for: better stewardship of Canada's natural and cultural heritage; modeling sustainable design practices and raising awareness about climate change; and prioritizing a sincere commitment to Truth and Reconciliation through a variety of means including rethinking the very management structure of all national parks in Canada. The methods used to achieve these goals, namely multidisciplinary research, learning-through-making, and community engagement, are then elaborated. I conducted research on Canadian history, the policies and practices of Parks Canada, co-management administrative frameworks, sustainable architecture, and designing for coastal resilience. I designed posters, brochures, maps, wayfinding signage and a website geared at knowledge mobilization, all of which helped me clarify my ambitions for rebranding Canada's national parks. Also central to my methodology was my community engagement with members of the Mi'kmaq Confederacy of Prince Edward Island, who have been generous with their knowledge and supportive of this thesis project. It is my hope that in offering them this book, I will be helping them realize their goals.

**Chapter 3 – “A 'new' National Parks System”** proposes how to reshape the Parks Canada System as a whole, so that assertions about preserving and protecting landscapes for current and future generations aligns with decisions and actions. To these ends, this chapter outlines three propositions for Canada's national parks. The

first is the introduction of a cooperative management framework between Parks Canada and the local Indigenous communities whose ancestral lands are designated as national parks. The test case for this is the proposed co-management framework outlined for the Hog Island Sandhills National Park Reserve. The second critical proposition for Parks Canada is a call for a solid and consistent commitment to landscape stewardship. One impactful gesture that could become a policy for all national parks would be that only a small portion of the protected area be used for architectural development, and the option to not build any large permanent structure in the park should be encouraged. The third proposition is an example of how to curate the visitors' experience of National Parks in a different way to educate tourists about local and Indigenous culture and to provide an important intellectual and visceral understanding of our natural environment's vulnerability and the impact of the climate crisis.

**Chapter 4 – “The Site”** focuses on the Hog Island Sandhills National Park Reserve that is currently being proposed by the Mi'kmaq Confederacy of P.E.I. The Hog Island Sandhills are important to the local Mi'kmaq community as their ancestors have lived in this region for millennia. The proposed National Park Reserve would offer land stewardship of 50 kilometres of sandbars located along the northeastern coast of P.E.I., which is becoming increasingly urgent as the three main sandbars of Hog Island are protecting the Lennox Island community and the Malpeque Bay from rising sea levels and storm surges. This chapter addresses the current fragile condition of these sandbars and their relationship to neighbouring Lennox Island, which is home to a community of 450 residents. Research into methods of addressing coastal erosion and staying ahead of rising sea levels sets the stage for the design interventions for the proposed National Park Reserve.

**Chapter 5 – “Design Interventions”** presents the design interventions for the proposed Hog Island Sandhills National Park Reserve, which include coastal remediation, seafood farming cultivation, the design of material culture in the form of posters and maps, as well as wayfinding design, and architectural interventions that sit lightly on the ground or float on the water. The programmatic features and ambitions of the Cultural Landscape Centre, the Floating Classroom near the existing water treatment facility, and the curated activities in the Hog Island Sandhills National Park Reserve are explained as individual components as well as how they work together to curate a new National Park experience.

**Chapter 6 – “The Experience”** takes the reader through a visual tour of this new National Park Reserve. The journey begins on the mainland, and continues with the visitor approaching the Cultural Landscape Centre, which houses the exhibition spaces, classrooms, restaurant, and kayak rental facility as well as the co-management spaces. From here, the reader takes a boat ride from the Centre to the floating classroom to learn about design responses for coastal resilience and seafood farming after which the experience continues on a contained portion of the Hog Island National Park Reserve itself before returning to the point of departure. The **Epilogue** and concluding evocative image summarize the aspirations of the thesis project.





## Chapter 1

### Canadian Identity, Canadian Confederation, and the Canadian Pacific Railway

The notion of Canadian identity is frequently reduced to a cluster of well-known stereotypes (such as igloos, maple syrup, hockey, finishing sentences with “Eh?”, and demonstrating excessively apologetic politeness), which have dominated Canada’s image to the rest of the world. Canadians themselves are also prone to attaching their identity to a handful of national symbols. According to a data collected by a polling firm for Parks Canada in 2005 and a survey conducted by Statistics Canada that collected information about Canadians’ appreciation of national symbols and perceptions of shared values, the Canadian Health Care System, the “Charter of Rights and Freedoms” and the Canadian flag ranked as the top national symbols, followed by national parks, the national anthem, and the Royal Canadian Mounted Police (RCMP). Yet these national symbols and simplistic generalizations obscure the political complexity and the difficulty of ascribing one national identity to a country created through the fusion of people from many nations. Canadian identity is a much-debated topic about which no consensus has been reached. What is of particular interest here is the status accorded to Canada’s national parks as symbols of national identity.

In contrast to the United States of America, which is often described as a “cultural melting pot,” Canada proudly distinguishes itself as a “cultural mosaic” that embraces and represents the incredible cultural diversity of its citizens.<sup>3</sup> This too is a simplistic metaphor that falsely suggests that all people living in Canada are embraced and represented equally. Indigenous Peoples have inhabited Turtle Island (North America) for millennia.<sup>4</sup> What is now Canada was colonized by the French in the 16th century followed by the British, and by the 19th century immigration to Canada opened up to the rest

[Facing page]  
Figure 1.1 Canadian Symbols

<sup>1</sup>William J. Wistowsky, “Canada’s National Parks: What are they worth to Canadians and why?” (PhD diss., University of Guelph, 2007), 10; Marie Sinha, “Spotlight on Canadians: Results from the General Social Survey: Canadian Identity, 2013,” Statistics Canada, October 1, 2015, 3-5. <https://www150.statcan.gc.ca/n1/en/pub/89-652-x/89-652-x2015005-eng.pdf?st=ds4uoegD>

<sup>2</sup>Charles Blattberg, “Canadian Identity,” *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/canadian-identity>.

<sup>3</sup>Will Kymlicka, “Politics of Identity – II: Being Canadian,” *Government and Opposition* 38, no. 3 (2003): 300.

<sup>4</sup>Amanda Robinson, “Turtle Island,” *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/turtle-island>.



The Making of Canada



1867

Figure 1.2 Map of Canadian Confederation Canada in 1867

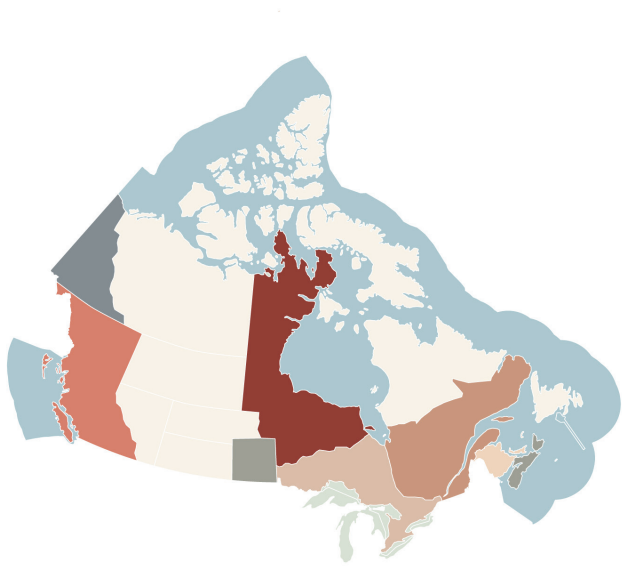
On March 29, Queen Victoria gave her royal assent to the British North America Act, which was passed by the British Parliament. It went into effect on July 1st. The Act merged Canada's, Nova Scotia's, and New Brunswick's colonies into one federal union. Newfoundland became Canada's newest province in 1949. Nunavut became Canada's newest territory in 1999. Its establishment establishes self-governance for the Inuit population of the region.



1870

Figure 1.3 Map of Canadian Confederation Canada in 1870

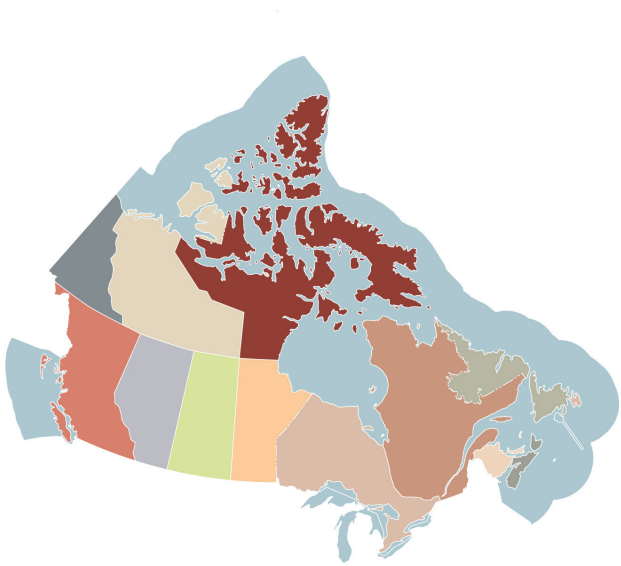
British Columbia was the sixth province to join the Confederation. On February 15, 1872, the legislature convened for the first time since Confederation.



1871

Figure 1.4 Map of Canadian Confederation Canada in 1871

As Canada's seventh province, Prince Edward Island joined the union. The provinces of Upper and Lower Canada were renamed Ontario and Quebec, respectively.



1999

Figure 1.5 Map of Canadian Confederation Canada in 1999

Alberta and Saskatchewan have joined Canada. Manitoba's landmass has grown. Nunavut was declared as part of Canada's first territorial changes since Newfoundland joined the Confederation in 1949, covering approximately 2 million square kilometres of the eastern Arctic.

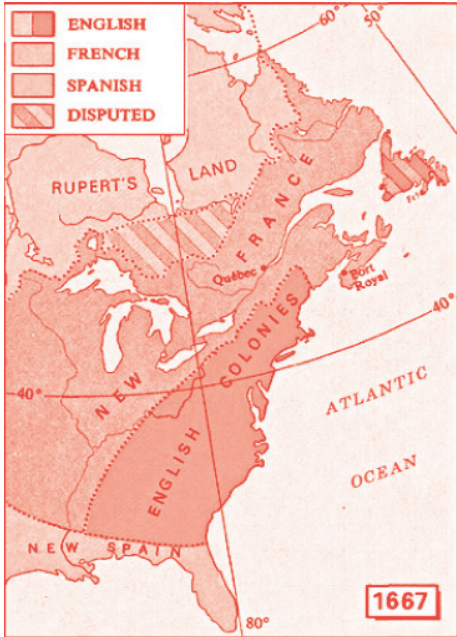


Figure 1.6  
1667 Map of North America

<sup>5</sup> Statistics Canada. "Focus on Geography Series, 2016 Census – Canada." <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-can-eng.cfm?Lang=Eng&GK=CAN&GC=01&TOPIC=7>.

<sup>6</sup> Statistics Canada. "Focus on Geography Series, 2016 Census – Canada."

<sup>7</sup> "Confederation," *Encyclopedia Britannica*, <https://www.britannica.com/topic/confederation-politics>; P.B. Waite, "Confederation," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/confederation>.

<sup>8</sup> Waite, "Confederation."

<sup>9</sup> Waite, "Confederation."

<sup>10</sup> Library and Archives Canada. "Maps: 1667-1999," <https://www.bac-lac.gc.ca/eng/discover/politics-government/canadian-confederation/Pages/maps-1667-1999.aspx>.

<sup>11</sup> Library and Archives Canada. "Maps: 1667-1999"; P.B. Waite, "Confederation."

<sup>12</sup> Omer Lavallé, "Canadian Pacific Railway," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/canadian-pacific-railway>; Jon Tatttrie, "British Columbia and Confederation," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/british-columbia-and-confederation>; P.B. Waite, "Confederation."

of the world. According to 2016 statistics, immigrants in Canada number approximately 7,540,830 which represents about 21.9% of the population, while 76.6% of the population were born in Canadian (of diverse cultural backgrounds) and 1.5% were non-permanent residents.<sup>5</sup> In 2016, Canada's Indigenous population numbered roughly 1,673,780 people, or 4.9% of the population.<sup>6</sup> These statistics reveal that there exists a plurality of Canadian identities: not 'one' monolithic Canada but 'many' Canadas.

'Confederation' refers to the political process of federal union by which people and states are permanently brought together.<sup>7</sup> Confederation also refers to July 1, 1867, when the colonies of Nova Scotia, New Brunswick, and the Province of Canada (present day Québec and Ontario) unionized to form the Dominion of Canada, a political move carried out in part out of fear that British North America would be taken over by the United States.<sup>8</sup> Canadian Confederation was characterized by many political and social challenges, including the fact that the Indigenous Peoples of what is now Canada were excluded from discussions about Confederation despite the fact that "they had established [...] bilateral (nation-to-nation) relationships and commitments with the Crown through historic treaties."<sup>9</sup> The North-West Territories (Rupert's Land and the North-Western Territory) were acquired by Canada through the Hudson's Bay Company in 1870 and a part of that land became the province of Manitoba.<sup>10</sup> When the United States purchased Alaska from Russia in 1867, the threat of American annexation to British Columbia grew.<sup>11</sup> British Columbia entered Confederation in 1871 as the sixth province, but a key condition was that British Columbia be linked to the eastern part of the country by train within 10 years, which in turn led to the construction of the Canadian Pacific Railway.<sup>12</sup>

The construction of this transcontinental railway cut through Indigenous lands. To continue construction, the federal government felt it necessary to extinguish Indigenous claim to land, and established Treaty 7, which was an agreement signed with the Plains First Nations in 1877 that included the exchange and distribution of cash payments, hunting and fishing tools, and farming supplies but was misleading about

the surrender of land.<sup>13</sup> The construction of the Canadian Pacific Railway was a huge undertaking for the parliament of Canada, and forced labour was used in order to complete the construction. In 1883, approximately 15,000 unskilled Chinese arrived in British Columbia.<sup>14</sup> The unsafe working conditions, inadequate compensation and harsh conditions resulted of numerous deaths among the Chinese rail workers, some reports stating that 600 out of 15,000 Chinese workers perished.<sup>15</sup> Despite these human costs, the arrival of the Canadian Pacific Railway at Banff, British Columbia in 1883 was a much-celebrated milestone. Two years later, in 1885 the Canadian Pacific Railway was completed and the eastern and western coasts of Canada were connected.<sup>16</sup>

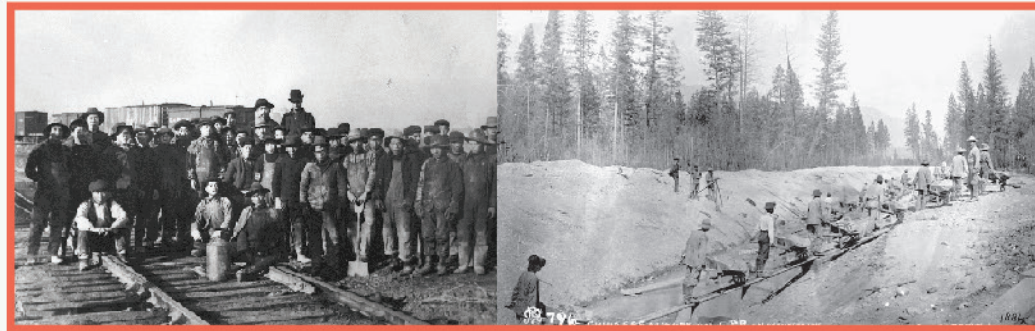
<sup>13</sup> Alex Tesar, "Treaty 7," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/treaty-7>; Lavallé, "Canadian Pacific Railway."

<sup>14</sup> David Lee, "Chinese Construction Workers on the Canadian Pacific," *Railroad History*, no. 148 (1983): 43.

<sup>15</sup> Lavallé, "Canadian Pacific Railway."

<sup>16</sup> Lavallé, "Canadian Pacific Railway."





CPR railway construction



Banff, Alberta - Hot Springs

## Early Discovery



Although colonial explorers had carried out the "search for the western sea" (i.e., the Pacific Ocean), it was only in the nineteenth century that the central Canadian Rocky Mountains were explored by non-Indigenous explorers, often led by 'Indian guides.'<sup>17</sup> During the construction of the Canadian Pacific Railway, a series of hot springs were discovered in Banff, British Columbia.<sup>18</sup> The discovery of these hot springs played a critical role in the development of national parks in Canada. It was Frank McCabe a CP Rail foreman and William McCardell who discovered what are now known as the Cave and Basin Hot Springs in 1883 but knowledge of the hot springs spread quickly among railway construction workers.<sup>19</sup> McCabe filed ownership claims of these hot springs with government in 1885, which were followed by separate ownership claims submitted by CP rail workers Theodore Sebring and David Keefe.<sup>20</sup> So many competing claims for ownership of the hot springs in Banff were sent to Ottawa that by 1885, the federal government was giving serious consideration to taking over these landscapes for Canadians to enjoy instead of granting

[facing page] Figure 1.7  
Construction of Canadian Pacific  
Railway

Figure 1.8  
Rogers Pass Station located one mile  
from British Columbia's Rogers Pass  
Summit, 1885

<sup>17</sup> W.F. Lothian, *A History of Canada's National Parks*, Vol. 1 (Ottawa: Parks Canada, 1976), 12-13. <http://www.parkscanadahistory.com/publications/history/lothian/eng/vol1.pdf>.

<sup>18</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 18.

<sup>19</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 18.

<sup>20</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 18-22.





Figure 1.9  
Hot Springs Pool, Banff, Alberta

private individuals the right to develop the hot springs. In a note sent to Deputy Minister Burgess in October 1885, Prime Minister John A. Macdonald expressed his hope that “great care has been taken to reserve all the land in or near the Hot Springs at Banff” and that “no squatting should be allowed and any attempt to squat resisted.”<sup>21</sup> By November 1885, a document stating that, “there have been discovered several **hot mineral springs which promise to be of great sanitary advantage to the public**, and in order that proper control of the lands surrounding these springs may be vested in the Crown, the said lands [...] are hereby **reserved from sale or settlement or squatting**,” was approved, thus making the hot springs public property.<sup>22</sup> The concept of a national park is based on a natural environment being set aside by a government or agency for the purpose of public recreation and enjoyment, as well as historical and scientific interest.<sup>23</sup>

By early 1887, the Minister of Interior took steps to set up the legislation to establish Canada's first National Park, using

<sup>21</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 19.

<sup>22</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 20.

<sup>23</sup> “National Park,” *Encyclopedia Britannica*, <https://www.britannica.com/science/national-park>.

Yellowstone National Park in the United States as a precedent, whose Act described the Yellowstone area as “dedicated and set apart as a public park or pleasuring ground for the benefit and enjoyment of the people.”<sup>24</sup> With the completion of the Canadian Pacific Railway, the number of visitors to this protected area grew due to the fame of the newly discovered Hot Springs. With increasing numbers of tourists visiting Banff, interest grew in developing and establishing businesses, sanitariums, and hotels and the area for the park was expanded in size to 674 square kilometers.<sup>25</sup> Shortly after the establishment in 1887 of the “Rocky Mountains Park Act” (now Banff National Park), the Yoho and Glacier Reserves became national parks, followed by the establishment of Waterton National Park in 1895 and by Jasper National Park in 1907.<sup>26</sup>



Figure 1.10:  
Banff Springs Hotel c.1920



Figure 1.11  
The Exshaw entrance to the park in 1922

Figure 1.12  
Car camping in Banff in 1948.

<sup>24</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 24.

<sup>25</sup> Maxwell W. Finkelstein, Leanna Fong, Nathan Coschi, “Banff National Park,” *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/banff-national-park>; Lothian, *A History of Canada's National Parks*, Vol. 1, 24.

<sup>26</sup> Lothian, *A History of Canada's National Parks*, Vol. 1, 30-32, 52.

## Mandate and Policies

Canada's national park system is the second oldest in the world, as well as a key tourist attraction and national symbol.<sup>27</sup> Canada's national parks are defined as a "special type of public land administered under the provision of the National Parks Act", and the branch of the federal government responsible for "maintaining and restoring the ecological integrity" of the park system, as well as "fostering public understanding, appreciation and enjoyment" of these landscapes in ways that ensure their ecological integrity for present and future generations is Parks Canada.<sup>28</sup> The following is an overview of key legislation that outlines the mandate to conserve these landscapes.

### *Rocky Mountains Park Act, 1887* *Statutes of Canada, 50-51, Victoria, Chap. 32* *Assented to 23 June 1887*

2. The said tract of land is hereby reserved and set apart as a public park and pleasure ground for the benefit, advantage and enjoyment of the people of Canada, subject to the provisions of this Act and of the regulations hereinafter mentioned and shall be known as the Rocky Mountains Park of Canada.<sup>29</sup>

The Rocky Mountains Park Act of 1887 was the first regulation established for what is now Banff National Park in Alberta. This regulation was modelled on the Act drafted for Yellowstone National Park, which had been established in the 1870s.<sup>30</sup> While the legislation for Banff specifies that the land will be set apart as a public park for the people of Canada, it is clear that it was envisioned principally as a "pleasure ground" for tourists. The competing interest in protecting this landscape and catering to the tourism industry set a precedent for future national parks in Canada.

<sup>27</sup> Wistowsky, "Canada's National Parks: What are they worth to Canadians and why?," 2.

<sup>28</sup> Wistowsky, "Canada's National Parks: What are they worth to Canadians and why?," 4.

<sup>29</sup> Parks Canada History eLibrary, "Rocky Mountains Park Act, 1887, Statutes of Canada 50-51 Victoria, Chap. 32. Assented to 23 June 1887," <http://parkscanadahistory.com/publications/rocky-mountains-park-act.htm>.

<sup>30</sup> National Park Service, "Yellowstone National Park Protection Act (1872)," <https://www.nps.gov/yell/learn/management/yellowstoneprotectionact1872.htm>

## ***The Dominion Forest Reserves and Parks Act, 1911***

“The Governor in Council may, by proclamation, designate such reserves or areas within forest reserves or such other areas as he sees fit, the title to which is vested in the Crown in the right of Canada, to be and to be known as Dominion Parks, and they shall be maintained and made use of as public parks and pleasure grounds for the benefit, advantage and enjoyment of the people of Canada, and the provisions of this act governing forest reserves, excepting Section 4, shall apply to the Dominion parks.”<sup>31</sup>

The Dominion Forest Reserves and Parks Act of 1911 reiterated the mandate to protect and preserve these natural landscapes. This regulation was developed followed establishment of five additional National Parks located in the Midwest – Calgary and British Columbia. The creation of multiple National Parks in Canada created a new interest in establishing an agency that collectively oversees all National Parks, leading to the decision by the Canadian Parliament to form a branch of the government to administer these protected areas. Hence the creation of Parks Canada in 1911. The first National Park agency created was headed by JB Harkin under the Dominion Forest Reserves and Parks Act.<sup>32</sup> The agency's main goal was to create more National Parks within Canada, protecting the areas as they saw fit.

<sup>31</sup> Parks Canada, “The Dominion Forest Reserves and Parks Act, 1911.”

<sup>32</sup> E.J. Hart, *J.B. Harkin, Father of Canada's National Parks* (Edmonton: University of Alberta Press, 2010), 90.

## ***National Parks Act, 1930***

4. “The Parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to the provisions of this Act and Regulations, and such Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations.”<sup>33</sup>

The enactment of the National Parks Act in 1930 heightened the prolonged efforts of Commissioner Harkin and his staff to have the administration of the parks removed from the authority of the Dominion Forest Reserves and Parks Act. Their goals were to establish Parks Canada Agency as the sole managing authority. The National Park Act of 1930 was an additional regulation to further “protect” the National Parks system. By 1930, 11 established National Parks had been formed since the creation of the first one in Banff. This also established the first National Park in Eastern Canada, Thousand Islands [formerly known as St. Lawrence Island] National Park in 1914 and Georgian Bay Islands National Park in 1929, both located in Ontario. A new phrase was introduced into the National Parks Act of 1930, expanding the mandate for landscape stewardship by adding “to leave them unimpaired”. This sparked discussions and conversations with conservation activists to further protect these landscapes from structural developments and shift its focus from economic interest to environmental preservation. This conversation grew over the issues of the Prince Albert National Parks shack tent townsite within its boundaries. These townsites were established as part of the growing tourist industry within these National Parks.<sup>34</sup>

<sup>33</sup> Parks Canada History eLibrary, “The National Parks Act. Statutes of Canada, 20-21 George V, Chap. 33. Assented to 30 May 1930,” <http://parkscanadahistory.com/publications/national-parks-act-1930.htm>.

<sup>34</sup> Elizabeth Lunstrum, Lunstrum, Elizabeth. “A Century of Parks Canada, 1911-2011, edited by Claire Elizabeth Campbell.” *The Canadian Geographer*, no. 1 (March 2013): 15.



## ***National Park System Plan, 1970***

“This vision was provided by a national parks system plan devised in the early 1970s. Its fundamental principle was to protect a representative sample of each of Canada's landscapes. In order to guide the development of a finite system of national parks using this principle of “representativeness”, Canada was divided into 39 distinct “National Park Natural Regions” based on (the appearance of the land) and vegetation. The goal of the System Plan is to represent each natural region in the national parks system.”<sup>35</sup>

The latest regulations drafted for Canada's National Parks entailed the creation of the National Park System Plan, established in the early 1970s, or 85 years following the creation of the first national park in Canada. This new plan formally established a concrete strategy to create a series of National Parks across Canada. At this time, there were 22 National Parks and the first National Park Reserve, Klappan National Park Reserve in Yukon, was formed. The goal of this new plan was to establish at least one National Park for every terrestrial region in Canada. According to this plan, there are 39 terrestrial regions in Canada.

<sup>35</sup> Canadian Heritage Parks Canada, “National Park System Plan: Introduction to Natural Park System Plan: Status of Planning for Natural Regions,” 1997. <https://www.pc.gc.ca/en/pn-np/plan>; Environment Canada Parks Service, “National Parks System Plan,” 1990. <http://parkscanadahistory.com/publications/system-plan-eng-1.pdf>; Craig Shafer, “The Rise, Fall, and Legacy of Part Two of the National Park System Plan: Natural History,” *The George Wright Forum* 33, no.1 (2016): 29-46.

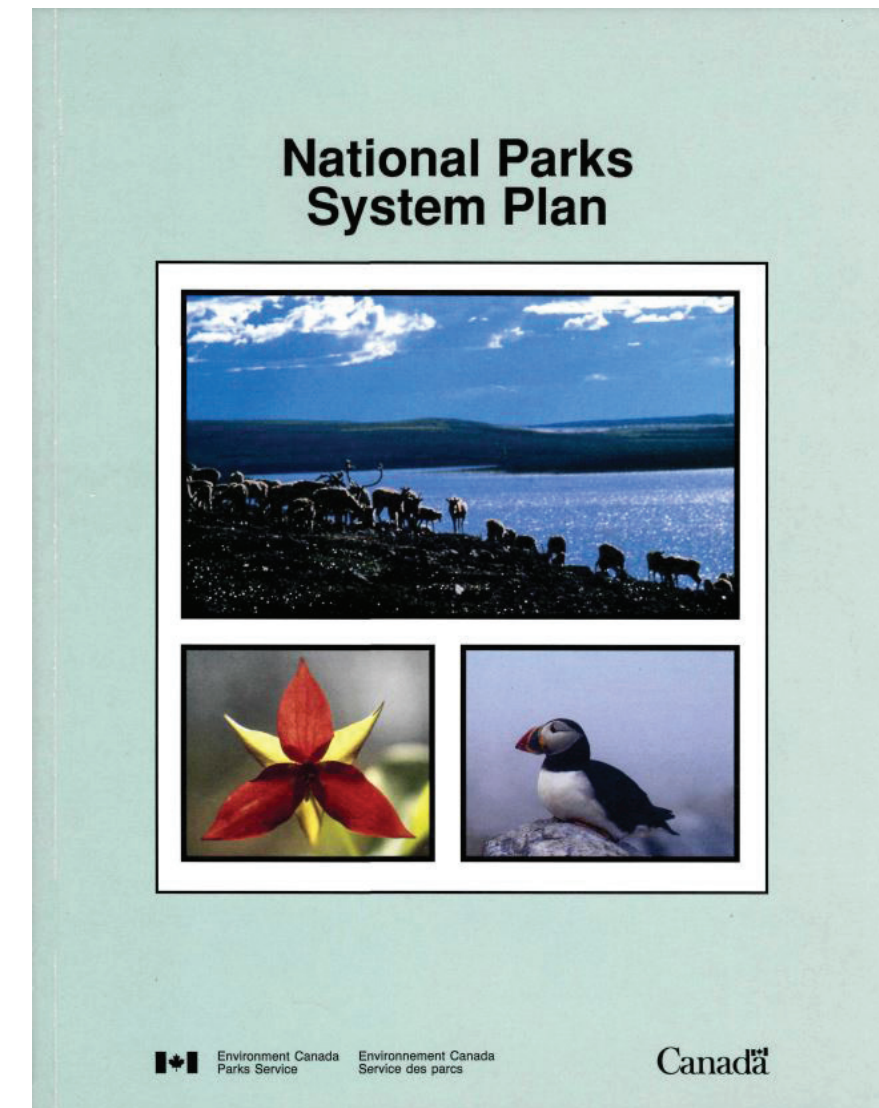
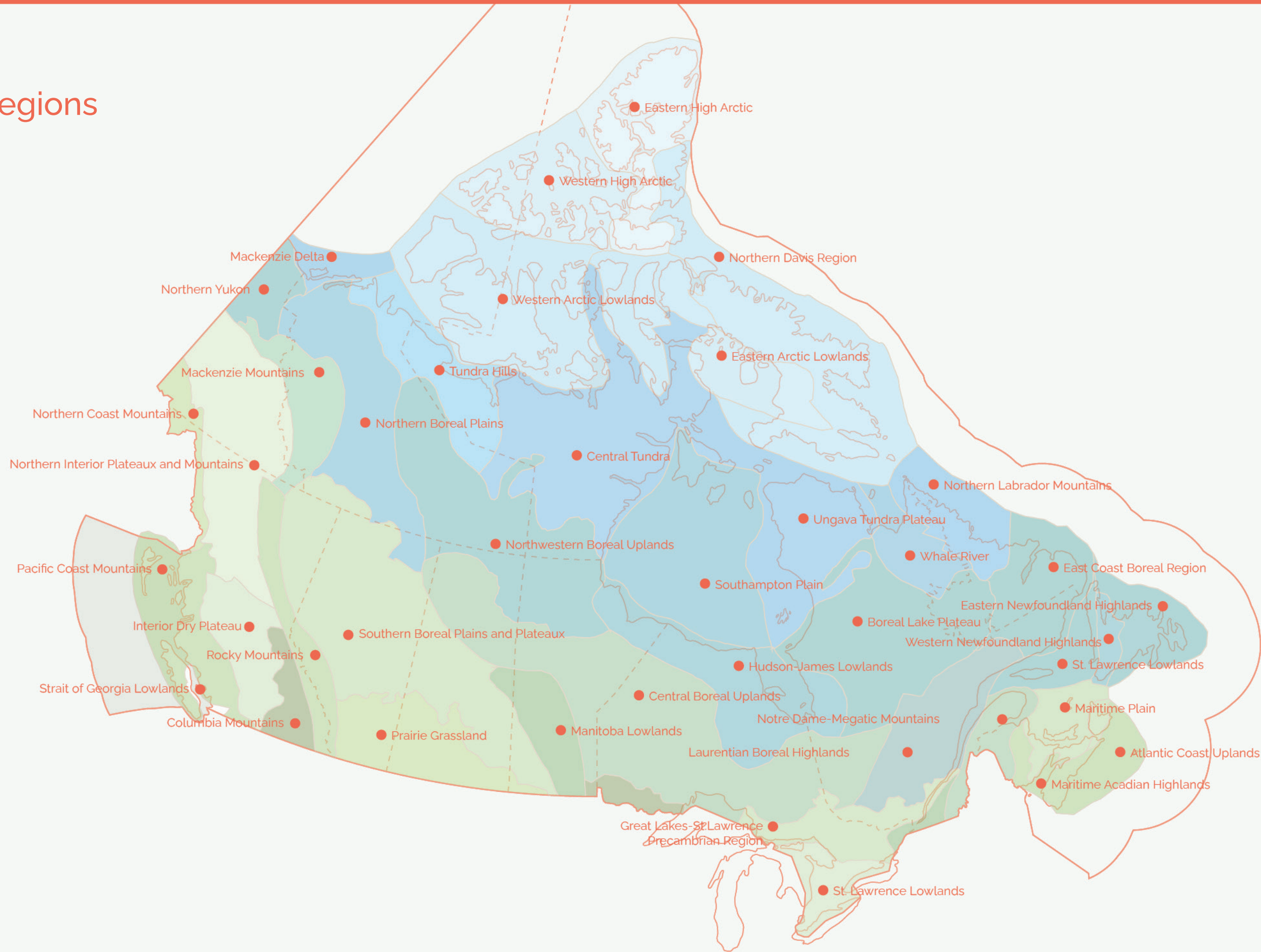


Figure 1.13  
The National System Plan Book

# Terrestrial Regions of Canada





of the woods. Their guide is a Stony Indian whose native name meaning “the one with a thumb like a blunt arrow,” proves so unpronounceable that Hector calls him “Nimrod” for short, and as Nimrod he goes down to history. There is a horse for

At the site of old Bow Fort, four days later, they camp “on a fine level shelf a few hundred yards up a creek that joins the Bow river at this point.” The carts must be left here since they are too unwieldy to cross the mountains. There are three Red River men, Peter, Brown and Richards, well versed in the ways of the woods.

Their guide is a Stony Indian whose native name meaning “the one with a thumb like a blunt arrow,” proves so unpronounceable that Hector calls him “Nimrod” for short, and as Nimrod he goes down to history. There is a horse for each man and three for the carrying of instruments, ammunition and bedding, for Hector has heard that there is an abundance of game in the mountains and so takes “no provisions excepting a little tea and a few pounds of grease.”



**The Kicking Horse Trail**

Book produced by  
Department of Interior



“The fallen timber requires hours of chopping”

Following the gravel flats of the river with an occasional plunge into the woods they come to what is now Banff and camp near Cascade mountain, whose Indian name, unfortunately lost, meant “mountain where the water falls.” Wild sheep and goats are abundant but extremely difficult to secure. They are told one, shot on Cascade mountain, and wounded in five different places, which climbed out on a ledge and remained there seven days before he fell dead to the valley.

From Banff they turn westward to find a pass to the southwest, once used by Cree war parties and Kootenays on expeditions of barter or friendship, now long neglected. At Castle Mountain, after two days spent in drying the meat of a moose, they leave the Bow, turn to the south along the valley of the Little Vermilion, known today as Altrude creek. It is hard going and the climb is steep. The August sun beats down

Twelve

In Modern American English  
the term “Nimrod” is often used  
sarcastically to mean a  
dimwitted or a stupid person

## Turtle Island



For many First Nations communities, Turtle Island refers to the continent of North America, which has been inhabited by Indigenous Peoples for 13,500 to 30,000 years, which has been substantiated by archaeological artifacts.<sup>36</sup> Out of any area in Canada, British Columbia was inhabited by the greatest number of distinct First Nations, and they developed distinct languages and cultures due to the climatic and topographic diversity of the west coast.<sup>37</sup> The Nootka, Bella Coola, Tlingit, Haida, Tsimshian, Kwakiutl and Salish were among the First Nations inhabiting the Pacific Coast, while on the plateaus of the Rocky Mountains lived the Tagish, Tahltan, Tsetsaut, Carrier, Chilcotin Interior Salish, Nicola and Kootenay First Nations.<sup>38</sup>

The Indigenous Peoples of Turtle Island have endured extensive discrimination, oppression and violence since Europeans colonized North America. Among the darkest moments in Canadian history was the creation of residential schools for Indigenous children, which began in 1831 when the Mohawk Institute began to accept “boarders.”<sup>39</sup> Authorized by Sir John A. Macdonald in July 1883, the residential school system was designed to isolate Indigenous children from their families and continue the act of cultural genocide by restricting the exposure

[page 19- 20] Figure 1.14  
Terrestrial regions of Canada

[facing page] Figure 1.15  
Collaged elements from The Kicking Horse Trail book (1927) produced by Parks Canada about its history

Figure 1.16  
An Inuit family in 1917

[page 23] Figure 1.17  
Map of Indigenous Turtle Island before colonization

[page 24] Figure 1.18  
Map of Colonial North America after colonization

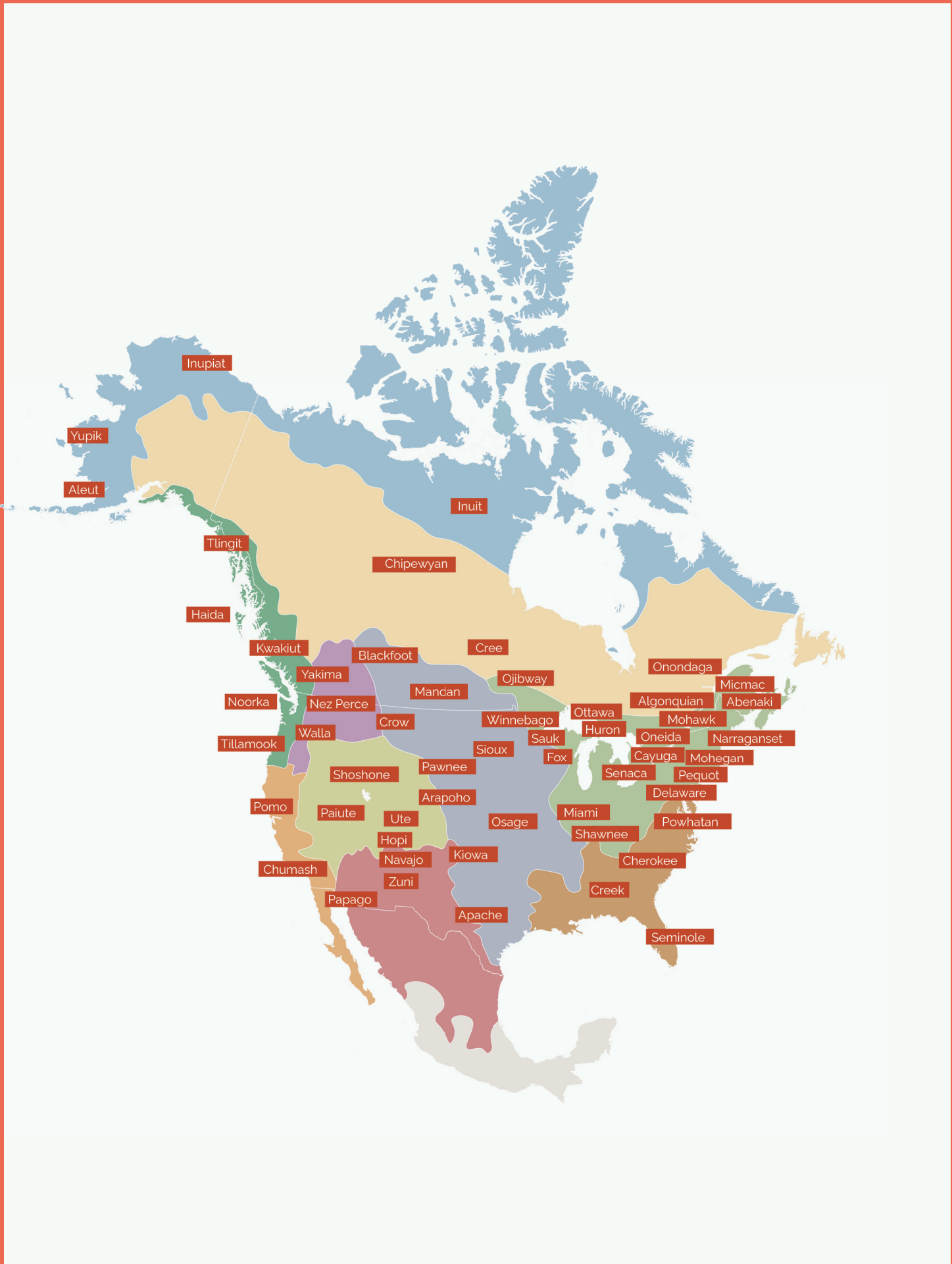
<sup>36</sup> “Timeline: Indigenous Peoples,” *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/timeline/first-nations>

<sup>37</sup> Government of Canada, “British Columbia,” <https://www.canada.ca/en/canadian-heritage/services/provincial-territorial-symbols-canada/british-columbia.html>

<sup>38</sup> Government of Canada, “British Columbia.”

<sup>39</sup> Government of Canada, “British Columbia.”





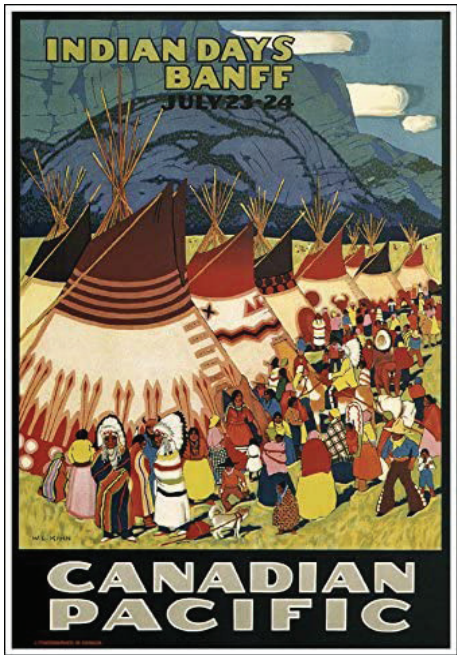


Figure 1.19  
"Banff Indian Days" poster, 1925

<sup>40</sup> "Timeline: Indigenous Peoples," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/timeline/first-nations>.

<sup>41</sup> Blackfoot Crossing Historical Park, "Our Land," <http://www.blackfootcrossing.ca/our-land.html>.

<sup>42</sup> "Copy of Treaty and Supplementary Treaty No.7, made 22nd Sept. and 4th Dec. 1877. Between Her Majesty the Queen and the Blackfeet and the Other Indian Tribes, at the Blackfoot Crossing of Bow River and Fort MacLeod.," Alex Tesar, "Treaty 7," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/treaty-7>

<sup>43</sup> Parks Canada History eLibrary, "Rocky Mountains Park Act, 1997. Statues of Canada 50-51 Victoria, Chap. 32. Assented to 23 June 1887," <http://parkscanadahistory.com/publications/rocky-mountains-park-act.htm>.

<sup>44</sup> Daniel Meister, "The Canadian Mosaic, Archival Silences, and an Indigenous Presence in Banff," <https://activehistory.ca/2020/08/the-canadian-mosaic-archival-silences-and-an-indigenous-presence-in-banff/>

<sup>45</sup> Daniel Meister, "The Canadian Mosaic, Archival Silences, and an Indigenous Presence in Banff."

<sup>46</sup> William Henderson and Catherine Bell, "Rights of Indigenous Peoples in Canada," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/aboriginal-rights>

to their heritage.<sup>40</sup> Since the Confederation there have been a number of treaties signed between the Indigenous Peoples and the government of Canada, but many have proven to be fragile and not respected by the government. The 1877 Treaty Number 7 or the Blackfoot Treaty, was an agreement made between the Crown and The Blackfoot Confederacy, which included the Siksika, Kainai, Piikani, Tsuu Tina and Stoney Nations.<sup>41</sup> Treaty Number 7 ultimately enabled Parliament to fulfil a promise to British Columbia by looting 50,000 square km of land from those Indigenous communities to complete the construction of the transcontinental railway.<sup>42</sup>

#### Banff National Park and Indigenous Peoples

Since the formation of what is now Banff National Park, regulations have been in place to regulate these protected areas. The Rocky Mountain Act of 1887 was established for this public park with the third clause specifying that; "No person shall, except as hereinafter provided, locate, settle upon, use or occupy any portion of the said public park."<sup>43</sup> This meant that no individual could settle in these places reserved for tourist and public park use. The establishment of this park resulted in the Nakoda First Nations being expelled from their land. As part of the Treaty Number 7 and the Rocky Mountains Act 1887, the Nakoda People rightly understood that these treaties would allow them to continue to hunt and fish within Banff National Park. However, it was underhandedly stipulated that certain activities were permitted only from "time to time", which ultimately meant that they did not take place.<sup>44</sup> More explicitly, Banff National Park's annual report highlighted that "it is of great importance that if possible, the Indians [sic] should be excluded from the Park."<sup>45</sup> Not only were the Indigenous groups prohibited from living off of the land for food, but the creation of CPR also destroyed natural patterns within the environment. This caused the depletion of resources in the Rocky Mountains, for which Indigenous Peoples were blamed by the government officials, and the decision to expand the park forced the Nakoda People to move further from their ancestral lands. A system was also passed to prohibit the Indigenous Peoples from leaving their reserves without permission from an "Indian Agent" and meant that they were barred from Banff National Park unless invited.<sup>46</sup>

#### Banff Days

The clause stipulating that Indigenous People could return to their now 'government-protected' land from "time to time" applied only to special occasions. Banff Indian Days began in 1894 during a summer flood that stranded a tourist from the Banff Spring Hotel.<sup>47</sup> Tom Wilson approached the Chief Hector Crawler of the Stoney Nakoda and asked if he could bring a group of Indigenous People to entertain the stranded tourist. Encouraged to parade and dance for the tourist, this instance became an official annual event in Banff National Park that lasted until 1978.<sup>48</sup> Banff Indian Days grew from a day-long event to a five-day attraction. Nakoda First Nations were the first Indigenous group that were exploited as an attraction for tourists but a few years after, other First Nations such as Tsuu t'ina, Siksika (Blackfoot), Cree and Ktunaxa (Kootenay) were included.<sup>49</sup> Indigenous children, men and women would be prompted to display their traditional clothing or 'regalia' for prize money. They were also forced to dance, perform music, compete in horse and foot races as well as rodeo competitions. The Indigenous Peoples actively participated in this event as this was their only opportunity to perform these traditional activities, which they were otherwise prohibited from doing on their reserves. In 1922, 71,540 tourists from various parts of Canada and the United States flocked to Banff National Park for the Indian Days activities.<sup>50</sup>



Figure 1.20  
Man in full-feathered headdress, Banff Indian Days



Figure 1.21  
Opening parade of Stony Indians, Banff Indian Days



Figure 1.22  
Bronco-busting, Banff Indian Days

<sup>47</sup> Whyte Museum of the Canadian Rockies, "Mountain Women | A Mountain Town," <https://www.whyte.org/a-mountain-town>.

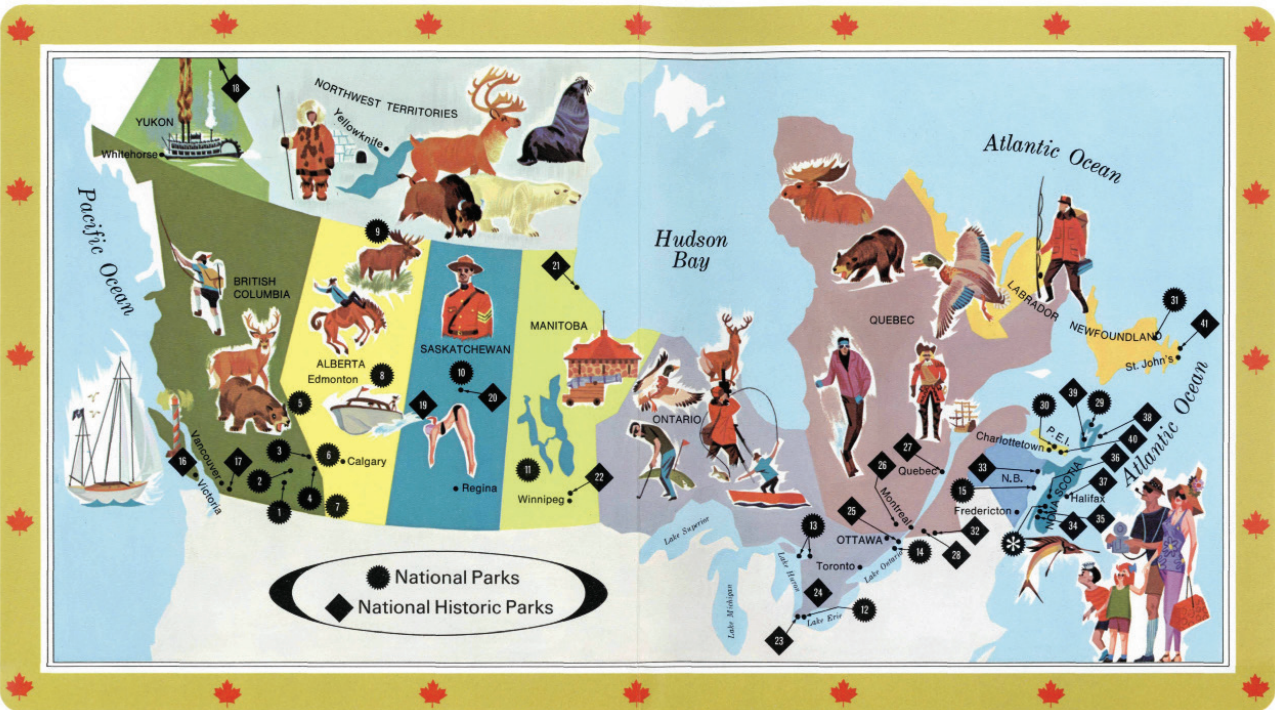
<sup>48</sup> Whyte Museum of the Canadian Rockies, "Mountain Women | A Mountain Town."

<sup>49</sup> Whyte Museum of the Canadian Rockies, "Mountain Women | A Mountain Town."

<sup>50</sup> Whyte Museum of the Canadian Rockies, "Mountain Women | A Mountain Town."



Visual Communication



While administrators, tourists and the general public tend to focus on the scenic landscapes of the national parks, the communicative power of Parks Canada's material culture, wayfinding and architecture must not be underestimated. The maps, brochures, posters and other ephemeral documents that constitute the agency's material culture play a critical role in communicating the ethos of Canada's national parks and the role the parks system plays in cultural identity.

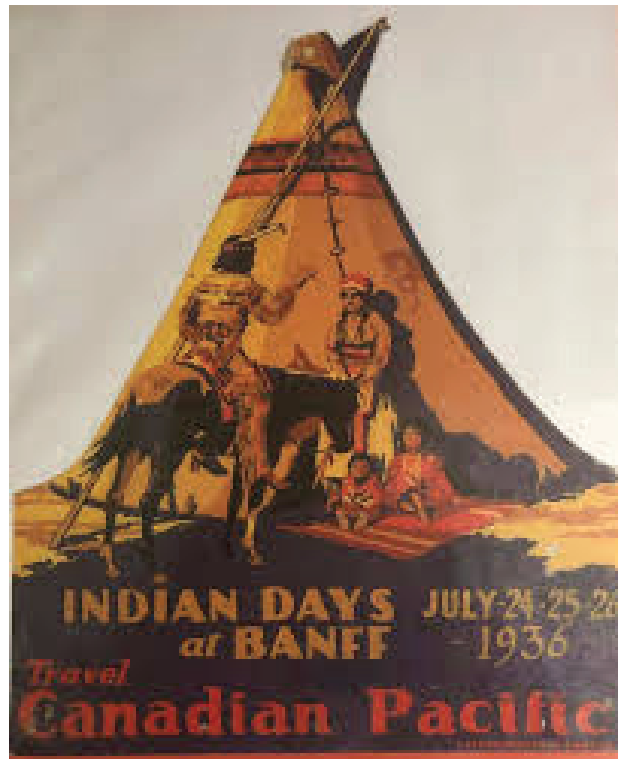
[facing page] Figure 1.23  
Tourist map produced for Parks Canada, 1959.

Figure 1.24  
Tourist map produced for Parks Canada, 1960s.

These examples of National Parks tourist maps created in the 1960s and 1970s seem to be aiming to display Canada's regional variety by offering specific visual iconography for each province, ostensibly to entice the public to visit the different parks. Beyond the playful graphic language that is often used in tourist maps, the representational choices do not truly reflect Canadian regionality. For example, a moose is shown in the northernmost part of Québec but this is misleading as moose do not roam around in Nunavik.<sup>51</sup> Another misrepresentation in this map, which goes beyond misleading to being offensive, is the portrayal of Indigenous People. The map falsely suggests

<sup>51</sup> Nature Conservancy Canada, "Moose," <https://www.natureconservancy.ca/en/what-we-do/re-source-centre/featured-species/mammals/moose.html>





[left] Figure 1.25  
"Banff Indian Days" poster, 1936

[right] Figure 1.26  
"Banff Indian Days" poster  
[date unknown]

that Indigenous People only live in the most northern regions of Canada in igloos or in teepees in the Prairies, which sends the implicit message that either they do not exist in every province, region and territory of Canada (which they do), or that their existence is invisible. Moreover, the fact that all of the tourists depicted in the maps as enjoying the Canadian landscape for leisure purposes are white, does not reflect well on Parks Canada. Design choices to represent Canada's national parks should embody each park's uniqueness, accurately illustrating the natural and cultural identity of each site. False and/or misleading promotional materials can result in a seriously damaging representation of a place or an entity and it also sets up false expectations of visitors, of a place, and in this case, of Canada's national parks as a whole.

Wayfinding is also an important element of Canada's National Parks. This design element provides navigational clues for visitors and tourists visiting the parks. In both built and natural settings, wayfinding systems are created to visually direct and educate people about their current location. This system guides visitors in a carefully curated sequence to experience a



Figure 1.27a  
Parks Canada sign with directions to  
Stoney Squaw

Figure 1.27b  
Parks Canada sign with directions to  
Stoney Squaw

place or a building. Within Canada's national parks, wayfinding signs are seen on walking and skiing trails to inform the public about the name of that specific location and sometimes facts or significant historical information about that specific place. To produce effective wayfinding, it is important to understand the local orientation of natural attractions within the place or surroundings. The wayfinding for Canada's national parks may seem like a fairly innocuous element in the creation of the whole establishment's identity, but unfortunately, even the wayfinding within our national parks has proven to be deeply problematic. One example may be seen in the photo taken in Banff National Park in August 2020, featuring a derogatory term for Indigenous women. For several years, a group of First Nations, hikers and lawyers have requested that this wayfinding sign be removed but the best Parks Canada has done to address this issue is to place a piece of tape over the offensive word.<sup>52</sup> Good graphic design in such a context involves both a solid understanding of the importance of place names and a commitment to inclusive, unbiased communication.

Canada's National Parks have been in existence for over 140 years and have been at the forefront of tourism in Canada, which has given them the status of common symbol of national identity. The architectural facilities within national parks have also played a critical role in establishing each parks' identity and in curating the way we interact with our protected landscape. One of the earliest structures in Banff National Park was Superintendent George Stewart's home, built between 1886 and 1888.<sup>53</sup> Stewart oversaw the design of the townsite that was successful in attracting wealthy and well-travelled tourists of the Victorian era.<sup>54</sup> Other structures erected at Banff

<sup>52</sup> Chad Tweten, "Derogatory term for Indigenous women removed from mountain and trail in Banff National Park," CTV News, Calgary, September 18, 2020, <https://calgary.ctvnews.ca/derogatory-term-for-indigenous-women-removed-from-mountain-and-trail-in-banff-national-park-1.5110884>; Jenna Dulewich, "Parks Canada quietly removes racist name from Banff trail," AirdrieTODAY, September 18, 2020, <https://www.airdrietoday.com/beyond-local/parks-canada-quietly-removes-racist-name-from-banff-trail-2725313>

<sup>53</sup> The Banff Heritage Corporation, "Walking Through Banff's History," 2012, <https://banff.ca/DocumentCenter/View/784/Walking-Through-Banffs-History?bidid=>

<sup>54</sup> W.F. Lothian, *A History of Canada's National Parks*, Vol. 1 (Ottawa: Parks Canada, 1976), 12, <http://www.parksCanada-history.com/publications/history/lothian/eng/vol1.pdf>, 12.

[facing page] Figure 1.28  
Collage of architecture and townsites  
within Canada's National Parks

National Park include the Spring Banff Hotel and Chateau Lake Louise, which are among the largest structures the Rocky Mountains. As tourists continued to flock Canada's National Parks, the townsites and large infrastructures continued to grow. There were six townsites established within Canada's National Parks, which clearly contradicts the government's mandate to forbid any settlement. Clearly, Indigenous People were forced off of their ancestral lands but wealthy tourists were most welcome to come to the national parks and stay.

Taking a critical position about the role of architecture within national parks is a significant part of this thesis project. Architectural interventions in national parks should reflect the particular identity of these protected landscapes and should be pursued with a greater commitment to sustainability than what has been demonstrated to date. Pioneered by architect Jason McLennan, "The Living Building Challenge" is an international sustainable architecture certification program that goes much further than LEED certification.<sup>55</sup> Its standards go beyond aspirations to do as little harm as possible, and instead insists on buildings actually improving the environments they sit in. A major catalyst for sustainable design, as of May 2017, there are 380 buildings certified under this program. The challenge of designing a Living Building certified intervention is a central aspect of this thesis exploration. In my effort to design a new type of architecture for Canada's national parks, I have been inspired by the Living Building certified Te Kura Whare, a building designed for the Ngāi Tūhoe, a Māori iwi, or tribe to better understand how to create an architecture that touches the land lightly, is built with materials that minimize its carbon footprint, and that is sensitive to the Indigenous community that it serves.<sup>56</sup>

<sup>55</sup> International Living Future Institute, "Living Building Challenge 4.0," <https://living-future.org/lbc/>

<sup>56</sup> International Living Future Institute, "Healing From Within: Te Kura Whare," <https://living-future.org/biophilic/case-studies/te-kura-whare/>

Tourist Infrastructure

Townsites

1888



1890



1939



Lake Louise 1884



Field 1886



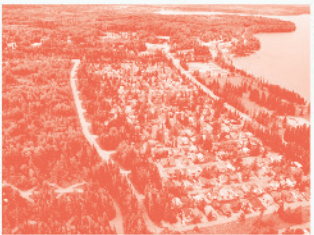
Waterton 1904



Jasper 1907



Weskesiu 1928



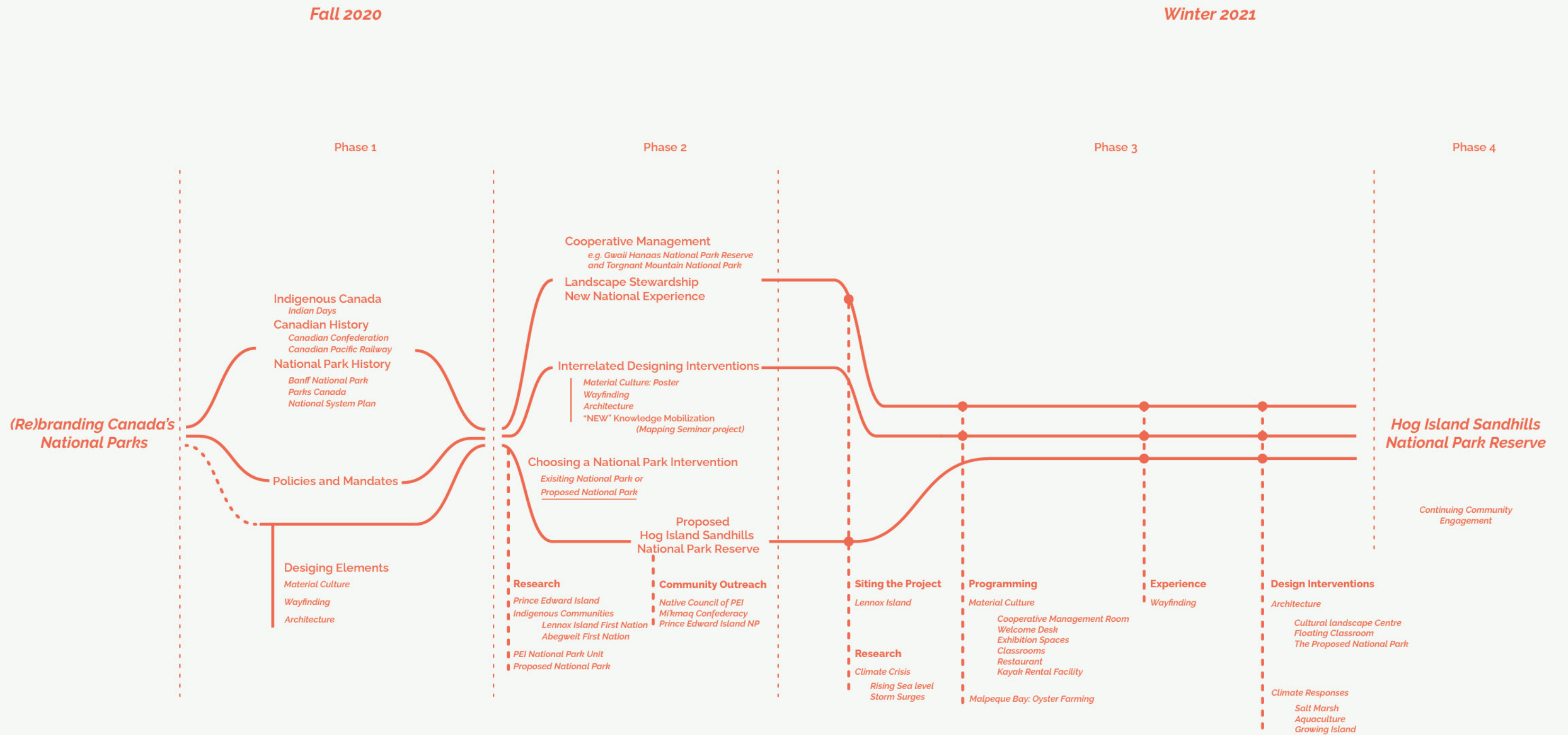
Riding 1933



## II

### Methodology







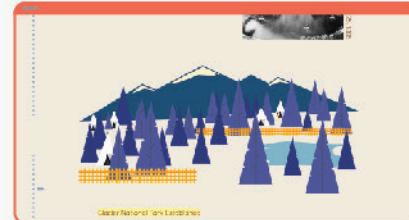
39 Terrestrial Regions



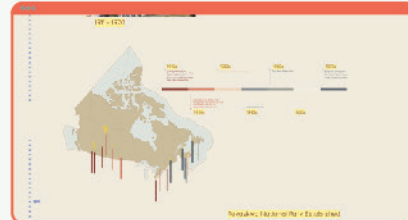
Indigenous Map of Canada



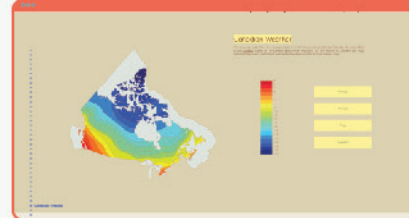
National Park History



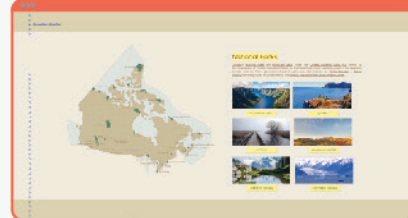
National Park Timeline



Canadian Weather



Current National Park Activities



Canadian Confederation



Maps of North America



## Chapter 2

### Methodology

This thesis project began with an interest in how the architecture of Canada's national parks and the parks' wayfinding and promotional materials could be redesigned to better reflect Canadian identity and improve tourists' experiences of these protected landscapes. My research into the history of Canada's national parks exposed the extent to which the parks system was deeply entwined with the history of the country's formation and its troubling colonial legacy. This more nuanced understanding led me to develop more critical objectives anchored around better protecting the country's natural and cultural heritage, addressing climate change through design and raising awareness about its urgency, and prioritizing a sincere commitment to Truth and Reconciliation. In this way, my broad ambition for my thesis project was to propose an example of a rebranded national park in Canada in order to cultivate positive "massive change".<sup>1</sup> To achieve this, my methodology was anchored around three interrelated approaches, namely: the pursuit of **multidisciplinary research; learning-through-making exercises; and community engagement with First Nations.**

My research entailed drawing on **literature from multiple disciplines.** I began with primary and secondary source research on the history of Canada's national parks in order to understand the ambitions, legislation, management and chronology of actions of the federal government, other historical actors and Parks Canada. This research not only clarified the deep interconnection between nation-building ambitions and the establishment of the first national parks, but very importantly, it exposed the less well-known dark history of Indigenous peoples' removal and ongoing exclusion from their ancestral lands. Related to this, I gained a better understanding of the extent to which the tourism industry and all of the built infrastructure that supports it, has resulted in Parks Canada inadequately respecting their mandate to protect and preserve the landscapes designated as national parks. These insights had a tremendous impact on shaping my critical agenda for my thesis project.

Prompted by my findings about the history of Parks Canada, I conducted research into co-management framework(s) for national parks in order to hone my critical position and proposed

[pages 35-36] Figure 2.1  
(Re)branding Canada's National Parks  
thesis project workflow timeline

[page 37] Figure 2.2 Knowledge Mo-  
bilization website produced for Car-  
tographic Epistemologies graduate  
seminar taught by Dr. Aliko Economides

<sup>1</sup> Bruce Mau, *Mau MC24: Bruce Mau's 24 Principles for De-  
signing Massive Change in Your Life and Work*, ed. Jon Ward  
(London; New York: Phaidon Press Limited, 2020).

design intervention. My research in this field deepened my understanding of the cultural and environmental benefits of cooperative management entailing Indigenous-led conservation practices, which go further in terms of landscape stewardship than other park management models. Most influential were the collective volume edited by Stan Stevens on the relationship between Indigenous peoples and natural parks in various contexts worldwide, as well as the Canadian precedents for co-management models that have been established at the Gwaii Haanas National Park Reserve in British Columbia and at the Torngat Mountains National Park in Labrador.<sup>2</sup>

Related both to my research on cooperative management for national parks and my growing awareness of the need for a stronger commitment to landscape stewardship, I conducted research on the impacts of climate change and measures that can be taken to support landscape conservation. My research on rising sea levels and the strategies that may be employed to increase coastal resilience, such as the work of landscape architect Kate Orff and the Self-Assembly Lab, were particularly influential.<sup>3</sup> This research into designing for coastal resilience also shaped my position that aquatic regions (and not only terrestrial ones) should be part of the criteria for establishing national parks and determining areas to protect.

My multidisciplinary research into measures that can mitigate the devastating effects of climate change also encompassed the area of architectural sustainability. The principles and environmental standards advanced by the “Living Building Challenge,” which was pioneered by architect Jason McLennan, and case studies of particular architectural projects that meet those standards have informed my design approach to architectural sustainability.<sup>4</sup> All of this research into designing for climate change alerted me to the opportunity to develop the design interventions and curate the visitors’ experience of the national park in ways that not only address the climate crisis through sustainable choices, but that sensitize and educate the public about its urgency and implications. In this way, the ambition of this thesis project is to offer a model of a national park that would have visitors coming away with an intellectual and visceral

understanding of the fragility of our natural environment and the collective responsibility we have to protect it.

Another important facet of my methodology has been to pursue **learning-through-making** exercises that enable me to translate my research and critical position into graphic work that communicates my findings and supports the development of my design interventions. In designing new posters, brochures and maps for Parks Canada, my aim has been to critically rebrand the visual language of the parks’ material culture. In parallel, this graphic design work has helped me to determine the programmatic components for the architectural interventions I am proposing for the chosen site. Furthermore, relating to my research on the entwined histories of the formation of Canada as a country, the history of the development of national parks and the treatment of Indigenous people, I also produced an extensive series of maps that are brought together in the form of a website that I designed in the context of a graduate seminar I took in the Fall semester of my thesis year.<sup>5</sup> This website, titled “Rebranding Canada’s National Parks” is a work of research-creation for knowledge mobilization. The website seeks to complement existing information online offered by Parks Canada while also providing a more inclusive counter-narrative about the origins and biases that have characterized the development of the parks system since the beginning.

Finally, another key pillar of my methodology has been my **community engagement** to create a culturally appropriate, inclusive design for and with the Indigenous people the proposed project is to serve. Due to pandemic-related travel restrictions in 2020-21, it was not possible for me to travel to Prince Edward Island to visit the site and speak in person with the members of the Mi’kmaq Confederacy of Prince Edward Island (MCPEI), the collective voice of the two Indigenous groups who inhabit the island province. However, I was fortunate to have received the guidance of the Native Council of PEI, who provided me with information about the Indigenous peoples of Prince Edward Island and the names and organizations to reach out to. My phone and Zoom conversations and email correspondence with various people have greatly enriched my understanding of the cultural context. Madlene Sark, On-

<sup>2</sup> Stan Stevens, ed., *Indigenous Peoples, National Parks, and Protected Areas: A New Paradigm Linking Conservation, Culture, and Rights* (Tucson: University of Arizona Press, 2014); Eugene Thomlinson and Geoffrey Crouch, “Aboriginal Peoples, Parks Canada, and Protected Spaces: A Case Study in Co-Management at Gwaii Haanas National Park Reserve,” *Annals of Leisure Research* 15, vol.1 (April 2012): 69-86, <https://doi.org/10.1080/11745398.2012.670965>; Parks Canada, “*Tongait Kakkasungita SilakKijapvinga* | Torngat Mountains National Park of Canada: Management Plan,” June 2010, <https://www.pc.gc.ca/en/pn-np/nl/torngats/info/index>

<sup>3</sup> Orff, Kate. *Toward an Urban Ecology*. New York: The Monacelli Press, 2016; Self-Assembly Lab, “Growing Islands,” <https://selfassemblylab.mit.edu/growingislands>.

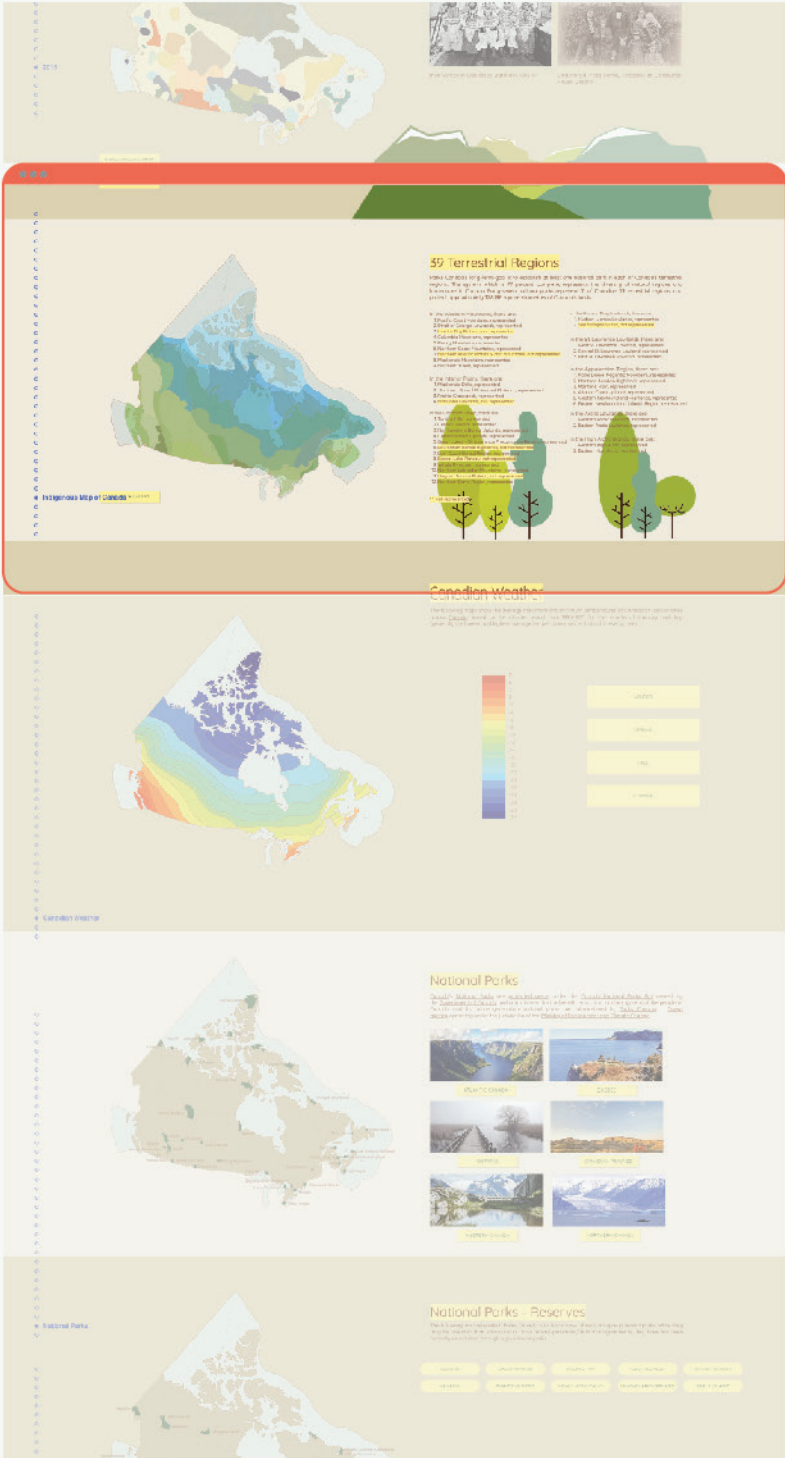
<sup>4</sup> International Living Future Institute, “Living Building Challenge 4.0,” <https://living-future.org/lbc/>.

<sup>5</sup> Dr. Alike Economides, “Cartographic Epistemologies,” Faculty Research Seminar, McEwen School of Architecture, Fall 2020.

[facing page] Figure 2.23  
Knowledge Mobilization website pro-  
duced for Carto-graphic Epistemologies  
graduate seminar taught by Dr. Alik  
Economides

Reserve Councillor and member of the Lennox Island First Nation Band Council was the first member of the community that I spoke with about Lennox Island and about reaching to members of the community. Jamie Thomas, Cultural Manager of Lennox Island, and member of the community, put me in touch local photographers Jonathan Wright and Laura Brothers, who took numerous photos on my behalf in order to help me better understand the site and the local community. Jesse Francis, the Strategic Manager for both Parks Canada and MCPEI, provided information about the proposed National Park Reserve, the future timeline, the current feasibility study and other ideas about the site's potential space for a visitor or welcome space. I am very grateful for the openness and enthusiasm I have received from members of the Lennox Island First Nation and the Mi'kmaq Confederacy of PEI throughout our correspondence. It is my hope that this thesis project supports the community's goals to establish a National Park Reserve on PEI, and contributes to safeguarding their environment and culture.

Canada's National Parks - Knowledge Mobilization  
[www.RebrandingCanadasNationalParks.com](http://www.RebrandingCanadasNationalParks.com)





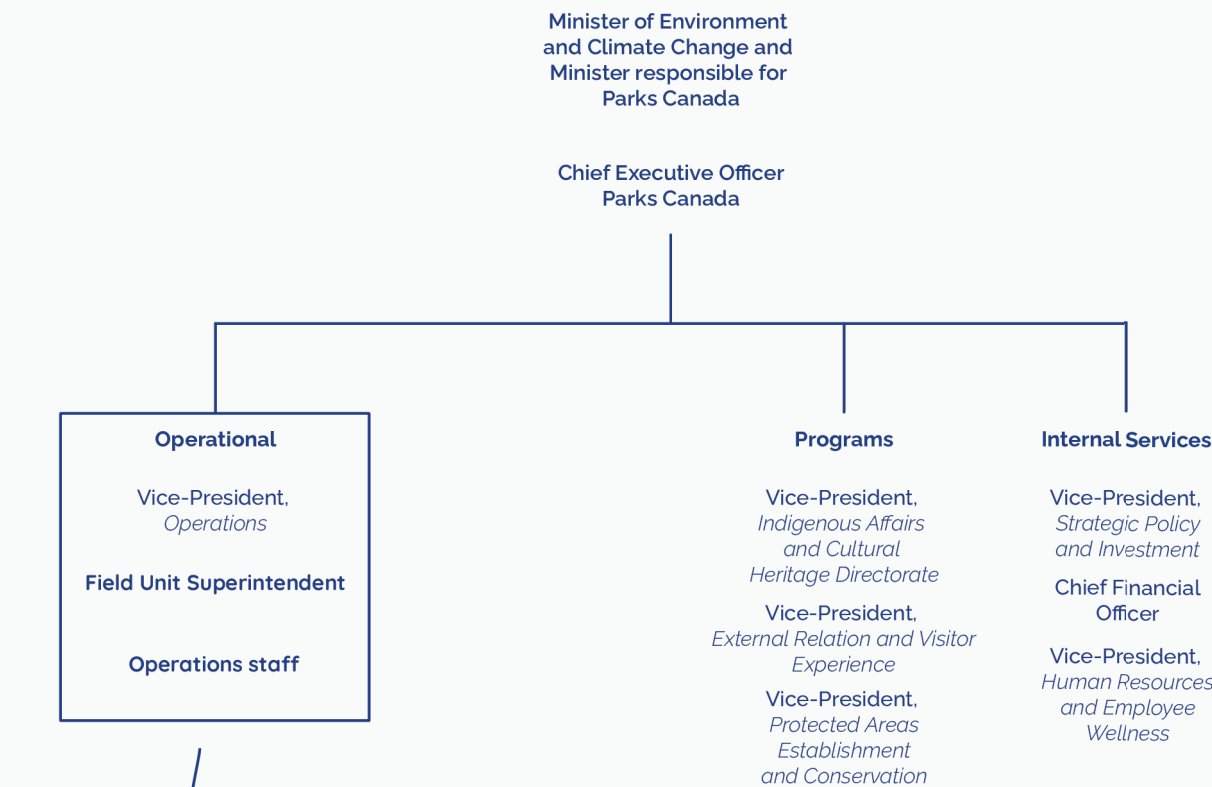


# Canada's National Parks and National Parks Reserves

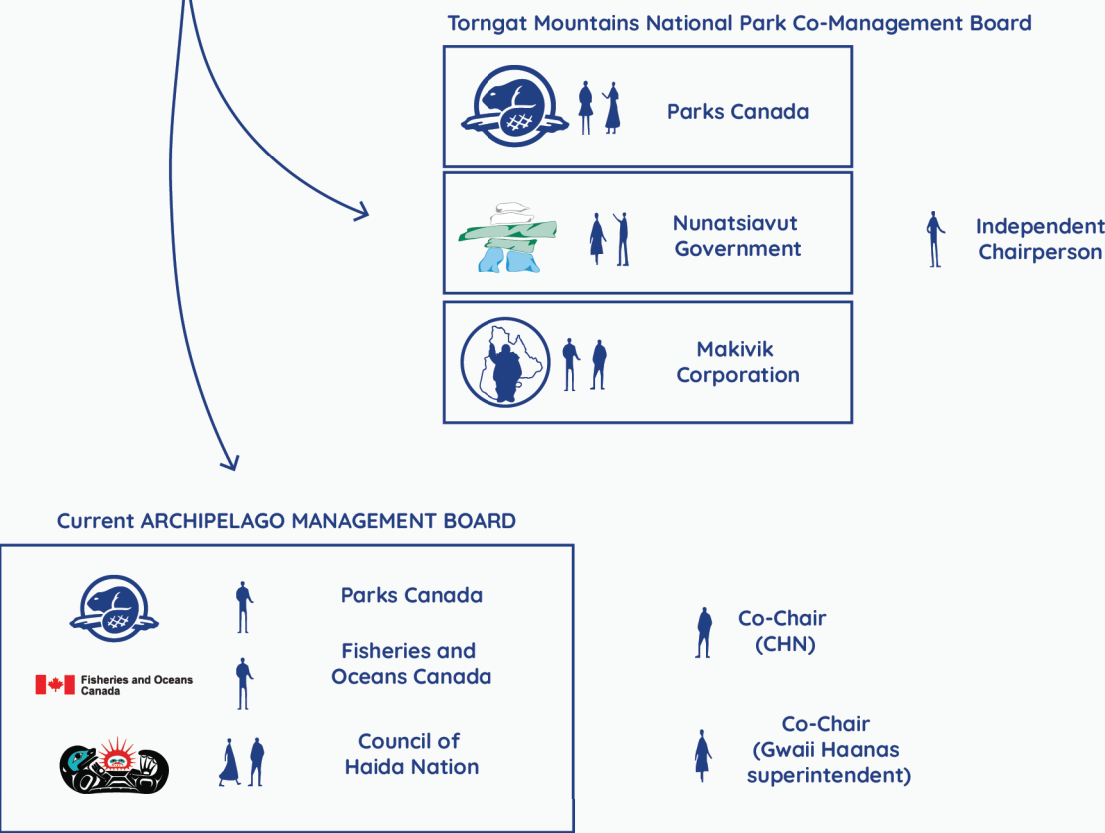


48 national parks and  
national park reserves  
as of 2020

Current Operational Management



Cooperative Management



Chapter 3  
Operational Cooperative Management

National Parks in Canada have been managed by the federal government for over 140 years, and their legacy includes the horrible treatment of Indigenous people who were removed from their land and prohibited from hunting and fishing there. In recognition of these colonial abuses, cooperative management as an administrative framework has been gaining recognition due to its focus on shared authority and decision-making by different groups.

In the context of Parks Canada, co-management has already been used since 1993 by the Haida Gwaii Council and the federal government to co-manage Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve and Haida Heritage Site. The co-management takes place through the Archipelago Management Board (AMB), which is made up of an equal number of representatives from the Council of the Haida Nation and the Government of Canada.<sup>1</sup> The AMB is thus responsible for all aspects of planning, operation, and management of Gwaii Haanas. The agreement is now seen as a model of cooperative management for how those with differing viewpoints on sovereignty, title and land ownership can work together.

Another example of national park co-management in Canada is the Torngat Mountains National Park Co-Management Board established in 2005. Torngat National Park is located in northern part of Labrador and Nunavik region. According to the Cooperative Management Board, "The management plan reflects the wishes of Inuit of Nunatsiavut and Nunavik to reconnect them with the Torngat Mountains, to ensure the knowledge of Elders is passed down to future generations of Inuit, to protect this Inuit homeland for all time, and to share the Inuit story of Tongait KakKasuangita SilakKijapvinga

[pages 45-46] Figure 3.1  
Map of Canada's 48 National Parks and National Park Reserves as of 2020

[page 47] Figure 3.2  
Current operational of Parks Canada and Cooperative Management System

<sup>1</sup> Parks Canada, "Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve, and Haida Heritage Site," <https://www.pc.gc.ca/en/pn-np/bc/gwaiihaanas/info/coop>; Parks Canada, "Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve, and Haida Heritage Site – Guiding Principles," <https://www.pc.gc.ca/en/pn-np/bc/gwaiihaanas/info/principles-principles>; Eugene Thomlinson, and Geoffrey Crouch, "Aboriginal Peoples, Parks Canada, and Protected Spaces: A Case Study in Co-Management at Gwaii Haanas National Park Reserve," *Annals of Leisure Research* 15, vol.1 (April 2012): 69-86, <https://doi.org/10.1080/11745398.2012.670965>.





Landscape Stewardship



Torngant Mountain National Park

To ensure a commitment to landscape stewardship, only a portion of the land within the boundaries of the National Park is used for physical infrastructure.

Inuktitut word "Tongait"  
9,700 km<sup>2</sup> of from Saglék Fjord to the northern tip of Labrador, and westward from the Atlantic seacoast to the Québec border

< 0.05 % for any physical infrastructure within the National Park boundary

or



Proposed Hog Island Sandhills National Park Reserve in Prince Edward Island

The yellow dot (●) on Lennox Island is approximately 5 km outside of the proposed National Park Reserve



Any large architectural intervention would be located outside the National Park Reserve itself

Landscape Stewardship

Canada is the second largest country in the world in terms of landmass. It consists of 39 terrestrial regions and holds 20% of the world's fresh water in its lakes, rivers, streams, and wetlands. In December 2019, the Office of the Prime Minister of Canada released a letter of mandate to the new Minister of Environment and Climate change.

Minister of Environment and Climate Change Mandate Letter December 13, 2019

"Work with the Minister of Fisheries, Oceans and the Canadian Coast Guard to introduce a new ambitious plan to conserve 25 per cent of Canada's land and 25 percent of Canada's oceans by 2025, working toward 30 per cent by 2030. This plan should be grounded in science, Indigenous knowledge, and local perspectives. Advocate at international gatherings that countries around the world set a goal of 30 percent conservation by 2030 as well." <sup>3</sup>

This letter aligns with the European Union, and Britain's pledge to protect 30% of its land and sea by 2030.<sup>4</sup> By the end of 2019, Canada had managed to conserve 12.1% of its terrestrial areas (land and freshwater) and 13.8% of its marine territories. Currently, Canada has 48 National Parks which are administered by Parks Canada. In keeping with the National Parks System Plan, as of 2020, 32 out of 39 terrestrial regions were protected, which covers more than 340 000 square km or 3% of Canada's land-mass. Organizations such as the Canadian Parks and Wilderness Society (CPAWS) continues to fight for the protection of public land and water, working closely with the federal government to reach the 30% goal for the protection of Canada's land and freshwater by 2030.<sup>5</sup>

[facing page] Figure 3.5  
Proposed landscape stewardship for existing National Parks

<sup>3</sup> Justin Trudeau, "Minister of Environment and Climate Change Mandate Letter," December 13, 2019, <https://pm.gc.ca/en/mandate-letters/2019/12/13/minister-environment-and-climate-change-mandate-letter>

<sup>4</sup> Kate Abnet and Simon Jessop, "Britain, Canada, EU throw weight behind 2030 biodiversity protection goal," *Reuters*, September 28, 2020, <https://www.reuters.com/article/us-climate-change-governments-nature/britain-canada-eu-throw-weight-behind-2030-biodiversity-protection-goal-idUKKBN26J25U>

<sup>5</sup> Canadian Parks and Wilderness Society, "Protecting Canada's National Parks: A Call for Renewed Commitment to Nature Conservation," 2016 Parks Report, <https://cpaws.org/wp-content/uploads/2019/07/CPAWS-Parks-Report-2016.pdf>; Canadian Parks and Wilderness Society, "Healthy Nature, Healthy People: A Call to Put Nature's Protection at the Heart of Canada's COVID-19 Recovery Strategies," 2020 Parks Report, 3, <https://cpaws.org/wp-content/uploads/2018/02/CPAWS-Parks-Report-2020-ENG.pdf>





Parks Canada - Learning from Experience

## A New National Park Experience

Canada's National Parks were created to showcase the natural environment for Canadian and foreign tourists, offering enticing activities ranging from hiking, skiing, golfing and overnight stays in cabins. Due to the parks' popularity, numerous infrastructures have been built to accommodate tourists. According to Parks Canada, these infrastructures and recreational developments were "carefully" considered with stakeholders and with Parks Canada's guiding principles in mind, which stipulate that "given the limited range of unspoiled wilderness left in Canada, it is inappropriate to establish additional communities or intensive infrastructure for recreation in existing and future national parks."<sup>6</sup> Yet it is apparent that these large recreational activities were constructed in the national parks for local and federal economic benefit.<sup>7</sup> It is important to understand that these landscapes can be enjoyed by the public but also be protected and preserved for future generations of Canadians.

As of 2020, activities in National Parks and National Park Reserves includes nature and wildlife tours and Indigenous experience. Bird watching is example of an activity that can be done within our national parks. This activity cultivates an appreciation for the local wildlife and is far preferable to creating large ski resorts and communities that disrupt the regional ecosystem. It is imperative to reassess the Parks Canada's commitment to landscape preservation to both continue to engage in tourism while also protecting wildlife within National Parks.

In contrast to the "Indian Days" that exploited Indigenous Peoples for the economic benefit of those profiting from the tourism industry, it is important for Parks Canada to engage in a continual conversation with Indigenous communities to understand how to accurately and sensitively represent their teachings to visitors of the national parks. Decisions about "Indigenous Learning Experiences" should come solely from Indigenous groups who will determine how, what, when and where they want to present their culture to the public. Activities within National Parks and Reserves should be created for the public to appreciate and to gain understanding about Canada's natural and cultural landscape.

[facing page] Figure 3.6  
Proposed National Park activities

<sup>7</sup> Parks Canada, "Parks Canada Guiding Principles and Operational Policies – Preface," <https://www.pc.gc.ca/en/docs/pc/poli/princip/preface>; Parks Canada, "Parks Canada Guiding Principles and Operational Policies – Objectives," <https://www.pc.gc.ca/en/docs/pc/poli/princip/sec2/part2d/part2d2>

<sup>8</sup> William Wistowsky, "Canada's National Parks: What are they worth to Canadians and why?" (PhD diss., University of Guelph, 2007), 7-8.







## Chapter 4

### Proposed National Park Reserve

Currently, Canada has 48 National Parks and National Parks Reserves as well as three proposed ones, namely, the National Park Reserve in the South Okanagan-Similkameen, Qausuittuq National Park and Hog Island Sandhills National Park Reserve.<sup>1</sup> As part of the National Parks System Plan developed in the 1970s, Parks Canada has been working to establish national parks in every terrestrial region in Canada. As of 2020, 31 parks have been established within the country's 39 terrestrial regions.<sup>2</sup> Reflecting on how to best direct my thesis project to develop a more robust 'new' park system, I was faced with the option of reworking the architecture, wayfinding and material culture of an existing national park, or directing my design energy to a park-in-formation and offering a proposal for how it could be shaped from the outset. The latter option is what I chose. It is my hope that the ideas I am contributing are helpful to the local Mi'kmaq communities and that my advocacy for a co-management framework combined with robust environmental stewardship in all national parks will make a productive contribution to a broader conversation within and about Parks Canada.

At the time of writing, Canada had set a target goal of 30% of its landmass to be protected by 2030.<sup>3</sup> Yet by the end of 2019, only 12.1% of the country's landmass and fresh water have been protected. This means that in the next decade, 17.9% of Canada's landmass will need protection to meet the target goal, which is itself not ambitious enough.<sup>4</sup> Thus by intervening in a proposed National Park and developing all aspects of the guiding framework from the outset, it is possible to pursue a more sincere and far-reaching approach to landscape stewardship, which in turn could set a new standard in which terrestrial and aquatic regions are deemed important to protect. The proposed Hog Island Sandhills National Park Reserve in Prince Edward Island is unlike other natural parks that feature dramatic topography and abundant flora. Rather, it consists of a 50-kilometre strip of fragile sandbars that protect the northeastern coast of P.E.I. Establishing this site as a protected area would signal that Parks Canada is prioritizing landscape stewardship and coastal resilience over tourism-attracting beauty.

[pages 57-58] Figure 4.1  
Map of existing national, provincial parks  
and the proposed national park reserve  
on Prince Edward Island

[facing page] Figure 4.2  
Map of Lennox Island with community  
facilities

<sup>1</sup> Parks Canada, "National Parks: Map of completing the parks system," <https://www.pc.gc.ca/en/pn-np/cnnp-cnnp/carte-map>.

<sup>2</sup> Canadian Heritage Parks Canada, "National Park System Plan: Introduction to Natural Park System Plan: Status of Planning for Natural Regions," 1997, <https://www.pc.gc.ca/en/pn-np/plan>; Environment Canada Parks Service, "National Parks System Plan," 1990, <http://parkscanadahistory.com/publications/system-plan-eng-1.pdf>; Parks Canada, "National Parks: Map of completing the parks system."

<sup>3</sup> Canadian Parks and Wilderness Society, "Protecting Canada's National Parks: A Call for Renewed Commitment to Nature Conservation," 2016 Parks Report, <https://cpaws.org/wp-content/uploads/2019/07/CPAWS-Parks-Report-2016.pdf>

<sup>4</sup> Environment and Climate Change Canada, "Canada's Conserved Areas: Canadian Environmental and Sustainability Indicators," 2020, <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/conserved-areas.html>.



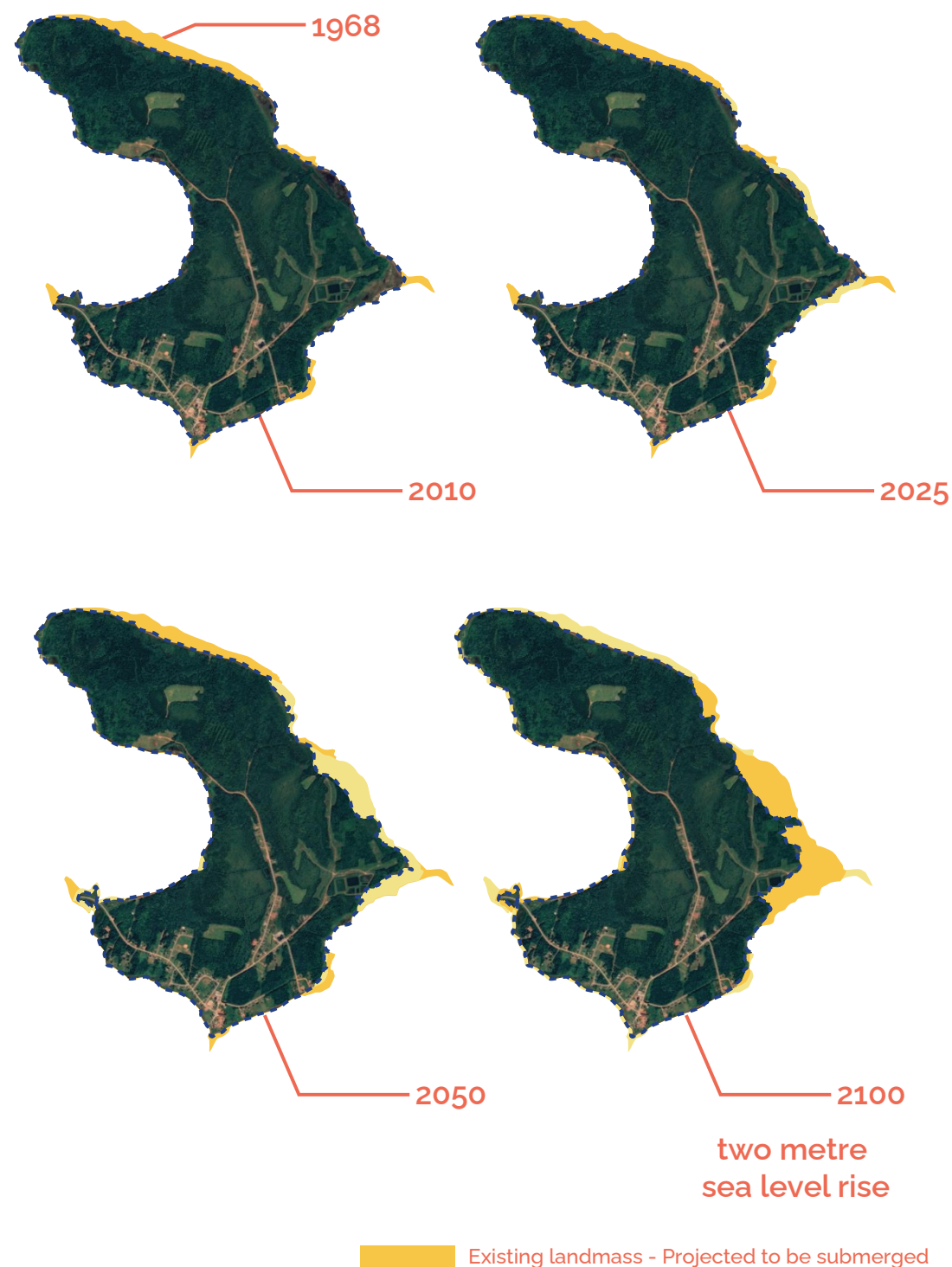


Figure 4.3  
Lennox Island sea level rise projections  
from 2010 to 2100

The proposal for this National Park Reserve is led by two Indigenous communities in the province: Lennox Island First Nation and Abegweit First Nation whose collective voice is the Mi'kmaq Confederacy of PEI (MCPEI). The Mi'kmaq have inhabited these islands for more than 10,000 years. Presently, this cluster of islands is under a specific land claim filed by the Mi'kmaq Confederacy in 1996 and again in 2012, due to the "federal government [having] breached its judiciary duty after failing to turn over the lands to the reserves after purchasing them in 1942".<sup>5</sup> In the words of Lennox Island First Nation Chief Darlene Bernard, "the Hog Island Sandhills are incredibly special to the Mi'kmaq people. We propose to protect and preserve this special place, including its nature and its cultural sites."<sup>6</sup> In 2016, the federal government accepted the basis of the land claim and created a partnership between the Mi'kmaq Confederacy, and the provincial and federal governments to make these island sandhills protected landscapes. This partnership coincides with meeting Prince Edward Island's target goal of protecting 7% of its land.<sup>7</sup> As of August 2020, P.E.I. was still only at 4.4% of its target goal, rushing to protect the additional 2.6%.<sup>8</sup> If realized, Hog Islands Sandhills National Park Reserve will not only be the second national park on this island province, joining Prince Edward National Park, but as a protected area, it will allow the province to meet its goal to protect 7% of PEI's landmass.

One of our greatest environmental threats is rising sea levels. Coastal communities within Canada, especially on the Atlantic side, are at great risk and Prince Edward Island is the smallest province and is surrounded by seawater. According to the Atlantic Climate Adaptation Solutions Association of Canada, since 1900, 30 cm of sea level rise has been observed in the capital city of Charlottetown since 1900.<sup>9</sup> A storm surge record was also experienced on January 21, 2000, when 4.23 metres above the chart datum of storm surges in Charlottetown destroyed \$20 million worth of property.<sup>10</sup> Lennox Island, near the proposed Hog Island Sandhills National Park Reserve, is also experiencing the dangerous effects of sea level rise. According to Gilbert Sark, "When our artifacts start popping up on the shore because of erosion, I asked myself: What's one of the major things erosion comes from? Higher water table, high storms. And where does that come from? Global warming."<sup>11</sup> Studies have projected that the Island community of Lennox First Nation, which has already lost 200 acres of land,<sup>12</sup> will be underwater in a hundred years. CLIVE, i.e., the Coastal Impacts Visualization Environment tool developed by the University of Prince Edward Island, predicted that a large portion of Lennox island will be under water by 2100.<sup>13</sup>

<sup>5</sup> Mi'kmaq Confederacy of Prince Edward Island, "Community Summary Information Note: 1942 Addition to Reserve, Hog Island Specific Claim, July 10, 2019," <http://mcpei.ca/wp-content/uploads/2019/07/Hog-Island-Claim-Summary-July-10-2019.pdf>; "Meetings this week to address First Nations' Hog Island claims," Saltwire, August 5, 2019, <https://www.saltwire.com/prince-edward-island/news/meetings-this-week-to-address-first-nations-hog-island-claims-339496/>

<sup>6</sup> Jennifer Bain, "The Mi'kmaq Confederacy's Dream for A New National Park In Prince Edward Island," *National Parks Traveler*, March 1, 2021, <https://www.nationalparkstraveler.org/2021/03/mikmaq-confederacys-dream-new-national-park-prince-edward-island>.

<sup>7</sup> Prince Edward Island, Canada, "Canada supports PEI to expand protected areas," August 14, 2019, <https://www.princeedwardisland.ca/en/news/canada-supports-pe-i-expand-protected-areas>.

<sup>8</sup> Jessica Doria-Brown, "P.E.I. still far from reaching goal of protecting 7% of land," *CBC News*, January 14, 2021, <https://www.cbc.ca/news/canada/prince-edward-island/pei-protected-land-development-jamieson-1.5873279>.

<sup>9</sup> Atlantic Climate Adaptation Solutions Association, "Sea Level Rise and Storm Surge Hazard Mapping in Prince Edward Island," Accessed March 12, 2021, <https://atlanticadaptation.ca/en/islandora/object/acasa%3A635>; Government of Canada, "Adapting to Sea Level Rise in Charlottetown, P.E.I.: Climate change adaptation measures can be adjusted as the science advances," 2014, [http://epe.lac-bac.gc.ca/100/201/301/weekly\\_checklist/2014/internet/w14-22-U-E.html/collections/collection\\_2014/rncan-nrcan/M174-10-2013-eng.pdf](http://epe.lac-bac.gc.ca/100/201/301/weekly_checklist/2014/internet/w14-22-U-E.html/collections/collection_2014/rncan-nrcan/M174-10-2013-eng.pdf).

<sup>10</sup> Government of Canada, "Adapting to Sea Level Rise in Charlottetown, P.E.I."

<sup>11</sup> Alanna Mitchell, "As Sea Level Rises, These People Show Us How to Cope," *National Geographic*, <https://www.nationalgeographic.com/science/article/151214-lennox-is-land-canada-climate-change-erosion>.

<sup>12</sup> Mitchell, "As Sea Level Rises, These People Show Us How to Cope."

<sup>13</sup> University of Prince Edward Island Climate Lab, "CLIVE: Coastal Impacts Visualization Environment," <https://projects.upei.ca/climate/clive/>; Nick Walker, "Adam Fenech on P.E.I.'s rising sea levels: How a digital visualization is showing islanders the future toll of climate change on their home," *Canadian Geographic*, May 24, 2016, <https://www.canadian-geographic.ca/article/adam-fenech-peis-rising-sea-levels>.



Collective voice of Indigenous First Nations in Prince Edward Island

## The Mi'kmaq in Prince Edward Island

Kjiktulnu ("our great boat") or Prince Edward Island, has been home to the Mi'kmaq People for at least 10,000 years.<sup>14</sup> The Mi'kmaq People arrived in the Mi'kma'ki, a traditional territory of the Mi'kmaq which includes the coastline areas of Québec, Gaspé Peninsula, eastern New Brunswick, Prince Edward Island, southern Newfoundland, and Nova Scotia. In his visit to the "New World", Jacques Cartier visited what is now P.E.I. and mentioned in his diary in 1534 that he had done some trading with the Mi'kmaq people.<sup>15</sup> Years later, the majority of these areas were colonized by the French. In 1769, St John's Island (now PEI) became a separate colony after gaining independence from Nova Scotia.<sup>16</sup> In 1772, Lennox Island was given to Sir James Montgomery who "allowed" Mi'kmaq people to continue to live there. In 1799, the name of St John's Island was changed to Prince Edward Island.<sup>17</sup> By 1800, all Prince Edward Island was owned by the colonial settlers, only "allowing" Mi'kmaq people to occupy certain parts of the island in accordance with the colonial regulations. This, however, brought a petition from the Indigenous inhabitants of Lennox Island, requesting to purchase the island. In 1840, the new owner, David Stewart, asked for an excessive amount of money from the Lennox First Nation. In 1846, Charles Worrel, another "owner" of these lands, offered to the First Nations "a free gift of a portion of the lands of his estate to certain Indians, and their descendants."<sup>18</sup> The Mi'kmaq people have continued to live on Lennox Island.<sup>19</sup> The Mi'kmaq communities of Abegweit First Nation and Lennox Island First Nation decided in 2002 to form an alliance as a "not-for-profit" tribal council; a provincial Territorial organization governed by Band Councils from both communities.<sup>20</sup> The MCPEI provides an advisory service for its First Nations members like band governance, community planning, financial and economic development, and other services. One of their latest initiatives was the creation of the proposed "Hog Island Sandhill National Park Reserve" as a continued fight to protect these landscapes.



Figure 4.4  
Map of Mi'kmaq Confederacy of Prince Edward Island

Figure 4.5  
Artist's representation of the Mi'kmaq people during pre-colonial times in the Atlantic region

<sup>14</sup> L'Nuey, "Treaties of Peace and Friendship," [https://lnuey.ca/wp-content/uploads/2020/09/lnuey\\_4291\\_treatyday\\_ResearchPaper\\_V01\\_lowres.pdf](https://lnuey.ca/wp-content/uploads/2020/09/lnuey_4291_treatyday_ResearchPaper_V01_lowres.pdf)

<sup>15</sup> H.P. Biggar, *The Voyages of Jacques Cartier* (Toronto: University of Toronto Press, 1993), 21.

<sup>16</sup> Michael McDonald, "Lennox Island First Nation: First Reserve in Canada to be owned by its people," *Mi'kmaq Maliseet Nations News*, 1, <https://www.mmn.ca/2019/07/lennox-island-first-nation/>

<sup>17</sup> McDonald, "Lennox Island First Nation: First Reserve in Canada to be owned by its people."

<sup>18</sup> Tammy MacDonald, "Mi'kmaq on Epekwitk: Creation of The Reserves on PEI," Feb 4, 2010, [https://web.archive.org/web/20160206210331/http://www.mcpei.ca/files/u1/Creation\\_of\\_the\\_Reserves\\_on\\_PEI\\_1.pdf](https://web.archive.org/web/20160206210331/http://www.mcpei.ca/files/u1/Creation_of_the_Reserves_on_PEI_1.pdf)

<sup>19</sup> Tammy MacDonald, "Reserves on Prince Edward Island," *The Canadian Encyclopedia*, <https://www.thecanadianencyclopedia.ca/en/article/reserves-on-prince-edward-island>

<sup>20</sup> Mi'kmaq Confederacy of Prince Edward Island, "Program and Services," <https://mcpei.ca/#programs>.









## Site Images: Hog Island Sandhills



[pages 67-68] Figure 5.1  
Map of the Hog Island Sandhills and  
Lennox Island, P.E.I.

Figure 5.2  
The sand bars of Hog Island Sandhills

## Site Images: Hog Island Sandhills



Figure 5.3  
Lennox Island entrance - Winter



Site Images: Lennox Island



Figure 5.4  
View of Lennox Island



Figure 5.5  
View of Lennox Island with bridge to the mainland in the distance



Figure 5.6  
View of the Lennox Island pow wow grounds

Site Images: Malpeque Bay



Figure 5.7  
View of the bridge to Lennox Island from the mainland

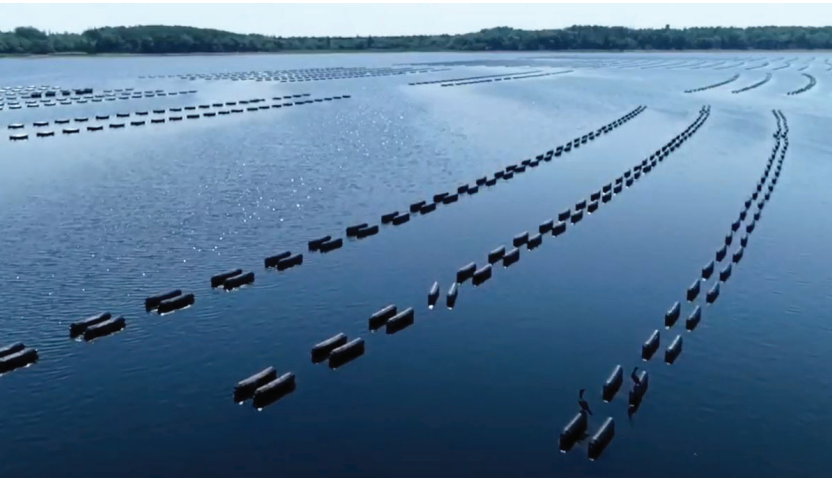
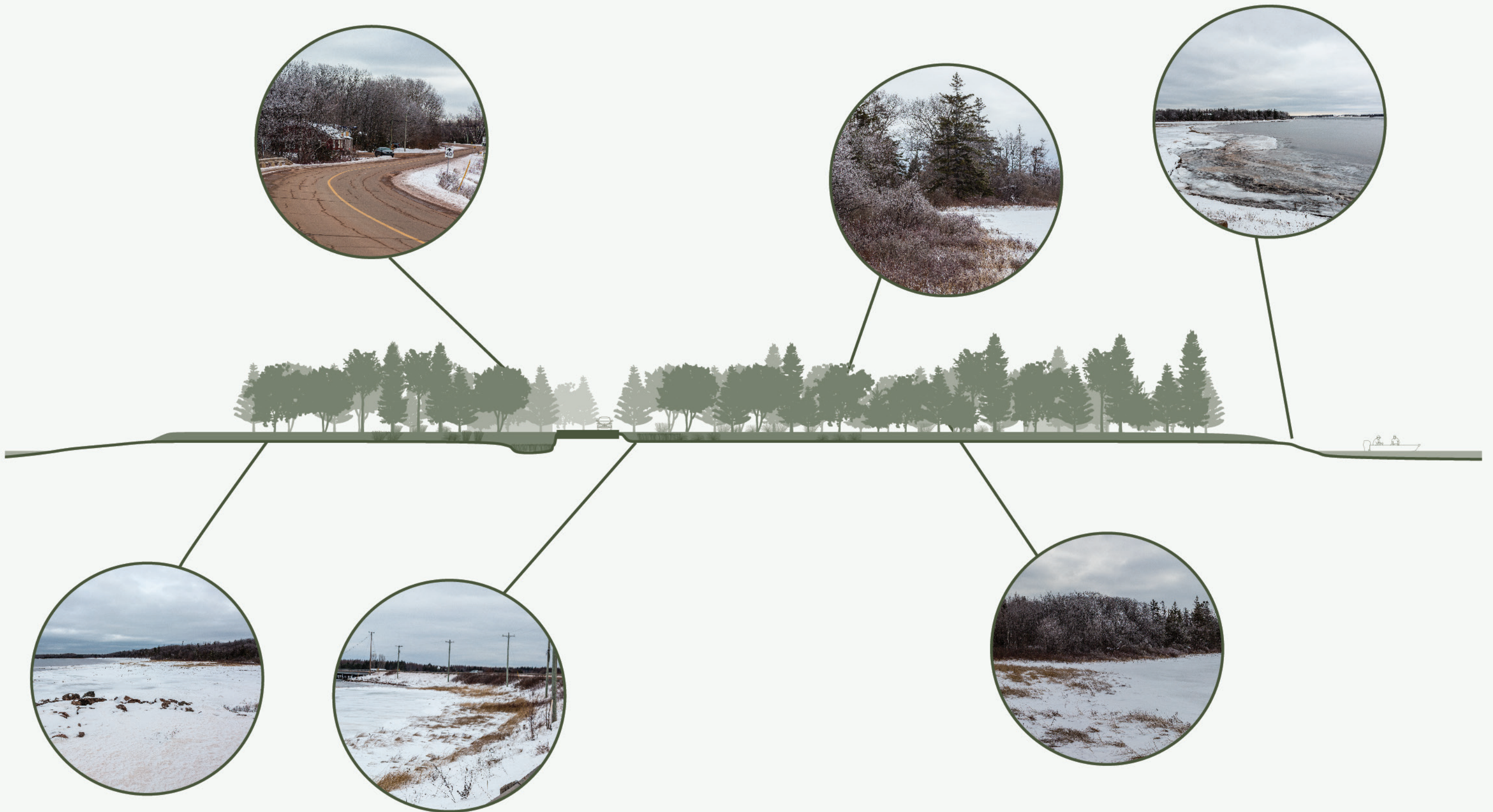


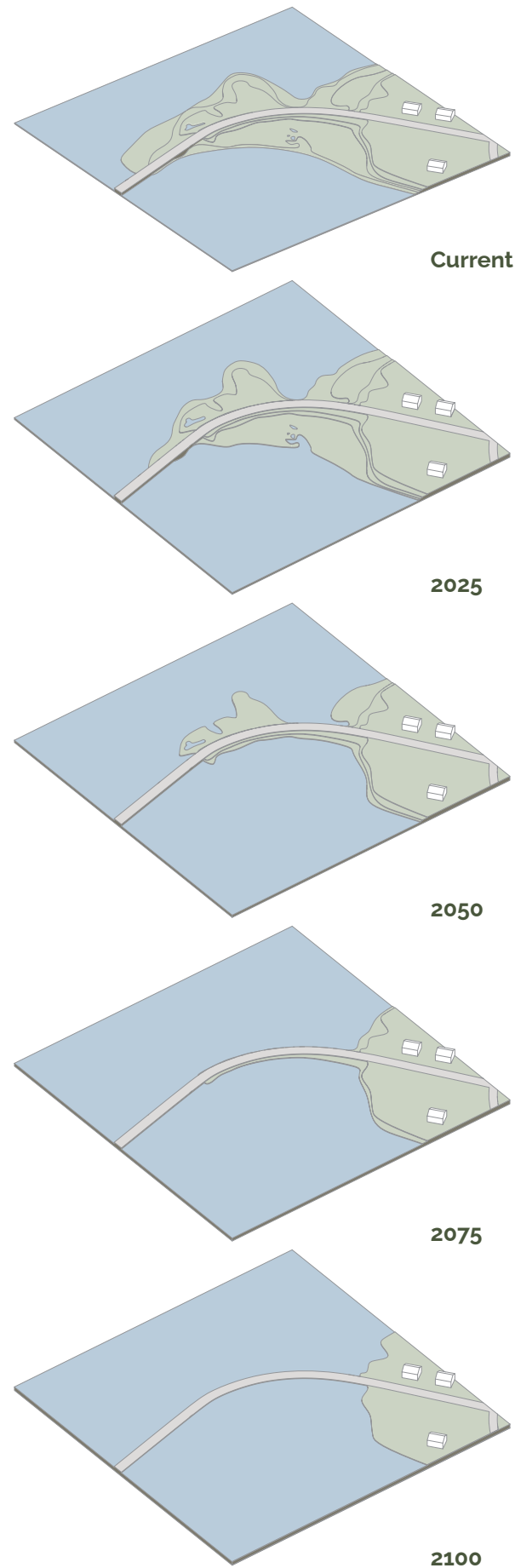
Figure 5.8  
Aerial view of Malpeque Bay Oyster leases 01



Figure 5.9  
Aerial view of Malpeque Bay Oyster leases 02







## Coastal Resilience

As discussed in the previous chapter, the site of the proposed National Park Reserve is threatened by rising sea levels. If the climate crisis continues at its current rate, it is predicted that a large portion of Lennox Island will be underwater by 2100. Yet despite the negative effects of climate change on the island, Dr. Tony Charles, Director of the School of the Environment and the Community Conservation Research Network (CCRN) at Saint Mary's University in Halifax, feels that the community is well-positioned to adapt to the changing environment.<sup>1</sup> The climate crisis is a global threat, with coastal regions being particularly vulnerable to extreme flooding. The rate of global warming can only be slowed through collective human effort and designers have a huge role to play in developing sustainable solutions for built infrastructure on land and where land meets water.

Communities in Prince Edward Island's North Cape coastal region are experiencing increasingly harsher storm surges and coastal erosion. Remediating these coastal areas is the most urgent issue this region must address. For Lennox Island there are a range of approaches that could be implemented to save this community from being swallowed by sea water including salt marshes, redesigned aquaculture, and beach rebuilding. In this context, the adjacent Hog Island Sandhills has been proposed as an optimal site for a National Park Reserve. Communities living in close proximity to national parks, especially Indigenous communities, play a significant role in helping to protect these natural landscapes. Moreover, design interventions focused on enhancing PEI's coastal resilience have the potential to inform a redefined set of landscape stewardship ambitions for Parks Canada.

[pages 73-74] Figure 5.10  
Lennox Island Cultural Landscape  
Centre site section.

[facing page] Figure 5.11  
Lennox Island Cultural Landscape  
Centre site sea level rise projection -  
current to 2100



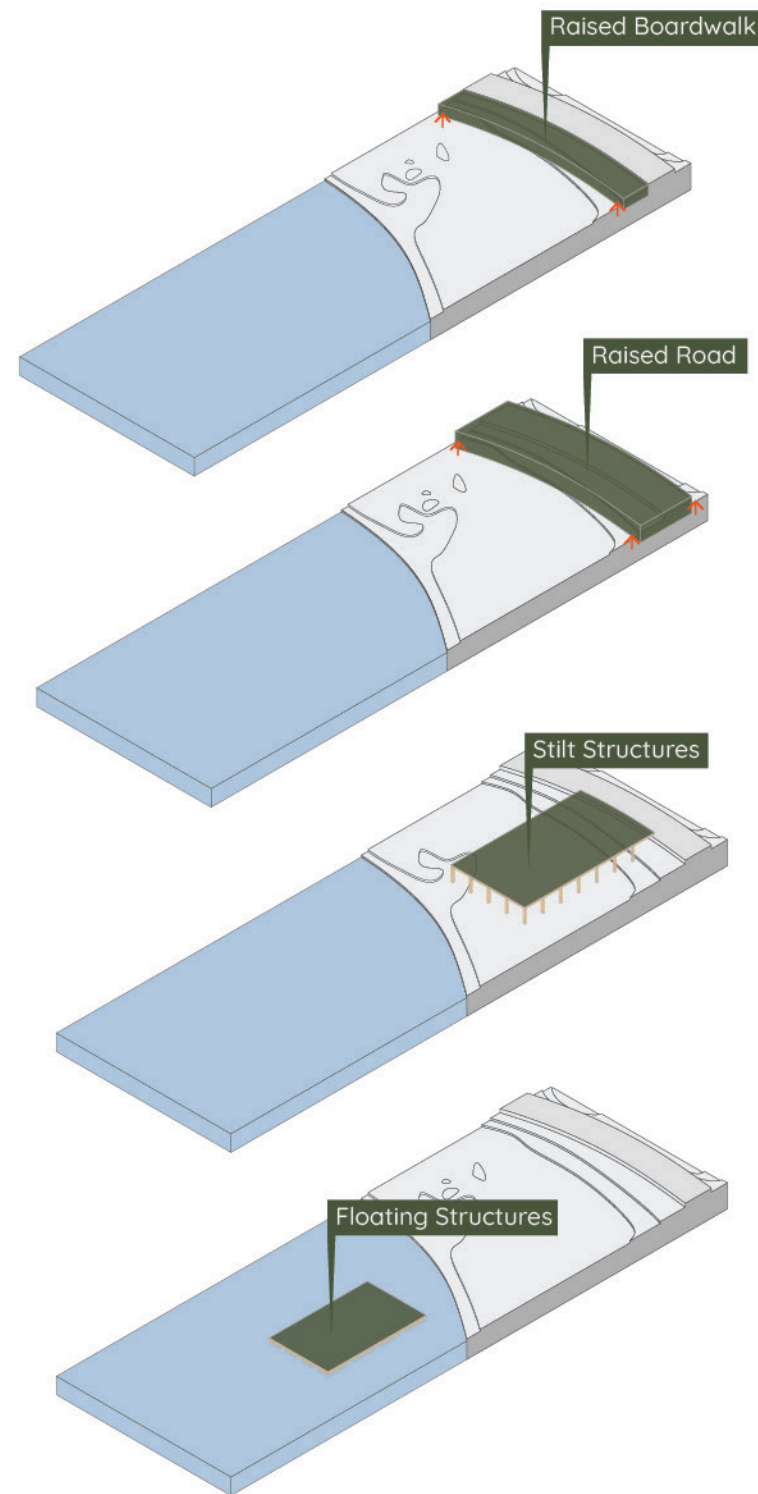
Figure 5.12  
Lennox Island coast



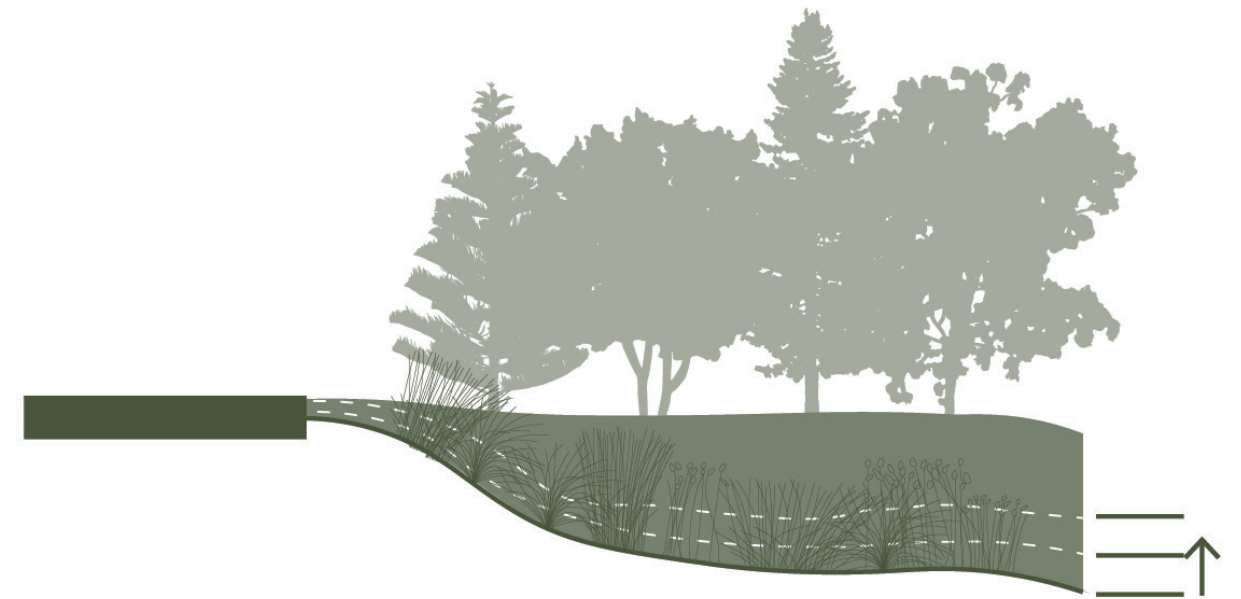
Figure 5.13  
Lennox Island community houses

<sup>1</sup> Alanna Mitchell, "As Sea Level Rises, These People Show Us How to Cope," *National Geographic*, updated February 23, 2016, <https://www.nationalgeographic.com/science/article/151214-lennox-island-canada-climate-change-erosion>.





## Salt Marsh



Salt marshes are coastal wetlands that are flooded by sea water and drained by changes in tides and surges.<sup>2</sup> Containing peat soil, which consists of organic decomposing plants, salt marshes buffer ocean waves, trap sediments and offer a natural way of protecting coastlines from erosion thus supporting the human and non-human communities who inhabit them. Research conducted by the National Centers for Coastal Ocean Science concluded that salt marsh ecology can help resist rising sea levels by increasing the elevation of any marsh from 2.3 mm to 9 mm a year, while the current sea level rises at a rate of 2.5 mm a year.<sup>3</sup> This means that with salt marshes, coastal communities can stay ahead of rising sea levels. In addition to increasing the rate of coastal elevation, different types of salt marsh vegetation can help the coastal ecosystem by filtering and improving the water quality. This type of coastal wetland is found on Prince Edward Island and on Lennox Island. The proposed Cultural Landscape Centre is intentionally placed at the point of arrival onto Lennox Island for several reasons, one of which is to showcase the sustainable design approach taken to reinforcing the island's coast.

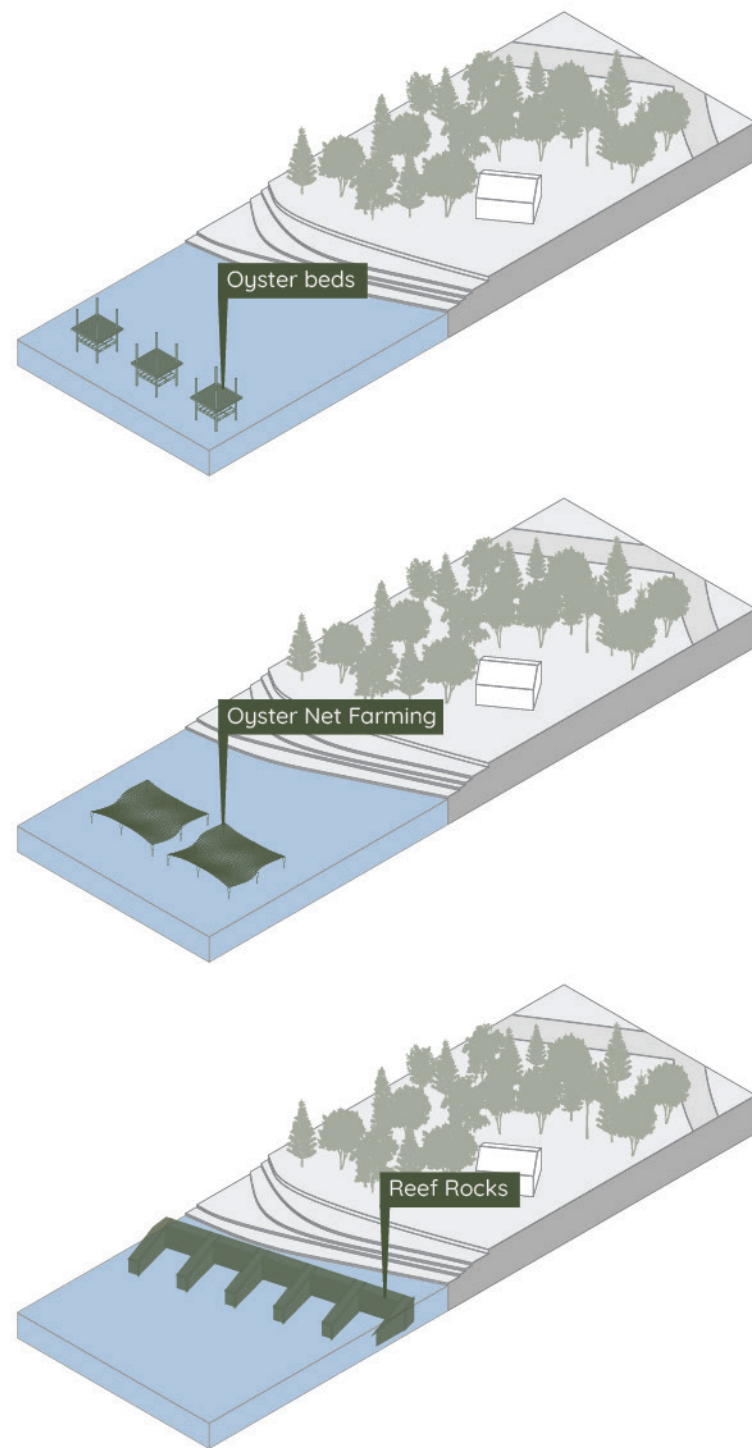
[facing page] Figure 5.14  
Design responses for climate crisis

Figure 5.15  
Lennox Island Cultural Landscape  
Centre salt marsh projection

<sup>2</sup> NOAA, US Department of Commerce, "What Is a Salt Marsh?", <https://oceanservice.noaa.gov/facts/saltmarsh.html>

<sup>3</sup> National Centers for Coastal Ocean Science, "Salt Marsh Ecology in an Era of Sea Level Rise", <https://coastalscience.noaa.gov/project/salt-marsh-ecology-era-sea-level-rise/>





## Aquaculture

Aquaculture is the controlled marine cultivation of aquatic forms. One use of this type of aquatic environment is to rehabilitate and restore aquatic species.<sup>4</sup> Types of aquatic production include oysters, clams, mussels, shrimp, salmon, and algae. This system has a lot of benefits for the local economy, for food production and for the rehabilitation of endangered and threatened aquatic species. On Prince Edward Island, aquaculture is a significant driver of the local economy and provides an important source of employment for the local community. Mi'kmaq First Nation participates in this fishing culture, with Malpeque Bay known all over the world for its famous oysters.<sup>5</sup> Malpeque bay is connected to the proposed Hog Island Sandhills National Park Reserve, therefore redesigning the aquaculture to include floating oyster nurseries and oyster beds can help buffer wave energy from strong storm surges and protect the community from rising sea levels. Examples of designers' contributing to this effort include landscape architect Kate Orff's work on "oyster-tecture."<sup>6</sup> This research concluded that oyster and mussel aquafarming creates intertidal habitats that cause waves to slow down. A series of aquaculture interventions are incorporated within the 'new' National Park Reserve experience on Lennox Island and Hog Island Sandhills, which are experienced on the journey from the Cultural Landscape Centre to the National Park Reserve site.

[facing page] Figure 5.16  
Design responses for oyster farming and coastal resilience



Figure 5.17  
Kate Orff, "Oyster-tecture" rendering 01

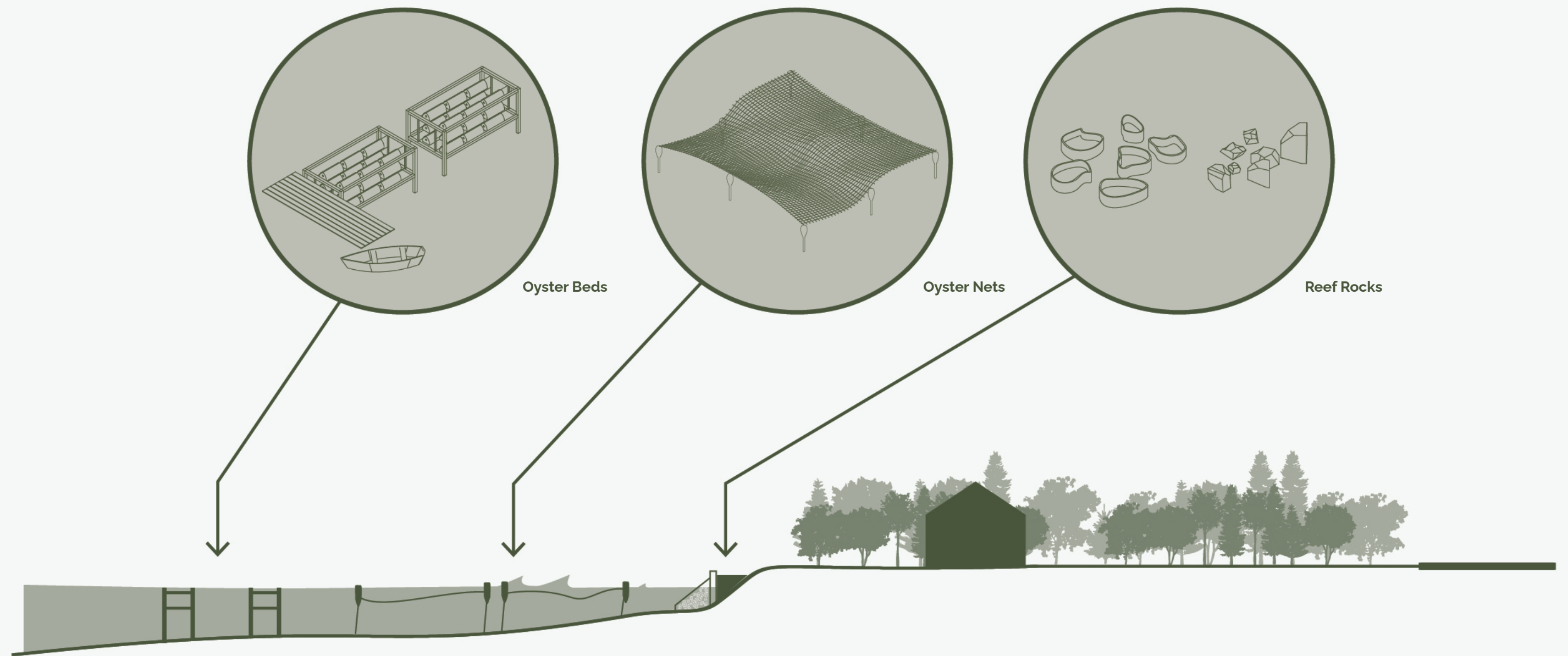


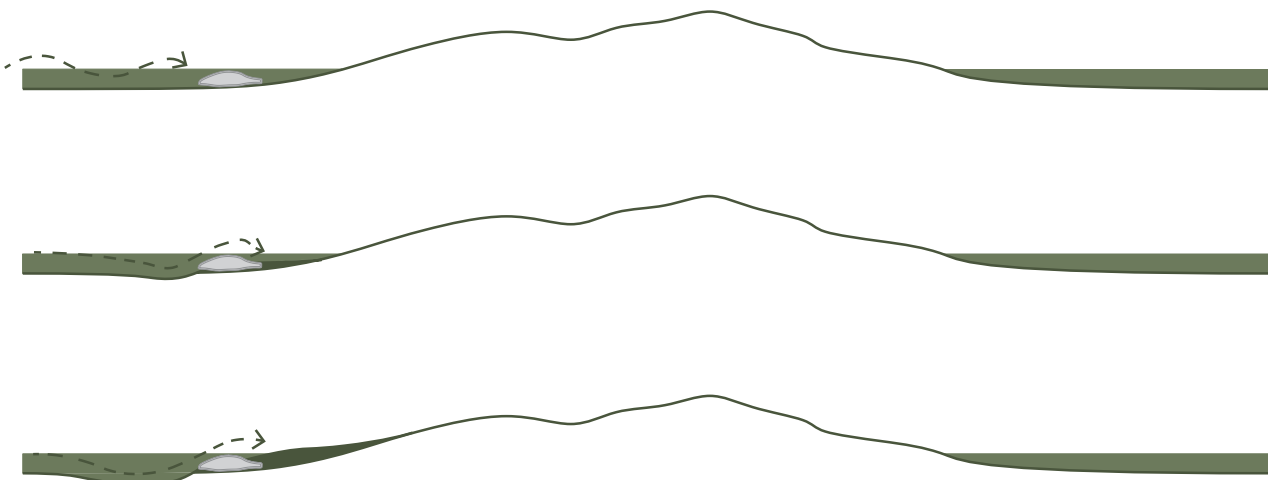
Figure 5.18  
Kate Orff, "Oyster-tecture" rendering 02

<sup>4</sup> NOAA, US Department of Commerce, "What Is Aquaculture?", <https://www.noaa.gov/stories/what-is-aquaculture>.

<sup>5</sup> Ramsar Sites Information Service, "Malpeque Bay," <https://rsis Ramsar.org/ris/399>.

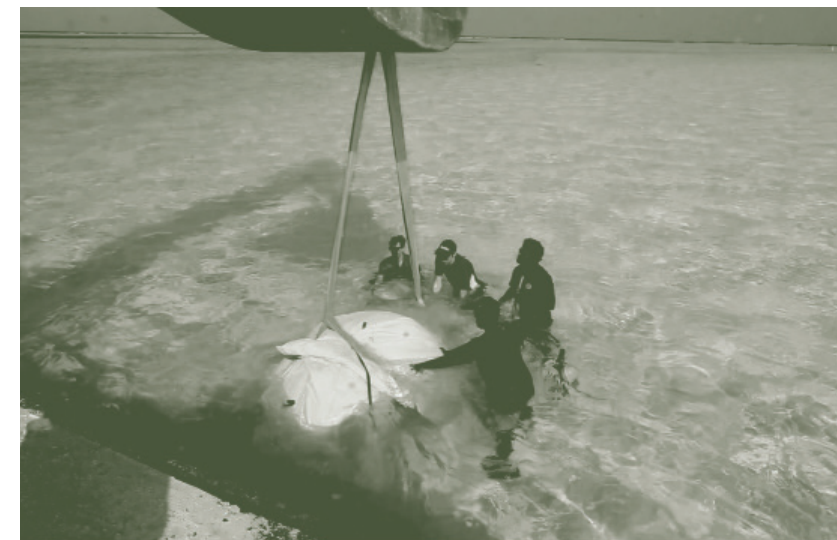
<sup>6</sup> Kate Orff, *Toward an Urban Ecology* (New York: The Monacelli Press, 2016), 89-116.





## Growing Islands

Rebuilding beaches and sand bars is another approach to protecting coastal regions. "Growing Island" is a research study conducted by MIT's Self-Assembly Lab and Inverna, an organization based in the Maldives, that focuses on harnessing the energy of ocean waves to help sand self-organize into new islands or to rebuild coastlines. The first field experiment was conducted in February 2019 in the Maldives by submerging "bladders" (large, heavy canvas bags design to be filled with sand) along the coastal beaches.<sup>7</sup> The project continued to look at how these sand bars grow, move, and disappear through time. Currently, they see approximately 1 metre of growth of sand within the sandbags or "bladders" months after having been submerged along the coast.<sup>8</sup> This new approach to coastal remediation can also be implemented at the Hog Island Sandhills National Park Reserves as the site consists of fragile sand bars and dunes with a low elevation.



[pages 81-82] Figure 5.19  
Lennox Island and coastal design  
interventions section

[facing page] Figure 5.20  
Self-Assembly Lab, Growing Islands field  
experiment in the Maldives (February  
2019)

[facing page] Figure 5.21  
Growing island diagram



Figure 5.22  
Self-Assembly Lab, Growing Islands field  
experiment in the Maldives (February  
2019)



Figure 5.23  
Self-Assembly Lab, Growing Islands field  
experiment in the Maldives (February  
2019)

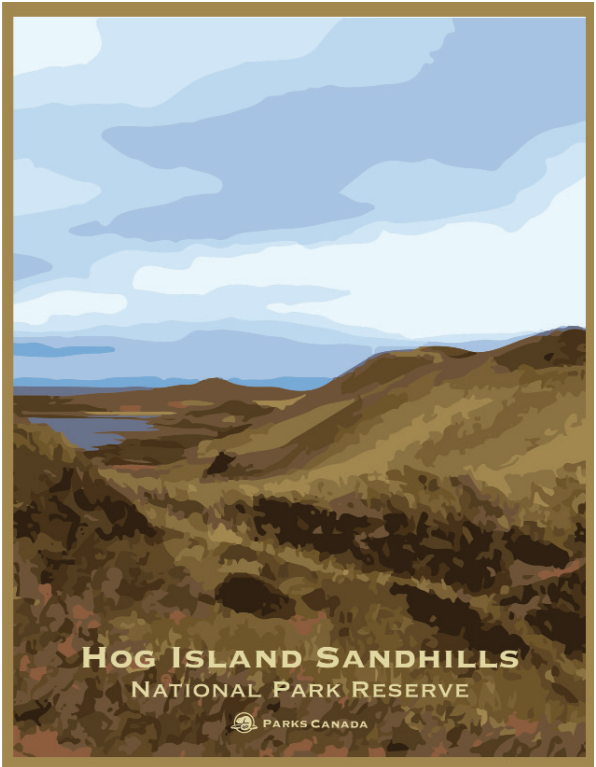
Figure 5.24  
Self-Assembly Lab, Growing Islands field  
experiment in the Maldives (February  
2019)

<sup>7</sup> Self-Assembly Lab, MIT, "Growing Islands: Rebuilding Beaches and Protecting Coastlines through Wave Energy", <https://selfassemblylab.mit.edu/growingislands>.

<sup>8</sup> Self-Assembly Lab, "Growing Islands."



Material Culture - Posters

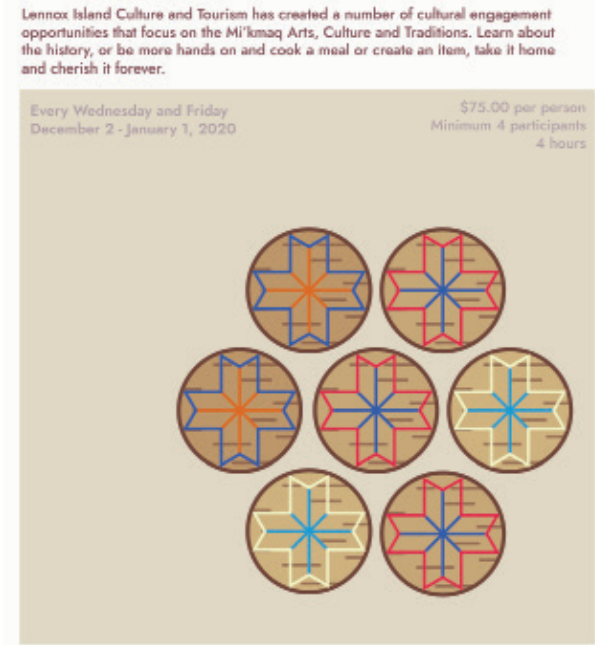


As part of the proposed rebranding of the material culture of Parks Canada, I have designed a series of posters that refer to different aspects of the proposed National Park Reserve. The posters, currently in English, are imagined to have a French version as well as one reflecting the language of the local Indigenous community. This is motivated by the intention to recognize the first human inhabitants of this land and to promote inclusivity within Canada's National Parks and National Park Reserves. The thematic focus of each poster also informed the choice of architectural programs housed within the Cultural Landscape Centre. In this way, graphic design work and architectural programming are mutually informing.

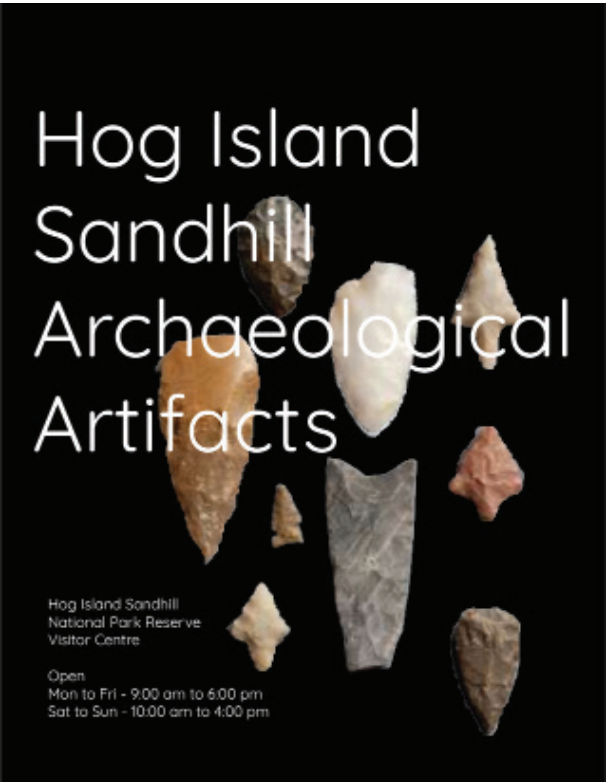
National Park Poster

Figure 5.25  
Poster design related to architectural programming

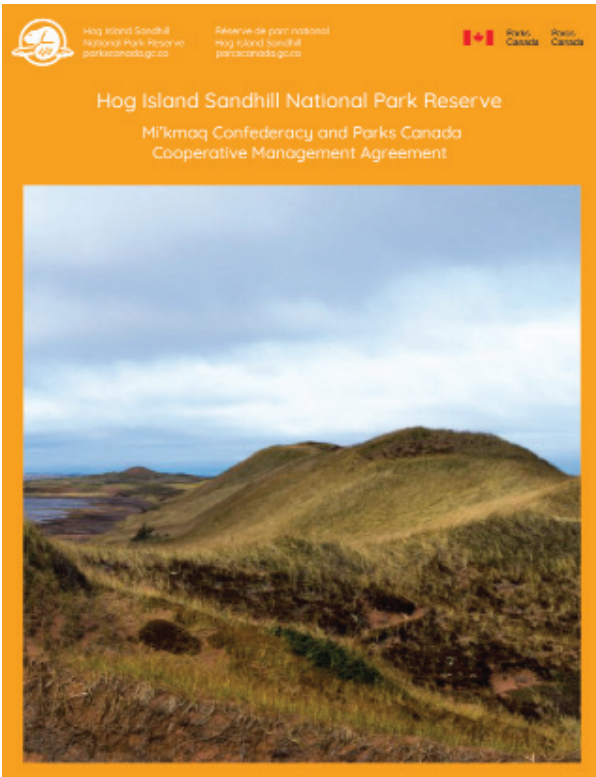
Birch Bark and Porcupine Quill Work



Mi'kmaq traditional classes poster



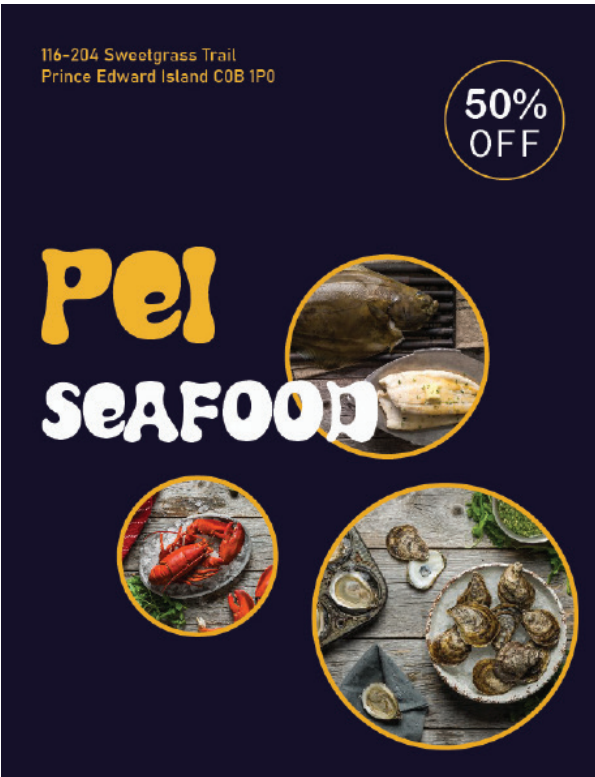
Exhibition Poster



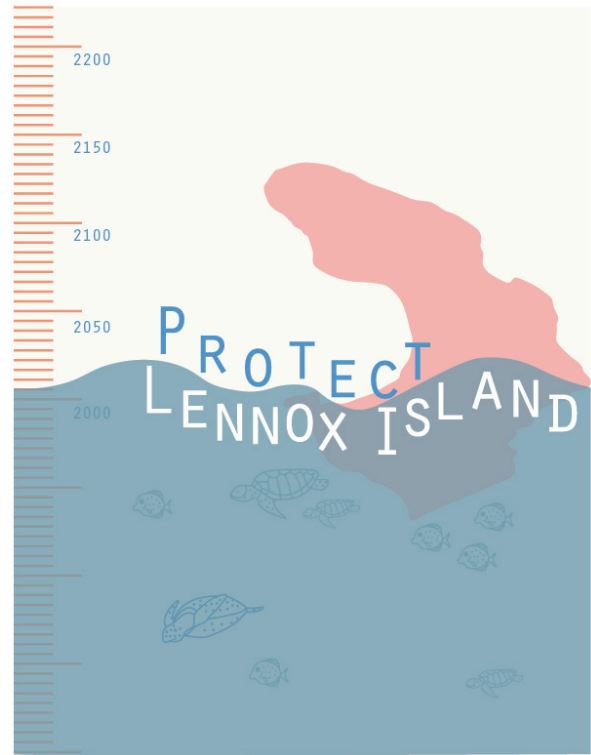
Proposed National Park Co-Management Document



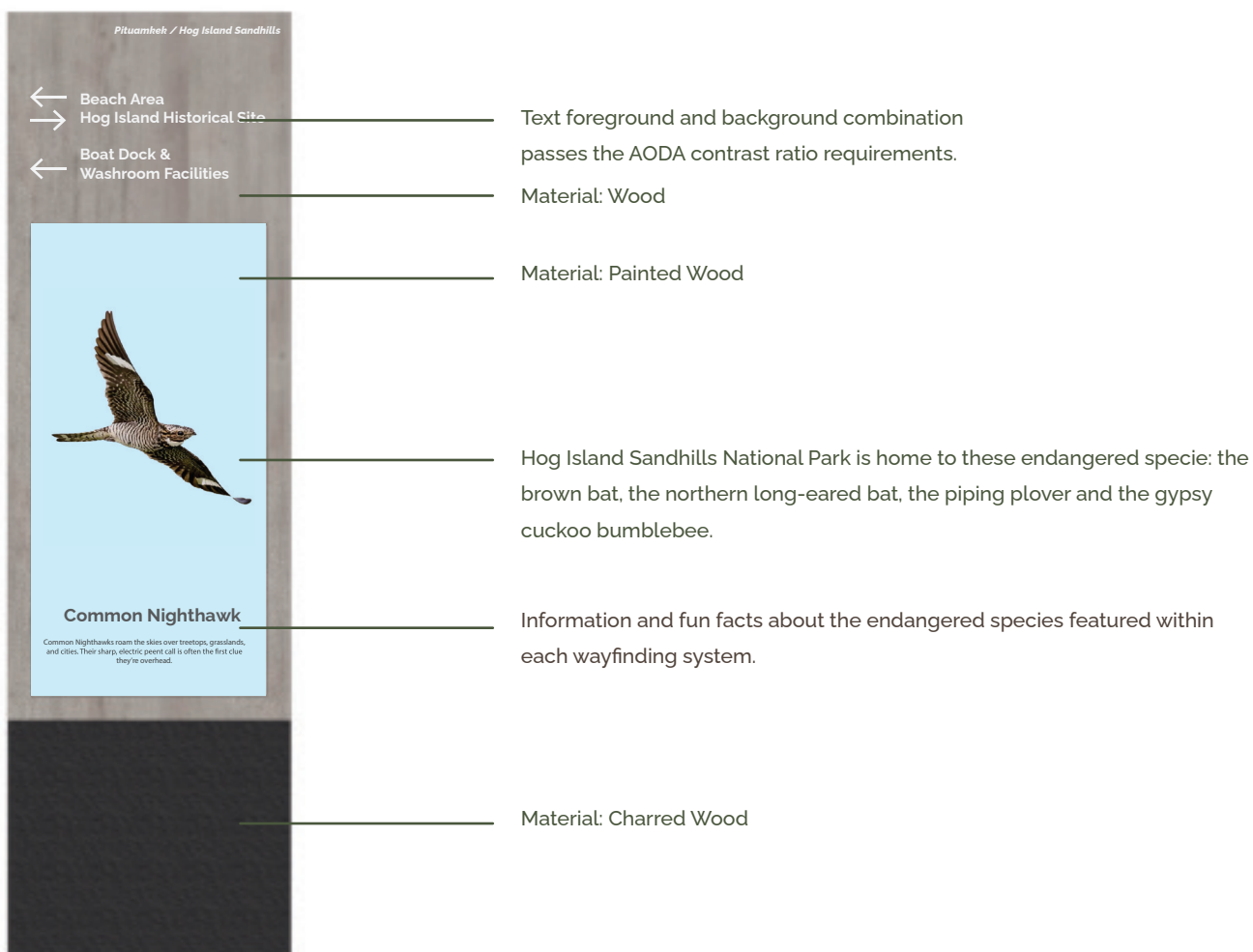
Mi'kmaq Event Poster



Restaurant Poster



Save Lennox Island Poster



## Wayfinding



The typical wayfinding system that currently exists within Canada's national parks to guide tourists to their destinations, consists of simple signage on poles with little design ambition. For the proposed National Park Reserve, the wayfinding system is inspired by local Indigenous artists and reflects the local flora, fauna and community. Curated to enrich the visitors' journey beyond simple navigation, the designed wayfinding system is embedded with the architecture, the floating classrooms and within the outdoor park.

Unlike the United States of America, Canada does not have federal standard guidelines for signage accessibility. In the province of Ontario, the "Accessibility for Ontarians with Disabilities Act" (AODA) establishes the laws for standards governing information and communication as well as the design of public spaces.<sup>9</sup> The AODA's goal is to identify, remove and prevent barriers for people with disabilities. In Prince Edward Island there is the "Highway Signage Act", but the proposed wayfinding goes beyond currently established laws to ensure that the proposed National Park Reserve is fully accessible.

[facing page] Figure 5.26  
National Park Reserve wayfinding  
components

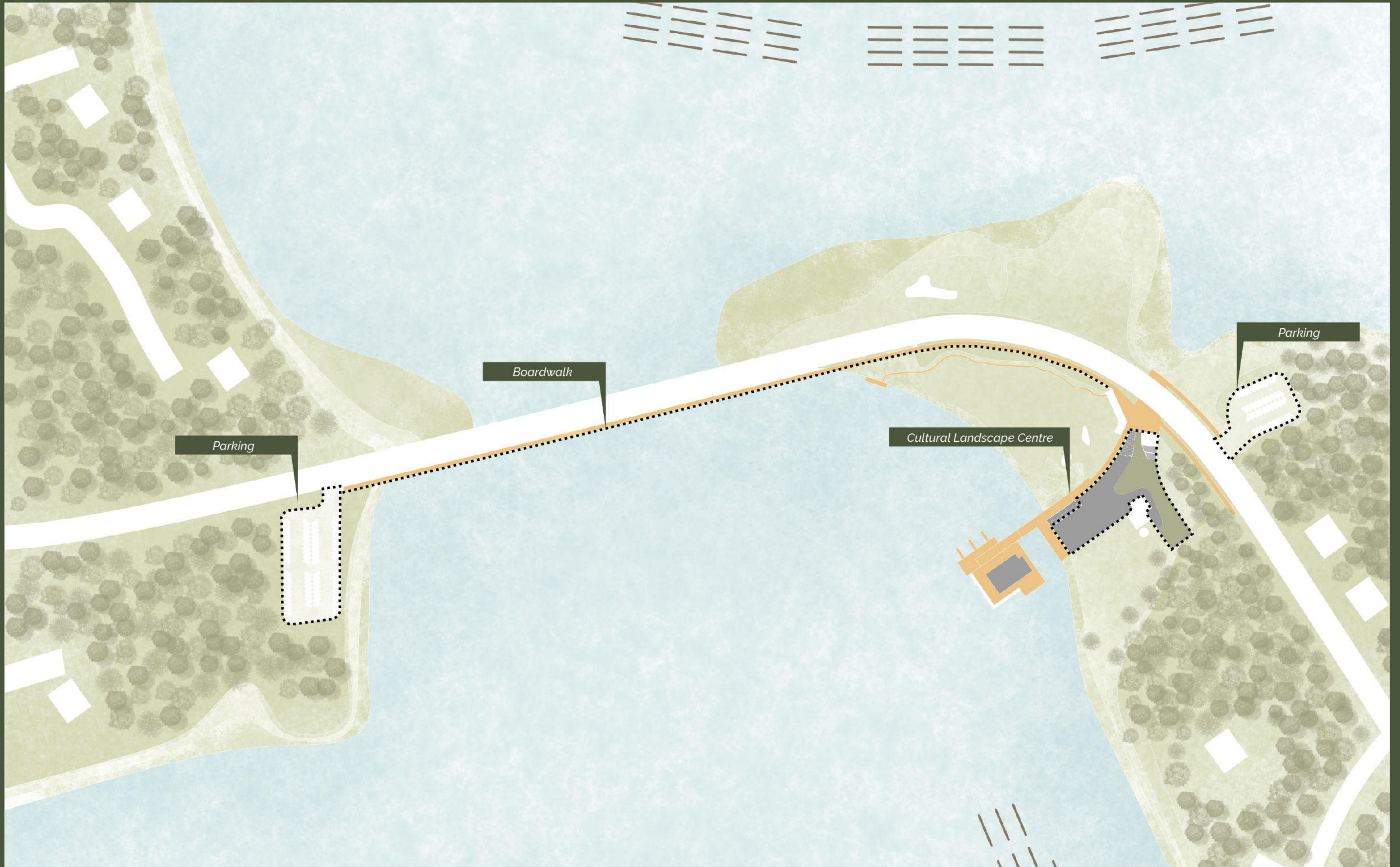
Figure 5.27  
Proposed National Park Reserve  
wayfinding examples

<sup>9</sup> Province of Ontario, "Accessibility for Ontarians with Disabilities Act, 2005," <https://www.ontario.ca/laws/statute/05a11>.

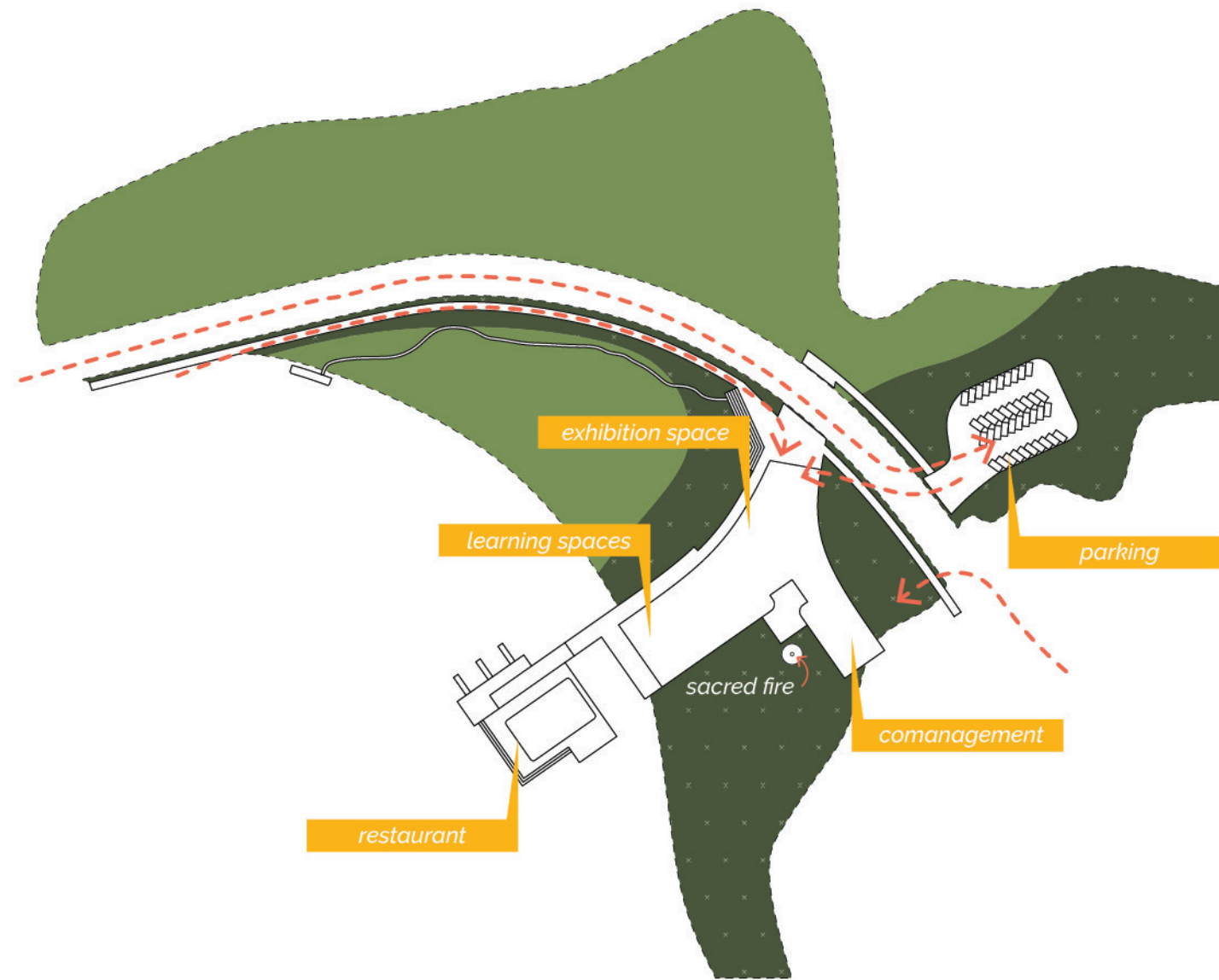




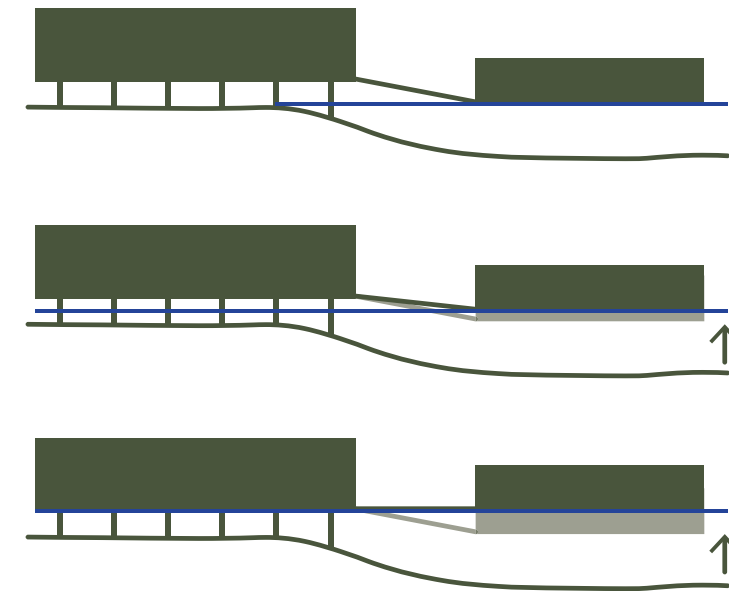








## Cultural Landscape Centre



The main architectural intervention is purposely not located within the ecosystem of the park itself. Strategically sited at the point of arrival onto Lennox Island by the bridge connecting to the rest of P.E.I., the Cultural Landscape Centre acts as an entrance and introduction to the Lennox Island community that will be comanaging the National Park Reserve. The physical proximity between the Indigenous inhabitants of the island and the Centre is also beneficial because of the projected job opportunities that will be created for the community.

Given the site's coastal conditions, salt marshes will be incorporated into the design. Part of the Centre will be built on stilts, allowing it to sit 3 metres above the marshy ground as protection from storm surges, which to date, have reached 2.5 metres in the province. The stilts have a concrete base to resist harsh weather and saltwater exposure, and a mass timber top. The other part of the Cultural Landscape Centre will float in Malpeque Bay. With hollow drums embedded in its base, this structure will rise and dip according to the sea level. Both parts of the Centre will be connected by an exterior boardwalk.

[pages 89-90] Figure 5.28  
Hog Island Sandhills National Park Reserve and Lennox Island site plan

[pages 91-92] Figure 5.29  
Cultural Landscape Centre site plan

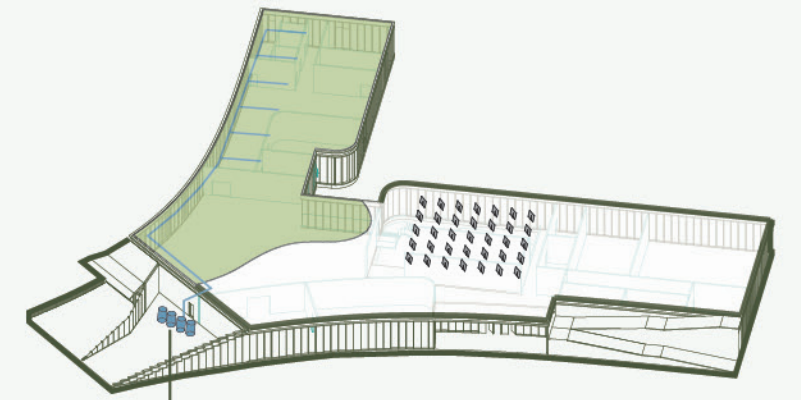
[facing page 97] Figure 5.30  
Cultural Landscape Centre site diagram

Figure 5.31  
Cultural Landscape Centre diagram

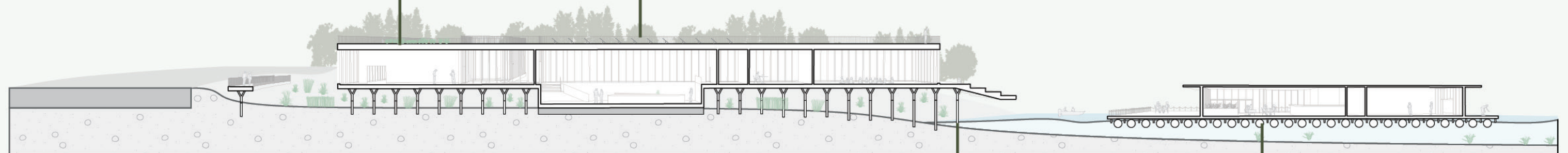
Green Roof



Solar Panels



Rain Water Collection



Stilts



Floating Drums









The name of this main architectural intervention is derived from UNESCO's definition of "cultural landscape" as a site that guarantees and sustains biological diversity in association with historical and cultural human activities.<sup>10</sup> The Cultural Landscape Centre will house exhibition spaces, classrooms, cooperative management spaces, a restaurant, and a kayak rental facility, which combined, contribute to safeguarding the environmental and cultural sustainability of the local Indigenous community and educating visitors about the climate crisis. Two parking lots, one located at the opposite end of the bridge to the island and connected to the Centre by an accessible boardwalk, and the other across the road from the Centre, accommodate visitors to the National Park Reserve.

The Cultural Landscape Centre features an exterior green roof that integrates solar panels and a rainwater collection system to reduce the Centre's environmental footprint. These elements are part of my rebranding of Canada's national parks to demonstrate a greater commitment to sustainable architecture within these protected areas, in alignment with "Living Building Challenge" standards<sup>11</sup> Constructed primarily of glulam with glass curtain walls and exterior wooden cladding, an important opportunity exists to cultivate the local manufacturing of mass timber building materials. Currently, glulam manufacturing facilities in Canada are limited to British Columbia, Alberta, Ontario, and Québec. If local manufacturing were to be incorporated into all buildings erected within Canada's National Parks and priority were to be given to local, and particularly Indigenous builders, Parks Canada would be taking important steps toward greater environmental and cultural sustainability.

The Centre is the first stop in the journey to the Hog Island Sandhills National Park Reserve, offering a welcome desk, exhibition spaces, and classrooms for visitors. Communicating a commitment to landscape stewardship and Indigenous allyship, the Centre also features a cooperative management room and offices for the use of National Parks staff and members of the Mi'kmaq Confederacy who together, will make decisions for all

[pages 95-96] Figure 5.32  
Cultural Landscape Centre site section

[pages 97-98] Figure 5.33  
Cultural Landscape Centre floor plan

[facing page] Figure 5.34  
Cultural Landscape Centre facade detail

<sup>10</sup> United Nations Educational Scientific and Cultural Organization, "Cultural Landscapes," <https://whc.unesco.org/en/culturallandscape/#1>; Michael Jones, "The Concept of Cultural Landscape: Discourse and Narratives." In *Landscape Interfaces: Cultural Heritage in Changing Landscapes*, eds. H. Palang and G.Fry (Springer, Dordrecht: 2003), 21-51.

<sup>11</sup> International Living Future Institute, "Living Building Challenge 4.0," <https://living-future.org/lbc/>



developments and policies bearing on the Hog Island Sandhills National Park Reserve. The co-management space features a round table that seats the nine members of the proposed co-management framework for National Parks. To create a tradition for Canada's National Parks and National Park Reserves, an indoor fireplace was designed in the middle of the co-management room. With an exterior fireplace always being on during operating hours of the Centre. It is imagined that fire from the exterior hearth will be brought into the co-management space by participants who together light the interior fireplace before beginning discussions as a reminder and renewal of the commitment to upholding treaties. In a similar spirit, a Legacy Room was designed for the Centre to offer a safe and dignified space for the telling of Indigenous (hi)stories. It was inspired by the Legacy Room aboard the Canada C3 ship that brought members of Indigenous communities, students, educators, researchers and tourists to visit Indigenous communities along Canada's coast in 2017, the 150th anniversary of Confederation.<sup>12</sup>

"Intention: The Legacy Room is for everyone – it's yours, mine and ours. Our Legacy Room is a place that invites and supports ceremony and helps shape the protocol for the Canada C3 journey. It is intended to provide space to conduct ceremony, to read, to reflect, to discuss, to debrief, to counsel or to process. It's also a place to share your thoughts on reconciliation in many different ways. The conversations aren't always easy, and there are multiple perspectives and diverse lived experiences that shape the ongoing interpretation and understanding of reconciliation." <sup>13</sup>

Three classrooms in the Cultural Landscape Centre accommodate groups of 10 to 45 people and are designed to be adaptable to different forms of teaching, be that about rising sea levels or making traditional Mi'kmaq crafts. The Centre's three exhibition spaces present artifacts and visual representations of the current climate crisis.

The first exhibition showcases traditional Mi'kmaq crafts such as sewing baskets, miniature wigwams made of birchbark and sweet grass, and traditional knives, all of which are available for purchase as a way of supporting the local Indigenous artisans. The second exhibition focuses on the 2000-year-old Mi'kmaq archeological artifacts, such as cord-wrapped stick ceramics found on the Hog Island Sandhills in 2006.<sup>14</sup> The third exhibition presents the Malpeque Bay and climate design responses of the redesigned oyster beds and mussel farming infrastructure. A portion of this space touches the ground, offering a window through which to view the rising sea water at eye level.

The floating restaurant is connected to the rest of the Centre by an exterior boardwalk and serves mussels, soft-shell clams and oysters harvested in the Malpeque Bay, the latter of which have made PEI famous for over a century.<sup>15</sup> Within the floating structure, there will also be rental space for kayaks and canoes, with the floating dock for the boats that transport visitors to the classroom on the water.

<sup>14</sup> Helen Kristmanson, "Pitawelkek: A 2000 year old archaeological site in Malpeque Bay," The Island Magazine (Fall/Winter 2019): 2-14.

<sup>15</sup> Pangea Shellfish Company, "Malpeque Oyster, Malpeque Bay, PEI," [https://www.pangeashellfish.com/oysterology/malpeque-oyster?dc0611a7\\_page=2%202](https://www.pangeashellfish.com/oysterology/malpeque-oyster?dc0611a7_page=2%202)

<sup>12</sup> Canada C3, "Canada C3 Expedition: An Epic Journey to Celebrate Canada and Connect Canadians," [http://www.sandraawn.ca/new-files/studies-reports-presentations/17\\_Canada%20C3%20Expedition.pdf](http://www.sandraawn.ca/new-files/studies-reports-presentations/17_Canada%20C3%20Expedition.pdf).

<sup>13</sup> Canada C3, "Canada C3 Expedition"

# Cooperative Management Spaces

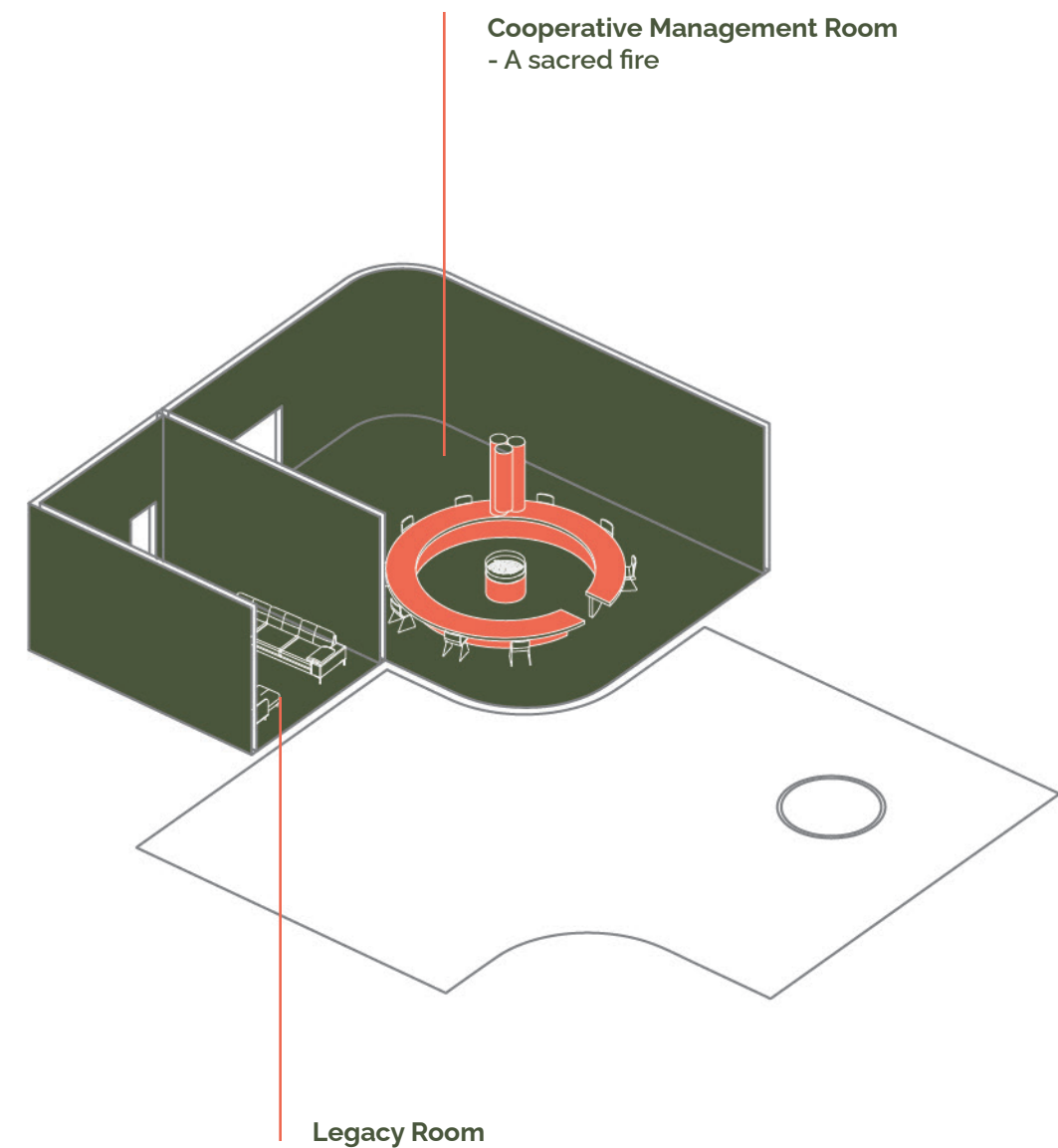


Figure 5.35  
Cultural Landscape Centre - Cooperative  
Management spaces axonometric  
diagram

# Exhibitions Spaces

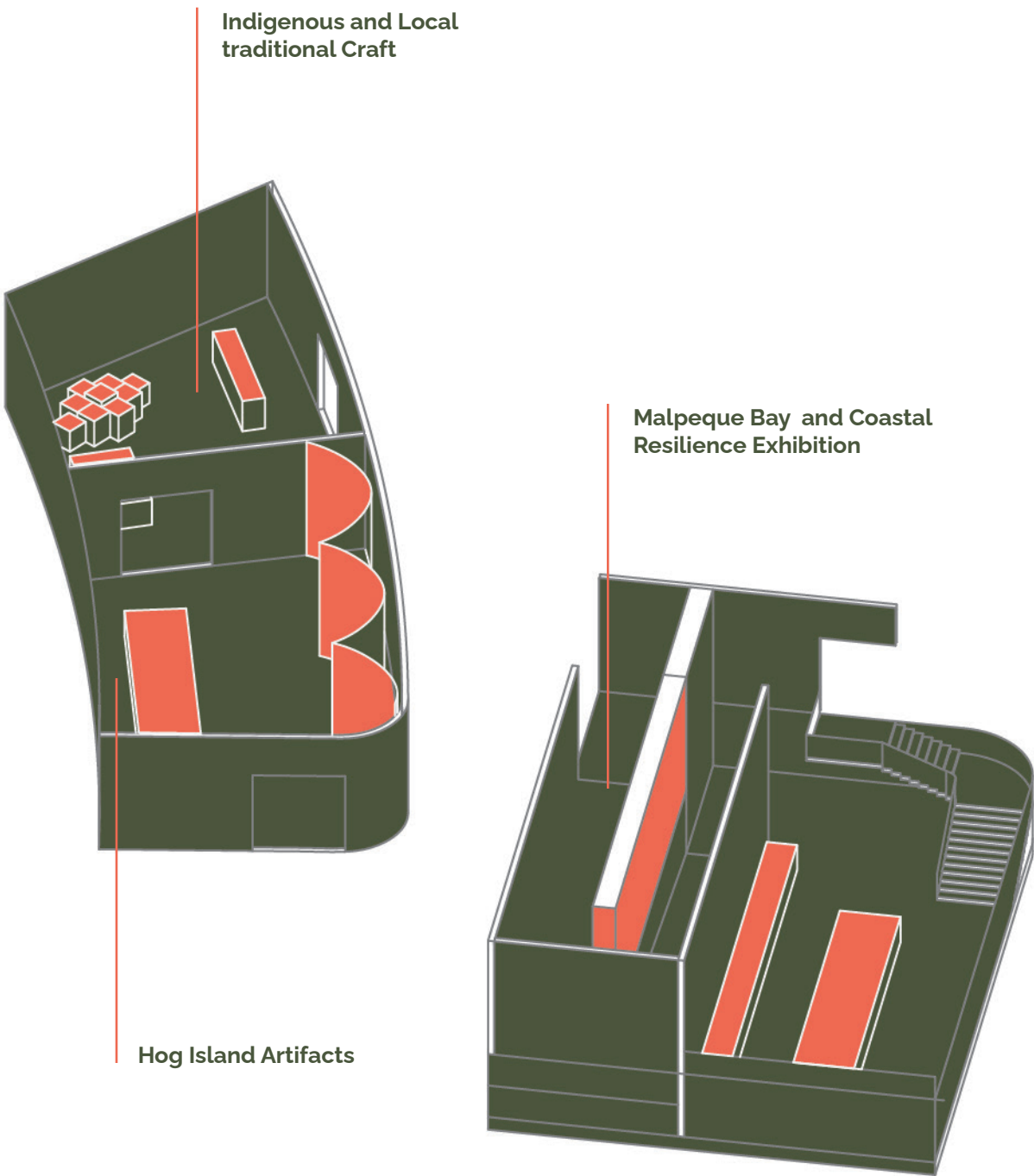
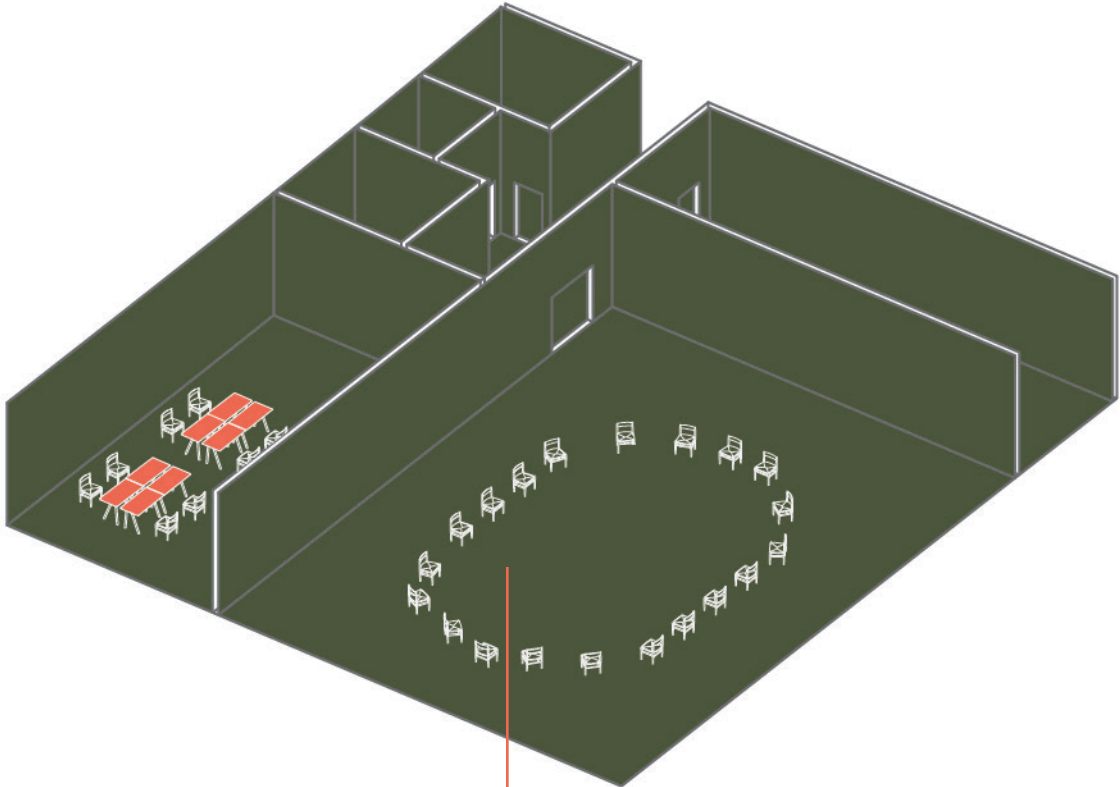


Figure 5.36  
Cultural Landscape Centre - Exhibition  
spaces axonometric diagram



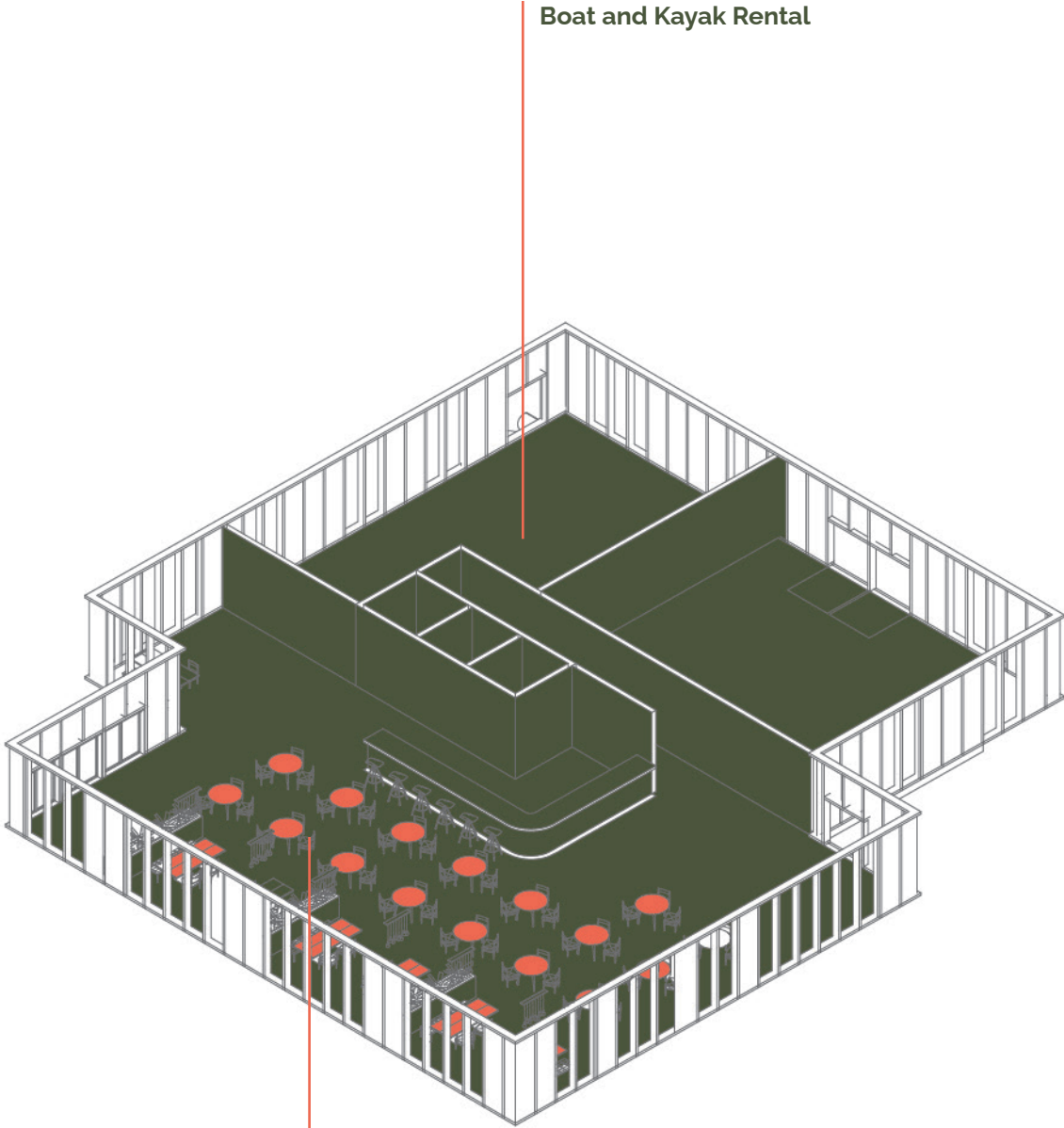
**Classrooms**



**Classrooms**  
Teaching  
Traditional Crafts  
Climate Crisis  
Indigenous and Local History

Figure 5.37  
Cultural Landscape Centre - Classroom  
axonometric diagram

**Floating Restaurant and Rental Facility**



**Floating Restaurant**  
Malpeque Bay Oyster and other  
Seafood

Figure 5.38  
Cultural Landscape Centre - Floating  
Restaurant axonometric diagram





## The Floating Classroom

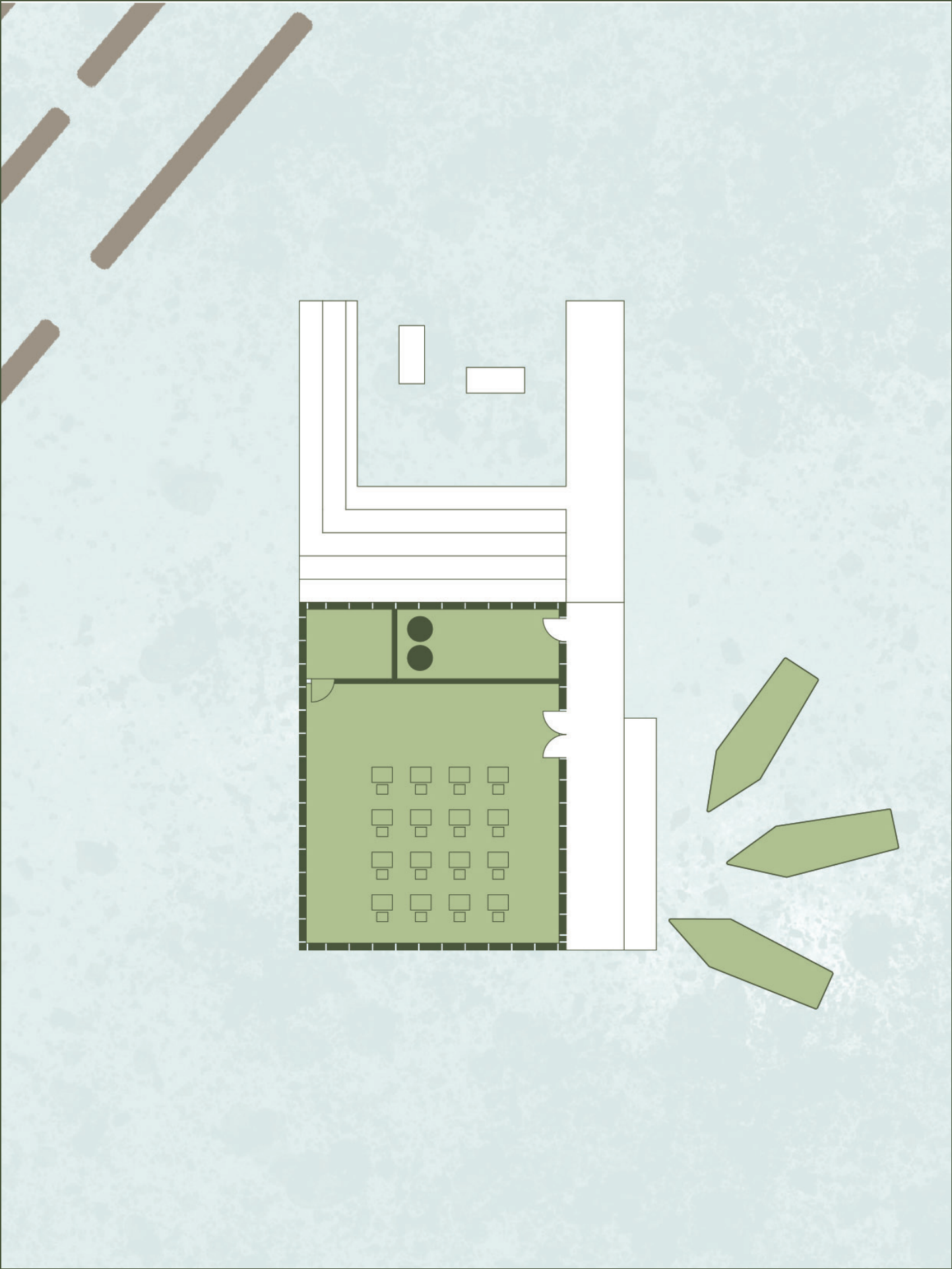
Another part of the curated experience of the proposed intervention is the floating classroom, which is located near the existing Lennox Island water treatment facility. According to researchers, the water treatment facility is only three feet above sea level and will be impacted greatly by rising sea levels in the next few years if not protected.<sup>16</sup> Oyster beds, oyster and mussel habitats, and reef rocks are the climate design responses integrated into Malpeque Bay to protect the community from storm surges and rising sea levels. The program for the floating classroom supports the overall curated experience of the new National Park Reserve and supports local seafood farmers within the Lennox Island community.

This floating classroom offers indoor and outdoor classroom spaces to teach visitors how to protect coastal communities, build oyster beds and net habitats and cultivate and harvest oysters, and includes storage space and an accessible washroom for visitors and seafood farmers. The indoor classroom can comfortably fit 16 students or visitors, while the outdoor classroom can accommodate 20 people. A rain collection system and solar panels to sustain enable the floating classroom to be off the grid, while waste will have to be transported back to Lennox Island Community to not pollute the water. Constructed of stick wood framing and glulam that sits on hollow drums to keep it afloat with large window panels and exterior wood cladding, the facility is anchored to prevent it from hitting oyster beds during storm surges.

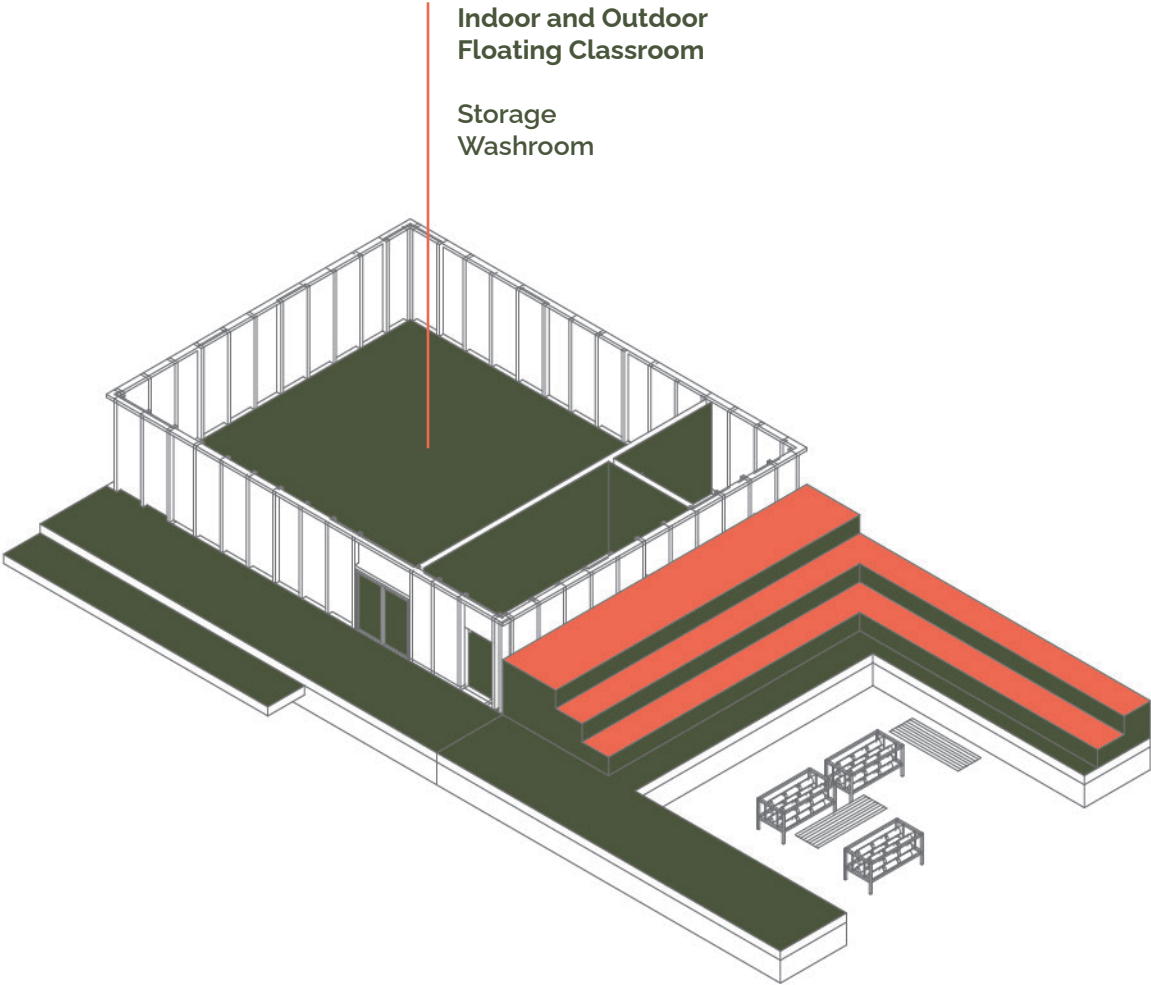
[facing page] Figure 5.39  
Floating Classroom site plan

<sup>16</sup> Alanna Mitchell, "As Sea Level Rises, These People Show Us How to Cope," *National Geographic*, <https://www.national-geographic.com/science/article/151214-lennox-island-can-ada-climate-change-erosion>.





# Floating Classroom

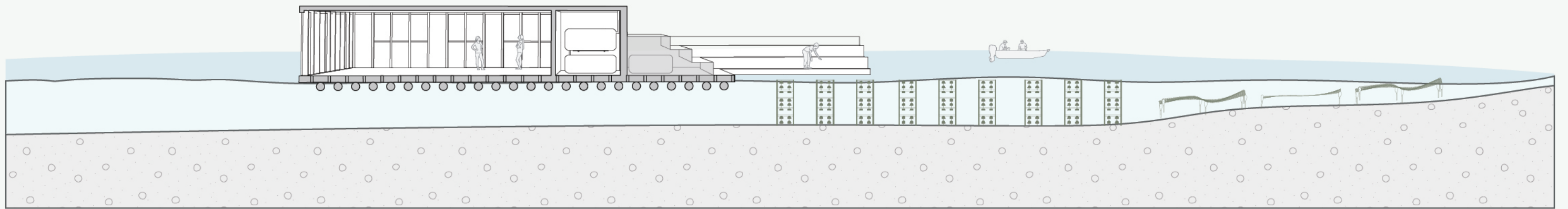


[facing page] Figure 5.40  
Floating Classroom floor plan

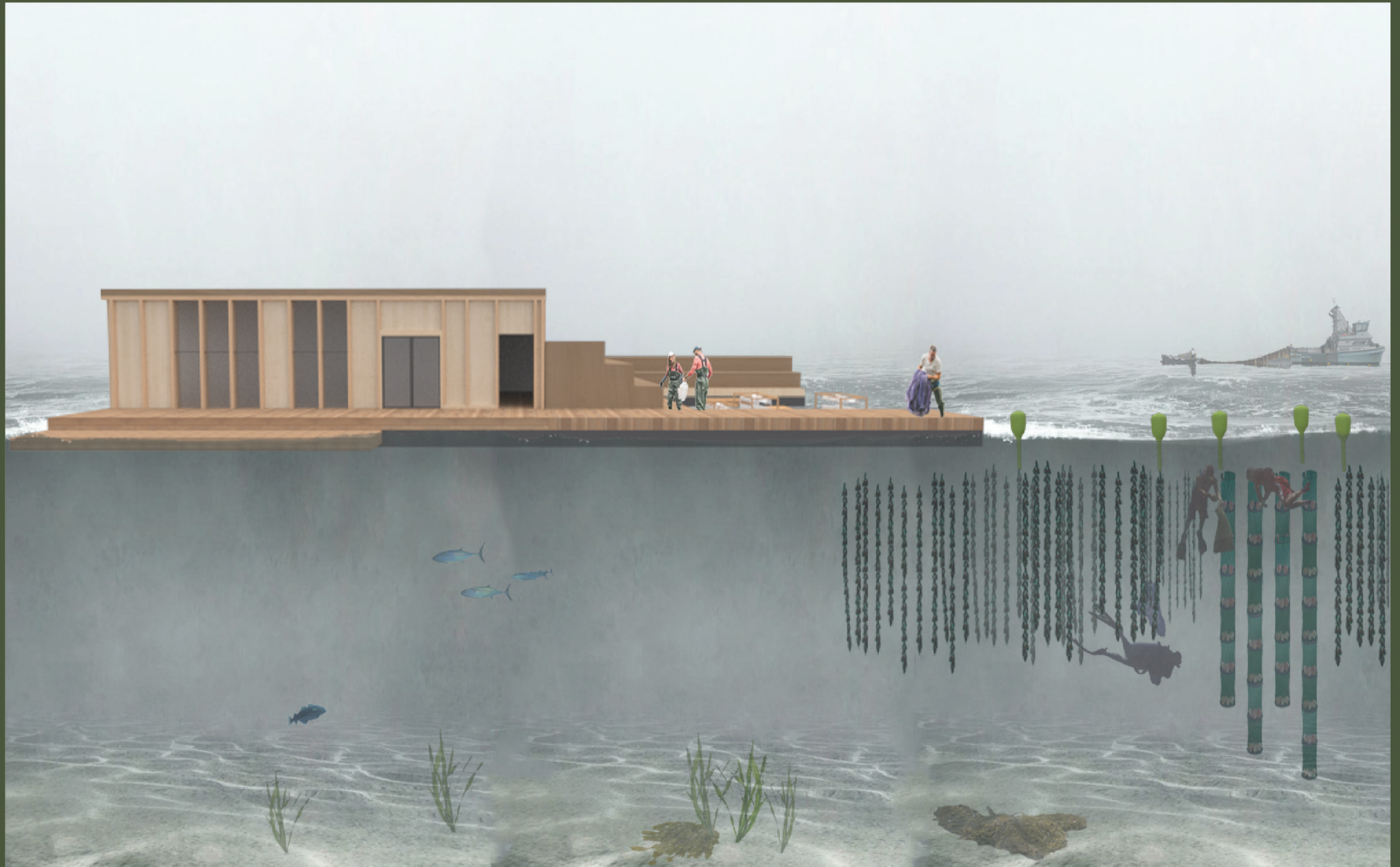
Figure 5.41  
Floating Classroom axonometric  
diagram

[page 111-112] Figure 5.42  
Floating Classroom section

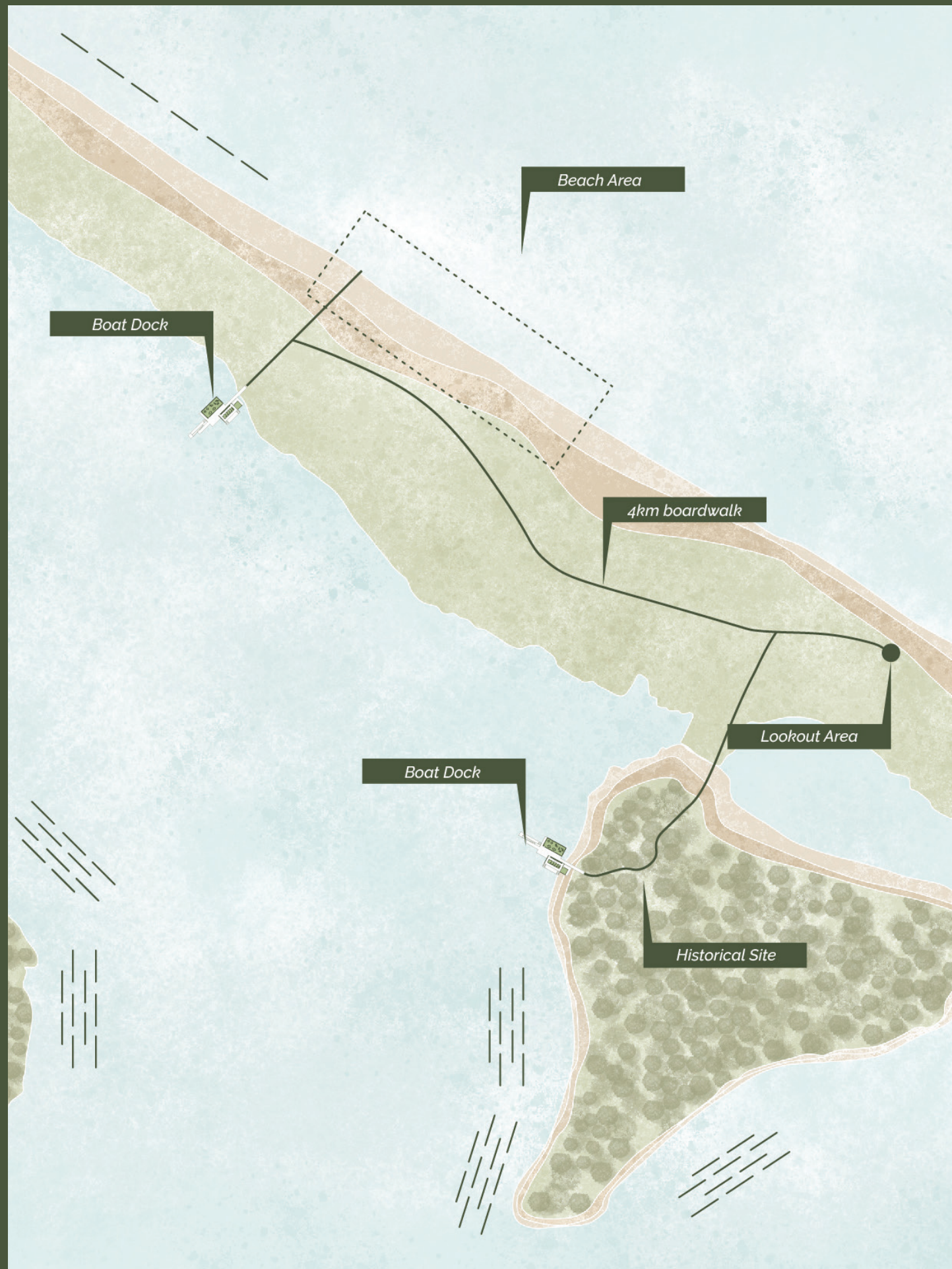
[page113-114] Figure 5.43  
Floating Classroom rendering











## Hog Island Sandhills National Park Reserve

The proposed National Park Reserve is located 5 kilometres by boat from the Cultural Landscape Centre. The site is a series of sandbars protecting the northeastern coast of P.E.I. and Malpeque Bay. The proposed intervention and activities within Hog Island Sandhills are limited to approximately 3 kilometres of these sandbars, primarily within Hog Island and the Hog Island sandbar. The "Growing Island" research conducted by MIT's Self-Assembly Lab is incorporated to protect this series of sandbars by increasing their mass and elevation by submerging sandbags along the thinnest part of the sandbars to reinforce them against storm surges.<sup>17</sup>

To protect this fragile landscape, activities are contained within the selected portion of the National Park Reserve. Upon arrival at Hog Island Sandhills National Park Reserve, visitors come to a floating boat dock offering a warm-up shelter, washrooms, storage and waste rooms. These programs are housed within the two floating dock entrances for visitors to the park. Within the 3-km area of the park that is accessible to for tourists, visitors can enjoy typical National Park activities such as walking in nature, swimming, skiing and bird watching, but here, on 2-metre wide wooden boardwalks. In addition to these activities, the archeological site can be viewed on the main Hog Island. A series of wayfinding signs in the National Park Reserve direct visitors to and from the boating docks and warm-up shelters located at both ends of the boardwalk.

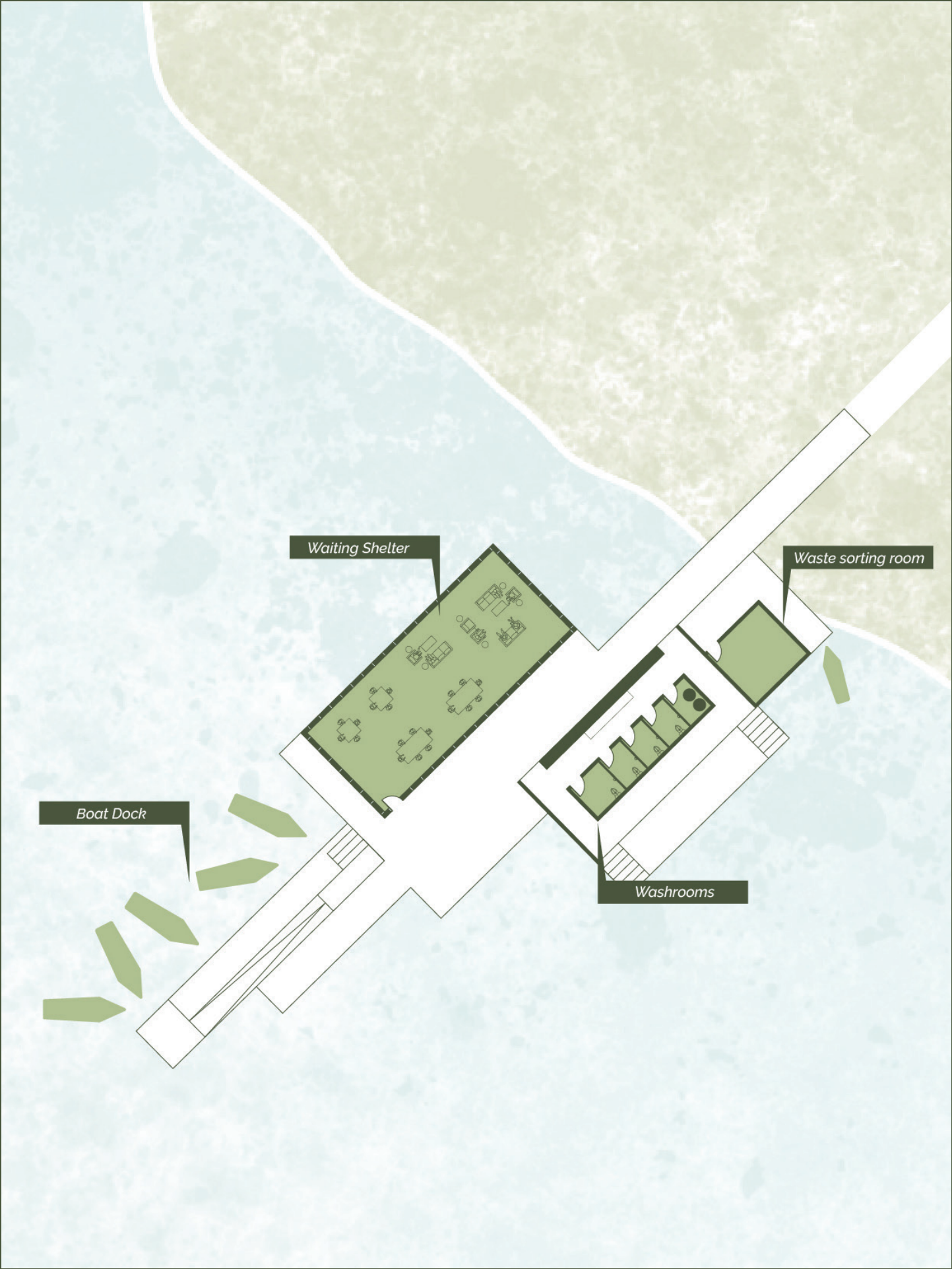
Designed in a similar manner to the Cultural Landscape Centre, the warm-up shelter and washrooms sit on stilts, while the boat dock is a floating structure. A ramp from the boat dock to the boardwalk was added for accessibility. A glulam structure, window panels and exterior wood cladding remain the consistent material palette of the site. Sourced locally, white pine and sugar maple, which are native to Prince Edward Island will be the main types of wood used in construction.<sup>18</sup> A water collection system, solar panels and waste management room are incorporated to ensure that the structures are self-sustaining with waste from the National Park Reserve taken back to the Lennox Island community to be sorted out and disposed of properly.

[facing page] Figure 5.44  
Hog Island Sandhills National Park Reserve site plan

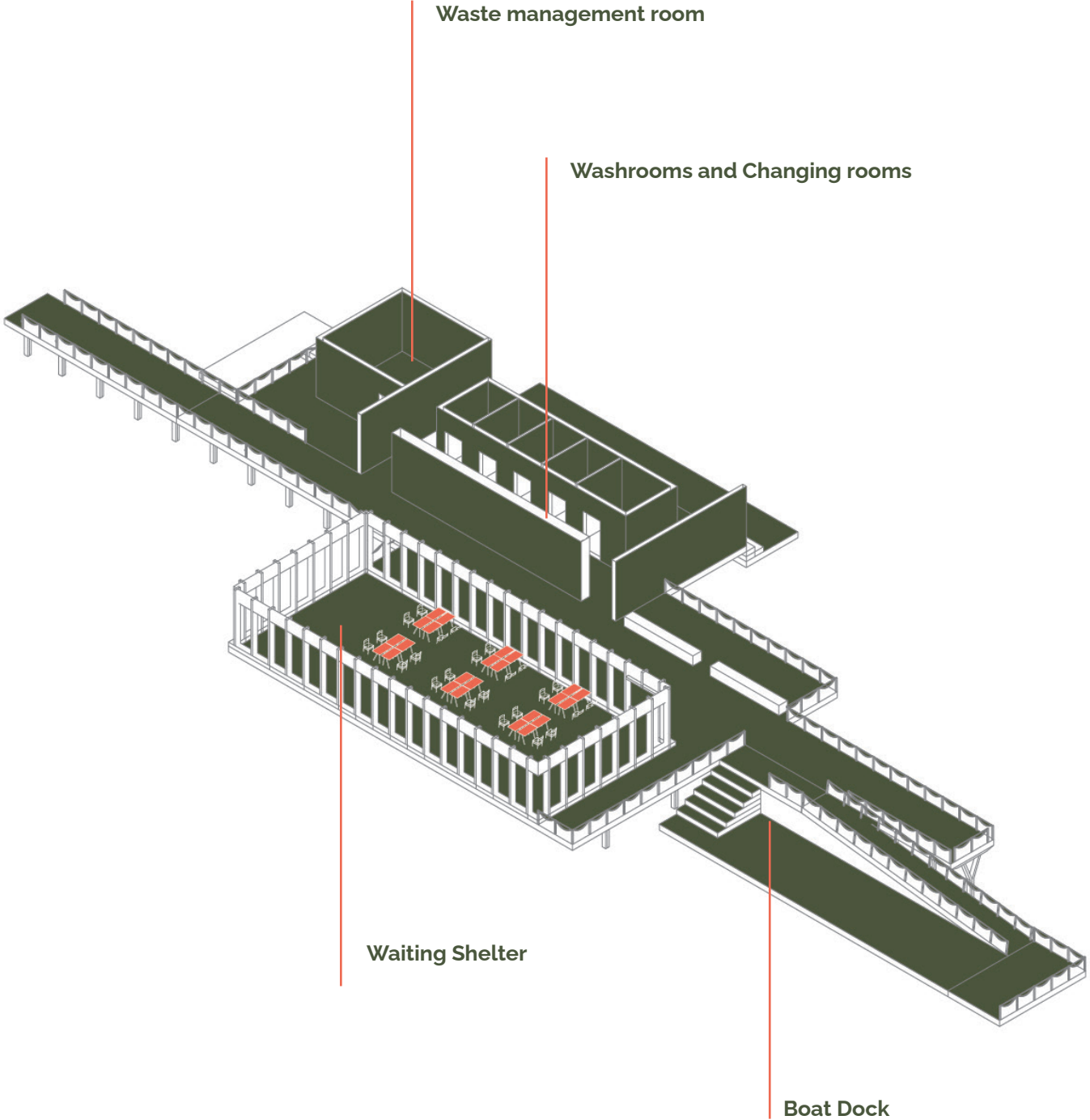
<sup>17</sup> Self-Assembly Lab, "Growing Islands," <https://selfassemblylab.mit.edu/growingislands>.

<sup>18</sup> Charlottetown, "Native Trees of Prince Edward Island," [https://www.charlottetown.ca/UserFiles/Servers/Server\\_10500298/File/Environment%20and%20Sustainability/Urban%20Forestry%20and%20Wildlife/Urban%20Woodlands%20and%20Natural%20Area/Native%20trees%20of%20PEI.%20Factsheet.%202020.pdf](https://www.charlottetown.ca/UserFiles/Servers/Server_10500298/File/Environment%20and%20Sustainability/Urban%20Forestry%20and%20Wildlife/Urban%20Woodlands%20and%20Natural%20Area/Native%20trees%20of%20PEI.%20Factsheet.%202020.pdf)





# National Park Welcome Dock



[facing page] Figure 5.45  
National Park Reserve Welcome Dock  
floor plan  
Figure 5.46  
National Park Reserve Welcome Dock  
axonometric diagram  
[page 119-120] Figure 5.47  
National Park Reserve Welcome Dock  
section

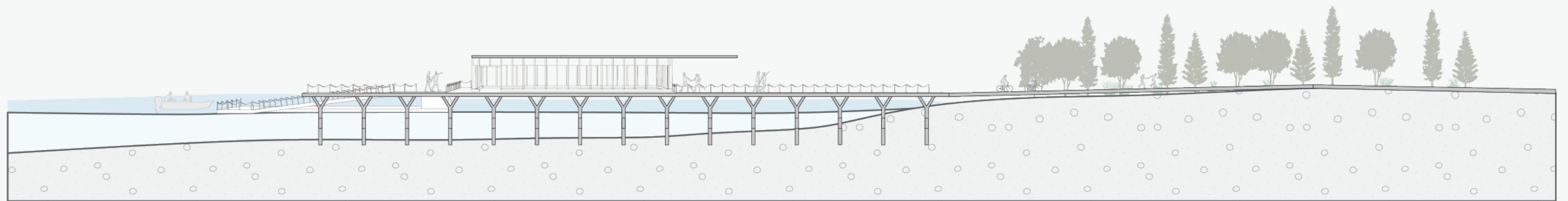








Figure 6.01  
View of the National Park Reserve  
welcome sign



Figure 6.02  
View of the Cultural Landscape Centre  
from the bridge boardwalk







Figure 6.03  
View of the entrance to the Cultural Landscape Centre



[left] Figure 6.04  
View of the exterior fire pit and Malpeque Bay from the Cultural Landscape Centre

[right] 6.05  
View of the welcome desk



[top] Figure 6.06  
View of the Cultural Crafts  
Exhibition space  
[bottom] Figure 6.07  
View of the Malpeque Bay  
Exhibition space ramp



[facing page] Figure 6.08  
View of the Malpeque Bay  
Exhibition pit







Figure 6.09  
View of the Cultural Landscape Centre  
exterior deck



Figure 6.10  
View from the boat dock  
Chapter 6: The Experience



Figure 6.11  
View of the Floating Classroom



Figure 6.12  
View of the exterior portion of the  
floating classroom







Figure 6.13  
View of the Hog Island  
Sandhills National Park  
Reserve Welcome Dock from  
the water



[left] Figure 6.14  
View of the Hog Island  
Sandhills National Park  
Reserve Welcome Dock



[right] Figure 6.15  
View of a National Park  
Reserve wayfinding sign



Figure 6.16  
View of the National Park Reserve beach



Figure 6.17  
View of the National Park Reserve  
departure dock







Figure 6.18  
View of the Floating Restaurant and  
Cultural Landscape Centre





Epilogue:

*Reconciliation includes anyone with an open mind and an open heart who is willing to look into the future with a new way.*  
-Chief Dr. Robert Joseph

Since national parks in Canada were first established, the official federal mandate has been to preserve protected areas for current and future generations of Canadians. While this sounds noble, it is deeply problematic, both because of the lack of sufficient environmental protections in favour of expansive tourism infrastructure, and because of the exclusion of Indigenous communities – who were removed from their ancestral lands for the creation of these parks – from the Canadians envisioned as enjoying these landscapes. One of the offerings of this thesis project is making the history of the abuse of Indigenous people a well-known, inextricable dimension of the history of Canada's national parks' creation, coupled with a design proposal that presents a starkly contrasting method for the development of a new park. Defining a new set of standards for how we preserve, manage and share protected areas in Canada and honour First Nations communities, "(Re)branding Canada's National Parks" aspires to support the Indigenous communities of Prince Edward Island in particular, while triggering a paradigm shift within Parks Canada more generally.

Cooperative Management between Parks Canada and Indigenous Peoples would radically transform the entire management, development, and policymaking of national parks in ways that would be inclusive of Indigenous communities and reflect a genuine commitment to landscape stewardship and acknowledgement of Indigenous peoples' right to their ancestral lands. Only through shared governance and shared decision-making will truly equitable policies and places be created. Through this just model of a new parks system, the livelihood and security of Indigenous communities, as well as a sustainable use of natural resources and concrete actions to mitigate climate change will be ensured.

The case of the proposed Hog Island Sandhills National Park will create important opportunities for Lennox Island First Nation. Starting with the co-management between the Indigenous community and Parks Canada, the curated programs will guarantee employment opportunities for the local community that include jobs as National Park tour guides, boat drivers and exhibition curators, environmental studies teachers, Indigenous Knowledge Carriers, artisans, restaurant staff and local seafood farmers. Seafood production within Malpeque Bay will increase while the infrastructure for this aquaculture does double duty augmenting the islands' coastal resilience. The design interventions for this proposed National Park Reserve stem from and insist upon a rigorous approach to prioritizing environmental and cultural sustainability while embodying a diverse and inclusive understanding of Canadian identity and a more profound commitment to Truth and Reconciliation.

[facing page]  
Figure 7.1  
The elemental fragility of treaties



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