INDIGENOUS PROTECTED AND CONSERVED AREA: A TOOL FOR MARINE CONSERVATION AND STEPS TOWARDS RECONCILIATION IN THE CANADIAN ARCTIC

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ABSTRACT

Keywords: Indigenous Protected and Conserved Area, reconciliation, Inuit, Indigenous governance, Indigenous self-determination, biodiversity conservation, Indigenous and Community Conserved Area, Indigenous marine protection, Indigenous Peoples, Canadian Arctic

Canada’s commitment to conservation has recently been renewed with the ambitious targets to conserve 25 percent of the Canada’s lands and oceans by 2025, and a goal of 30 percent by 2030. To achieve these targets, Canada will need to collaborate with Indigenous Peoples in the Arctic. In recent years, the nature of conservation frameworks and management in the Canadian Arctic has been changing towards approaches with increased engagement of Inuit and use of Inuit Knowledge. The emergence of new conservation approaches is in line with the global rising interest in Indigenous-led protection and conservation frameworks and a political movement towards reconciliation with Indigenous Peoples. National discussions on Indigenous protections in Canada gave rise to the emergence of the concept of Indigenous Protected and Conserved Areas as a conservation model advancing the role of Indigenous Peoples while meeting the challenges relating to meeting conservation targets in Canada. In Canada’s Arctic marine environment, Indigenous Protected and Conserved Areas offer the opportunity to strengthen resilience, well-being and continuity of Inuit traditions and customs and move forward from the legacy of settler-colonial structure in conservation practices. Indigenous Protected and Conserved Areas as a marine protection tool in Canada’s Arctic presents the opportunities to elevate the recognition of Inuit rights, self-determination and knowledge systems, and to promote the creation of Inuit-led protected areas while working towards achieving Canada’s conservation targets. To promote opportunities for Inuit self-determination through marine protections, paradigm shifts in conservation practices are necessary that consider a holistic approach to marine protection that reflects Inuit worldviews, includes and recognizes Inuit legal traditions and customary self-governance institutions, and accounts for the social, cultural, economic, political and ecological implications of conservation in Canada’s Arctic. Furthermore, flexible and adaptive policies and management practices, in addition to long-term federal funding, are necessary for capacity-building of locally-driven Inuit-led marine stewardship and conservation initiatives that are adapted to the needs, interests and circumstances of communities within Inuit Nunangat.
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LIST OF ABBREVIATIONS AND ACRONYMS

ANMPA  Anguniaqvia Niqiqyuam Marine Protected Area
AOI    Area of Interest
CAOR   Canadian Arctic Ocean Region
CAR    Canadian Arctic Region
CBD    *Convention on Biological Diversity*
CBS    Canadian Biodiversity Strategy
CCA    Community-Conserved Area
CIRNAC Crown-Indigenous Relations and Northern Affairs Canada
COSEWIC Committee on the Status of Endangered Wildlife in Canada
DFO    Fisheries and Oceans Canada
ECCC   Environment and Climate Change Canada
EEZ    Exclusive Economic Zone
EPA    Edéhzhíe Protected Area
FJMC   Fisheries Joint Management Committee
FPIC   Free, Prior, and Informed Consent
HTO    Hunters and Trappers Organization
ICCA   Indigenous and Community-Conserved Area
ICE    Indigenous Circle of Experts
IFA    Inuvialuit Final Agreement
IIBA   Inuit Impact and Benefit Agreement
IK     Indigenous Knowledge
ILPA   Indigenous Lands and Protected Areas
IPA    Indigenous Protected Area
IPCA   Indigenous Protected and Conserved Area
IQ     Inuit Qaujjimajatuqangit
ISR    Inuvialuit Settlement Region
IUCN   International Union for Conservation of Nature
JBNQA  *James Bay and Northern Québec Agreement*
LILCA  *Labrador Inuit Land Claims Agreement*
LK     Local Knowledge
MBS    Migratory Birds Sanctuary
MPA    Marine Protected Area
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<td>NLCA</td>
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<td>National Marine Conservation Area</td>
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<td>NMR</td>
<td>Nunavik Marine Region</td>
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<td>NRS</td>
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<td>SARA</td>
<td>Species at Risk Act</td>
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<td>SCBD</td>
<td>Secretariat of the Convention on Biological Diversity</td>
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<td>TEK</td>
<td>Traditional Ecological Knowledge</td>
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<td>TK</td>
<td>Traditional Knowledge</td>
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<tr>
<td>TNMPA</td>
<td>Tarium Niryutait Marine Protected Area</td>
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<tr>
<td>TRC</td>
<td>Truth and Reconciliation Commission</td>
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<tr>
<td>UNDRIP</td>
<td>United Nations Declaration on Rights of Indigenous Peoples</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>WPC</td>
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INTRODUCTION

In 2015, in response to the *Strategic Plan for Biodiversity 2011-2020* of the Convention on Biological Diversity, Canada adopted its own *2020 Biodiversity Goals and Targets for Canada* with four Canadian goals and 19 objectives for biodiversity conservation for 2020 (Environment and Climate Change Canada [ECCC], 2016a; Parks Canada, 2016). In particular, Canada’s Target 1, based on Aichi Target 11 of the Strategic Plan, states: “By 2020, at least 17% of land and inland water areas, and 10% of coastal and marine areas are conserved through networks of protected areas, and other effective area-based conservation measures clearly defined” (ECCC, 2016a). By the end of 2019, Canada had protected 13.81 percent of its marine and coastal areas, exceeding its international objective, including more than 9 percent of these areas being all, or in part, in the Arctic region (Fisheries and Oceans Canada [DFO], 2019g). Canada’s commitment to conservation has now been renewed with more ambitious targets. The Liberal government announced in September 2019 the new targets to conserve 25 percent of the Canada’s land and 25 percent of oceans by 2025, with a goal of 30 percent for each by 2030 (Liberal Party of Canada, 2019; Turnbull, 2019). These commitments have yet to be legally bound within existing or new federal instruments relating to conservation.

In recent years, the nature of conservation frameworks in the Canadian Arctic has been changing towards approaches with increased engagement of Inuit including the use of Indigenous Knowledge, Traditional Ecological Knowledge and Inuit Qaujimajatuqangit. The emergence of new conservation approaches is in line with the rising global interest in Indigenous-led protection within conservation frameworks and a political movement towards reconciliation with Indigenous Peoples and Indigenous self-determination (Artelle and al., 2019; Berkes and al., 2007). Indigenous Protected and Conserved Areas (IPCAs) are an emerging concept of a conservation model, advancing the role Indigenous Peoples in meeting the challenges relating to biodiversity conservation in Canada (Indigenous Circle of Experts [ICE], 2018). Considering the future of Inuit and the future of the Arctic ecosystems are inextricably linked, the knowledge and expertise that Inuit possess about their environment is invaluable for the conservation of these ecosystems and for the resilience, well-being and continuity of Inuit traditions and customs (DFO and Fisheries Joint Management Committee, 2013b; ICE, 2018; Theriault, 2011). Recent initiatives from varying levels of governments have investigated, implemented and reviewed the potential of IPCAs in conservation frameworks in Canada.

IPCAs as a conservation tool may create the opportunities to elevate the recognition of Inuit rights, self-determination and knowledge systems, and to promote the creation of sustainable development
opportunities for Inuit all the while working towards achieving Canada’s conservation targets. For the implementation of IPCAs in Arctic marine conservation, further information is needed to assess the legal conservation capacity provided, for example through Inuit land claim agreements and constitutionally protected rights. The impacts and benefits of the participation of Inuit in the appointment, selection, designation, management and monitoring of protected areas in the Arctic marine environment needs also be considered.

The main objective of this essay is to determine how IPCAs could be effectively and beneficially implemented for the conservation of marine environments and for the benefits of Indigenous communities in the marine environment of the Canadian Arctic. To reach this objective, the essay is separated into 8 chapters. The first four chapters set the background of the characteristics, state and threats to Canada’s Arctic marine environments, set the current context for the conservation and protection of marine environments in Canada’s Arctic and present Canada’s commitment to biodiversity conservation and the conventional tools for marine protection in Canada. The fifth chapters addresses the international and national rising interest in recognizing the rights and titles of Indigenous Peoples along with how those rights are currently recognized within modern land claims agreements, how they address Inuit culture and lifestyle in the Arctic and how it is relevant to the context of reconciliation with Inuit in the context of marine conservation in the Canadian Arctic. The sixth chapter presents international examples of Indigenous protected areas designations, seeks to clarify the concept and the characteristics of IPCA in Canada and presents current Indigenous-led protections in Canada. The seventh chapter outlines the issues and challenges of implementing Indigenous protections within Canadian conservation frameworks and proposes means for the reconciliation and empowerment of Inuit in the Canadian Arctic, notably how IPCAs can contribute to the recognition and implementation of Indigenous rights, self-determination, knowledge systems and the creation of sustainable development opportunities for Indigenous communities. The last chapter presents a set of recommendations for the implementation of IPCAs in Canada as a conservation tool to reach beyond national biodiversity conservation targets while promoting reconciliation, empowerment and self-determination of Arctic Indigenous communities.

An executive summary of the essay in French is presented in Appendix 5.
1. OVERVIEW OF CANADA’S ARCTIC MARINE ENVIRONMENTS

For many not from the region, the Arctic represents a remote, inhospitable and extremely cold homeland of polar bears. The reality is that the Arctic is a component that is intrinsic to Canada’s identity, is abundant with marine life, and has sustained Indigenous communities for thousands of years (Global Affairs Canada, 2002; Inuit Tapiriit Kanatami [ITK], 2004). This chapter aims to define politically, geographically and ecologically the Arctic region in Canada.

1.1 Definitions of the Arctic in Canada

The area called the “North” in Canada is not consistently defined in the literature and depends strongly on the context of its application, generally referring to “Northern” Canada or to Canada’s “Arctic” (Crown-Indigenous Relations and Northern Affairs Canada [CIRNAC], 2019a). Although not always inclusive or appropriate, these terms are defined using a variety of approaches. Politically, Northern Canada, colloquially known as the “North”, refers to the three northern territories: Nunavut, Yukon and Northwest Territories (CIRNAC, 2019a; Global Affairs Canada, 2017; Natural Resources Canada, 2014). Alone, these regions represent more than 40% of Canada’s land mass (Natural Resources Canada, 2014). Another definition of the North uses the southern limit of continuous permafrost as a natural demarcation of northern regions, which then includes the northern portions of seven provinces: British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec and Newfoundland and Labrador (Natural Resources Canada, 2014). With this latter definition, Canada’s North represents almost two thirds of the country’s land mass (Natural Resources Canada, 2014). In Canada, the Arctic Circle is also used to mark the boundary to the “Arctic” at the approximate latitude 66°33’N (CIRNAC, 2019a; Paterson and al., 2017). The Arctic is often defined by scientists and academics as this region above the Arctic Circle, which also marks the latitude above which the sun does not rise on the winter solstice and does not set on the summer solstice (National Snow and Ice Data Center, 2020b). Other indicators may also be used to define the Arctic, with the most common being the Arctic tree line, which is the northern limit of tree growth, and latitudes where average daily summer temperatures are below 10 degrees Celsius (National Snow and Ice Data Center, 2020b). Under all definitions, the entire Canadian portion of the Arctic Ocean is included in the Arctic region of Canada.

As for marine territories, the United Nations Convention on the Law of the Sea (UNCLOS) set a limit not exceeding 12 nautical miles from a country’s land territory and internal water; the area outside of this 12-nautical miles limit is considered international waters (United Nations Convention on the Law of the Sea
(UNCLOS, 1982). However, also outlined by UNCLOS, countries have sovereignty and the rights to manage and use resources within their Exclusive Economic Zone (EEZ), the area of the sea immediately adjacent to the shores of a state within a 200 nautical miles limit (Oceans Act; UNCLOS). Therefore, most of Canada’s northern waters fall under federal jurisdiction while also falling under the jurisdiction of modern Inuit treaties (Land Claims Agreements), which will be discussed later (Bonesteel, 2008).

The department of Fisheries and Oceans Canada (DFO) gives a definition of the Canadian Arctic Ocean Region (CAOR) in its report State of Canada’s Arctic Seas. The Canadian Arctic Ocean Region boundaries are presented in Figure 1.1 (Niemi and al., 2019). With this defined boundary, the CAOR is almost four million km$^2$ of ocean, an area equivalent to approximately 41 percent of the area of Canada’s terrestrial lands and lakes (Government of Canada, 2013; Niemi and al., 2019). The CAOR is mostly comprised of islands, with 94 major islands and approximately 36,470 minor islands, forming the Canadian Arctic Archipelago. The CAOR coastline of the mainland extends from the Yukon-Alaska border to northern Labrador, for more than 176,000 km, representing at least 70 percent of all Canadian coasts. (Niemi and al., 2019)

Figure 1.1 Map of the Canadian Arctic Ocean Region (CAOR) (bound by the yellow outline) covering land, water and ice within the Arctic Archipelago. Bounded by Davis Strait, Baffin Bay and Greenland to the northeast, the Beaufort Gyre and the Beaufort Sea on the northwest and encompassing portions of lands and waters following the coastline in eastern Yukon, the Northwest Territories, Nunavut, and northern Manitoba, Ontario, Québec and Labrador. As referenced within the State of the Arctic Ocean report. (source: Niemi and al., 2019)
The Arctic is also defined by Inuit themselves. As previously defined, Canada's Arctic waters fall predominantly within federal territorial waters, but also within modern Inuit land claims agreements, which represent distinct cultural regions. Inuit Nunangat is the Inuit homeland in northern Canada and encompasses four marine Inuit land claims regions: the Inuvialuit Settlement Region (in the northern portions of the Northwest Territories and Yukon Territory), Nunavut (which is both a land claim region and a territory), Nunavik (in northern Québec), and Nunatsiavut (in northern Labrador) (see Figure 1.2) (ITK, 2019a). The governance structure of each of the four regions is outlined in constitutionally protected land claims agreements, which also make Inuit the largest non-Crown landowners in Canada (Canadian Geographic, 2018). Other Indigenous groups also traditionally occupy Arctic environments, including Innu,

![Figure 1.2 Map showing Inuit Nunangat (the Inuit homeland in Canada) with the location, boundaries and areas of overlap of the four Inuit Land Claims Regions, including the Inuvialuit Settlement Region (yellow), Nunavut (blue), Nunavik (purple), and Nunatsiavut (orange). Inuit Nunangat includes land, water, and ice. The total area covers 35 percent of Canada's landmass and 50 percent of its coastline. (source: Inuit Tapiriit Kanatami, 2018)
Dene and Cree nations in parts of Yukon, Northwest Territories, Nunavut, Ontario, Québec, and Labrador (M. Freeman, 2017). There are 51 communities established in Inuit Nunangat, with 85% of the 60,000 inhabitants identifying as Indigenous (ITK, 2020; Li and Smith, 2016). For the purpose of this essay, Inuit Nunangat will be used as the definition of the Arctic and will be used to describe the landmass and ocean region, biodiversity, and the people living in this region.

1.2 Specificities of Canadian Arctic Marine Environments

Aquatic environments, marine and freshwater ecosystems, cover more than two thirds of the planet. While freshwater ecosystems cover less than 1 percent of the globe, marine waters cover approximately 71 percent. (Häder and al., 2020) Covering 14,090,000 km² with an average depth of 987 metres, the Arctic Ocean is the smallest and shallowest of the Earth’s oceans (Ostenso, 2020). Several characteristics make the Arctic Ocean’s physical, chemical and biological processes unique and vastly different than the adjoining Pacific and Atlantic oceans. Most notably, the Arctic Ocean is nearly landlocked and only has a few connections to the northern Atlantic and Pacific oceans (Narvik University College, 2010; Niemi and al., 2019; Ostenso, 2020). It occupies a basin around the North Pole and is surrounded by the land of six countries north of the Arctic Circle (Canada, Russia, Iceland, Norway, United States, Denmark/Greenland) (Narvik University College, 2010; Ostenso, 2020; Rudels, 2015). In addition, ice packs cover a significant portion of the ocean most of the year (Narvik University College, 2010; Ostenso, 2020). Together, these physical characteristics significantly hamper the exchange of energy between the Arctic Ocean and other oceans (Ostenso, 2020). The ice itself also reduces the exchange of energy with the atmosphere by impeding the mixing effects of wind and wave actions (M. K. Afenyo, 2017; Ostenso, 2020).

Inuit Nunangat encompasses a significant portion of the Arctic Ocean between the latitudes 51 and 86° N (Niemi and al., 2019). The Arctic marine environment can be simply delimited by the presence of saltwater and sea ice, bounded by the interface with freshwater (such as in estuaries) or by the extensive coast within Inuit Nunangat (Oceans North and al., 2018).

An important physical factor structuring life in the Arctic is the extreme seasonality in intra-annual solar irradiance driving ice cover formation and associated physical processes such as temperature, atmospheric exchange, and riverine inflows (Meltofte and al., 2013; Niemi and al., 2019; Oceans North and al., 2018). Sea ice is the most influential feature shaping Arctic marine life structure and interactions, supporting a wide range of species within complex ecosystems (DFO, 2020b; Niemi and al., 2019). Sea ice can be grouped into two categories: seasonal ice and multi-year or perennial ice. Seasonal sea ice will form and melt within one year whereas multi-year ice will have survived at least one melt cycle. Both have distinct
properties and host different organisms and interactions. (DFO, 2020b) The ice has important effects on ecology and climate. For example, the seasonal productivity of phytoplankton is the principal driver of biogeochemical cycling in the Arctic Ocean as many fish and marine mammals depend on ice algae growing in the brine channels of the ice as a source of primary synthesis of organic matter (Tremblay and al., 2012). As such, the herbivorous food web, and the organisms relying on it, are strongly dependent on the primary production of ice algae and phytoplankton during the seasonally ice-covered polar seas, for which formation is strongly correlated to climate. Typically, the onset of sea ice melt in the spring leads to a lipid-rich ice algae bloom, providing nutrients for zooplankton (Tremblay and al., 2012). Then, phytoplankton take over as the dominant primary producer for most of the year (Meltofte and al., 2013; Tremblay and al., 2012). In the fall, as the ice starts to form again, a second bloom may occur in polynyas (Tremblay and al., 2012). These blooms and shifts in the location of primary production drive multiple species migrations throughout the year, particularly when combined with the presence and formation of polynyas.

Polynyas are areas of the ocean where ice growth is substantially delayed or does not form, leaving recurrent areas of open water surrounded by sea ice (National Snow and Ice Data Center, 2020a; Tremblay and al., 2012). Polynyas play crucial roles for physical, biological and chemical processes occurring at the atmosphere and ocean interface. A large amount of energy is lost to the atmosphere, particularly in the winter (National Snow and Ice Data Center, 2020a; Preusser and al., 2015). In polynyas, the salinity of surface water increases as salty brine is being expelled in the water by the formation of sea ice, therefore also increasing the density of surface water. The increased density causes the surface water to then sink, overturning ocean water and bringing nutrients to the surface. (National Snow and Ice Data Center, 2020a) Consequently, polynyas are important biological hotspots for seabirds, marine mammals, fish and invertebrates which congregate to those areas in large numbers to feed on the phytoplankton thriving on the nutrients-rich water, and thus allowing those animals to overwinter at higher latitudes (Barber and Massom, 2007; Heide-Jørgensen and al., 2013; Meltofte and al., 2013). The open water also provides access between the ocean and atmosphere for air-breathing marine animals such as seals and whales (National Snow and Ice Data Center, 2020a; Niemi and al., 2019). Moreover, the presence of air-breathing predators has attracted Inuit and provided the basis for important subsistence hunting areas for millennia (Heide-Jørgensen and al., 2013; Oceans North and al., 2018; S. D. Smith and al., 1990). Sea ice is also an important travel route used by Inuit, notably for travel for hunting (DFO, 2020b; Niemi and al., 2019; Oceans North and al., 2018). In the Canadian Arctic, 23 polynyas have been identified, from which the North Water Polynya (Pikialasorsuaq, meaning the “great upwelling” in the Kalaallisut language) in Baffin
Bay has been recognized as one of the planet’s most productive ocean ecosystems (Barber and al., 2007; Meltofte and al., 2013).

In addition to the presence of sea ice, the inflow of fresh water from rivers contribute to the regional and local variability in the marine environment (Meltofte and al., 2013; Oceans North and al., 2018). The range of conditions (salinity, stratification, vertical mixing) creates seasonally and spatially different habitats where organisms either frequent or avoid for their survival (Oceans North and al., 2018). As presented in the Canada’s Arctic Marine Atlas, the Canadian Arctic marine environment can be further broken down into marine domains (see Figure 1.3), each with distinct physical oceanographic features determining and characterizing the marine habitats and their species (Oceans North and al., 2018). Physical factors such as salinity, depth, currents, water temperature, tides as well as the presence, absence and overall dynamics of sea ice further influence the habitats within those marine domains (DFO, 2020b; Niemi and al., 2019; Oceans North and al., 2018). The marine domains are distinguished by the presence of perennial or

![Figure 1.3 Map depicting the five marine domains of the Canadian Arctic (from East-to-west: Beaufort-Amundsen (orange), High Arctic (red), Kitikmeot (yellow), Baffin-Labrador (dark blue), and Hudson-Fox (pink)) according to their physical oceanographic features and their influence, including the landscape of the seabed, the sources of sea water, the surface currents and the dominant energy source driving ocean currents (source: Oceans North, 2018)](image-url)
seasonal ice, the influence of Arctic Ocean waters and Arctic surface waters, the river influence on fresh water inflows, and the presence and position of shallow sills as boundaries for the region (Oceans North and al., 2018).

Similarly, DFO divides the Arctic into five Arctic marine bioregions, which differ slightly from the marine domains described previously (see Figure 1.4): Arctic Basin, Western Arctic, Arctic Archipelago, Eastern Arctic, and Hudson Bay Complex (DFO, 2018c; Niemi and al., 2019). These marine bioregions have distinctive oceanographic and bathymetric features, which define the habitats and the species they support (DFO, 2011, 2018c, 2020a).

Figure 1.4 Map of the marine bioregional boundaries identified in 2009 by the Canadian Science Advisory Secretariat advice (CSAS SAR - 2009/056) for the 13 bioregions in Canada’s marine waters, defined by their attributes and similarities, primarily based on oceanographic and bathymetric similarities (source: Fisheries and Oceans Canada, 2018c, 2020a).
1.3 Overview of Canadian Arctic Marine Ecology

In general, Arctic terrestrial and marine biodiversity is lower than at southern latitudes with small and phylogenetically-clustered communities (Meltofte and al., 2013). Nevertheless, more than 21,000 species of animals, plants and fungi have been recorded, with a large portion being endemic to the Arctic (Meltofte and al., 2013). As previously mentioned, the physical characteristics of the Arctic marine environment structure the biodiversity, with the most important being the extreme seasonality (Heide-Jørgensen and al., 2013; Meltofte and al., 2013; Niemi and al., 2019). Biological diversity, defined as species richness in a given location or region, is the result of niche-based and dispersal-based factors (Meltofte and al., 2013).

Dispersal is facilitated by the connectivity between habitats in the marine environment, although different habitats are created by gradients related to geomorphology, latitude, proximity to coastlines, inputs of freshwater from rivers, and oceanic currents (Meltofte and al., 2013; Oceans North and al., 2018). Sea ice provides conditions for the proliferation of characteristic flora and fauna on both the top (e.g. melt ponds) and bottom (under-ice habitats) of the ice (Meltofte and al., 2013). Sea ice also allows the dispersal of terrestrial species within the Arctic Archipelago and with the mainland (Meltofte and al., 2013; Oceans North and al., 2018).

The diversity of terrestrial and marine Arctic is highly spatially heterogeneous and is lower than at lower-latitudes for multiple taxa; this relationship is likely due to the Arctic’s extreme seasonality and the resulting short growing seasons, widespread persistent or seasonal ice cover, and overall harshness of climate (Meltofte and al., 2013; Niemi and al., 2019). However, according to the Arctic Biodiversity Assessment, several marine organisms’ groups are more diverse than at lower latitudes, including benthic invertebrates, marine crustaceans and phytoplankton (Meltofte and al., 2013).

1.3.1 Humans

The Arctic is home to more than over 100,000 Canadians, with the majority identifying as Indigenous (DFO, 2020b). Indigenous peoples have inhabited the Canadian Arctic for 5000 years. Inuit view themselves as part of the ecosystem. Thus, Inuit culture and way of life are intimately tied to their knowledge of the land, water, ice, weather and animals. (ITK, 2004) Traditionally, Inuit were nomadic people, seasonally changing location as they adapted every aspect of their lifestyle (from shelter, to food, to transportation) to follow seasonably-available food resources (M. Freeman, 2017; ITK, 2004). Therefore, there were intimate relationships between settlements and resources availability (M. Freeman, 2017). Inuit economy and food security were based on hunting large marine mammals including seals, walruses, whales and caribou. Depending on the season, Inuit also fished, hunted birds and waterfowl, and collected clams or mussels,
1.3.2 Invertebrates

In the Arctic marine environment, invertebrates form the bottom of the food web, along with phytoplankton (Oceans North and al., 2018). Invertebrates diversity is far from homogenous in the Arctic and depends on niche-based factors such as adaptation to habitats types and food resources availability (Meltofte and al., 2013). Benthic invertebrates are organisms that inhabit the seafloor, either in soft or hard substrates. Annelids, echinoderms, sponges, crustaceans and molluscs are the dominant taxonomic groups of macro- and megafauna, while the meiofauna (small-sized benthic biota) is dominated by nematodes and crustacean arthropods, such as amphipods and copepods (Meltofte and al., 2013; Niemi and al., 2019; Oceans North and al., 2018). In estuarine and brackish marine habitats, where turbid waters lead to low levels of primary production, the abundance of resources supports large communities of benthic organisms (Meltofte and al., 2013; Niemi and al., 2019). These rich assemblages of amphipods, copepods, and mysids (shrimps) are supporting higher trophic consumers such as mammals, fish, and birds (Niemi and al., 2019).

Moreover, species of herbivorous zooplankton play an important role in transferring energy and lipids from phytoplankton through the food web (Meltofte and al., 2013, 2013; Søreide and al., 2010). Free-swimming molluscs such as pteropods, a group predatory zooplankton, also contribute significantly to this “marine snow” of sinking decaying material falling from the surface waters to the ocean bottom. (Oceans North and al., 2018) Hundreds of species of amphipods (crustacean zooplankton) have been recorded living in the sea ice and throughout the water column, and are important food sources for marine and ice-associated fish, mammals and birds, notably to Arctic char, Arctic cod, bowhead whales and seals (Finley and Evans, 1983; Meltofte and al., 2013; Oceans North and al., 2018, 2018; Søreide and al., 2010).
Several species of invertebrates are important to subsistence harvest, including mussels, shrimps, urchins and clams (Hurtubise, 2016; Priest and Usher, 2004; Stewart and Lockhart, 2005). In Nunavut commercial and subsistence shrimp fisheries are an important source of employment for Inuit (Hurtubise, 2016).

1.3.3 Fish

Marine and anadromous fish play important ecological roles in the Canadian marine ecosystem as they allow the transfer of energy from lower trophic levels (e.g. by eating phytoplankton) to higher trophic levels (e.g. to predators such as seabirds, mammals). Particularly, the migration of anadromous fish species (feeding in the sea, spawning and overwintering in freshwater) allows the inflow of nutrients from marine environments to freshwater and terrestrial environments (Galappaththi and al., 2019; Oceans North and al., 2018).

A book by Coad and Reist (2018) compiled the marine Arctic ichthyofauna (fish biodiversity) in the Canadian Arctic, which comprises 221 species, within 138 genera and 58 families. Arctic ichthyofauna represents approximately 25% of all Canadian freshwater and marine species, which amounts to 1,439 species, and 15% of families (233). Marine fish in the Canadian Arctic can exhibit one of two types of life-history strategies: anadromy (spend some periods of their life history in the marine environment and remaining periods in freshwater, for example feeding in the sea and spawning and overwintering in freshwater) or wholly associated to the marine environment. Most Arctic species are wholly marine, but 24 species within six families exhibit anadromy. (Coad and Reist, 2018)

In the human context, Arctic fishes are extremely important for food in and outside the Arctic (Niemi and al., 2019; Oceans North and al., 2018). Fishing has long been an important part of Arctic community culture and lifestyle and is still important for the diet and economy of Inuit (DFO, 2020b; Meltofte and al., 2013; Oceans North and al., 2018). Several marine and anadromous fish species are particularly important for subsistence but also for small-scale and commercial fisheries in the Arctic. Species exhibiting migratory life histories generally support commercial fisheries, with nearly all anadromous species being traditionally harvested, particularly Arctic char (Salvelinus alpinus) which are harvested in freshwater lakes or as anadromous migrating populations (Coad and al., 2018; Galappaththi and al., 2019; Meltofte and al., 2013). The exploitation of anadromous species also presents economic opportunities such as the anadromous Arctic char fisheries, which have been expanding since the 1940s in Cumberland Sound and Cambridge Bay (Hurtubise, 2016; Priest and al., 2004). It is most likely that harvesting of anadromous fish species has been occurring since human occupation of the Arctic. Inuit benefit from this in many ways, including sharing catches to ensure food security within the community. Fish and other country food
sharing has shaped Inuit traditions and customs (Coad and al., 2018; ITK, 2004). Other anadromous fish species important for marine subsistence harvest include cisco and other salmonid species (Coad and al., 2018; Priest and al., 2004). Wholly marine fish species are also harvested and exploited by Inuit, typically for commercial and domestic fisheries, including cod (Greenland cod, Arctic cod, Atlantic cod), sculpin and Greenland halibut (also known as turbot) (Coad and al., 2018; Priest and al., 2004).

1.3.4 Birds

Most birds found in the Arctic are seasonally populating the area, with the vast majority only spending a brief period at such high latitudes where reproduction and feeding takes place (Meltofte and al., 2013). Because of these migrations, birds are links between the Arctic and the rest of the globe. The dominant ecological and taxonomic groups of Arctic birds are waterfowl, shorebirds and seabirds (Meltofte and al., 2013; Oceans North and al., 2018).

Birds have a broad cultural significance for Arctic communities. They are harvested for their meat and eggs. Migratory waterfowl represent a significant portion of the subsistence harvest of Inuit living in Hudson Bay, James Bay and Nunatsiavut, including species such as Canada, snow, blue and brant geese and several species of ducks (Natcher and al., 2011; Stewart and al., 2005). Birds are also important features of Inuit folklore, art and spirituality; the bones, skin and down of birds are used for ceremonies, clothing and tools (M. Freeman, 2017; ITK, 2004). Moreover, down from bird nests (such as sea ducks) can be harvested for making warm clothing (Gilchrist and al., 2018). Inuit harvest of seabirds is generally sustainable, mostly involving the gathering of eggs from eiders, murres, black guillemots, gulls and terns as well as the hunting of eiders for meat and down (Merkel and Barry, 2008).

1.3.5 Mammals

A relatively low number of mammals occupy the Arctic, including only 21 species of marine mammals with consistent presence or distribution in the Canadian Arctic (Meltofte and al., 2013; Oceans North and al., 2018). Marine mammals play important roles in the food web where some are top predators feeding on other mammals or fish (e.g. polar bears feeding on ringed seals) while others feed on lower trophic levels (e.g. bowhead whales feeding on zooplankton) (Oceans North and al., 2018). Terrestrial mammals must also be mentioned as important species occupying or using the marine environment, as the presence of sea ice allows the migration and use of resources for terrestrial mammals, including polar bears, muskoxen and caribou (Meltofte and al., 2013; Oceans North and al., 2018).
Marine and terrestrial mammals occupying the Arctic are culturally and economically significant to northern communities as they are part of their subsistence diet, their spiritual culture and their economy (ITK, 2004; Priest and al., 2004; Stewart and al., 2005). These mammals support people by providing nutritional food sources as well as material for daily use (e.g. fur, hides, bones) and material for economically valuable and marketable products (e.g. narwhal tusks carving, hides) (Hurtubise, 2016). Inuit maritime subsistence harvest is dependent on access to these mammals, as subsistence hunting has both a nutritional and cultural significance for maritime Indigenous communities, as discussed further in Section 5.2 and further (Heide-Jørgensen and al., 2013; Meltofte and al., 2013; Oceans North and al., 2018).

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is responsible for assessing the status of wildlife species at risk in Canada (COSEWIC, 2019a). The Species at Risk Act (SARA) establishes Schedule 1 as the official list of wildlife species at risk, with species and their populations being classified as either extirpated, endangered, threatened, or a special concern (Species at Risk Act). Table 1.1 presents a list of the status of culturally important Arctic marine mammals and represent a significant portion of the subsistence harvest according to a study by the Nunavut Wildlife Board (Species at Risk Act; Priest and Usher, 2004).

Table 1.1 Culturally important species of Arctic marine mammals representing a significant portion of subsistence harvest of Canadian Inuit hunters along with their COSEWIC and SARA status ranked from highest to the least level of concern using SARA status. (“No status” have not been formally assessed by COSEWIC and “data deficient” means status could not be determined with available data). (sources: Species at Risk Act; Priest and Usher, 2004)

<table>
<thead>
<tr>
<th>COSEWIC Status</th>
<th>SARA Status</th>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>No status</td>
<td>No status</td>
<td>Harp seal</td>
<td><em>Phoca groenlandica</em></td>
</tr>
<tr>
<td>Data Deficient</td>
<td>No status</td>
<td>Bearded seal</td>
<td><em>Erignathus barbatus</em></td>
</tr>
<tr>
<td>Special concern</td>
<td>No status</td>
<td>Ringed seal</td>
<td><em>Pusa hispida</em></td>
</tr>
<tr>
<td>Special concern</td>
<td>Special concern</td>
<td>Atlantic walrus</td>
<td><em>Odobenus rosmarus rosmarus</em></td>
</tr>
<tr>
<td>Special concern</td>
<td>Special concern</td>
<td>Narwhal</td>
<td><em>Monodon monoceros</em></td>
</tr>
<tr>
<td>Special concern</td>
<td>Special concern</td>
<td>Polar bear</td>
<td><em>Ursus maritimus</em></td>
</tr>
<tr>
<td>Endangered</td>
<td>Endangered</td>
<td>Beluga whale</td>
<td><em>Delphinapterus leucas</em></td>
</tr>
<tr>
<td>Special concern</td>
<td>Endangered</td>
<td>Bowhead whale</td>
<td><em>Balaena mysticetus</em></td>
</tr>
</tbody>
</table>
2. CANADIAN CONTEXT FOR THE CONSERVATION AND PRESERVATION OF MARINE ENVIRONMENTS

Marine environments, whether Arctic, temperate or equatorial share at least one commonality in that they are all physically connected. The “openness” of marine environments influences to a great extent the dispersal of organisms, nutrients, pollutants, and other materials at scales and rates much different than that of terrestrial ecosystems (Carr and al., 2003). Therefore, human activities and natural disturbances can influence marine environments at various scales from global (e.g. climate change) to local (e.g. introduction of invasive species) (Moschella and al., 2007). As previously mentioned, the Arctic Ocean has the particularity to be almost landlocked and ice-covered most of the year, which creates unique conditions and makes this environment more sensitive to specific threats. For example, although relatively remote, Arctic marine ecosystems currently face multiple threats from environmental and anthropogenic stresses, such as climate change, biodiversity decline, habitats degradation, anthropogenic pollution, offshore oil and gas exploration and exploitation, and increased shipping activity, with many of these threats originating from distant regions (Kirk and Miller, 2018; Williams, 2008).

2.1 Climate Change

First, the Arctic is particularly sensitive to climate change, which is already dramatically changing the sea ice dynamics and threatening the survival of the species adapted to cold and ice-covered conditions (IPCC, 2013; Oceans North and al., 2018). Arctic sea ice is experiencing many changes such as a significant loss of multi-year ice, thinning of the ice, more mobile and fragile ice covers, as well as changes in the seasonal sea ice region including earlier melt and a later freeze-up dates (DFO, 2020b; Niemi and al., 2019).

The melting of sea ice changes the Arctic ocean surface albedo. Albedo is the ratio of reflected energy to short-wave incident energy received by the surface (mainly solar radiation). In a simplified way and in general, the lighter and smoother a surface, the more energy it reflects. On the contrary, the darker and rougher the surface, the more energy it absorbs (Myhre and al., 2013). Above normal surface temperatures as well as an increase in ocean temperature contribute to earlier thaw in spring, a longer thaw period and increases in open-water surfaces (Andry and al., 2017; Galley and al., 2016; Mortimer and Sharp, 2018). The accelerated melting of the ice thus contributes to the exposure of darker, open water surfaces; the dark ocean water absorbing more incoming solar radiation than snow and ice (Andry and al., 2017).

Consequently, the albedo, the changes in temperature, as well as the melting of the ice interact to create a fairly obvious reinforcing feedback loop: the higher the temperature, the more ice melts, the lower the albedo, and the more energy is absorbed by the surface (Andry and al., 2017; Galley and al., 2016).
According to the climate models of the United Nations Climate Change Secretariat (UNFCCC), the poles will be particularly sensitive to climate change since the global redistribution of energy, by oceanic or atmospheric circulation for example, will cause the local temperature to increase at a greater scale than in other regions of the globe (IPCC, 2019). In fact, since the mid-1960’s, Arctic surface air temperature has increased twice as much as the global mean rate (Niemi and al., 2019; IPCC, 2019). This redistribution of energy also changes the frequency and intensity of extreme events for which the environment, in the broad sense of the term, cannot absorb the resulting disturbances (IPCC, 2019).

Therefore, global warming and climate variability and change have already affected Arctic marine environments and will keep affecting, directly and indirectly, Arctic ecosystems in the foreseeable future and will be by far the most serious threats since they are also exacerbating all other threats (Conservation of Arctic Flora and Fauna, 2013).

2.2 Biodiversity and Ecosystem Variability

As sea ice is the most influential feature shaping Arctic marine life, thinning of the ice as well as changes in freeze-thaw cycle seasonality, iced surfaces coverage and location all have the potential to seriously impact ecological processes and interactions. For example, species migrations are perturbed by the early melt cycle and late freeze cycle of the sea ice, some species being altogether unable to adapt to the quickly changing conditions, therefore, restructuring the Arctic food web (IPCC, 2013; Oceans North and al., 2018). Also, thinning ice has the potential to increase under-ice phytoplankton blooms, leading to modifications in the location, timing, and predictability of primary production for grazers (Conservation of Arctic Flora and Fauna, 2013; Meltofte and al., 2013; Niemi and al., 2019; Tremblay and al., 2012). As such, the increase in length of the open-water period may induce a shift in energy sources from ice algae to phytoplankton. These modifications could have cascading effects on species interactions from distribution and abundance of species to an extension of their range extensions. (DFO, 2020b; Meltofte and al., 2013; Niemi and al., 2019; Tremblay and al., 2012)

Reports by the Conservation of Arctic Flora and Fauna, the biodiversity working group of the Arctic Council, and by DFO show current status and trends in Canada’s Arctic marine environment (Meltofte and al., 2013; Niemi and al., 2019). These documents, the Arctic Biodiversity Assessment (Meltofte and al., 2013) and the State of Canada’s Arctic Seas (Niemi and al., 2019), provide insights and knowledge (scientific and Inuit) to better understand marine ecosystems in the Canadian Arctic, observed ecosystem responses to changes in sea ice as well as current gaps in knowledge about marine habitats, species and food webs, and
seasonality and variability of events and processes. Key findings from the reports regarding Arctic marine biological diversity and ecosystems variability state that:

- Arctic marine biodiversity is being degraded;
- There is a northward migration of species with the range of species from lower latitudes extending or shifting to higher latitudes;
- Migratory species are threatened by overharvest and habitat alterations outside the Arctic region;
- Arctic biodiversity is threatened by disturbances and habitat degradation (Meltofte and al., 2013; Niemi and al., 2019).

The reports also stated that fragmentary knowledge of many Arctic species, ecosystems, and their stressors are making trends assessment and detection difficult (DFO, 2020b; Niemi and al., 2019). Variability in many marine taxa populations remains largely unknown (DFO, 2020b).

2.3 Anthropogenic Activities

Anthropogenic factors having potential deleterious impacts on the Arctic environment are also a source of ongoing concerns (Narvik University College, 2010). Human impacts on the environment include direct or indirect changes to biophysical environments, ecosystems, and biodiversity. The main anthropogenic threats facing the Arctic marine environment are anthropogenic pollution and pressures due to human activities. Threats from anthropogenic pollution originate from both long-range and local sources of pollution, with pollutants having direct and indirect impacts on the health of species and ecosystems. (Meltofte and al., 2013; Niemi and al., 2019; Oceans North and al., 2018; IPCC, 2019)

Rapid temperature increases and reductions of sea ice in the summer recorded in the past few decades and reduced sea ice has already increased and is likely to facilitate transportation and shipping activities in the Canadian Arctic (Pizzolato and al., 2016; IPCC, 2019). The majority of shipping activities in the Arctic are destination shipping, supply delivery to Arctic communities, and support for mining and oil and gas operations (Oceans North and al., 2018). Growing interest in transit shipping through the Northern Sea Route and the Northwest Passage and in the tourism industry may result in significant increases in shipping activities (increased frequency and longer shipping season) during the increasingly longer ice-free season, and increased marine traffic, especially by cruise ships and pleasure craft (Niemi and al., 2019). Shipping activities generate many detrimental disturbances to Arctic ecosystems by creating noise, air, and water pollution, which impact both humans and ecosystems, as well as increase the risk of invasive species and the potential for deleterious spills (Meltofte and al., 2013; Niemi and al., 2019; Oceans North and al., 2018).
The local threat of spills of oil and other substances transported as cargo or fuel increases with the intensification of shipping activities. Spill response in the Arctic is a challenge because of the vast geographical area, the lack of infrastructure and resources, and the unique environmental conditions (weather, light, and ice) complicating spill response operations (M. K. Afenyo, 2017; Meltofte and al., 2013). The state of knowledge on the fate and behaviour of different types of fuels in case of accidental spill in the presence of sea ice and their physical and metabolic impacts on living organisms is deficient (M. Afenyo and al., 2016; M. K. Afenyo, 2017; Dupuis and Ucán-Marín, 2015; Hellstrøm, 2017). Such spills are harmful to a large variety of aquatic organisms and can lead to immediate mortality or sub-lethal damage in marine wildlife, threatening all trophic levels and Arctic communities relying on these organisms for subsistence (Dupuis and al., 2015; Häder and al., 2020; Meltofte and al., 2013; Oceans North and al., 2018).

The marine environment of the Canadian Arctic also faces threats from offshore oil and gas exploration and production. Despite the federal government announcement on December 20, 2016 for a moratorium on new offshore oil and gas licencing, the Arctic seabed is known to contain important quantities of lucrative oil and gas resources and this moratorium is to be reviewed every five years, meaning it is only in effect for five year increments (Bernauer, 2020; Kirk and Miller, 2018; Office of the Prime Minister of Canada, 2016). Exploratory drilling and extraction activities have a significant influence and deleterious effects on the Arctic ecosystems, including underwater noises, the discharge of liquids from vessels and drilling, and the disturbance of sea ice and polynyas by ice-breaking and support vessels. These effects have the potential to change the behaviour, health, and habitat use of benthic and marine flora and fauna. (Nunavut Impact Review Board [NIRB], 2019)

A recent ecosystem stressor is the presence of microplastics, heavy metals and other contaminants in the water (Niemi and al., 2019). Land-based pollution is transported by rivers and introduced into ocean environments (Derraik, 2002; Macdonald and al., 2005). Concerns include the increase and the effects of pollutants originating in the Arctic as well as long-range pollutants which, through the action of waves, currents and winds, can reach Arctic regions (Macdonald and al., 2005; Routti and al., 2019). Bioaccumulation in animals and biomagnification of pollutants in the Arctic marine food webs have important impacts on human and wildlife health and implications for the conservation and management of many animals, particularly for top-level carnivores of the Arctic (Bolton and al., 2020; Dietz and al., 2019; Routti and al., 2019). Long-range transported bioaccumulative contaminants such as halogenated organic compounds (e.g. persistent organic pollutants [POPs]) and heavy metals (e.g. mercury, cadmium) already have considerable impacts on the Arctic biodiversity (Dietz and al., 2019; Foster and al., 2019; Niemi and al., 2019; Routti and al., 2019). These contaminants have a range of effects on vitamin metabolism,
immune functioning and hormones as well as other effects on oxidative stress, pathology and reproduction of organisms (Dietz and al., 2019). The traditional diet of Indigenous Peoples includes marine mammals as their main source of fat, such as bowhead whales (Chukmasov and al., 2019). As a result, there are concerns for the health of Indigenous populations since consuming these animals poses serious risks of intake of contaminants such as POPs (lipophilic pollutants) which can perturb the endocrine, reproductive, and immune systems, and can potentially cause cancer (Chukmasov and al., 2019; Dietz and al., 2019).

Another human activity posing threats to Arctic biodiversity and ecosystems is the commercial harvest of animals. Commercial fisheries in the Arctic are currently operating in Cumberland Sound, Cambridge Bay, Baffin Bay and Davis Strait area, with fishing operations primarily targeting Greenland halibuts (*Reinhardtius hippoglossoides*), shrimps, capelins, and herrings (Hurtubise, 2016; Niemi and al., 2019; Oceans North and al., 2018; Priest and al., 2004). Although there have been stock depletions in the recent past, the Canadian Arctic Ocean Region has little exposure to industrial-scale commercial fisheries. Small-scale, community-based fisheries remain the dominant fishing activities, targeting species such as the Arctic char (Oceans North and al., 2018). Marine mammals are also harvested for subsistence hunting or for material, including ringed seals (*Pusa hispida*), bearded seals (*Erignathus barbatus*), narwhals (*Monodon monoceros*), bowhead whales (*Balaena mysticetus*), beluga whales (*Delphinapterus leucas*), polar bears (*Ursus maritimus*) and walruses (*Odobenus rosmarus*) (Hurtubise, 2016; Oceans North and al., 2018; Priest and al., 2004). The effects of subsistence harvesting remain largely minimal; current marine mammal population trends across the Canadian Arctic Ocean are, for the most part, not well understood (DFO, 2020b; Niemi and al., 2019). The Bering-Chukchi-Beaufort and Eastern Canada-West Greenland bowhead whale populations are known to be increasing in abundance, recovering from historical whaling, which is supported by evidence from both Indigenous Knowledge (IK) and science (COSEWIC, 2009; Niemi and al., 2019). In the 1970s, polar bear populations were impacted by overhunting for the fur trade. Since then, harvest management allowed for subsequent recovery, although trends for the Canadian population are hard to determine due to irregular surveys, wide confidence intervals, changes in survey methods and complicated management of stocks because of overlap with multiple Canadian authorities (COSEWIC, 2018; Priest and al., 2004). Multiple beluga populations are recognized in the Canadian Arctic, with all but one appearing in the SARA registry under special designations; for a total of 7 populations, two are under “Special Concern”, two are “Threatened” and two are “Endangered”. Commercial historical hunting pressures, habitat degradation of estuaries, small vessel traffic disturbance, shipping activity, fishery removals of food resources, and contaminants seem to have contributed to the decline of these populations. Yet, current subsistence hunting quotas appear to be sustainable. (COSEWIC, 2004)
3. COMMITMENTS TO BIODIVERSITY CONSERVATION IN CANADA

Biodiversity conservation is a relatively new topic on the world’s environmental agenda (Novacek, 2008; Robin, 2011). With the realization that issues relating to sustainability and the degradation of biodiversity worldwide could not be handled at the individual state level, a platform for collaboration, the Earth Summit, was created by Member States of the United Nations in 1992 at the United Nations Conference on Environment and Development, also known as the Rio “Earth Summit” (Report of the United Nations Conference on Environment and Development, Proceedings of the Conference, 1992). One product of the Rio “Earth Summit” is the Convention on Biological Diversity (CBD), a multilateral treaty created with the goal of promoting sustainable development. The CBD was signed by 168 Member States between 5 June 1992 (Rio “Earth Summit”) and 4 June 1993, then received 30 ratifications, finally entering into force on 29 December 1993 (Secretariat of the Convention on Biological Diversity [SCBD], 2020b). The three main objectives of the CBD are: “the conservation of biological diversity (1); the sustainable use of its components (2); and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (3)” (SCBD, 2012).

In 2002, 10 years after the CBD opened for signature, the Conference of the Parties (COP) (the governing body of the CBD) developed the Strategic Plan for the Convention on Biological Diversity 2002-2010 with the aim to improve and guide the implementation of the CBD. The Plan included in its mission statement a commitment by the Parties, the 2010 Biodiversity Target, to “achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth” (SCBD, 2007). However, the Global Biodiversity Outlook 3, a report published in 2010 by the CBD, stated that this objective had not been met (SCBD, 2010).

A revised and updated Strategic Plan for Biodiversity for the 2011-2020 period was then adopted in 2010 at the 10th meeting of the COP in Nagoya, Japan (SCBD, 2020a). This new Plan included five strategic goals overarching the 20 Aichi Biodiversity Targets. These targets serve as a framework for the establishment of national and regional targets by the Member States and aim to promote the implementation of the original objectives of the CBD (UNEP, 2010). The five strategic goals and the 20 Aichi Biodiversity Targets are presented in Appendix 1. The most progressive target is Target 11, which states that, by 2020, at least 17% of terrestrial and inland water as well as 10% of coastal and marine areas of Member States must be conserved to improve the status of biodiversity.
3.1 Canada’s Commitments to Conservation

Canada was the first industrialized country to sign and ratify the CBD (ECCC, 2015). Following Canada’s ratification of the CBD, the Canadian Council of Ministers of the Environment created and tasked the federal, provincial and territorial working groups on biodiversity to develop the Canadian Biodiversity Strategy (CBS) (Federal, Provincial and Territorial Governments of Canada, s. d.). The Canadian Biodiversity Strategy was released in 1995 and signed by all Canadian jurisdictions by 1996 as Canada’s National Biodiversity Strategy and Action Plan as a statement of commitment to implement the CBD in Canada. The Canadian Biodiversity Strategy was developed to identify the measures required to meet Canada’s obligations under the CBD (ECCC, 2015; Federal, Provincial and Territorial Governments of Canada, s. d.).

It is only in 2006 that Canada developed and adopted the Biodiversity Outcomes Framework to guide and monitor the implementation of the Canadian Biodiversity Strategy (ECCC, 2015). The Biodiversity Outcomes Framework was updated in 2015 in response to the CBD’s updated Strategic Plan for Biodiversity 2011-2010 and its global Aichi Biodiversity Targets. Similarly, the Biodiversity Outcomes Framework presents a set of new mid-term goals (4) and targets (19), which reflect the Canadian context and its priorities for the conservation of biodiversity (ECCC, 2016a). These aspirational goals and targets are presented in Appendix 2. In response to Aichi Biodiversity Target 11, Canada’s Target 1 states: “By 2020, at least 17% of terrestrial areas and inland water, and 10% of marine and coastal areas of Canada are conserved through networks of protected areas and other effective area-based measures.” (ECCC, 2016a)

The Liberal government announced in September 2019 the new targets to conserve 25 percent of the Canada’s land and oceans by 2025, with a goal of 30 percent by 2030 (Liberal Party of Canada, 2019; Turnbull, 2019). These commitments have yet to be legally bound within existing or new federal instruments relating to conservation.

3.2 Pathway to Canada Target 1

To achieve Canada’s international biodiversity commitment to conserve at least 17% of its land and freshwater, and 10% of marine and coastal areas by 2020, a nation-wide initiative was created. The initiative Pathway to Canada Target 1 was developed to create a plan and recommendations to achieve this commitment through a coordinated network of protected areas, Indigenous Protected and Conserved Areas (IPCAs), and other conservation measures (Pathway to Canada Target 1, s. d.). The One with Nature report (2018) was produced by Pathway to Canada Target 1 and provided guidance to achieve Canada’s conservation targets, including four priorities which were meant to address three key challenges to biodiversity conservation identified by the initiative. The four priorities are as follows:
1. Expand the systems of federal, provincial and territorial protected and conserved areas.
2. Promote greater recognition and support for existing Indigenous rights, responsibilities, and priorities in conservation.
3. Maximize conservation outcomes.
4. Build support and participation for conservation with a broader community.

The three challenges to biodiversity conservation identified in the One with Nature report are:

1. Protecting the right amount of habitat to support viable populations of all species;
2. Protecting the right areas so protected and conserved areas can function as a representative ecological network, not simply as “islands of green;” and
3. Managing areas in the right way—a way that looks for cooperation across jurisdictional boundaries, and respects natural boundaries where possible.

The report also suggested tools for conservation that could be used to support progress towards Canada Target 1. Notably, the initiative suggests supporting the creation and recognition of IPCAs (Canadian Parks Council, 2018).

3.3 Indigenous Circle of Experts

In 2017, as part of the Pathway to Target 1 initiative, the Indigenous Circle of Experts (ICE) was created to develop a report on Indigenous-led conservation and provide advice to federal, provincial, territorial and Indigenous governments on how to achieve Canada Target 1 in the spirit and practice of reconciliation. The members of the ICE were Indigenous experts and officials from federal, provincial, and territorial jurisdictions. To hear from Indigenous Peoples across the country to inform the report, ICE hosted four regional gatherings with Indigenous Peoples across Canada and officials from federal, provincial, and territorial jurisdictions. Those gatherings aimed to discuss and inform the concept of Indigenous-led conservation with IK and local experiences from Elders, Indigenous conservation practitioners and others in attendance. The work that resulted was published in the We Rise Together report in March of 2018 and provided recommendations and guidance on how Canada Target 1 could be met while including the development of Indigenous-led conservation. (ICE, 2018).

The report highlights the legacies of colonialism persisting in conservation approaches in Canada and their implications for reconciliation with Indigenous Peoples. Particularly, the ICE emphasizes the resulting disconnection between Indigenous Peoples and their territories as well as the need to recognize, treat equally and value IK systems, traditions and cultural practices as other frameworks for protection and
conservation (ICE, 2018). Conservation practices should also reflect Indigenous values and worldviews (ICE, 2018). Indigenous cultures are inextricable from land and water as they are based on the worldview that humans are part of nature, not separated from it, and that all living things are interdependent. Therefore, the health of the land and the health of the people are interconnected. (ICE, 2018; ITK, 2004; Oceans North and al., 2018) To reflect these principles, the ICE, with the contribution of participants from the regional gatherings, described the nature, scope, meaning and characteristics of the concept of Indigenous Protected and Conserved Areas in Canada. (ICE, 2018)

The term “Indigenous Protected and Conserved Area” (IPCA) is the term chosen by the ICE to refer to a range of protected and conserved area approaches supporting the rights, responsibilities, and priorities of Indigenous Peoples in Canada. The ICE defines IPCAs as “lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance and knowledge systems.” (ICE, 2018) According to the ICE, there are three fundamental elements shared by IPCA initiatives: (1) they are Indigenous-led, (2) they represent a long-term commitment to conservation, and (3) they elevate Indigenous rights and responsibilities (ICE, 2018). These characteristics will be further outlined in Section 6.2.

The report also highlights the need to practice the principle of ethical space in the pursuit of IPCAs, which includes respecting the integrity of all knowledge systems and legislative, policy and political frameworks (ICE, 2018). The concept of ethical space is further outlined in Section 6.2.

Four challenges need to be addressed for the implementation of IPCAs. The ICE emphasizes that, in order to achieve The Pathway to Target 1, Canada must be willing to:

1. Share jurisdictions and responsibilities to and for the land with Indigenous Peoples.
2. Ensure the viability and sustainability of IPCAs and support their governance and management structures by providing financial solutions. These financial solutions must be dynamic to adapt and be adapted to the context of each IPCA and must also be substantial.
3. Realize IPCAs must build on existing skills and knowledge to “create a capacity [to] support structures [borne by local actors] that benefit communities and their lands and waters” (ICE, 2018).
4. Respect that conservation objectives of IPCAs, apart from achieving Canada’s biodiversity conservation targets, must emphasize the need to protect and conserve cultural keystone species and places which are important for Indigenous peoples’ survival, cultural and spiritual ceremonies, and traditional ways of life.(ICE, 2018)
Finally, the ICE formulates recommendations to lay the foundation for the creation of IPCAs that “recognize the critical role of Indigenous wisdom and knowledge in managing complex ecosystems and addressing conservation- and protection-related challenges” (ICE, 2018). These recommendations were grouped into six themes:

1. Reconciliation in conservation;
2. “We rise together” (“best practices”);
3. Holistic and integrated approaches to stewardship;
4. Capacity-building;
5. Sustained funding; and,
6. Implementation.

The recommendations for each theme are outlined in Appendix 3.
4. CONVENTIONAL TOOLS FOR MARINE PROTECTION IN CANADA

Currently, Canada has four legal tools available to protect marine areas or species and to promote the sustainable management of marine resources. These tools are Marine Protected Areas, National Marine Conservation Areas, National Wildlife Areas, Migratory Bird Sanctuaries.

Globally, protected areas are often defined using the Guidelines for Marine Protected Areas developed by the World Conservation Union (IUCN) and categorised using the IUCN Protected Area Categories System (Dudley and al., 2013; Kelleher, 1999). According to these documents, marine protected areas include a range of regulatory tools and management objectives for the protection of biodiversity and sustainability of marine resources. Marine protected areas are described as key component of integrated management of coastal and marine areas and part of their sustainable development (Kelleher, 1999). In 1995, the newly presented Canadian Biodiversity Strategy included the direction to:

“make every effort to complete Canada’s networks of protected areas representative of land-based natural regions by the year 2000, and accelerate the protection of areas that are representative of marine natural regions”. (Environment Canada, 1995)

4.1 Marine Protected Area (MPA)

In Canada, Marine Protected Areas (MPA) are areas designated for special protection by the federal government under the Oceans Act. In 1996, formal definitions of MPAs and MPA networks were consolidated in the Oceans Act. The Oceans Act assigns the responsibility to the Minister of the DFO “to lead and coordinate development and implementation of a national network of marine protected areas”. Thereby, DFO is enabled to conserve as MPAs marine and coastal areas for the conservation and protection of their marine species, and populations, the diversity of habitats and ecosystems, as well as special places (DFO, 2018b; Oceans Act). Special designations could also include the conservation and protection of areas with significant spiritual or cultural heritage, or traditionally used by Indigenous communities (DFO, 2018a). As per the Oceans Act, the development and implementation of MPAs require them to be done in collaboration with other government agencies, “…with provincial and territorial governments and with affected aboriginal organizations, coastal communities and other persons and bodies, including those bodies established under land claims agreements” (Section 31, Section 35(2)). In the Arctic, the establishment of MPAs and MPA network is consistent with land claims agreement as they require federal agencies to negotiate directly with Inuit communities and land claims organizations.

In 1999, DFO developed and published the National Framework for Canada’s Network of Marine Protected Areas was with the aim of providing strategic direction for the design of a national network of MPAs. This
document presents a framework to establish individual MPAs, with the following 5-step process (DFO, 2019a). On a case-by-case basis, these steps may be followed concurrently or sequentially:

- **Step 1: Identification of Areas of Interest (AOIs)**
  - Selection of AOI through one of the 13 bioregional MPA Network Process
  - Establishment of the proposed MPA Advisory Committee, with associated consultation and engagement mechanisms

- **Step 2: Initial Screening of AOIs**
  - Creation of the ecological, social, cultural, and economic profile/overview of the AOI
  - Site analysis to provide deeper understanding of previously described context
  - Interested parties may contribute with information or external knowledge (e.g. Traditional Knowledge) for the overview and assessment of AOI.

- **Step 3: AOI Evaluation and Recommendation**
  - Development of the conservation objectives, regulatory measures and boundaries of the proposed MPA based on the overview and assessment report, associated risks, and consultations with interested parties.

- **Step 4: Development of a Management Plan for Candidate MPA Site**
  - Completion of key documents (e.g. Strategic Environmental Assessment (SEA), the Cost/Benefit Analysis (CBA), Regulatory Impact Analysis Statement (RIAS), etc.)
  - MPA regulations are drafted by the Department of Justice and published in *Canada Gazette, Part I* for public comments (for a period of time, usually 30 days)
  - MPA regulations may be modified to reflect comments received, then finalized MPA regulations are published in *Canada Gazette, Part II* (MPA designation)

- **Step 5: Management of MPA**
  - MPA management framework with key elements: Conservation Objectives, MPA Management Plan; MPA Monitoring Plan (including monitoring indicators, protocols and strategies); compliance and enforcement measures; and public education and outreach measures.
  - The MPA management is adaptive: through the monitoring process, managers can provide input to make informed decisions in order to adaptively manage the MPA

Federal Marine Protected Areas (MPA) created under the *Oceans Act* are designed primarily on an individual basis and for nature conservation, with activities legally acceptable on the protected area and
protection standards having been specifically tailored to individual MPA’s conservation objectives (Bujold and Simon, 2018). The *Oceans Act* provides space for Indigenous engagement in MPAs as it allows and recognizes joint collaboration, consultation and the establishment of management bodies with affected Indigenous organisations, including Indigenous bodies established under land claims agreements, for the purpose of, among others, the implementation of integrated management plans and the establishment of marine environmental quality guidelines, objectives and criteria (Sections 32(c), 33(1a), 33(2), 2019). Moreover, Section 2.1 of the *Oceans Act* specifies that “nothing in this Act shall be construed so as to abrogate or derogate from any existing aboriginal or treaty rights of the aboriginal peoples of Canada under Section 35 of the *Constitution Act, 1982*”. To provide advice and recommendations to the Crown government, co-management bodies have been established under modern land claims agreements, while multi-stakeholder advisory committees or bilateral engagement efforts are the usual mechanisms allowing for Indigenous engagement outside modern land claims agreements (Ibey and al., 2018).

To date, there are 14 MPAs across Canada, covering over 350,000 km² or approximately 6% of Canada’s marine and coastal areas. Specifically, three of these MPAs are within the Canadian Arctic Ocean Region and Inuit Nunangat:

- Tarium Niryutait MPA, established in 2010 in the Inuvialuit Settlement Region: 1,750 km²
- Anguniaqvia Niqiqyuam MPA, established in 2016 in the Inuvialuit Settlement Region: 2,358 km²
- Tuvaijuittuq MPA established in 2019 in Nunavut: 319,411 km²

Tuvaijuittuq MPA is discussed in Section 4.5 and Tarium Niryutait MPA and Anguniaqvia Niqiqyuam MPA are discussed in Section 6.4.2. MPAs in the Arctic cover more than 323,519 km² and more than 5.5% of Canada’s marine and coastal areas. (DFO, 2019g) As such Arctic MPAs represent a disproportionate area of coverage of Canada’s three oceans making up more than 92% of the area of all MPAs.

### 4.2 National Marine Conservation Area (NMCA)

Since 1986 with the enactment of the *National Marine Conservation Areas Policy*, Parks Canada (PC) has the authority to administer a type of federal marine protection called National Marine Conservation Area (NMCA) (Parks Canada, 2008). This authority was reaffirmed in 2002 with the corresponding *Canada National Marine Conservation Areas Act* (*Canada National Marine Conservation Areas Act*, 2002). NMCAs are marine areas created and managed to protect and conserve “...representative marine areas for the benefit, education and enjoyment of the people of Canada and the world” (*Canada National Marine Conservation Areas Act*, 2002). NMCAs are thus chosen as examples of Canada’s major marine ecosystems and key features, meaning they are representative of the 29 marine bioregions identified by Parks Canada.
As the role of an NMCA is to manage the protection and conservation of marine ecosystems, sustainable uses could be permitted in the area, including traditional fishing and hunting activities (Canada National Marine Conservation Areas Act, 2002).

The establishment of NMCAs follows steps similar to those of the establishment of MPAs under the Oceans Act. The 5-step process in the establishment of a new NMCA is as follows (Parks Canada, 2017):

- **Step 1: Identifying representative marine areas (candidate sites)**
  - The marine and coastal habitats, the biology as well as marine, geologic, archaeological and historic features are taken into consideration.

- **Step 2: Selecting a potential NMCA from the candidate sites identified**

- **Step 3: Assessing the feasibility of a NMCA**
  - Cooperation and consultation with other federal agencies, provincial or territorial governments, local communities, regional stakeholders and Aboriginal peoples are undertaken to develop and assess proposals.

- **Step 4: Negotiating an agreement**
  - With the feasibility study demonstrating the support of the consulted parties, an agreement is negotiated to develop the regulatory framework under which the NMCA will be established and managed.

- **Step 5: Establishment of a NMCA**
  - The negotiated NMCA is established under the Canada National Marine Conservation Areas Act.

Indigenous engagement is also possible through NMCAs (Ibey and al., 2018; ICE, 2018). As for the Oceans Act, the Canada National Marine Conservation Areas Act (2002) acknowledges the existing aboriginal or treaty rights of Indigenous Peoples constitutionally protected under Section 35 of the Constitution Act, 1982, which must be respected in NMCAs (Canada National Marine Conservation Areas Act, 2002). It also allows provides space for Indigenous engagement as it seeks and supports partnerships with Indigenous Peoples for the establishment and management of NMCAs and allows and recognizes joint collaboration and consultation with Indigenous organisations, including Indigenous bodies established under land claims agreements (Canada National Marine Conservation Areas Act, 2002; Parks Canada, 2019a). However, the administration, management and control responsibility and authority of marine conservation areas remains to the Minister of the Crown (Canada National Marine Conservation Areas Act, 2002). Current NMCA policy framework allows for a range of cooperative management arrangements with Indigenous
Peoples for the planning, management and monitoring of NMCAs to achieve the purpose, conservation and management objectives of the conserved areas (Parks Canada, 2019a).

Currently, there are four NMCAs in Canada, the nearly-established Tallurutiup Imanga in the Arctic, and three proposed NMCAs throughout Canada (Parks Canada, 2019a). The Tallurutiup Imanga NMCA will be discussed in Section 4.5 below.

4.3 National Wildlife Area (NWA)

In 1994, amendments to the Canada Wildlife Act authorized the Canadian Wildlife Service (a branch of Environment and Climate Change Canada [ECCC]) to create, manage and protect marine wildlife areas for wildlife conservation, research activities or interpretation of wildlife (Section 4.1 (1)). NWAs are created with the purpose of preserving habitats that are critical to migratory birds and other wildlife species (ECCC, 2008). There are currently 55 NWAs across Canada. The five NWAs in Nunavut and the proposed NWA in the Northwest Territories aim to protect significant marine components, including: Akpait NWA (seabirds and marine wildlife), Ninginganiq NWA (bowhead whales and a polynya near Coburg Island, which is adjacent to the North Water Polynya), Polar Bear Pass (Nanuit Itillinga) NWA (bird species and some mammals including species at risk such as Peary caribou), Qaulluit NWA (seabirds, walrus and ringed seal), and the Edéhzhíe Protected Area (the first Indigenous Protected and Conserved Area for which there is a proposal to make Edéhzhíe a NWA; the Edéhzhíe Protected Area will be discussed in Section 6.3.1) (ECCC, 2019a; Environment and Natural Resources, s. d.).

4.4 Migratory Birds Sanctuaries (MBS)

In 1919, the first Migratory Bird Sanctuary (MBS) was officially designated in Québec under the Migratory Birds Convention Act (ECCC, 2019b). In 1994, the Migratory Birds Convention Act was amended to authorize the Canadian Wildlife Service to create and manage MBS to protect migratory birds against hunting, physical disturbances and trade (Migratory Birds Convention Act). At present, there are 92 MBS across Canada, with 49 including both terrestrial and marine environments; the marine portions of these areas (13,992 km²) can be counted towards Canada’s marine conservation targets (ECCC, 2019b; DFO, 2019g). In the Arctic, 17 MBS have marine portions with an approximate size contribution to marine conservation targets of 13,587 km² (DFO, 2019g).

4.5 Current Status and Recent Advances in Protection of Arctic Marine Areas

As of August of 2019, 13.81% of Canada’s marine and coastal areas were protected through the establishment of 14 MPAs under the Oceans Act, three NMCAs under the National Marine Conservation
Areas Act as well as 12 NWAs under the Canada Wildlife Act and portions of Marine Refuges, MBSs, National Parks and National Historic Sites with marine components (DFO, 2019g). Canada achieved its marine conservation target of 10 percent protection of marine and coastal areas in August 2019. Significant contributions towards the achievement of Canada’s Target 1 were made in the recent years, notably with extensive conservation efforts in the Arctic region. (DFO, 2019b)

The Tuvaijuittuq Marine Protected Area was designated on the 29th of July 2019 under the Oceans Act. The Tuvaijuittuq MPA is a long-term protected area covering 319,411 km² in Canada’s High Arctic Basin, off the northwest coast of Nunavut’s Ellesmere Island (Figure 1.5) (Qikiqtani Inuit Association [QIA], 2020).

The marine environment covered by the Tuvaijuittuq MPA encompasses the low-water mark extending to the outward boundary of Canada’s EEZ, including the seabed, the subsoil to a depth of five metres, the

![Figure 4.1 Location and boundaries (in yellow) of Tuvaijuittuq Marine Protected Area in the High Arctic Basin with adjacent Inuit communities identified. Tuvaijuittuq Marine Protected Area covers an area of 319,411 km², which represents approximately 5.55% of all Canada’s marine area and approximately 91% to the area protected by MPAs under the Oceans Act. (source: Qikiqtani Inuit Association, 2020)](image-url)
water column and the sea ice. (DFO, 2019c) It is the first MPA to be designated for interim protection by ministerial order under the Oceans Act. The region encompassing Tuvaijuittuq, which aptly means “the place where the ice never melts”, is expected to be the last area to retain sea ice year-round. The Tuvaijuittuq MPA has an approximate size of 319,411 km\(^2\), which represents and approximate 5.55% coverage contribution to federal marine conservation targets. The conservation objectives of this immense MPA were “to contribute to the conservation, protection and understanding of the natural diversity, productivity and dynamism of the High Arctic sea ice ecosystem”. The ministerial order imposed significant prohibitions on activities in the area, where no new or additional human activities will be allowed to occur, with a few exceptions including the exercise of Inuit rights respecting wildlife harvesting as provided for under the Nunavut Agreement. (DFO, 2019f)

The consultations undertaken prior to the designation of Tuvaijuittuq were considerable. Extensive consultation and engagement were conducted with key Inuit partners, notably through the Nunavut Marine Conservation Target Steering Committee (the Committee). The Committee was established in May 2017 with the objective of coordinating the establishment of Tuvaijuittuq MPA regarding planned and in-progress marine conservation activities within and adjacent to Nunavut. The Committee, which included Nunavut Tunngavik Inc. (an Inuit organisation ensuring that the provisions under the Nunavut Land Claims Agreement are carried out), discussed the feasibility and desirability for the creation of and provided recommendation for options for the Tuvaijuittuq MPA. Particular concerns were expressed regarding the boundaries of the proposed MPA and treaty obligations under the Nunavut Land Claims Agreement as well as concerns regarding the loss of access to possible resources over the use of a ministerial order. These concerns were addressed for the final proposal of the MPA. Community engagement processes were also conducted in the Nunavut communities of Arctic Bay, Resolute Bay and Grise Fiord to evaluate the community support for the establishment of an MPA in the High Arctic. DFO officials met with Hunters and Trappers Organization (HTO) boards and communities to provide information and seek feedback on the potential protection options for the Tuvaijuittuq MPA. Engagement of stakeholders within the Northwest Territories and the Inuvialuit Settlement Region was also undertaken as they are adjacent to the now established Tuvaijuittuq MPA. (DFO, 2019c)

The other recent marine protection providing significant contributions towards Canada’s Target 1 is the Tallurutiup Imanga National Marine Conservation Area. While it was first proposed in the 1980s, it was only ratified in August 2019 when the Government of Canada and the Qikiqtani Inuit Association (QIA) signed an Inuit Impact and Benefit Agreement (IIBA), required for the final establishment of the NMCA (Parks Canada, 2019d). The Tallurutiup Imanga NMCA is located in the northeastern region of Nunavut in
Lancaster Sound, covering approximately 108,000 km² (see Figure 1.6) (DFO, 2019h; Parks Canada, 2019g; QIA, 2020). The approximate coverage contribution to the federal Marine Conservation Targets of the Tallurutiup Imanga NMCA is 1.9% (DFO, 2019h). The region has a significantly high biodiversity and is important for Arctic migrating species as the waters of the eastern entrance to Tallurutiup Imanga NMCA remain open most of the year (Parks Canada, 2019e). It is recognized as one of the most significant ecological areas in the world due to its high productivity and is significantly rich in culture and wildlife for the Inuit living in the region (Parks Canada, 2019e). The conservation objectives of this NMCA is “to protect and conserve the area for the benefit, education and enjoyment of Inuit, the people of Canada and the world” (Parks Canada, 2019g).

**TALLURUTIUP IMANGA NATIONAL MARINE CONSERVATION AREA**

108,000 km²
1.9% of Canada’s marine area

Figure 4.2 Locations and boundaries (yellow area) of the nearly-established Tallurutiup Imanga National Marine Conservation Area in the eastern Canadian Arctic Ocean Region with the Inuit communities adjacent to the NMCA identified and the location of Migratory Bird Sanctuaries adjacent to the NMCA indicated (with a bird). Tallurutiup Imanga NMCA is located in the northeastern region of Nunavut within Lancaster sound and covers an area of 108,000km², which represents approximately 1.9 percent of Canada’s marine area and protects critical habitats and significant ecological areas. (source: Qikiqtani Inuit Association, s.d.)
The Tallurutiup Imanga IIBA and the Tuvaajuittuq Agreements are estimated to provide significant financial and real benefits for the surrounding communities, including meaningful job creation, development of potential fishing opportunities, support for Inuit-led research, monitoring and capacity-building as well as Inuit Stewards program and infrastructures. These agreements also promote Inuit stewardship programs and create new collaborative governance models between Inuit and the Canadian Government which allow for capacity development and participation in governance and management of the protected areas for the adjacent communities. (QIA, 2020)

Moreover, of particular interest for coastal and marine protection in the Arctic are emerging regional marine planning initiatives such as Imappivut (meaning “Our oceans” in English) which is an ocean management initiative in the Labrador Sea, adjacent to Torngat Mountains National Park, arising from a partnership between the Nunatsiavut Government and the Government of Canada. The Imappivut initiative is discussed in Section 6.4.3.
5. RECOGNIZING THE RIGHTS AND TITLES OF INDIGENOUS PEOPLES IN THE CANADIAN ARCTIC

There is increasing international and national attention on the need to recognize and implement the inherent and collective rights of Indigenous Peoples regarding their continued use and original occupation of the land (Office of the Prime Minister of Canada, 2018). International legislation includes declarations that commit member states to protect the culture and way of life of Indigenous Peoples. Of particular interest is the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), adopted in 2007 by the Member States of the United Nations by a majority of 144 states voting in favour, and 4 voting against (Canada, Australia, New Zealand and the United States). The UNDRIP is an international instrument establishing a framework of minimum standards recognizing and protecting the rights of Indigenous Peoples. The UNDRIP recognizes the rights of Indigenous Peoples to self-determination and to sustainable and equitable development in accordance with their own needs and interests as well as promote the rights of indigenous peoples affirmed in existing treaties and agreements. Also, Article 19 of the Declaration introduces the concept of Free, Prior and Informed Consent (FPIC), which requires States to consult and cooperate with Indigenous Peoples to obtain their FPIC before adopting and implementing legislative or administrative measures that may affect them, notably their rights to their lands, territories and resources. The concept of FPIC is further explained in Section 6.2. It also recognizes that Indigenous Knowledge, cultures and traditional practices contribute to the conservation of the environment. (UN General Assembly, 2007)

In 2010, the federal government issued a Statement of Support endorsing UNDRIP but emphasized that it was an “aspirational document”; Canada justified its hesitancy to be a full supporter of the Declaration with concerns on provisions relating to the level of autonomy recognized for Indigenous Peoples particularly regarding questions of lands, territories and resources, FPIC used as a veto in matters regarding Indigenous Peoples as well as self-government without negotiations (Indigenous and Northern Affairs Canada, 2011a). Although for nearly a decade Canada refused to endorse all principles of the UNDRIP, it was eventually fully adopted in 2016 (Indigenous and Northern Affairs Canada, 2011b).

In addition to UNDRIP, international commitments of Canada to respect and promote the rights of Indigenous Peoples are inherent to the endorsement of the CBD and its associated Strategic Goals for Biodiversity and Aichi Biodiversity Targets. Aichi Targets 14 and 18 emphasize the need for recognition of Indigenous rights, Traditional Knowledge, innovations, practices and interests relating to conservation and customary sustainable use of biodiversity as well as the need to integrate those rights into federal
legislation (see Appendix 1 for all Aichi Biodiversity Targets). Target 18 also emphasizes that the CBD should be implemented with the full participation of Indigenous Peoples. (UNEP, 2010)

In Canada, Section 35 of the Constitution Act, 1982, formally recognizes and affirms the inherent rights of Aboriginal Peoples as well as the existing aboriginal and treaty rights of the Aboriginal Peoples of Canada (The Constitution Act, 1982). The adoption of Section 35 thus formally entrenched in the Constitution Act, 1982, the inherent and treaty rights of Indigenous peoples in Canada, noteworthily the recognition of treaty rights including rights existing or acquired by way of land claims agreements (The Constitution Act, 1982).

5.1 Canadian Arctic Land Claim Agreements with a Marine Component

As previously defined, Inuit Nunangat encompasses four Inuit land claims regions: Inuvialuit Settlement Region (in northern Yukon Territory and northern Northwest Territories), Nunavut Settlement Area (covering the Territory of Nunavut), Nunavik (in northern Québec), and Nunatsiavut (in northern Labrador). These regions were consolidated with comprehensive and specific land claims agreements, which were negotiated to recognize and settle Indigenous title and ownership of lands and resources and reflect the regional priorities of those culturally distinct regions. All of these land claims have a marine component. (ITK, 2019a; Oceans North, s. d.)

5.1.1 Western Arctic Claims Settlement Act and Inuvialuit Final Agreement

In 1984, the signature of the Western Arctic (Inuvialuit) Claims Settlement Act by the Government of Canada and the Committee for Original Peoples’ Entitlement, representing the Inuvialuit of the Inuvialuit Settlement Region, approved, gave effect to and declared valid the Inuvialuit Final Agreement (IFA) (Western Arctic (Inuvialuit) Claims Settlement Act). The IFA was the third comprehensive land claim agreement finalized in Canada and the first to be signed north of the 60th parallel (Inuvialuit Regional Corporation, 2017).

Under the IFA, the Inuvialuit Settlement Region (ISR) was designated. The ISR is the westernmost Inuit region in Canada, covering approximately 1,172,749 km² (including 91,000 km² of land) in the Northwest Territories and Yukon, both on the mainland and in the Arctic Archipelago. The IFA gave the rights to surface and some subsurface areas within the ISR to the Inuvialuit people. (Inuvialuit Regional Corporation, 2016b) Under the provisions of the IFA, the Inuvialuit Regional Corporation and its subsidiaries were established to administer and manage Inuvialuit lands and funds allocated in the Agreement (Inuvialuit Regional Corporation, s. d.). Moreover, other provisions of the IFA created co-management committees,
boards and councils which bring together Inuvialuit, the federal and, in some cases, the territorial levels of government to allow for integrated resource management of certain aspects within the ISR, such as land use and protection of the land and environment through co-management (Inuvialuit Regional Corporation, 2016a, s. d.). Theses co-management bodies are in part responsible for environmental, fisheries and wildlife management (Inuvialuit Regional Corporation, 2016a). The IFA also specifies Inuvialuit harvesting rights for the ISR, including preferential rights to harvest specific species for subsistence purpose (Inuvialuit Regional Corporation, s. d.).

The population of the ISR is spread across six communities, all located in the Northwest Territories portion of the ISR. In 2015, of the estimated 5,700 people living in the ISR, 3,300 are Inuvialuit. (Inuvialuit Regional Corporation, 2016b) In 2020, there were 4,703 beneficiaries of the IFA (Inuvialuit Regional Corporation, 2020).

5.1.2 Nunavut Land Claims Agreement

In 1993, the Nunavut Land Claims Agreement (NLCA) was ratified and the Nunavut Act was signed (Nunavut Act; Nunavut Land Claims Agreement Act). The Nunavut Settlement Area (NSA) as defined in the NLCA includes waters adjacent to the land for a distance extending 12 miles from the coastline (Nunavut Land Claims Agreement Act; Oceans North, s. d.). In 1999, after a transitional period and as provided by the Nunavut Act, the new territory of Nunavut was established from the eastern portion of the Northwest Territories (ITK, 2004). The NLCA established the Nunavut Settlement Area (NSA), which is the largest Canadian land claim and encompasses 350,000 km², almost one fifth of Canada’s landmass (ITK, 2004; Nunavut Land Claims Agreement Act). Nunavut is separated into three smaller regions, each with their own Regional Inuit Organization (RIO): Kitikmeot, Kivalliq (formerly Keewatin) and Qikiqtaluk regions. Inx the last census, there were 35,580 people living in Nunavut, including 30,140 Inuit (Statistics Canada, 2018c).

The NLCA is comprised of 42 chapters and addresses the environmental rights of Nunavut Inuit, including regarding management and harvesting rights, land, water and environmental management regimes, parks, conservation areas and heritage resources. The Agreement specifically recognizes and provides the legal rights of Inuit to harvest wildlife as per their traditional and current use of lands and waters in Nunavut. It also recognizes the rights of Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources, including the offshore. (Nunavut Land Claims Agreement Act)
5.1.3  Nunavik Inuit Land Claims Agreement

For more than 4000 years, Inuit have inhabited the Nunavik territory of what is now the northern Québec (Makivik Corporation, 2013). At the last census, there were more than 11,000 Inuit living in 14 villages in Nunavik, mostly along the coasts of Hudson’s Bay, Hudson Strait and Ungava Bay (Statistics Canada, 2018b). The first comprehensive land claim signed in Canada was the James Bay and Northern Québec Agreement (JBNQA), signed in 1975 between the Grand Council of the Crees (of Québec), the Northern Québec Inuit Association, the Government of Québec and the Government of Canada, with the addition of three corporations. The JBNQA recognized the rights of the Indigenous peoples, whether territorial or cultural, and framed land management and the relationship between the Government of Québec and the Indigenous Peoples of the James Bay and Northern Québec region. The JBNQA does not have a marine component. (James Bay and Northern Quebec Native Claims Settlement Act)

Subsequently, the Nunavik Inuit Land Claims Agreement (NILCA) was signed in 2006 by the Government of Canada, the Government of Nunavut and the Makivik Corporation (representing Nunavik Inuit) for the marine portion of Nunavik. The NILCA took effect in 2007 and recognizes the Indigenous rights, titles, jurisdiction and interests of Nunavik Inuit within the Nunavik Inuit Settlement Area, which is entirely marine (the terrestrial component of Nunavik is covered under the James Bay and Northern Quebec Land Claim Agreement of 1975). The Nunavik Inuit Settlement Area is comprised of two components which are the Labrador portion of the Nunavik Settlement Area and the Nunavik Marine Region (NMR) (refer to Figure 1.2 for the map of Inuit Nunangat land claims regions). The NMR includes marine areas and islands offshore in James Bay, Hudson Bay, Hudson Strait and Ungava Bay in Québec as well as offshore areas adjacent to a portion of northern Labrador. This Agreement has transboundary features: the claims include areas of overlap with Nunavut as well as Nunatsiavut and the Eeyou Marine Region. The NILCA establishes Nunavik Inuit’s offshore rights (surface and subsurface) and traditional rights to use the resources within the NMR. To address wildlife, land management, harvesting rights and conservation issues within the land claims area, the NILCA also establishes co-management bodies, such as the Regional Nunavimmi Umajulivijiit Katujiqatigininga (an association of hunters, fishermen and trappers; Article 5 part 7), as well as co-management and planning boards which have decision-making authority with respect to wildlife matters. (Nunavik Inuit Land Claims Agreement Act)

5.1.4  Labrador Inuit Land Claims Agreement

The Inuit of Nunatsiavut have occupied what is now the north coast of Labrador for thousands of years and are descendant of the prehistoric Thule people (Nunatsiavut Government, s. d.-a). The Labrador Inuit
**Land Claims Agreement** (LILCA) is a treaty and land claims agreement recognized by Section 35 of the *Constitution Act, 1982* (*Labrador Inuit Land Claims Agreement Act*).

After almost three decades of negotiations, the LILCA was signed between the Labrador Inuit Association (representing the Inuit of Labrador), the provincial government of Newfoundland and Labrador and the federal government of Canada in January of 2005 and came into effect in December of the same year (Government of Newfoundland and Labrador, s. d.; *Labrador Inuit Land Claims Agreement Act*). The subsections of Section 17.3 of the LILCA allowed for the establishment of the *Labrador Inuit Constitution, 2005*, and recognizes the latter as the fundamental law of Inuit of Nunatsiavut. As a result of the ratification of LILCA and under Section 17.3.3 of the Agreement, the Government of Nunatsiavut was established and now has the responsibility to represent the interests of its Inuit beneficiaries and ensure that the terms of LILCA are implemented within Nunatsiavut. (*Labrador Inuit Land Claims Agreement Act*)

Nunatsiavut was the first Inuit region to achieve self-government. The Nunatsiavut Government being an Inuit regional self-government within the province of Newfoundland and Labrador (Nunatsiavut Government, s. d.-b). The Nunatsiavut Government is also responsible for the development, conservation and management of Labrador Inuit Lands. The Agreement also states the requirement for consultation of the Nunatsiavut Government if an MPA designated under the *Oceans Act* is to be developed and extended within the estuarine, coastal and marine areas, in which case an agreement must be signed between the federal government and the Nunatsiavut Government. It is also provided that the Nunatsiavut Government can recommend the establishment of MPAs within Nunatsiavut as well as the terms and conditions relating to their management plans. (*Labrador Inuit Land Claims Agreement Act*)

At the last census, from the approximately 7500 beneficiaries of LILCA, approximately 2560 people were living in the five communities located within Nunatsiavut and Inuit represented more than 89% of the population (Nunatsiavut Government, 2013; Statistics Canada, 2018a).

### 5.2 Inuit culture and lifestyle in the Canadian Arctic

Current Inuit culture evolved from two groups: the Sivullirmiut and the Thule (ITK, 2004). The Sivullirmiut were the first people to settle east of the northern coast of Alaska approximately 4000 to 5000 years ago (M. A. Freeman, 2020; ITK, 2004). It is by adapting to the sea covered by a thick layer of ice during winter that ancestors to Inuit people developed the knowledge, skills and technology needed to hunt marine mammals and resources throughout the year. Sivullirmiut spread east across Canada as far as southern Greenland and established villages, migration routes and hunting territories. (ITK, 2004) The Thule were another group believed to be the ancestors of the present-day Inuit and arrived approximately 1000 years
ago in Inuit traditional lands and areas (M. A. Freeman, 2020; ITK, 2004). Thus, for thousands of years, Inuit Peoples were entirely self-sufficient, having developed the knowledge, skills and technology to utilize and rely on both land and coastal marine resources, such as the harvest of marine mammals, in every season of the year (ITK, 2004; Pauktuutit Inuit Women of Canada, 2006). Hunting, trapping and fishing shaped and governed the Inuit worldview, is still central to the subsistence harvesting, culture and spirituality of Inuit today (Hurtubise, 2016; ITK, 2004, 2020).

The Inuit worldview, the set of beliefs and values honoured and upheld by Inuit, is spiritually centered upon beliefs of animal and human-like spirits and their interconnectedness, as explained by a rich mythology regarding both the natural and the supernatural world. For example, Inuit believe that the humans are an inherently part of nature and that the spirit of a recently deceased relative is taken on by a newborn. (Pauktuutit Inuit Women of Canada, 2006) The Inuit worldview shapes the way they interact with the world around them, including land, animals, and people. Inuit culture and traditions are recounted according to their worldview, which does not divide the past from the present and must be told as a continuous and consistent history and way of life, as time is non-linear and cyclical in nature. The Inuit worldview is passed through generations by the oral tradition. The telling of stories and information through the voices of Inuit Elders is part of Inuit culture and way of learning and contributes to how Inuit understand that their life is a continuation to that of their ancestors. (ITK, 2004) Inuit culture is thus dynamic and is an evolving body of knowledge and cultural insights to which each generation add from their own their relationship to the environment and to each other (ITK, 2004; Pauktuutit Inuit Women of Canada, 2006).

These traditions and beliefs also shape and structure the way Inuit interact with each other. Inuit customary laws are not usually written down and do not fit into modern legal concepts. Inuit customary laws govern the behaviour of Inuit societies with complex set of values, beliefs and taboos. Through the oral tradition, these clear rules of behaviour would be passed on to younger generations. Moreover, within Inuit customary law, no formal authority is given among Inuit to enforce these laws and punish offenders, the focus rather being on ensuring that the community would return to security, peace and stability. As the traditional Inuit lifestyle revolves around a seasonal rhythm to community life, kinship, consensus-based decision-making, cooperation and conservation are important Inuit values. These values are imperative to strengthen the ability of communities to meet the challenges imposed by the life in the Arctic with innovation, resourcefulness and perseverance and thus guarantee their self-reliance. To make decisions affecting the community, adults would gather and voice their views, discuss the issues and compromise until a decision was reached by consensus. (Pauktuutit Inuit Women of Canada, 2006)
5.3 Reconciliation with Indigenous Peoples in Canada

Canada’s history and present are shaped by settler colonialism and its legacies (ICE, 2018; Truth and Reconciliation Commission of Canada [TRC], 2015c). In the past 400 years, Europeans aggressively removed, disconnected and displaced Indigenous peoples from their land, culture and communities (Barker, 2012; TRC, 2015c). The first European settlers took on Canada’s east coast, then moved west and south across Canada to reach the west coast in the 1830s (Cavanagh and Veracini, 2016). During this time, settlers undertook massive colonisation efforts in the principles of expansion of territorial claims under the application of the *terra nullius* doctrine, which entailed that Europeans that *discovered* lands that were *inhabited were* entitled to claim such lands (Barker, 2012; Short, 2016). Power was wielded over the local populations and this invasive settler society, over time, developed a distinctive identity and sovereignty, which were imposed on Indigenous Peoples often in violent ways (Cavanagh and al., 2016; TRC, 2015c).

It was during the eighteenth century that Europeans settlers started entering the Arctic, first as whalers and then as fur traders. The life of Inuit started changing rapidly as the exchange of materials and technology impacted every aspect of their lives and culture. The establishment of shore stations for whaling in the 1850s marked the beginning of the permanent presence of outsiders in the Arctic, which also led to over-harvesting of whales. (ITK, 2004) Until then, the sovereignty of the Arctic had not been a concern for Canada. However, in the late 19th century, political issues and international conflicts caused an increased military presence in the Arctic. In 1880, to confirm Dominion title and ownership of the Arctic Archipelago a formal declaration of jurisdiction was passed in the form of an Order in Council. (Bonesteel, 2008) At the start of the 20th century, the influence and pressure of settlers intensified in the North as the seizure of lands under the pretexts of military concerns and resource extraction began. (ITK, 2004; TRC, 2015c) The Canadian Government also started the relocation of many Inuit communities, motivated by sovereignty concerns and an interest in making Inuit reliant on European ways of life. By the 1950s the Government encouraged Inuit to settle permanently into communities and structures of community governance similar to those in southern Canada (Bonesteel, 2008). Before these relocations and settlement life, Inuit lifestyle was often nomadic, centered around following patterns of hunting and harvesting. This imposed colonial dispossession denied the right to lands and to self-reliance to Inuit and thus implied a concurrent dispossession of Inuit traditions, culture, and way of life. (Inutiq, 2020)

Inuit suffered traumas by colonial practices that were specifically targeted to their lifestyle. Between 1950 and 1975, the federal government imposed qimmiit (sled dog, meaning “many dogs”) killings, forced relocations and family separation onto Inuit (QIA, 2019). To uncover the perspective and the lasting
impacts of those events, the QIA established the Qikiqtani Truth Commission in 2007 (QIA, 2014). The Qikiqtani Truth Commission was tasked with gathering testimonies about events between 1950 and 1975, while specifically excluding the High Arctic relocations and residential schools issues, from Inuit who lived through those difficult times and from the subsequent generations, who remember the suffering of their Elders (QIA, 2014, 2019).

Qimmiit were essential to Inuit life, their care and management being an integral part of Inuit culture, lifestyle, resilience, and survival. They helped hunters by pulling hunting and traplines equipment in winter, helped locate the game and carried it back, and assisted in a multitude of other aspects of Inuit life. The relationship between Inuit and qimmiit was developed through centuries and qimmiit were integrated into everyday life, storytelling and spirituality practices. Between 1957 and 1975, there was sharp decline in qimmiit. Many hunters abandoned their qimmiit when entering permanent settlements or were forced to relocate south, but it is undeniable that thousands of dogs were shot by the Nunavut Royal Canadian Mounted Police (RCMP), as qimmiit were seen as dangerous to the inhabitants by the RCMP and other authorities. Qimmiit were essential for travel in the Arctic. After their qimmiit were killed, hunters were unable to support Inuit hunting culture and Inuit traditional lifestyle as they could not travel outside of the settlements. Therefore, they could no longer maintain their connections to the lands nor rely on country foods for subsistence. Unable to feed their families, food security, independence, self-reliance and identity became important issues for Inuit hunters and their families who struggled to survive after the slaughter of their qimmiit. As hunting is an integral part of Inuit culture, the loss of qimmiit was thus accompanied by a loss of self-worth, cultural teachings, beliefs, values, and skills. (QIA, 2014)

In addition, forced relocations to settlement and medical evacuations contributed to the dislocation of the lives of Inuit. To improve Inuit health, medical strategies that involved removing patients to southern hospitals were implemented, which resulted in families being separated and contributed to the alienation of Inuit from their culture. By 1975, most Inuit lived in permanent-settlements created by the government. (QIA, 2014) Together, these colonial practices imposed on Inuit resulted in family separation, loss of community and culture (CIRNAC, 2019b). A deep sense of loss and shame still remains among Inuit Elders who remember the drastic lifestyle change they experienced during those decades (QIA, 2019). The loss cultural teachings, beliefs, values, and skills and associated grief are issues that Inuit still have to cope with today (QIA, 2014). Although the Canada’s Minister of Crown-Indigenous Relations and Northern Affairs Canada apologized to Inuit on August 14, 2019 on behalf of the federal government for these practices, the path forward to reconciliation must include concrete measures to promote Inuit culture, well-being and healing for current and future generations (Tranter, 2019).
The continuity of Inuit customary and traditional hunting and fishing practices have also been impacted by the introduction of harvest quotas and total allowable catch, regulating which species Inuit could harvest in the 20th century (Hurtubise, 2016). Ill-adapted conservation measures, such as seasonal restrictions or restrictions related to species conservation status, restricted Inuit subsistence hunting and fishing in turn diminishing their ability to harvest seasonally in the same way they used to having lasting detrimental effects on Inuit food security (Hurtubise, 2016; Theriault, 2011). The imposition of quotas, which is still enacted in conservation frameworks, has further socio-cultural implications, as they violate Inuit rights to subsistence harvesting and prevent Inuit from passing Traditional Knowledge to younger generations through the practice of traditions and customs (Hurtubise, 2016; Theriault, 2011).

Indigenous Peoples in Canada experienced and are still experiencing deeply traumatic events and legacies of Canada’s colonial history, such as Canada’s Indian Residential Schools, intense racism and systemic discrimination (TRC, 2015a, 2015c). In 2008, the Truth and Reconciliation Commission (TRC) was launched by the Government of Canada to learn what had happened in those residential schools and inform all Canadians about those findings (TRC, 2015a). The TRC mandate defines “reconciliation” as:

“...an ongoing individual and collective process, and will require commitment from all those affected including First Nations, Inuit and Métis former Indian Residential School (IRS) students, their families, communities, religious entities, former school employees, government and the people of Canada. Reconciliation may occur between any of the above groups.” (TRC, 2015c)

The TRC then published reports on what was learned and outlined 94 “Calls to Action” to advance the process of Canadian reconciliation and to address the legacies of these residential schools. A number of these “Calls to Action” can encompass issues related to marine conservation, including calls 42 to 47 and 50. These “Calls to Action”, call upon the federal, provincial, territorial, municipal and governments, among others, “to fully adopt and implement the UNDRIP as the framework for reconciliation”, “to commit to the recognition and implementation of Aboriginal justice systems in a manner consistent with the Treaty and Aboriginal rights of Aboriginal peoples, the Constitution Act, 1982, and the UNDRIP” as well as “to repudiate concepts used to justify European sovereignty over Indigenous peoples and lands”. In fact, these calls include commitments such as respecting Indigenous peoples’ right to self-determination, including the right to practise, develop, and teach their own traditions, customs, and ceremonies, supporting the renewal or establishment of Treaty relationships based on principles of mutual recognition, mutual respect, and shared responsibility as well as ensuring that institutions, policies, programs, and practices comply with the UNDRIP. (TRC, 2015b)
In addition, the TRC published ten “Principles of Reconciliation” upon which reconciliation between Indigenous and non-Indigenous Canadians must be based. These principles assert the treaty, constitutional, human, and self-determination rights of Indigenous Peoples and affirm the need to support the integration of IK systems, oral tradition, laws and connections to the land into the reconciliation process. The TRC also insists that trust building, accountability and transparency as well as joint leadership and substantial investment of resources will be needed to advance reconciliation. (TRC, 2015c) Therefore, although Indigenous rights and titles are recognized under Section 35 of the Constitution Act, 1982, in Treaties and Land Claim Agreements and through the endorsement of UNDRIP by the Government of Canada, significant work is still needed to fundamentally shift the national narrative regarding Indigenous Peoples in Canada from a culture of domination and oppression to a culture of decolonization, respect, understanding and inclusion of Indigenous Peoples.
6. INDIGENOUS PROTECTED AND CONSERVED AREA: AN EMERGING CONCEPT IN CANADA

Protecting places and conserving biodiversity and ecological services are concepts that Indigenous Peoples and local communities have long practiced and promoted (Borrini and al., 2004; Forest Peoples Programme and al., 2016; ICCA Consortium, s. d.-a; Ashish Kothari, 2008). It is only recently that the importance of Indigenous and Community Conserved Areas (ICCA) have started being recognized by international organizations, conservation agencies and governments (Ashish Kothari, 2008). Two events have particularly contributed to the international recognition of the importance of ICCAs: the fifth IUCN World Parks Congress (WPC) to the CBD in Durban in 2003 and the seventh meeting of the Conference of the Parties (COP) to the CBD in Kuala Lumpur in 2004. During the Durban meeting, the WPC recognized the importance and systematized the concept of governance of protected areas. During the same meeting, the WPC also acknowledged the governance role of Indigenous Peoples and communities in conservation outcomes and recommended in its Message of the fifth IUCN WPC to the CBD the full participation of Indigenous Peoples in the establishment and management of protected areas. (IUCN, 2005) In 2004, following the fifth WPC, the IUCN published, as part of its Best Practice Protected Area Guidelines series, guidelines for conservation agencies and governments to provide guidance on policy and practice for ICCAs and co-managed protected areas (Borrini and al., 2004). In 2008, based on the work done by the fifth WPC, the IUCN prepared and published guidelines for category classification of protected areas comprising both management category and governance type, one of which was Community Conserved Areas (Dudley, 2008). Within this governance type, the IUCN distinguishes two main subsets: (1) Indigenous Peoples areas established and run by Indigenous Peoples and (2) Community Conserved Areas established and run by local communities (Dudley and al., 2013). The IUCN defines this governance type as:

“protected areas where the management authority and responsibility rest with indigenous peoples and/or local communities through various forms of customary or legal, formal or informal, institutions and rules.” (Dudley and al., 2013)

Appendix 4 presents the most recent IUCN protected area definition, management categories and governance types.

Responding to the WPC’s message and building on the IUCN work, during its seventh meeting of the COP to the CBD in Kuala Lumpur in 2004, the CBD approved the CBD Programme of Work on Protected Areas, which supports a “new approach” to conserved areas and draws attention to the rights of Indigenous People to participate and ensure their FPIC in conservation practices (Borrini-Feyerabend and al., 2004; SCBD, 2004). The concept of “Indigenous and Local Community Conserved Areas” is formally adopted by CBD parties. The seventh meeting of the COP to the CBD also invites the Parties and other governments
to consider, support and promote as fundamental guiding principles for conservation the full and active participation of local and Indigenous communities in establishing, developing and implementing traditional approaches and adaptive management approaches, and drawing upon and use TEK and LK to conserve and sustain the use of the biological diversity. (SCBD, 2004) The new definitions and concepts for protected areas were subsequently integrated within the _Strategic Plan for the Convention on Biological Diversity 2011-2020_ and the Aichi Targets (SCBD, 2020a).

In 2010, following the tenth meeting of the COP to the CBD, the ICCA Consortium was established as an International Association for the promotion of the appropriate recognition and support of ICCAs at global, national and regional scales in the broader objective of conserving and promoting biodiversity, ecological functions, sustainable livelihoods and well-being of Indigenous Peoples and local communities (ICCA Consortium, s. d.-b).

### 6.1 International examples of IPA/IPCA designations

Globally, there are many conservation initiatives of areas governed by Indigenous Peoples under a variety of terms and designations, including Indigenous Protected Areas (IPA), IPCA, ICCA, Indigenous Reserves, Tribal Parks, Indigenous Conservation Territories, and many others (Ashish Kothari, 2008; Ashish Kothari and al., 2012; Oviedo, 2006; Smyth, 2006). While they have shown to provide important conservation, social and livelihood benefits, along with potential to increase significantly the amount of global protected areas or under other conservation status, not all of them are recognized or appropriately supported (Ashish Kothari and al., 2012).

Although the IUCN only recognized Indigenous owned and managed areas as a governance type in 2004, Australia has developed strong co-management arrangements with Indigenous Peoples since the Gurig National Park became the first jointly-managed park in Australia in 1981 (Borrini-Feyerabend and al., 2004). After the federal government of Australia expressed the interest to protect and represent all distinct bioregions within its National Reserve System (NRS), it was acknowledged that Aboriginal and Torres Strait Islander community owned significant areas of lands, including sometimes whole bioregions, and increasingly more lands as large territories were being returned to Indigenous Peoples under land claims agreements in the mid-1990s (Szabo and Smyth, 2003). The idea of Indigenous owned and managed protected areas emerged as a necessity to include bio-regionally significant Indigenous-owned land within the NRS (Szabo and al., 2003).

In 1998, Nantawarrina in the northern Flinders Ranges of South Australia was the first Indigenous Protected Area (IPA) designated on Aboriginal-owned property, with the objectives to “[preserve]
Australian's natural heritage and the culture of its first inhabitants” (Borrini-Feyerabend and al., 2004; National Indigenous Australians Agency, 2018). Since then, a total of 76 dedicated IPAs were added to the NRS, covering 67,329,778 million hectares, or 43.9% percent of the NRS. Most IPAs are dedicated under IUCN Categories 5 and 6, for which the management objectives emphasize protecting and sustaining an area while valuing the cultural and traditional interactions between people and nature. (National Indigenous Australians Agency, 2020)

In Australia, IPAs are similar to national parks or other Australian reserves, but with the particularity of being owned and controlled by their traditional owners, the local Aboriginal community (National Indigenous Australians Agency, 2018; Szabo and al., 2003). IPAs are recognized by all tiers of the Australian government as protected areas, but there is no IPA-specific legislation (Smyth and al., 2016). Rather, IPAs are supported by a combination of other existing legal measures and mechanisms such as Indigenous legal rights, Indigenous law and non-legal measures, tenure regimes, fisheries regulations, cultural heritage legislation and environmental protection legislation (Borrini-Feyerabend and al., 2004; Smyth and al., 2016). For the creation of IPAs, Indigenous Peoples voluntarily accept protected area status over their lands in return to for government support, all the while retaining their autonomy and having the responsibilities to develop a management plan for their lands, waters or resources with the goal of conserving its biodiversity values (Borrini-Feyerabend and al., 2004).

Furthermore, Indigenous and Traditional Peoples in South America have long been contributing to biodiversity conservation, with several South American countries having legal provisions to recognise the direct rights of Indigenous Peoples to manage their lands, waters or resources. These countries include Brazil, Bolivia, Colombia and Panama (Ashish Kothari, 2008; Oviedo, 2006). As the forerunner of the UNDRIP, the 1989 Indigenous and Tribal Peoples Convention of International Labour Organization Convention, also known as ILO Convention 169, recognized the:

“aspirations of [Indigenous and Tribal Peoples] to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions, within the framework of the States in which they live.” (Convention C169 - Indigenous and Tribal Peoples Convention)

The ILO Convention 169 further recognizes the right of Indigenous Peoples to self-determination within a nation-state (Convention C169 - Indigenous and Tribal Peoples Convention; Hanson, 2009). After ratifying the ILO Convention 169, most South American countries modified their legislation to include Indigenous Peoples’ rights and titles to lands, alongside other legal and policy changes such as the integration of Traditional Knowledge and management practices in protected areas management and changes in
protected areas categories allowing for sustainable and subsistence use of resources by traditional communities (Oviedo, 2006). In Brazil, Indigenous Lands and Protected Areas (ILPA) are areas owned, occupied and managed by Indigenous and Traditional Peoples and occupy more than one fifth of the Brazilian Amazon. These Indigenous-managed lands have been shown to be the most effective means to prevent deforestation as they are often created in response to the expansion of deforestation boundaries (Nepstad and al., 2006).

A variety of other Indigenous protections exist in the world under a variety of objectives, definitions, designations, legal recognition and governance types, but few of these addresses Indigenous rights and management in marine protections (Ban and Frid, 2018; Oviedo, 2006). However, increasing concerns about the decline in marine biodiversity, the negative impacts of colonial approaches to protected areas on Indigenous Peoples customary and traditional waters, and the potential impacts on both the well-being of ecosystems and Indigenous communities have motivated a number of countries to work with Indigenous Peoples to establish shared management and governance arrangements for marine protections (Ban and al., 2018; Lyver and al., 2014; Rist and al., 2019).

6.2 What are IPCAs in Canada

As previously mentioned, the Government of Canada updated in 2015 its Biodiversity Outcomes Framework in response to the CBD’s updated Strategic Plan for Biodiversity 2011-2010 and its global Aichi Biodiversity Targets (ECCC, 2015, 2016a). To achieve its targets and meet international commitments, the Pathway to Canada Target 1 recommended that Canada promote greater recognition and support for existing Indigenous rights, responsibilities, and priorities in conservation (Canadian Parks Council, 2018). The ICE was created as part of the Pathway to Target 1 initiative to develop a report on Indigenous-led conservation and provide advice to federal, provincial, territorial and Indigenous governments on how to achieve Canada Target 1 through the creation of IPCAs in the spirit and practice of reconciliation (ICE, 2018). In its report, the ICE presents its definition of IPCAs within the Canadian context. The ICE defines IPCAs as:

“...lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance and knowledge systems. Culture and language are the heart and soul of an IPCA.” (ICE, 2018)

In Canada, IPCAs as conservation tools have the potential to strengthen Indigenous rights whilst achieving biodiversity conservation targets and outcomes (Buscher, 2019; ICE, 2018; Zurba and al., 2019). Although
the management and governance objectives of individual IPCAs vary, they all share three essential elements, as outlined by the ICE:

1. They are Indigenous-led;
2. They represent a long-term commitment to conservation; and
3. They elevate Indigenous rights and responsibilities. (ICE, 2018)

The first fundamental characteristic of IPCAs is that they must be Indigenous-led, which means that “Indigenous governments have the primary role, [rights, and responsibilities] in determining the objectives, boundaries, management plans and governance structures for IPCAs”, which often rely on the ways Indigenous Peoples manage, govern and use their territories, lands and waters (ICE, 2018). As there are differences between governance systems within Indigenous communities, this definition for IPCAs allows for a variety of governance structures. As such, this new approach to conservation in Canada recognizes and upholds the traditional, customary and legal rights and titles of Indigenous Peoples and their rights to self-determination.

Indigenous worldviews consider conservation as multi-generational stewardship responsibility for their territories. A broader understanding of Indigenous conservation is that it is based on a mutual adaptation between the environment and the culture with the objectives of sustainably supporting ecosystems and harvest of resources (Ashish Kothari, 2008). Therefore, IPCAs must represent long-term commitments to lands and waters, as well as cultures and traditions, to achieve conservation for future generations. (ICE, 2018)

By acknowledging the rights and responsibilities of Indigenous Peoples to steward their traditional territories, IPCAs affirm and assert the relationships between Indigenous Peoples and their territory. By doing so, IPCAs also affirm the validity and represent an opportunity for a modern application of Indigenous traditional values, knowledge systems, legal traditions, customary and traditional law as well as customary, traditional and cultural practices. In the Canadian context, IPCAs represent an opportunity for the implementation of international instruments and commitments towards:

- the acknowledgement of Indigenous rights and titles;
- the respect of existing federal, provincial and territorial government legislation, policies and practices in a manner and form consistent with treaties, comprehensive land claim and self-government agreements; and,
- for true reconciliation between Indigenous Peoples and the broader Canadian settler society. (Canadian Parks Council, 2018; ICE, 2018)
A concept central to the IPCA framework is the concept of “ethical space” as mentioned in the ICE report *We Rise Together* (ICE, 2018). The concept of ethical space is a fundamental principle of engagement between Indigenous Peoples and settler governments and the ICE highlights that its purpose is to “co-create a space for collaboration and achieving common ground”, in the spirit of reconciliation, to open a path for mutual respect, cross-cultural literacy and co-governance (ICE, 2018; Lesage-Corbiere and Bell, 2018) Ethical space is created to provide a venue for collaboration that respects both Indigenous and western knowledge systems and legal mechanisms (ICE, 2018; Parks Canada, 2018). Within the IPCA framework, ethical space contributes to reconciliation by providing a framework to engage in open and honest dialogue and rebuild or establish trusting relationships with non-Indigenous governments (ICE, 2018; Lesage-Corbiere and al., 2018).

FPIC is another important concept emphasized in the ICE report for IPCAs in Canada. In the context of conservation, the conceptual framework of FPIC can be defined as follows:

- Free: Indigenous Peoples give their consent voluntarily in a process that is self-directed by the community without coercion, threats, intimidation, manipulation or retaliation;
- Prior: Consent is sought sufficiently in advance before any plan or part of a plan proceeds or decisions are made, with respect to Indigenous consultation and consensus processes;
- Informed: All relevant information is given to an appropriate engagement taken with Indigenous Peoples prior to seeking consent and as part of an ongoing process;
- Consent: The right for a definitive decision to be taken by Indigenous leaders representing their communities in accordance with customary and traditional decision-making processes and without conditions, which may imply the right to withhold consent. (Food and Agriculture Organization of the United Nations, 2020; ICE, 2018)

The concept of FPIC must be integrated to the IPCA framework in Canada in a manner consistent with how it is expressed in UNDRIP for the full recognition of Indigenous rights and titles to self-determination, and to ensure that ethical and respectful relationships and processes are developed and maintained during the creation of IPCAs (ICE, 2018; Plotkin, 2018).

### 6.3 Current Indigenous-Led Protections in Canada

In Canada, Indigenous governments and organisations are well-positioned to advance conservation of considerable areas of relatively intact ecosystems and other ecosystems with globally important ecological, social and cultural value (Artelle and al., 2019). In recent decades, a range of models to include
Indigenous Peoples and perspectives in decision-making processes and management of protected areas have been developed and implemented by Crown governments (Bujold and al., 2018).

Several initiatives and mechanisms currently allow Indigenous involvement in identifying, planning and managing Crown-protected areas, with varying levels of authority in their governance (ICE, 2018). In Canada, protected areas can be governed under various governance models and systems, which determine who holds authority, responsibility and accountability when it comes to making management decisions for the protected areas (see Sections 4.1 to 4.4). In 2015, Canada started to classify its protected areas according to four broad types of governance regimes: governance by government, shared governance, private governance and governance by Indigenous Peoples and local communities. (ECCC, 2016b)

As of 2016, governance by government was by far the most important regime as the federal government administered or jointly administered 45% of terrestrial protected areas and 80% of marine protected areas, and the provinces and territories administered or jointly administered 55% of terrestrial protected areas and 20% of marine protected areas. As such, 95% of all protected areas were under governance of Crown governments (federal, provincial or territorial governments). (ECCC, 2016b) In this governance model, while the authority rests in Crown government, Indigenous engagement can take different forms from consultation processes and mechanisms (such as under the obligation of the Crown to consult in the establishment of protected areas under Section 35 of the Constitution Act, 1982), advisory boards, or joint or cooperative management (predominantly for protected areas created under modern land claims agreements) (ICE, 2018). For shared governance or co-managed protected areas, a collaboration is established for decision-making authority, responsibility and accountability shared through a governance body or other cooperative or co-management mechanisms between different levels of government and other organizations or partners (e.g. Indigenous government or community, land trust, municipality) (Borrini-Feyerabend and al., 2004; ECCC, 2016b).

In 2016, only a small proportion of protected areas in Canada fell under shared governance or co-management models (approximately four percent). However, approximately three quarters of them are under arrangements between Indigenous groups and Crown governments (ECCC, 2016b; ICE, 2018). In Indigenous-governed protected areas, ecosystems and associated biodiversity, ecological services, and cultural values are conserved through customary laws or other effective means, and decision-making and management authority, responsibility and accountability is held by Indigenous Peoples and/or local communities (Borrini-Feyerabend and al., 2004; ECCC, 2016b).
6.3.1 Tribal Parks

In the Canadian context, land protection initiatives and conservation efforts that could fall within the definition of an IPCA include Tribal Parks. In the international context, Tribal Parks are recognised under different names and primarily as ICCAs. (ICE, 2018) In Canada, Tribal Parks are initiatives by the Indigenous groups in British Columbia to establish protected areas under the premises of Indigenous-led land governance and stewardship (Plotkin, 2018). In general, Tribal Parks are models of self-declaration of protected areas by Indigenous groups and use Traditional Knowledge and practices to mutually support conservation objectives, environmental stewardship and sustainable livelihoods (ICE, 2018).

The history of Tribal Parks started in 1984, when, in response to unsustainable logging practices on Meares Island, the Tla-o-qui-aht Ha’wihih (hereditary chiefs) declared the island, the traditional territories of Tla-o-qui-aht, a Tribal Park (ICE, 2018; Tla-o-qui-aht Tribal Parks Alliance, 2018). The blockade successfully halted logging operations, and now, community-based reconciliation, continuous improvement, adaptive management and monitoring, and collaboration with neighbouring First Nations are at the heart of the mission of the protected areas. The goal is “to promote respectful partnerships for the continued long-term protection of Tla-o-qui-aht Tribal Parks” (Tla-o-qui-aht Tribal Parks Alliance, 2018). However, Tla-o-qui-aht Tribal Parks has yet to be appropriately recognized and acknowledge by the Crown despite the Tla-o-qui-aht First Nation formally declaring their intention to protect the area (ICE, 2018). Since the creation of Tla-o-qui-aht Tribal Parks, the Tla-o-qui-aht have established three additional Tribal Parks: Ha’uukmin (Kennedy Lake Watershed), Tranquil Tribal Park and Esowista Tribal Park (Plotkin, 2018).

Another model of Tribal Park is Nexwagwezʔan (“It is there for us”) or the Dasiqox Tribal Park. This Tribal Park was proposed in 2017 as an expression of T̓síilhqot’in rights to govern and manage land, water and wildlife in their unceded traditional territory, and as a continuity to the Nemiah Aboriginal Wilderness Preserve established in 1989 by the Xeni Gwet’in. The motivation to establish the protected area came directly from Elders. (Dasiqox Tribal Park, s. d.; Plotkin, 2018) The particularity with the proposed area is that it is separate from the lands to which the T̓síilhqot’in were acknowledged title to by the Supreme Court in 2014 (Dasiqox Tribal Park, s. d.). Emerging from the colonial context, Dasiqox Tribal Parks represent an assertion of Indigenous law over unceded territory as it is T̓síilhqot’in Peoples, with important engagement from community members and leaders, who are setting down the laws of the lands and water within their territories for future generations and they rejected a co-management model for provincial protected area designation (Dasiqox Tribal Park, s. d.; Plotkin, 2018). The shortcomings to this model identified by Dasiqox
Tribal Park leaders in planning and managing are the limited staff capacity, and the amount of time and resources required for leaders (Plotkin, 2018).

6.3.2 Inuit Engagement in Federal MPAs

Recent advances in Indigenous involvement in the establishment and management of MPAs include the designation of Tarium Niryutait Marine Protected Area (TNMPA) and Anguniaqvia Niqiqyuam Marine Protected Area (ANMPA).

TNMPA was announced in August 2010 and was the first MPA in the Canadian Arctic, covering approximately 1,800 km² in the Mackenzie River Delta and the Beaufort Sea estuary. The establishment of TNMPA is the result of a collaborative effort between the Inuvialuit, private industry, local stakeholders and governments and DFO, representing the federal government (Beaufort Sea Partnership, s. d.-b). Most importantly, the TEK and expertise provided by Inuvialuit organizations and co-management bodies, such as Inuvialuit whale hunters and the communities of Aklavik, Tuktoyaktuk, and Inuvik, was used as a primary source of knowledge for the ecological assessment of the then proposed MPA, and then for the establishment of the TNMPA (DFO and al., 2013b). The conservation objectives for the TNMPA were also established using that knowledge, with the principal objective being, as identified as a major concerned for the region, “to conserve and protect beluga whales and other marine species, their habitats, and their supporting ecosystem” (DFO and al., 2013b).

Auxiliary key objectives of TNMPA are to conserve and protect biological resources within the MPA (including beluga whales and other marine species along with their habitats and their supporting ecosystem), to prohibit activities that could potentially impact those biological resources and to ensure their long-term sustainable management all the while preserving the harvesting traditions of the Inuvialuit people in the Inuvialuit Settlement Region (DFO, 2019e). The governance authority of the TNMPA is shared between DFO and the Fisheries Joint Management Committee (FJMC). The FJMC is a co-management committee including the Inuvialuit and the territorial and federal levels of government enabled by the IFA and tasked with the ensuring that “all marine, anadromous and freshwater fish and marine mammal stocks of the Inuvialuit Settlement Region will be managed and conserved for the wise use and benefit of present and future generations” (DFO and al., 2013b; Fisheries Joint Management Committee, s. d.). The monitoring plan for the TNMPA respects co-management, community-based approaches to monitoring and integration of Traditional Knowledge sources of information, as provided in the Inuvialuit Final Agreement (1984) (DFO and Fisheries Joint Management Committee, 2013a).
Part of the mechanisms used by the FJMC for the sustainable management of the renewable freshwater and marine resources of the ISR and their ecosystems is the use of TEK, and with respect to Inuvialuit culture, beliefs and practices (Fisheries Joint Management Committee, s. d.). Exceptions to the activities prohibited within the TNMPA were also made for subsistence harvesting by Inuvialuit, as this right is recognized and constitutionally protected under the IFA (DFO and al., 2013b). The selection of monitoring indicators for the conservation of ecosystems in the TNMPA included a balance between ecological indicators and socio-economic indicators as the desire by Inuvialuit for economic development in the ISR was an important consideration in the establishment of the MPA. Important collaboration between local hunters and trappers and western scientists have also made possible successful community-based monitoring programs and partnerships. (DFO and al., 2013a)

The second Arctic MPA and the first to have a conservation objective based solely on Indigenous Traditional and Local Knowledge is ANMPA, aims to maintain the habitat to support populations of key species for Inuvialuit (Beaufort Sea Partnership, s. d.-a; DFO, 2019d). Before the designation of the ANMPA in 2016, a workshop was conducted in the local community of Paulatuk to collect Traditional and Local Knowledge (TK/LK) on ice conditions, marine biota (species presence and use of an area), human use of areas, and geographic locations and boundary extent of the proposed MPA (KAVIK-AXYS Inc., 2012). The designation of the ANMPA allowed for the support of a number of ecologically important ecosystem components, including nearshore migration and feeding corridors for Arctic char, breeding and feeding habitat for polar bears and seals and a variety of other habitats supporting, among, bowhead whales, seabird colonies, cod and beluga, which in turn support the culturally important subsistence harvesting of these species for the Inuvialuit (DFO, 2019d).

6.3.3 Indigenous and Inuit Engagement in Federal NMCAs

Under the NMCA framework, an internationally recognized model of cooperative protected areas management is the one between the Government of Canada and the Council of the Haida Nation (Borrini-Feyerabend and al., 2004; ICE, 2018; Parks Canada, 2019a). In 1993, both parties signed the Gwaii Haanas Agreement, which includes the mutual commitment to protect the Gwaii Haanas’s natural, cultural and marine treasures (in Canada’s Pacific Ocean) while acknowledging the disagreement on ownership of the area (Parks Canada, 2019a). Based on this agreement, the Archipelago Management Board was created and is composed of an equal number of representatives from the Government of Canada and the Council of the Haida Nation (Parks Canada, 2019a, 2019b). The Archipelago Management Board has the entire responsibility and authority for management, planning and operations of Gwaii Haanas National Park
Reserve, National Marine Conservation Area Reserve and Haida Heritage Site (Parks Canada, 2019b). In 2010, the area was also designated as a Heritage Site in January and the Gwaii Haanas National Marine Conservation Area Reserve was established in June (Parks Canada, 2019b).

As previously mentioned, the Tallurutiup Imanga NMCA in the final phases of its establishment and demonstrates important Indigenous engagement through supporting a consensus-based governance model and the clear statement that Inuit will be considered in decision-making related to the establishment, management and operation of the conservation area, notably through the signature of the IIBA (Parks Canada, 2019g). There are other currently proposed projects that would advance Indigenous self-determination and Indigenous engagement in NMCAs. The Crown government and the Québec Cree Nation governments are examining, since June 2019, the feasibility of an NMCA in the Eeyou Marine Region (Bell, 2019; German, 2019). The creation of an Eeyou Marine Region NMCA would be enabled by provisions of the Canada National Marine Conservation Areas Act (2002) and require an impact and benefit agreement (Canada, 2017).

Additionally, the signing of the Inuit Impact Benefit Agreement (IIBA) for Tallurutiup Imanga is considered a significant element of Inuit self-determination as it supports in its principles a consensus-based governance model and the clear statement that Inuit will be considered in decision-making related to the establishment, management and operation of the nearly-established Tallurutiup Imanga NMCA (Parks Canada, 2019g). To understand and integrate Inuit perspective, Inuit Qaujimajatujagit (IQ) (Nunavut Inuit Knowledge, meaning “that which has long been known by Inuit”) was fundamental to inform and lead to an ecologically and socially holistic boundary for the NMCA (Inuit Circumpolar Council, s. d.; Parks Canada, 2019c). As the use and integration of IQ is also a premise of Canada National Marine Conservation Areas Act, the Nunavut Wildlife Act and the Nunavut Land Claim Agreement, IQ will continue to inform management of the NMCA (Parks Canada, 2019c). Furthermore, the regional marine planning initiative Imapivut in the Labrador Sea, arising from a partnership between the Nunatsiavut Government and the Government of Canada, was officially launched in September of 2017. The Imapivut Marine Plan is currently in development. The objectives of this initiative are to create an integrated and adaptive marine plan for the waters covered by the Labrador Inuit Land Claims Agreement that will contribute to achieving Canada’s international marine conservation targets while representing the full diversity of species and habitats and ensuring that Nunatsiavut Inuit interests and priorities are at the forefront of decision-making. Significant community engagement will ensure that traditional, local and scientific knowledge about areas, uses, and activities that have ecological, social, cultural, and economic importance to Labrador Inuit inform the development of this marine plan. (Nunatsiavut Government, 2018)
In September of 2019, a feasibility assessment was launched to determine the potential establishment of the Imappivut Indigenous Protected and Conserved Area (IPCA) under the Canada National Marine Conservation Areas Act, an initiative resulting from the 2017 Statement of Intent on Imappivut signed by the Nunatsiavut Government and the Government of Canada (Nunatsiavut Government, 2018; Parks Canada, 2019f). The establishment of an IPCA would allow for the conservation of biodiversity and Inuit culture and traditions and contribute to the well-being of the Inuit surrounding communities. As such, the Government of Canada and the Nunatsiavut Government are currently working together on the feasibility assessment of a proposed study area of approximately 15,000 km² for the waters offshore of the Labrador Inuit Settlement Area with the objectives of protecting both natural and cultural values of the Labrador Shelf marine region and portions of marine waters covered by the Labrador Inuit and Nunavik Inuit land claim agreements. Extensive consultations with local communities will play an important role in the feasibility assessment and for the provisions included in the Impacts and Benefits Agreement that would be negotiated under the Labrador Inuit and Nunavik Inuit land claims (due to areas of overlap) if the Indigenous protected area is deemed feasible. (Parks Canada, 2019f)

6.3.4 First IPCA in Canada

The Edéhzhíe Protected Area (EPA) is the first established IPCA, spanning 14,218 km² in the Northwest Territories (ECCC, 2018; Environment and Natural Resources, s. d.). The EPA, established in July of 2018, is the result of a collaboration between the Dehcho First Nations and the Government of Canada. This IPCA establishment stemmed from the Dehcho Dene desire to protect a fundamental part of Dehcho traditional territory and culture as well as diverse terrestrial and aquatic habitat, as lands, water and wildlife of Edéhzhíe that are integral to the Dehcho Dene culture, language and way of life. (Dehcho First Nations, s. d.; ECCC, 2019c) The EPA was designated an IPCA by Dehcho law and under the Edéhzhíe Agreement, signed by the Dehcho First Nations Grand Chief and the Government of Canada (Agreement regarding the establishment of Edéhzhíe; Environment and Natural Resources, s. d.). To complement the IPCA designation, the EPA will also be designated under federal authority as an NWA in 2020 (ECCC, 2019c). Under the Edéhzhíe Agreement, both the Dehcho First Nations and the Government of Canada were made responsible for the management and operation of the EPA, with all decisions to be made by consensus and consistently with “protecting the land, supporting the relationship between Dehcho Dene and the land, [and] contributing to reconciliation”, including encouraging the presence of Dehcho Dene on the land (Agreement regarding the establishment of Edéhzhíe; ECCC, 2019c).
7. CHALLENGES FOR RECONCILIATION AND INUIT EMPOWERMENT IN MARINE CONSERVATION

The future of Inuit and the future of the Arctic ecosystems are inextricably linked. For thousands of years, Inuit have managed and sustainably harvested Arctic lands, waters, and their resources. This intimate knowledge and expertise that Inuit possess of the environment is invaluable for the conservation of these ecosystems. In Canada, IPCAs could be used as a tool to integrate Inuit perspectives and knowledge to protect Arctic marine environments. However, to fulfill these objectives, there is a need to acknowledge, bridge and shift existing paradigms in knowledge systems and in conservation structures. IPCAs offer Indigenous Peoples and federal, provincial and territorial governments the opportunity to confront their shared past and address it by moving forward within the principles of reconciliation and towards the shared objective of environmental protection. To move forward, several challenges must be overcome to appropriately include Inuit in marine protections governance.

7.1 Indigenous Knowledge, Traditional Ecological Knowledge and Inuit Qaujimajatuqangit

Traditional Ecological Knowledge (TEK) refers to a subset of IK acquired by Indigenous Peoples on the relationships between and with living beings from their interaction with the environment (Whyte, 2013). As defined by the Nunavut Wildlife Management Board, TEK:

“concerns specific knowledge, obtained through Inuit experience, about various parts of the environment, including plants, animals, weather, and other physical elements. TEK also includes interpretations of the ways in which these parts of the environment interact.”

(Nunavut Wildlife Management Board, s. d.)

The respect, recognition and practice of Indigenous Peoples’ TEK is essential for the use, management and conservation of natural resources and ecosystems and there is increasing recognition of the linkages between cultural diversity and biological diversity, notably as acknowledged in the CBD and its Strategic Plan for Biodiversity 2011-2020, including Aichi Biodiversity Targets (Mazzocchi, 2006; SCBD, 2020a). Yet, there is still a tendency in conservation structures and practices to favour Western scientific knowledge and worldviews when it comes to decision-making on managing and conserving ecosystems and resources (Mistry and Berardi, 2016). Often, IK does not align with Western science because of their epistemological differences (Mazzocchi, 2006; Mistry and al., 2016; Wenzel, 1999). Western science is considered objective and rigorous because the knowledge is acquired by precise measurement and empirical testing verified for credibility and legitimacy, and because the knowledge is transmitted in written form (Mazzocchi, 2006; White, 2006). IK is often seen as subjective and arbitrary by academics and western scientists, because the knowledge is based on qualitative observations and passed down generations orally (Huntington, 2000; Mazzocchi, 2006). However, these comparisons and discriminatory attitudes stem from ignorance
and disapproval often tied to colonial-settler structures (Whyte, 2013). The assessment and interpretation of TEK is often performed through the perspective of practitioners of western science; TEK is often used and applied within structures determined by science (White, 2006). However, TEK cannot be understood or assimilated within Western worldviews, especially regarding management and conservation of nature (Mistry and al., 2016; White, 2006).

Rather than being considered fundamentally different, science and TEK should be considered as complementary (Whyte, 2013). The scientific approach can lose its ability to consider and grasp the complexity, uncertainty, non-linearity and perspectives of situations. (Mistry and al., 2016) TEK can bridge those gaps by generating a holistic and systemic understanding of complex ecosystems as the knowledge is adapted and embedded within the local environment (Hill and al., 2020; Iaccarino, 2003; Mazzocchi, 2006; Mistry and al., 2016). There is ample evidence that IK and Indigenous practices have enhanced conservation, biodiversity and environmental resources (Berkes and al., 2001; Forest Peoples Programme and al., 2016; Gadgil and al., 1993; Hill and al., 2020; Oberndorfer and al., 2020). Detailed and holistic understandings of the land and the behaviour of animals along with ethical codes governing the relations between humans, the land and the animals, passed through generations, has ensured the survival of Inuit in the Canadian Arctic (White, 2006; Zamparo, 1996).

As previously described, Inuit have a worldview rooted in Traditional Knowledge systems rooted in beliefs resulting from their use and occupation of their lands. These knowledge systems are used by Inuit to understand, interpret and interact with the world around them, including their biophysical environment. For Nunavut Inuit, the term Inuit Qaujimajatuqangit (IQ) refers to the wisdom of the land, animals, place names, geography and their history that is passed on from generation to generation (Inuit Circumpolar Council, s. d.; Nunavut Department of Education, 2007; Nunavut Impact Review Board, s. d.). It is important to note that IQ and TEK are in their essence a worldview, including not only knowledge, but also traditional beliefs, laws, principles, values, skills, culture, language, social organization, expectations and attitudes (Nunavut Impact Review Board, s. d.).

For managing, conserving and monitoring ecosystems and species, TEK offers a holistic approach with objectives that go beyond the scientific approach of focusing on conserving populations and species, and includes preserving the whole ecosystem as well as the relationship Inuit have with their resources, preserving access to these resources, and seeking holistic solutions to increase resilience of their communities (Berkes and al., 2007; Mistry and al., 2016). The knowledge acquired by Inuit is obtained by direct observation of and interaction with the environment, contributing significantly to an in-depth
understanding of animal behaviour (e.g. migration patterns, health of populations) as well as of the complexities of interconnected relationships between living beings and of long- and short-term changes in ecosystems (i.e. organisms, climate, and the physical environment) (Gilchrist and al., 2018; Idrobo and Berkes, 2012; Kendrick and Manseau, 2008; Zamparo, 1996). Moreover, Inuit recognize the human role and responsibility in ecosystem protection as this is inherent in TEK rules and customs for selective and sustainable harvesting of resources as well as customary and traditional practices for monitoring and overseeing resource use and habitats (Stephenson and al., 2014).

A challenge that has been encountered regarding the creation of IPCAs is the need to reconcile Indigenous and Western epistemologies (worldviews) (Tran and al., 2019; Zurba and al., 2019). As mentioned, integrating a holistic view of conservation within existing frameworks is a challenge, but IPCAs would offer the opportunity to document and engage with Indigenous Knowledge and processes at all steps of the creation of biodiversity protection (Berkes and al., 2007; ICE, 2018; Tran and al., 2019). Challenges include the lack of confidence in TEK/IQ by non-Indigenous structures and the difficulties and the complexity of integrating and applying TEK/IQ with structures built on inherently conflicting values within a single framework (Artelle and al., 2019; Berkes and al., 2007; Tran and al., 2019). By decentering and giving a place to Indigenous Knowledge systems, IPCAs offer the opportunity to avoid repeating and solidifying colonial legacy in conservation structures (Artelle and al., 2019). Prioritizing the Inuit ways to connect with the lands and waters could offer a renewed long-term approach and strategy to conserve biodiversity, by integrating a holistic approach to the interconnectedness of systems involved in protection measures (Berkes and al., 2007; Plotkin, 2018).

### 7.2 Paradigm Shift in Conservation

The current structures of protected areas in Canada have been developed through the paradigm of the Western science exclusionary conservation model reflecting a nature/culture dichotomy (Shultis and Heffner, 2016; Zurba and al., 2019). This approach dissociates the human system (culture) from the biosphere system (nature), thus placing humans as exogenous to nature and sustaining a “fortress conservation” type of mentality that deems only empty landscapes as adequately protected (Artelle and al., 2019; Zurba and al., 2019). The concept of wilderness is an epitome of this distancing: wilderness is presented as an opposition to spaces dominated by man and his work (culture), is essentially affected by the forces of nature, and thus retains its pristine character (Shultis and al., 2016; Zurba and al., 2019). The paradigms and beliefs arising from this dichotomy often means that the health and well-being of ecosystems is considered an opposing target to that of humans (Caillon and al., 2017). This model regards
parks as “refuges” from human damage to the environment, and a haven for those who seek to experience unspoiled nature (Shultis and al., 2016; Zurba and al., 2019).

In the larger context of land and resource appropriation during the settler colonial expansion, protected areas and parks have specifically benefitted from this exclusionary model (Finegan, 2018). Indigenous Peoples have been historically removed, often forcefully, from accessing their traditional territories and resources for the creation of protected areas (ICE, 2018; Shultis and al., 2016). Unfortunately, those settler-colonial structures and paradigms are not merely inherited, they persist in current conservation practices and structures, particularly those created before the recognition and affirmation of Indigenous rights by the Constitution Act, 1982 (Finegan, 2018; ICE, 2018). Many of these structures continue to act as conservation enclosures to the benefit of settler-colonial industries, such as tourism, recreation or sport hunting, from which Indigenous Peoples have historically been excluded from decision-making regarding resource management and conservation of their lands and waters (ICE, 2018; Shultis and al., 2016; Zurba and al., 2019). After many decades of systematic and systemic exclusion, there is now increasing recognition of the importance of the role Indigenous Peoples play in decisions and governmental processes affecting them, particularly regarding the conservation and collective management of ecosystems and natural resources in their traditional territories (Artelle and al., 2019; Ban and al., 2018; Borrini-Feyerabend and al., 2004; Finegan, 2018; Herrmann and al., 2012; ICE, 2018; Ashish Kothari and al., 2012).

The integration of TEK in conservation practices such as in IPCAs would benefit from shifting this conservation framework away from the idea that ecological systems and human systems are opposing entities. Particularly, Inuit recognize the human role and responsibility in ecosystem protection. Inuit traditional rules and customs have developed and adapted to selective and sustainable harvesting along with monitoring and overseeing of resource use and habitats. (Stephenson, Berkes, Turner and Dick, 2014)

This paradigm shift has started in Canada’s conservation practices. It is important to note that the federal government has already taken actions and commitments to optimize and coordinate supporting actions towards establishing new IPCAs and Indigenous engagement in conservation, notably through the Pathway to Canada Target 1 Challenge. The Canada Nature Fund is an investment by ECCC to support “the protection of Canada’s ecosystems, landscapes, and biodiversity—including species at risk” (ECCC, 2020a). The Canada Target 1 Challenge is one component of the Canada Nature Fund that will provide resources to publicly-driven projects having the potential to contribute to protected and conserved areas towards Canada’s goal of protecting 25% protection of lands and waters by 2025 (ECCC, 2020b). The establishment
of IPCAs was made a cornerstone of this strategy, with the Government of Canada announcing recently the establishment of up to 27 IPCAs nationwide, making almost half of the total of 62 announced projects. In Inuit Nunangat, two Inuit-led marine conservation projects recently received federal funding for the establishment of IPCAs (ECCC, 2020b). A project proposed by the community of Inukjuak Nunavik aims to create a 24,000 ha IPA for Arqvilliit (meaning “place where you see bowhead whales” in Inuktitut, also know as Ottawa Islands) in northeastern Hudson Bay to protect critical polar bear and eider duck habitat (ECCC, 2020b; Knopp, 2020). The establishment of the IPA would represent a step towards reconciliation with Nunavik Inuit by also contributing to the protection of culturally significant species, such as the polar bear, and thus supporting and recognizing Inuit traditional way of life (ECCC, 2020b).

The community of Sanikiluaq has also received the same federal support towards the establishment of "Qikiqtait", a community-driven stewardship program and IPA of potentially 33,000 km² for the Belcher Islands archipelago in Hudson Bay, Nunavut to protect eider duck and other culturally-important species habitat (Arctic Elder Society, 2019; ECCC, 2020b). Qikiqtait represents a unique opportunity to build capacity by providing stable and committed funding, employment opportunities, training, planning and community engagement to the neighbouring Inuit and Cree communities, as well as reflects a path towards self-determination and reconciliation with the involved Indigenous communities. (Arctic Elder Society, 2019)

However, it is unclear at this point in time if these projects will be created as IPCAs without backing legislation, and therefore act as other effective area-based conservation measures (OECM) or if they will be developed into federally-protected areas under new legislation currently under consideration through the Imappivut initiative mentioned above. OECMs are areas with clearly defined boundaries for which long-term adaptive management objectives and measures (not necessarily entrenched via legislation or regulation) are likely to provide biodiversity conservation benefits for identified ecological components of interest (e.g. species or habitats), such as fisheries closures (DFO, 2017). OECMs are recognized as a conservation measure that can contribute to Canada’s international and domestic marine conservation targets (DFO, 2017).

### 7.2.1 Environmental Justice and Self-determination

In the context of reconciliation in Canada and applying an environmental justice approach, it is important that Inuit have a voice and agency in decision-making processes regarding conservation initiatives (ICE, 2018; Simon, 2017; Theriault, 2011). The idea of environmental justice is that “all affected individuals should participate in decisions about the benefits and burdens relating to public health and the
environment” (Olive and Rabe, 2016). It is argued that the acknowledgement and recognition of Indigenous rights to self-determination over land claims agreements and the current inclusion and recognition of Indigenous Peoples in the broad landscape of conservation approaches in Canada are not sufficient to protect Inuit well-being, specifically through supporting traditional ways of life and addressing current threats to the Canadian Arctic environment (Olive and al., 2016; Tsosie, 2007). However, recent shifts in conservation paradigms offer the opportunity to build and grow adaptive capacity and address challenges for self-determination to Canadian Inuit (Pearce and al., 2015; Theriault, 2011).

7.2.2 Inuit Involvement in Conservation and Protected Areas as a Working Landscape for Arctic Communities

The new protected area paradigm presented previously offers the opportunity to embrace Indigenous peoples’ conservation capacity and recognize their conservation achievements as essential to creating, sustaining, and restoring biocultural diversity (Artelle and al., 2019; Stevens, 2014). As such, with recent advances from Canada regarding Indigenous engagement in protected areas, specifically for the concept of IPCAs as a well-designed system of protected area governance, conservation initiatives, have an increasing potential to be working landscapes for Arctic communities (Gardner and Dovetail Consulting, 2018; Murray and King, 2012; Plotkin, 2018). Specifically, IPCAs as conservation tools would be a way of sustaining the landscape by balancing the social, economic, and ecological needs of the Canadian Arctic communities (Artelle and al., 2019; Simon, 2017; Tran and al., 2019). The rationale behind this approach is that well-designed participatory systems of protected areas governance promotes environmental justice and reconciliation, and further creates positive outcomes in the effectively linked social, cultural and economic objectives of the community (Murray and al., 2012; Simon, 2017).

A study by Tran and al. (2019) reviewed the academic literature to synthesize the successes and challenges associated with the creation of IPCAs globally and found that Indigenous Peoples can achieve tangible political, social and ecological benefits from the establishment of IPCAs. Within the political theme, IPCAs enable a resurgence of Indigenous-led governance (Artelle and al., 2019). Recognising IPCAs as protected areas within national frameworks of conservation, accompanied by long-term funding, would support capacity-building of Indigenous governing institutions (Ban and al., 2018; Tran and al., 2019). Consequently, by building capacity, thus improving the ability of Indigenous organizations and governments to fulfill their mission and objectives through strong governance and sound management, IPCAs can advance self-determination of Indigenous Nations and communities (Artelle and al., 2019; Tran and al., 2019). Self-determination is the inherent and fundamental right of a Nation, such as Inuit, to “freely
determine their political status and freely pursue their economic, social and cultural development”, i.e. to make decisions for themselves and choose how they will be governed (UN General Assembly, 2007). By enabling Inuit to have governance and management responsibility, authority and accountability in conservation initiatives, such as in marine protections, it is also ensuring the recognition of their rights over their territory, as provided by Section 35 of the Constitution Act, 1982, the Labrador Inuit Land Claims Agreement Act, the Nunavik Inuit Land Claims Agreement Act, the Nunavut Land Claims Agreement Act and the Western Arctic (Inuvialuit) Claims Settlement Act, acknowledging Inuit resiliency and supporting traditional and customary Inuit law and knowledge systems in governance systems (ICE, 2018; The Constitution Act, 1982; Labrador Inuit Land Claims Agreement Act; Nunavik Inuit Land Claims Agreement Act; Nunavut Land Claims Agreement Act; Western Arctic (Inuvialuit) Claims Settlement Act; Plotkin, 2018; Tran and al., 2019).

By empowering Inuit to determine their own conservation objectives on their territory and supporting their constitutionally protected rights to wildlife management and harvest, Inuit would benefit on the social and ecological plan as well, as harvesting activities, climate change and food security are closely interconnected in the Arctic (Ban and al., 2018; ITK, 2019a; Tran and al., 2019). In fact, the capacity of Inuit to access their territory and its resources, to practice subsistence-related activities and, thus, to observe their food sharing traditions and customs reinforces social networks, provides access to nutritional sources of food for community members unable to harvest these resources themselves and supports the transmission of knowledge from generation to generation (Theriault, 2011). Also, within conservation frameworks, appropriately engaging Inuit such as through IPCAs or minimally through co-governance arrangements, the integration of management principles and policies derived from Traditional Knowledge systems can further support the transmission of TEK/IQ by reclaiming stewardship over the land, and thus advance restoration of Inuit relationships with the land (ICE, 2018; Murray and al., 2012; Tran and al., 2019).

The establishment of Indigenous-led protected areas, such as IPCAs, also has the potential to develop a conservation economy, providing economic and social benefits to Inuit (Gardner and al., 2018). IPCAs represent the opportunity to create long-term sustainable employment and generate professional development opportunities in all aspects of the establishment, management and enforcement of the protected area (e.g. local rangers) (Tran and al., 2019). A conservation economy can provide many benefits, simultaneously political, social and ecological benefits by living on the land and water, as it allows for a sustained and sustainable use of its resources and sustains the cultural and spiritual connection of Inuit with their territory (Gardner and al., 2018).
Furthermore, biodiversity conservation directly involves Inuit, Inuit environmental justice and Inuit self-determination for two major reasons: Inuit resources and knowledge have been shown to be necessary to identify, assess risk potential for, protect and recover species with conservation concerns, and also because biodiversity loss affects Inuit traditional and customary way of life and well-being (Olive and al., 2016; Tran and al., 2019). As the Inuit worldview entails they are inseparable from nature, the conservation of species and their ecosystems simultaneously upholds Inuit communities’ physical and cultural survival (Olive and al., 2016; Tran and al., 2019). The existing conservation frameworks and policies have allowed Canadian Inuit to participate in the process of protecting species and habitats with significant cultural and ecological values, such as the ringed seal, the polar bear and specific caribou populations, the COSEWIC having assessed risk potential for these species using TEK/IQ (COSEWIC, 2017, 2018, 2019b; Kowalchuk and Kuhn, 2012). Inuit being experts at reading the signs and signals of their environment (e.g. changing seasons, animal migration patterns, population abundance) and being in close proximity with the environment, puts them in a privileged position to note variability or changes to environmental conditions on a continuous time scale. Such skills and knowledge can be transferred to environmental monitoring and contribute strongly to a holistic view of conservation and protection of species and their habitats (Berkes and al., 2007).

7.3 Additional Challenges and Opportunities for Self-determination and Sustainable Development

Although conservation represents a working landscape for Inuit, several challenges must also be addressed to work towards self-determination, to shift the power towards Inuit governance and towards the sustainable development of Inuit communities (Tran and al., 2019). As demonstrated in the literature on IPCAs and conservation frameworks in Canada, there are definitive and complicated links between IPCAs and broader systemic, colonial, political, social, economic and ecological issues for Inuit (Finegan, 2018; ICE, 2018; Plotkin, 2018; Tran and al., 2019).

First and foremost, Inuit involvement and engagement in governance and management continues to be problematic. Through shared or co-governance arrangements, the power of Indigenous and Inuit advisory bodies remains limited and the ultimate decision-making power remains with the Minister, as the governance of protected areas is shared and sovereignty is not relinquished to Indigenous communities (Artelle and al., 2019; Ban and al., 2018; Plotkin, 2018). A significant divestment of power from Crown governments towards Inuit governments and organizations is needed to work towards and achieve true self-determination (Artelle and al., 2019; Gardner and al., 2018, 2018; ICE, 2018). As such, a release of governance and management power from Crown governments would relinquish control to Indigenous
Peoples, Inuit, to take charge and solve the issues and needs they consider important (Zurba and al., 2019). Addressing and correcting these persistent power structures currently anchored within a colonial paradigm would promote a change in perspective regarding the role of Indigenous Peoples and Inuit in governance and management of protected areas, considering them as assets and not as threats to biodiversity conservation (Artelle and al., 2019; Ban and al., 2018; Gardner and al., 2018). To achieve true self-determination, the assertion of sovereignty and responsibility to Indigenous Peoples is a step towards true government-to-government or nation-to-nation relationships.

Moreover, the current conservation frameworks remain within a siloed colonial governance model (Zurba and al., 2019). The western model of conservation separates and disconnects the management of natural resources from human well-being and cultural continuity (Zurba and al., 2019). This siloed governance mindset is closely related to the structure of Crown institutions and lacks cooperation across jurisdictional boundaries even within Crown governments levels and agencies (Artelle and al., 2019; Tran and al., 2019; Zurba and al., 2019). Moreover, the federalist nature of Canadian law and law-making restricts and defines responsibility and authority to specific government levels and agencies with limited collaboration possibilities (Tran and al., 2019; Zurba and al., 2019). This approach poses challenges to the implementation of IPCAs in the Canadian Arctic on two grounds. First, this siloed governance structure does not allow for a holistic approach to conservation that addresses simultaneously the social, political, economic and ecological objectives and needs linked with protected areas, as defined by Inuit. (Gardner and al., 2018; Tran and al., 2019; Zurba and al., 2019) Second, to achieve self-determination through conservation, Inuit governance must be informed by Inuit law and IPCAs must be defined by Indigenous principles, guiding how rights and stewardship responsibilities are exercised within IPCAs (ICE, 2018; Plotkin, 2018).

Currently, the same laws and conservation frameworks enabling Inuit to participate in the identification and protection of endangered and culturally significant species can also threatened Inuit livelihood (Olive and al., 2016; Theriault, 2011). For example, in a decision by the Supreme Court of Canada in 1997 regarding a case between Delgamuukw (an Indigenous territory in British Columbia) and the government of British Columbia, the judge argued that the “protection of the environment or endangered species” can “justify the infringement of Aboriginal title” (Delgamuukw v. British Columbia; Olive and Rabe, 2016). Although this decision was given prior to the implementation of SARA in 2002, it is still unclear, on a legislative basis, if species protection would stand as a legitimate reason for the infringement of rights and titles of Indigenous Peoples, even if they are constitutionally protected (Species at Risk Act; Olive and Rabe, 2016). The infringement of these rights and titles could have important social, cultural and economic
repercussions for Inuit communities, especially if it involves the protection of species significant for subsistence hunting and thus impedes the ability of the communities to access these resources (Olive and al., 2016; Theriault, 2011). In that matter, within conservation frameworks promoting self-determination and sustainable development of Indigenous communities, treaty and constitutional rights and titles of Indigenous Peoples would be recognized and supported by governance and management systems (Gardner and al., 2018; Tran and al., 2019). Indigenous rights and title must be recognized as inherent and inalienable, in conservation and otherwise, rather than provisional on their compatibility with conservation objectives and targets (Artelle and al., 2019).

Other challenges include building Indigenous capacity for management and operational participation on the land. At the root of these challenges are funding and capacity-building of Indigenous institutions. In general, conservation-oriented agencies and departments within Crown governments receive little funding and thus lack capacity to take action (Gardner and al., 2018). Operational capacity, whether for management or staffing capacity, can become problematic and challenged when funding sources are not sustainable or guaranteed (Plotkin, 2018; Tran and al., 2019). Consequently, Indigenous protections are often faced with limited financial and human resources to achieve conservation targets and limited capacity, such as for financial resources for education and stewardship (Olive and al., 2016; Tran and al., 2019). IPCAs offer a framework and the opportunity to secure funding sources from Crown governments, but also to look beyond Crown governments for resources, to build the capacity and resilience of Indigenous-led protections (Gardner and al., 2018; ICE, 2018; Simon, 2017). However, solutions are not unique and should be tailored for the needs and objectives of individual IPCAs, as the needs and interests of Indigenous governments and local communities vary (Gardner and al., 2018; ICE, 2018; Plotkin, 2018).

Perhaps of most importance, there is still a lack of trust from Indigenous and Inuit Peoples that meaningful change will happen, whether towards reconciliation or shifts in conservation paradigms (ICE, 2018). Documents, reports and literature on IPCAs in Canada strongly advocate for the respect and implementation of FPIC and ethical space for all steps of development, planning and implementing policies and frameworks in conservation to advance positive nation-to-nation relationship-building (Bujold and al., 2018; Gardner and al., 2018; ICE, 2018; Plotkin, 2018; Simon, 2017). This hurdle must be overcome before IPCAs can truly result in reconciliation and Inuit empowerment within marine conservation and protection in Canada.
8. RECOMMENDATIONS

The following section presents a set of recommendations for the implementation of IPCAs in Canada as a tool to for marine conservation and steps towards reconciliation in the Canadian Arctic.

8.1 IPCA as a Step Towards Reconciliation with Canadian Arctic Communities

The process of reconciliation constitutes the first and necessary step in implementing IPCAs in Canada. The process of reconciliation can be abridged to the three following principles:

- Recognition of the harm done and admission of responsibility
- Seeking and identifying truth
- Reparation of the damage caused by providing appropriate justice. (Finegan, 2018; Short, 2016)

Although the federal government has made commitments to support meaningful reconciliation, having examined reconciliation in a historical context, Canada still struggles with a legacy of colonial policies and structures in conservation (Cavanagh and al., 2016; Finegan, 2018; ICE, 2018; Simon, 2017). Indigenous Peoples have long been dealing with issues such as exclusion from decision-making, forcible relocations, rights violations, and loss of access to traditional lands and waters to conduct traditional and cultural activities, often under the pretext of conservation (Cavanagh and al., 2016; Forest Peoples Programme and al., 2016; ICE, 2018; Zurba and al., 2019). Decolonizing conservation can help support reconciliation with Indigenous Peoples. To do so, it is essential to acknowledge the past and ongoing shortcomings of government policies to recognise and address the cultural, social, and economic impacts of settler-colonial structures on Inuit communities in Canada. Key aspects of appropriate recognition include being observant to the rights and responsibilities of Inuit, particularly those regarding rights to territory and self-governance.

In order to move forward within the principles of reconciliation and towards a shared objective of environmental protection through the implementation of IPCAs:

1. It is recommended that the federal, provincial, territorial and Indigenous governments further endorse the concept and principles defining IPCAs as outlined in the ICE report *We Rise Together*, meaning that IPCAs should be Indigenous-led, represent a long-term commitment to conservation, and elevate Indigenous rights and responsibilities (ICE, 2018).

As such, IPCAs are Indigenous-based processes that rely on and protect Indigenous culture, traditions, language, and lifestyle in a way that existing conservation structures are not currently providing. However,
this definition is not intended to be prescriptive as the ICE also encourages Indigenous governments to adapt it to their local environment and context (ICE, 2018).

Although new Indigenous-led conservation structures are being considered, meaningful partnership and involvement with Inuit are considered unsatisfactory (Ban and al., 2018; Gardner and al., 2018; ICE, 2018). For example, in structures such as NWAs and MBSs that exist within land claims agreements areas, co-management bodies between the federal agency responsible for the protected area and Inuit exist, but ultimate decision-making and authority remains with the federal Minister. This is because these structures still rely on the federalist nature of Canadian government resulting in the division of power between the federal, provincial and territorial governments. These settler-colonial legal principles and structures have sanctioned and perpetuated policies that allow for prejudice and discrimination towards Indigenous Peoples (Finegan, 2018; ICE, 2018; TRC, 2015c, 2015a). However, recent advances by the federal government towards a meaningful engagement of Indigenous Peoples in conservation demonstrates a willingness to move away from the old regime and proof that the paradigm is shifting towards reconciliation and in support of Indigenous self-determination.

In order to move towards positive Indigenous–Crown relationships in conservation and in the spirit of reconciliation, it is recommended that:

2. Federal, provincial and territorial governments acknowledge and address the long-lasting impacts of settler-colonial structures and policies in conservation on Inuit lands, and work in new ways to collaborate with Inuit governments and organizations to support Inuit-led and Inuit-run conservation efforts.

As such, all levels of government should engage in truthful discussions about the existing conservation structures and work to modify or develop new co-management and governance arrangements with Inuit communities and governments for existing protected areas and parks. All levels of government should engage in discussions and resolutions with Inuit leadership to understand their worldview when it comes to the concept of IPCAs. Such discussions and processes should also occur regarding existing protected areas overlapping with land claim regions.

Within the principles of reconciliation to seek and identify truth and to repair the damage caused by providing appropriate justice, these discussions should consider how Inuit rights have been affected by existing government structures. Those impacts should be addressed and mitigated in the process of designating and managing protected areas and appropriately involve Inuit leadership at all levels. The concept of ethical space may provide an appropriate framework for these discussions to occur in order to
co-create a venue for collaboration and reach common goals. To address concerns, issues and needs regarding reconciliation surrounding protected areas, it is suggested that existing and future protection frameworks and agencies should have permanent boards specifically charged with determining how Indigenous reconciliation can be advanced, as an on-going process, in conservation practices and policies to pursue the recommendations made by the ICE. Significant progress has been made recently to consider the broader effects of settler colonialism in current conservation practices, and in ways to meaningfully include Inuit ways of life, worldviews, and management practices, which must be acknowledged, including the designation of Canada’s first IPCA in July of 2018 (Edéhzhie Protected Area designated by the Dehcho First Nations), the creation of the ICE (a government-funded initiative), the designation of ANMPA based mainly on TEK, and the feasibility study for the consideration of IPCAs under existing legislation such as the Imappivut initiative.

Stemming from Canada’s history of colonialism and historical exclusion of Inuit from decision-making on land-use, there remains mistrust among Inuit that meaningful change will occur and in federal, provincial and territorial governments as land managers (Finegan, 2018; ICE, 2018; Lesage-Corbiere and al., 2018). When decisions and actions that could impact Inuit and their rights, including designating their lands, territories and resources as conserved and protected, moving forward by enacting the principles of FPIC and working within the ethical space framework would encourage equality, trust, and mutual respect in establishing and maintaining respectful relationships, in the spirit of reconciliation, and towards healing from the country’s history and legacy of settler-colonialism.

8.2 Addressing Challenges to Biodiversity Conservation

Today, the Canadian Arctic Marine Region faces unparalleled challenges from climate change, seasonal and permanent sea ice loss and increasing human activities (DFO, 2020b; Meltofte and al., 2013; Niemi and al., 2019). Considering Inuit Nunangat encompasses 35 percent of Canada’s landmass, 50 percent of its coastline and most of the Canadian portion of the Arctic Ocean, it is vital that the federal government work with Canadian Inuit to establish and reach Canada’s current and subsequent conservation targets (ITK, 2020). Inuit have long been concerned with the loss of biodiversity and ensuing cultural identity considering the rapid changes in Inuit Nunangat (Inuit Circumpolar Council, 2009; ITK, 2019b). As previously stated, the conservation and sustainable use of lands, waters and resources are inherent to Inuit worldview, lifestyle, traditions and culture.

It will be important for the federal government to work collaboratively with Inuit to meet portions of their new targets to conserve 25 percent of Canada’s land and oceans by 2025, with a goal of 30 percent by
2030 and in a way that promotes Inuit empowerment in designating new protected areas within Inuit Nunangat.

Considering the contribution of Indigenous Peoples and TEK to conservation and management of ecosystems is well documented, their empowerment in decision-making for environmental governance practices remains generally unsatisfactory (Berkes and al., 2001; Forest Peoples Programme and al., 2016; Gadgil and al., 1993; Hill and al., 2020; Oberndorfer and al., 2020). IPCAs as a tool for conservation has the potential to create a new protected areas paradigm supporting Indigenous self-governance, cultures, livelihoods, and rights. This new paradigm would strengthen, legitimate and ensure the sustainability of marine protection and conservation practices by embracing Indigenous worldviews, management practices, culture, TEK, and interests. Yet, implementing an IPCA requires advancing this paradigm shift to standard practices. IPCAs must be implemented within the principles of reconciliation while being rooted and guided by Indigenous management practices and knowledge systems.

In order to move towards creating this as standard practice:

3. It is recommended that federal, provincial, territorial and Indigenous governments and organizations take meaningful actions towards the implementation of Aichi Target 14 which calls for the protection of ecosystems providing services and resources contributing to the livelihoods and well-being of Indigenous communities by creating legislation for IPCAs.

In the Inuit context, this could mean recognizing the importance and identifying ecosystems to which priority should be given in order to ensure and provide for access to cultural, economic, subsistence and traditional resources; implementing traditional ecological management practices for protected areas; and, having Inuit-Led management boards. Federal funding should be allocated to the long-term implementation of IPCAs including salaries for staff and monitoring efforts, just as is done for other forms of protections in Canada.

In order to promote capacity-building and sustainable development of Inuit organisations within a conservation framework:

4. It is recommended that specific attention should be given to taking meaningful actions towards the implementation of Aichi Target 18, which calls for the respect and legal recognition of Indigenous Traditional Knowledge and Practices relevant to conservation and their traditional and customary use of resources with the full and effective participation of Indigenous Peoples (SCBD, 2018).
In line with Aichi Target 18, all levels of government and organizations should respect and legally recognize that TEK and IQ are complementary to western science and move towards developing mechanisms for fully incorporating TEK/IQ in conservation practices and structures.

It is also important to recognize the impacts of current marine protections on traditional and customary use of resources. For example, the classification of species under the Species at Risk Act can undermine the authority of Inuit hunters to access these resources which contradicts the intent of land claims agreements in Inuit Nunangat (ICE, 2018; Olive and al., 2016; Theriault, 2011). These quotas and restrictions have negative outcomes for Inuit communities and the perpetuation of their traditional and customary practices (Theriault, 2011). As such, all levels of government should develop mechanisms to integrate TEK and IQ in all steps of the nomination, selection, designation, management and monitoring of marine protections, including IPCAs. As with the example of the ANMPA, it is encouraging that IQ and TEK was used equally to, and even took precedence over, western science to identify priorities for conservation for species and ecosystems at risk. Local observations building on centuries of knowledge put Inuit in an exclusive position to monitor and manage changes in the Arctic marine environment. The knowledge and accounts of Inuit on ecological processes and current threats to ecosystems is invaluable to identify and determine conservation priorities and objectives, even more so considering the difficulty to conduct scientific surveys and research in the Arctic marine environment.

Moreover, the holistic approach of Inuit when understanding and interpreting their environment has uncovered relationships between threats and their impacts on the environment where western science was unsuccessful. The integration of TEK and IQ in marine protections would thus allow for a holistic approach to conservation which aligns with and integrates the Inuit worldview supporting the interconnectedness of all living beings. Knowing that Inuit have contributed to the sustainable management and protection of the Arctic marine environment for millennia, it is essential that the conservation objectives of existing and future marine protected areas, including IPCAs, should encourage the full engagement of Inuit.

As an indispensable complement to the previous recommendation and in order to respect traditional and customary use of the lands and waters by Inuit:

5. It is recommended that the federal, provincial, territorial and Indigenous governments develop and implement a “whole-of-government” approach for marine protections across governments and government agencies to reflect a holistic approach to conservation and recognize Indigenous conservation efforts not currently recognized and reported by the Crown (Simon, 2017);
To reflect the holistic and stewardship approach of Inuit to land and water use, management, and conservation, government agencies should work together towards shared goals and the development of integrated framework and policy on the implementation of IPCAs (Lévesque, 2014; Nunavut Impact Review Board, s. d.; Tran and al., 2019). Such frameworks and policies should provide the impetus for collaboration across the different levels of governments and with Inuit organizations and leadership to address the complex challenges of Arctic biodiversity and environmental conservation. Moreover, Inuit have the right to decide if they would like these protected areas counted towards federal conservation targets. Ultimately, Indigenous Peoples should have the right to decide if they want to designate conservation areas within land claim agreement areas or their traditional territories, and if so, where and how they want them designated. This should also be considered in historically-designated protected areas where Indigenous stakeholders were not involved, allowing a revision of the current protections and provisions to reflect the local Indigenous group’s worldview and interests.

Considering that Inuit have viewed themselves as stewards of the Canadian Arctic for thousands of years, IPCAs could serve as a new model for conservation, enabling principles of stewardship instead of ownership along with whole-ecosystem biodiversity protections versus siloed species-based protection.

8.3 **Inclusion of Inuit in Marine Protection Governance, Standards and Federal Instruments**

Although Inuit rights to water and self-governance have been recognized by international and federal legal instruments, there remain hurdles to the application of these principles within marine protections and conservation structures (Berkes and al., 2007; Bujold and al., 2018; ICE, 2018; Tran and al., 2019). Inuit nationhood and self-determination are key to moving advancing nation-to-nation relationship for the co-governance of marine environments in a meaningful and productive way (Bujold and al., 2018; ICE, 2018; Simon, 2017).

In order to recognize the role of Inuit rights, titles and protection in legislation and commitments to conservation:

6. It is recommended that all levels of government work and take meaningful actions towards understanding, honouring, integrating and implementing the principles of existing and future international and national instruments, treaties, agreements and other documents recognizing the rights and titles of Inuit in marine protection.

Numerous of international and national instruments recognizing the rights and titles of Inuit in marine protections already exist (Bujold and al., 2018; *Oceans Act*; Parks Canada, 2019g; UN General Assembly, 2007). The modern land claim agreements in the Arctic present opportunities for Inuit to lead marine
conservation and planning initiatives (Simon, 2017). As recognized under modern land claim agreements and under Section 35 of the Constitution Act, 1982, Inuit have extensive surface, subsurface, onshore and offshore rights in Inuit Nunangat (Labrador Inuit Land Claims Agreement Act; Nunavik Inuit Land Claims Agreement Act; Nunavut Land Claims Agreement Act; Western Arctic (Inuvialuit) Claims Settlement Act). Therefore, Inuit hold decision-making rights and responsibilities in the management of the Inuit Nunangat marine environment, which should be recognized and integrated in existing and future conservation structures. Furthermore, all levels of government should keep working towards integrating the principles of UNDRIP in conservation policies by taking further meaningful actions to move from internationally affirmed principles to their integration into national policy and practice. IPCAs provide an opportunity to recognize and integrate the principles of those documents in marine protections policy and practice.

In order to integrate Inuit inherent rights to waters and self-governance in existing and future conservation structures:

7. It is recommended that all levels of government develop, in collaboration with Inuit leaders, a new federal policy directive recognizing IPCAs as a new type of protected area and develop a regulatory framework establishing processes for the nomination, selection, designation, funding, management, monitoring and enforcement of IPCAs for a systemic approach to co-governance with Inuit.

Considering that there is no current policy or framework legally recognizing IPCAs as a type of protected areas within national conservation frameworks, all levels of government should engage in discussions and processes to recognize IPCA within existing or future legislation. For existing conservation structures, such as the Oceans Act, amendments could allow for opportunities of co-governance of MPAs by including Indigenous governments and representatives beyond co-management structures. The legal integration of IPCAs in national marine protections would complement the objectives of IPCAs (Indigenous-led long-term commitments to conservation elevating Indigenous rights and responsibilities) by providing additional protection and stewardship measures and demonstrate a greater support from governments to achieve results for Indigenous-led conservation of biodiversity, ecosystems and resources (ICE, 2018).

It is, however, important to recognize that Inuit should first interpret and describe their inherent rights without being undermined by a colonial interpretation of them (e.g. Section 35 of the Constitution Act, 1982) (TRC, 2015a). As such, Inuit law, traditional and customary laws, institutions, protocols and cession-making processes should lay the foundation for co-governance arrangements of IPCAs, and it is essential that cultural safety be embraced and systemically embedded in conservation policies, including in marine
protections. National recognition of Inuit law is still lacking and, even where it is recognized, there is often conflict between statutory regimes and Inuit law in marine protections governance, which is in part due to how Inuit authority and jurisdiction are treated by colonial governments (Berkes and al., 2007; Finegan, 2018; Zurba and al., 2019). As such, the implementation of IPCAs would allow for the recognition of rights to the lands, territories and resources, including traditional and customary rights, for the well-being of Inuit and towards their self-determination.

In order to recognize and integrate Inuit traditional and customary laws in marine protection governance:

8. It is recommended that all levels of government work with Inuit leaders to reform existing conservation structures to include and recognize Inuit traditional and customary self-governance practices within Inuit Nunangat, including for IPCAs.

In order to establish true collaborative decision-making and co-governance with Inuit, Inuit should be fully engaged regarding decision-making for IPCAs and hold substantive authority in the process. In true co-governance structures, Inuit and colonial governments would work together on a nation-to-nation basis to co-create shared decision-making models that should be based on Inuit legal traditions and customary self-governance institutions in order to empower Inuit. In Inuit-led co-governance structures, all levels of authorities would participate in the implementation and management of IPCAs, but the responsibility should ultimately rests with Inuit governments. Also, shared decision-making models regarding Inuit communities in marine protection should be based on consensus between the parties involved in co-governance, as accepted within Inuit legal traditions and customs, and within the ethical space framework (ICE, 2018; Simon, 2017).

Additionally, all levels of colonial and Inuit government should collaborate to develop a new framework for federal policy that recognizes Inuit self-governance of IPCAs within Inuit Nunangat. For decision-making relating to conservation within Inuit-owned lands, the full participation and engagement of Inuit leaders, Elders and communities is necessary (ICE, 2018). The holistic system of conservation and management mechanisms embedded in TEK/IQ should act as the basis for the establishment of IPCAs in Inuit-owned lands. This would entail all levels of government to recognize and formalize the role of Inuit stewardship approaches to conduct monitoring and enforcement of protected areas management objectives and support governance models supporting Inuit-led management plan and monitoring for IPCAs.
8.4 IPCA for a Social-Ecological Approach to Promote Inuit Self-Determination Through Marine Protection

With the implementation of the previously stated recommendations, IPCAs have considerable potential to strengthen Inuit self-determination and resilience by recognizing the rights of Inuit to govern marine areas and protect marine resources, notably to ensure the sustainability of resources harvested for subsistence purposes. IPCAs have further potential to advance Inuit self-determination through conservation as they embrace a collective approach to biodiversity conservation by recognizing the integral role of Indigenous Peoples as leaders in conservation and respecting their rights, responsibilities, and priorities (Borrini-Feyerabend and al., 2004; Gardner and al., 2018; ICE, 2018; Plotkin, 2018). The establishment of IPCAs also offers the opportunity to create sustainable economic initiatives empowering and supporting local Inuit livelihoods by the creation and promotion of a conservation economy (ICE, 2018; Simon, 2017). For IPCAs, capacity-building should be supported by long-term funding to offer the full-time employment and career structures provided in other protected areas managed by government agencies (ICE, 2018).

In order to promote opportunities for Inuit self-determination through marine protections:

9. It is recommended that all levels of government work on developing flexible and adaptive policies, management practices and long-term funding to support locally-driven and Inuit-led marine stewardship and conservation initiatives.

Through self-determination and appropriate funding, Inuit can increase their resilience and their capacity through increased self-governance in protections of their waters (Artelle and al., 2019; Theriault, 2011). This is particularly important considering the current threats to the Arctic marine environment, including the impacts of climate change such as the loss of sea ice and changes in species populations migration patterns; it is important that Canadian Inuit are empowered to manage and protect the resources that are essential for their subsistence and customary and traditional activities (DFO, 2020b; Meltofte and al., 2013; Niemi and al., 2019; Theriault, 2011). Co-governance and community-based solutions for the management of these resources are ideal in Arctic marine protection as it draws explicit attention to the learning and collaboration functions of Inuit governance and knowledge systems to improve resilience, understand ecosystems and respond to complex conservation challenges holistically (Berkes and al., 2007; Theriault, 2011). By combining environmental stewardship, cultural restoration, and sustainable economic development objectives through collaboration and social learning, IPCAs offer a co-adaptive approach to ecosystem management promoting long-term social-ecological resilience.
In order to promote community-based solutions and improve social-ecological resilience through marine protection:

10. It is recommended that all levels of government work, in collaboration with Inuit leaders, on developing flexible and adaptive policies and management practices for marine protections that could be adapted to the needs, interests, and circumstances of communities within Inuit Nunangat.

Considering that traditional and customary management practices of Inuit have benefitted from and been developed through long-term interactions with their environment based on stewardship knowledge and adaptive livelihood practices, the conservation objectives of IPCAs should also be adaptive as their functional value may vary according to Inuit interests, needs and capacity (ICE, 2018). It is fundamental that the legal provisions of IPCAs are in line with the ancestral rights and traditional ways of life of Inuit. For IPCAs and marine protections in Inuit Nunangat, Inuit should be responsible for setting the conservation objectives and standards as different priorities and objectives for individual IPCAs may vary (e.g. conserving cultural keystone species to protect food security) (ICE, 2018; Tran and al., 2019). As such, all levels of government of should acknowledge and respect that IPCAs are places identified by Inuit for conservation and for which Inuit Knowledge system and legal traditions will be used to ensure Inuit can sustain their relationship with the land and water. By promoting social-ecological resilience, IPCAs also contribute to healing and reconciliation by supporting communities and individuals in reconnecting with their customary and traditional practices and guaranteeing that their lands and waters are truly Inuit-owned and -governed.
CONCLUSION

The marine environment of the Inuit Nunangat presents many ecological, cultural, and social dimensions, which are all interconnected and benefit from one other. The protection of all these dimensions is necessary to ensure that biodiversity conservation and continuity of traditions and customs of Arctic communities are adequately supported. The implementation of IPCAs within Canada’s conservation framework has the potential to create opportunities to elevate the recognition of Inuit rights, promote Inuit self-determination and knowledge systems, and to advance reconciliation with Inuit all the while working towards achieving Canada’s conservation targets. Although recent initiatives from all levels of government have advanced engagement of Inuit in marine protection, their extent in the Arctic could be expanded and strengthened within an IPCA legislative framework, policies to ensure the effective protection of the marine environment over the long-term and for advancing the capacity of Inuit communities.

Recommendations from this research address challenges to implement IPCAs while advancing reconciliation with Canadian Inuit, to address challenges to biodiversity conservation in Canada, to include Inuit in marine protection governance and to promote Inuit self-determination through marine protections. The application and implementation of the recommendations presented in this research would represent an opportunity for Canada to position itself at the forefront of Indigenous marine protection and conservation.
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Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

**Target 1:** By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

**Target 2:** By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

**Target 3:** By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.

**Target 4:** By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use

**Target 5:** By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

**Target 6:** By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

**Target 7:** By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
**Target 8:** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

**Target 9:** By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

**Target 10:** By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

**Strategic Goal C:** To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

**Target 11:** By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

**Target 12:** By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

**Target 13:** By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

**Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services

**Target 14:** By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

**Target 15:** By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building

Target 17: By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.
APPENDIX – 2  Canada’s Biodiversity Outcomes Framework and 2020 Goals and Targets  (source: Environment and Climate Change Canada, 2016)

Goal A: by 2020, Canada’s lands and waters are planned and managed using an ecosystem approach to support biodiversity conservation outcomes at local, regional and national scales.

   **Target 1:** By 2020, at least 17 percent of terrestrial areas and inland water, and 10 percent of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures.

   **Target 2:** By 2020, species that are secure remain secure, and population of species at risk listed under federal law exhibit trends that are consistent with recovery strategies and management plans.

   **Target 3:** By 2020, Canada’s wetlands are conserved or enhanced to sustain their ecosystem services through retention, restoration and management activities.

   **Target 4:** By 2020, biodiversity considerations are integrated into municipal planning and activities of major municipalities across Canada.

   **Target 5:** By 2020, the ability of Canadian ecological systems to adapt to climate change is better understood, and priority adaptation measures are underway

Goal B: By 2020, direct and indirect pressures as well as cumulative effects on biodiversity are reduced, and production and consumption of Canada’s biological resources are more sustainable.

   **Target 6:** By 2020, continued progress is made on the sustainable management of Canada’s forests.

   **Target 7:** By 2020, agricultural working landscapes provide a stable or improved level of biodiversity and habitat capacity.

   **Target 8:** By 2020, all aquaculture in Canada is managed under a science-based regime that promotes the sustainable use of aquatic resources (including marine, freshwater and land based) in ways that conserve biodiversity.

   **Target 9:** By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches.
**Target 10:** By 2020, pollution levels in Canadian waters, including pollution from excess nutrients, are reduced or maintained at levels that support healthy aquatic ecosystems.

**Target 11:** By 2020, pathways of invasive alien species introductions are identified, and risk-based intervention or management plans are in place for priority pathways and species.

**Target 12:** By 2020, customary use by Aboriginal peoples of biological resources is maintained, compatible with their conservation and sustainable use.

**Target 13:** By 2020, innovative mechanisms for fostering the conservation and sustainable use of biodiversity are developed and applied.

**Goal C:** By 2020, Canadians have adequate and relevant information about biodiversity and ecosystem services to support conservation planning and decision-making.

**Target 14:** By 2020, the science base for biodiversity is enhanced and knowledge of biodiversity is better integrated and more accessible.

**Target 15:** By 2020, Aboriginal traditional knowledge is respected, promoted and, where made available by Aboriginal peoples, regularly, meaningfully and effectively informing biodiversity conservation and management decision-making.

**Target 16:** By 2020, Canada has a comprehensive inventory of protected spaces that includes private conservation areas.

**Target 17:** By 2020, measures of natural capital related to biodiversity and ecosystem services are developed on a national scale, and progress is made in integrating them into Canada’s national statistical system.

**Goal D:** By 2020, Canadians are informed about the value of nature and more actively engaged in its stewardship.

**Target 18:** By 2020, biodiversity is integrated into the elementary and secondary school curricula.

**Target 19:** By 2020, more Canadians get out into nature and participate in biodiversity conservation activities.
APPENDIX – 3 Recommendations of the Indigenous Circle of Experts on the creation and implementation of Indigenous Protected and Conserved Areas in Canada as presented in their report *We Rise Together* (Indigenous Circle of Experts, 2018)

Reconciliation in conservation

1. ICE calls on federal, provincial, territorial and Indigenous governments to endorse the concept of IPCAs outlined in this report:
   - IPCAs are lands and waters where Indigenous governments have the primary role in protecting and conserving culture and ecosystems through Indigenous laws, governance and knowledge systems. Culture and language are the heart and soul of an IPCA.
   - However, ICE also encourages Indigenous governments to develop and refine this proposed definition according to their local environments.

2. ICE encourages federal, provincial and territorial governments to work with Indigenous governments to support the development and implementation of IPCAs that count, when appropriate, towards Canada’s biodiversity and protected area targets, including Target 1.

3. ICE calls upon federal, provincial and territorial governments to support the development of IPCAs beyond the Pathway to Target 1 timeline.

4.1 ICE recommends that federal, provincial and territorial governments support IPCAs whether they count towards Target 1 or not.

4.2 ICE calls on the Government of Canada to support and promote its definition of IPCAs internationally—such as under international designated areas of protection, including UNESCO designations like World Heritage and Biosphere Reserves—and with regards to processes and requirements in the context of IUCN and CBD.

5. ICE recommends that federal, provincial, territorial and Indigenous governments recognize and support the potential of IPCAs to enable sustainable, conservation-based Indigenous economies to help diversify local economies.

6.1 ICE calls on federal, provincial and territorial governments to acknowledge and address past wrongdoings—such as appropriating lands and waters from Indigenous Peoples, refusing to recognize the rights of Indigenous Peoples, and excluding them from access to their resources—in the establishment of parks and protected areas. In the spirit and practice of reconciliation, ICE
therefore also calls on governments to work with affected Indigenous communities and their
governments to determine appropriate action.

6.1 ICE calls on federal, provincial and territorial governments to develop collaborative governance
and management arrangements for existing federal, provincial and territorial parks and
protected areas.

6.2 ICE recommends that federal, provincial and territorial governments support Indigenous-designed
and -led cultural programs in existing parks and protected areas to educate the public (and where
applicable, government employees) about Indigenous natural laws and stewardship. This can be
done through Indigenous Peoples’ geographical, spiritual, social and economic connections to a
given park or protected area.

7. ICE recommends that federal, provincial and territorial governments enter into good faith
discussions with Indigenous governments that have an interest in establishing IPCAs relating to,
or coinciding with, parks and protected areas where there are not enough meaningful
partnerships with Indigenous governments.

8. For IPCAs or other protected areas already declared by Indigenous governments, such as Tribal
Parks, ICE calls upon federal, provincial and territorial governments to formally respond to and
engage in good faith dialogue with Indigenous governments to explore appropriate recognition,
level of protection and governance sought by the Indigenous government.

9. ICE recommends that federal, provincial, territorial and Indigenous governments work together on
an ongoing basis to review—and, where necessary, amend—protected area legislation, policies
and tools to support IPCAs.

“We Rise Together”

10. ICE recommends that federal, provincial and territorial governments use land withdrawals and
other measures to prevent development and new third-party interests in IPCA candidate areas
while those areas are being considered.

11. ICE calls on federal, provincial, territorial and Indigenous governments to practice the principle of
ethical space by building nation-to-nation, government-to-government and Inuit-to-Crown
relationships in the pursuit of IPCAs.
12. ICE recommends that when building relationships by developing IPCAs, federal, provincial and territorial governments respect the diversity of protocols, preferences, relationships and self-determination of Indigenous governments and regions.

13. ICE recommends that federal, provincial and territorial governments adopt a flexible approach to collaborating with Indigenous governments and Peoples when identifying and protecting sacred or culturally important areas and cultural keystone species, whether they are in an existing protected area or an IPCA. Governments should not be bound by standard objectives and criteria in these matters.

14. ICE recommends that Indigenous governments develop IPCA indicators for success, including social, economic and cultural indicators.

15. ICE calls on federal, provincial and territorial governments to acknowledge and respect the fact that Indigenous governments will use their own unique legal traditions and knowledge systems when establishing IPCAs.

16. ICE encourages philanthropic organizations and other NGOs to support and partner with Indigenous governments (and Indigenous NGOs, where applicable) and federal, provincial and territorial governments to develop, implement and manage IPCAs.

**Holistic and integrated approaches to stewardship**

17. ICE recommends that federal, provincial and territorial governments collaborate with Indigenous governments to support Indigenous land use planning, collaborative land use planning and governance models to support them.

18.1 ICE recommends that federal, provincial and territorial governments take a more integrated approach to conservation and biodiversity that is consistent with Indigenous worldviews and tailored to what the land and water need locally and regionally.

18.2 ICE recommends the full implementation and coordination of the other Aichi Targets and their related Canadian targets, notably (in the context of ICE’s mandate) Aichi Targets 14 and 18:

19. ICE recommends that federal, provincial and territorial governments facilitate and support cross-boundary (inter-national, provincial/territorial) conservation strategies as they relate to IPCAs.

20. ICE encourages the federal government to enable, fund and build on Indigenous-led processes to examine IPCAs in the marine context.
21. ICE calls upon federal, provincial and territorial governments, philanthropic organizations, academia, environmental NGOs and industry to support the capacity of Indigenous governments, communities and associated organizations to plan, establish and manage IPCAs and engage in conservation efforts more broadly.

22. ICE encourages federal, provincial, territorial and Indigenous governments to work together to support the development of on-the-land programs (e.g., guardian programs or similar community-based initiatives) for the development and management of IPCAs.

23. ICE recommends creating a network of IPCA managers, supported by an Indigenous-led national coordinating body in partnership with federal, provincial and territorial governments, to support the capacity, development, implementation and success of IPCAs now and beyond 2020.

24. Further to TRC Call to Action #57, ICE calls upon federal, provincial and territorial governments to educate and create mandatory skills-based training relevant to the local context for staff in intercultural competency, conflict resolution, human rights and anti-racism.

25. ICE recommends that federal, provincial, territorial and Indigenous governments collaborate with educational institutions to support and encourage further research and capacity-building in IPCAs, such as with respect to the impacts and mitigation of climate change.

26. ICE calls on federal, provincial, territorial and Indigenous governments, and conservation partners, to provide or facilitate secure multi-year funding for the planning, development and management of IPCAs.

27. ICE recommends that federal, provincial and territorial governments and Indigenous governments continue to support the work of ICE going forward to help guide the implementation of these recommendations.

28. Immediate actions

- Federal, provincial and territorial governments should support ICE to conduct communication and outreach directly with these governments, Indigenous governments, and potential non-government partners after the ICE Report is released to support the process of building IPCAs.
• ICE should be supported to host a National Gathering on IPCAs in 2018 for a commencement and ceremony to honour the work completed and work ahead.

• ICE should be expanded to include youth advisers (such as from the Youth Climate Advisory Body, or some other youth-oriented group focused on topical environmental issues) and Elder advisers.
IUCN defines a protected area as:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

The definition is expanded by six management categories (one with a sub-division), summarized below.

la Strict nature reserve: Strictly protected for biodiversity and also possibly geological/geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values.

Ib Wilderness area: Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition.

II National park: Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems, which also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

III Natural monument or feature: Areas set aside to protect a specific natural monument, which can be a landform, sea mount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove.

IV Habitat/species management area: Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category.

V Protected landscape or seascape: Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

VI Protected areas with sustainable use of natural resources: Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and
where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims.

The category should be based around the primary management objective(s), which should apply to at least three quarters of the protected area – the 75 per cent rule.

The management categories are applied with a typology of governance types – a description of who holds authority and responsibility for the protected area. IUCN defines four governance types.

**Governance by government**: Federal or national ministry/agency in charge; sub-national ministry/agency in charge; government-delegated management (e.g. to NGO)

**Shared governance**: Collaborative management (various degrees of influence); joint management (pluralist management board; transboundary management (various levels across international borders)

**Private governance**: By individual owner; by non-profit organisations (NGOs, universities, cooperatives); by for-profit organisations (individuals or corporate)

**Governance by indigenous peoples and local communities**: Indigenous peoples’ conserved areas and territories; community conserved areas – declared and run by local communities
APPENDIX – 5 French Executive Summary

LES AIRE PROTEGÉES ET DE CONSERVATION AUTOCHTONES: UN OUTIL POUR LA CONSERVATION MARINE ET UNE DÉMARCHE VERS LA RÉCONCILIATION DANS L’ARCTIQUE CANADIEN

Par Maude Durand

Résumé analytique en français de l’essai présenté en vue de l’obtention du double diplôme
Maîtrise en environnement
Master Gestion Intégrée de l’Environnement, de la Biodiversité et des Territoires

Sous la direction de Dr. Jennie Knopp

UNIVERSITÉ DE SHERBROOKE
UNIVERSITÉ DE MONTPELLIER (France)

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SOMMAIRE

Mots-clés : Aires protégées et de conservation autochtones, réconciliation, Inuit, gouvernance autochtone, autodétermination autochtone, conservation de la biodiversité, protection du milieu marin, peuples autochtones, Arctique canadien

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INTRODUCTION

Au cours des dernières années, les approches de conservation dans l’Arctique canadien ont évolué vers un engagement et une implication accrues des Inuits, notamment par l’utilisation de connaissances autochtones, des connaissances écologiques traditionnelles et de l’Inuit Qaujimajatuqangit. L’émergence de nouvelles approches de conservation reflète l’intérêt mondial croissant en matière de protection et de conservation dirigée par des Autochtones et le mouvement politique soutenant la réconciliation et l’autodétermination des peuples autochtones (Artelle et al., 2019; Berkes et al., 2007). Le concept d’aire protégée et de conservation autochtones (APCA) est un nouveau modèle de conservation avançant le rôle des peuples autochtones pour relever les défis liés à la conservation de la biodiversité au Canada (Indigenous Circle of Experts [CAE], 2018). Considérant que le futur des Inuits et le futur des écosystèmes de l’Arctique sont inextricablement liés, les connaissances et l’expertise que possèdent les Inuits au sujet de l’environnement sont d’une valeur inestimable pour la conservation de ces écosystèmes ainsi que pour la résilience, le bien-être et la continuité des traditions et coutumes inuites (Fisheries and Oceans Canada [DFO] et Fisheries Joint Management Committee, 2013b; CAE, 2018; Theriault, 2011). Des initiatives récentes de divers paliers de gouvernement ont étudié, mis en œuvre et examiné le potentiel des APCA dans les cadres de conservation au Canada.

Les APCA en tant qu’outil de conservation pourraient permettre de mettre de l’avant la reconnaissance des droits des Inuits, leur autodétermination et leurs systèmes de connaissances et de savoirs, ainsi que de promouvoir le développement durable des communautés inuites tout en contribuant à l’atteinte des objectifs de conservation du Canada. L’objectif principal de cet essai est de déterminer comment les APCA pourraient être mis en œuvre efficacement et avantageusement pour la conservation des milieux marins et au bénéfice des communautés autochtones dans le milieu marin de l’Arctique canadien.

1. L’ENVIRONNEMENT MARIN DE L’ARCTIQUE CANADIEN

L’Arctique canadien est riche en vie marine et a permis aux communautés autochtones de survivre pendant des milliers d’années (Global Affairs Canada, 2002; Inuit Tapiriit Kanatami, 2004). L’Inuit Nunangat est la patrie des Inuits dans le nord du Canada et englobe quatre régions ayant des composantes marines visées par des revendications territoriales inuites : la région désignée des Inuvialuit (dans les parties nord des Territoires du Nord-Ouest et du Yukon), le Nunavut (à la fois une région visée par des revendications territoriales et un territoire), le Nunavik (dans le nord du Québec), et le Nunatsiavut (dans le nord du
La structure de gouvernance de chacune des quatre régions est décrite dans des accords sur les revendications territoriales des Inuits, y compris Inuvialuit Nunangat (jaune), Nunavut (bleu), Nunavik (violet), et Nunatsiavut (orange). L’Inuit Nunangat comprend la terre, l’eau et la glace. Sa superficie totale couvre 35 % de la masse terrestre du Canada et 50 % de son littoral. (tiré de : ITK, 2018)

Figure 1.1 Carte montrant l’Inuit Nunangat (la patrie des Inuits au Canada) avec la localisation, les limites et les zones de chevauchement des quatre régions de revendications territoriales des Inuits, y compris Inuvialuit Nunangat (jaune), Nunavut (bleu), Nunavik (violet), et Nunatsiavut (orange). L’Inuit Nunangat comprend la terre, l’eau et la glace. Sa superficie totale couvre 35 % de la masse terrestre du Canada et 50 % de son littoral. (tiré de : ITK, 2018)

Labrador) (voir Figure 1.1) (Inuit Tapiriit Kanatami [ITK], 2019a). La structure de gouvernance de chacune des quatre régions est décrite dans des accords sur les revendications territoriales, lesquels sont protégés par la Loi constitutionnelle de 1982 (Canadian Geographic, 2018). L’Inuit Nunangat compte 51 communautés, dont 85 % des 60 000 habitants se déclarent autochtones (ITK, 2020; Li et Smith, 2016). L’Inuit Nunangat couvre une partie importante de l’océan arctique (Niemi et al., 2019). Pour cet essai, l’Inuit Nunangat est utilisé comme définition de l’Arctique canadien et sert à décrire les régions terrestres et océaniques, la biodiversité et les habitants de cette région.

La glace de mer est une caractéristique du milieu arctique qui façonne la structure et les interactions de la vie marine arctique et qui a des effets importants sur l’écologie et le climat; par exemple, elle gouverne la
productivité saisonnière du phytoplancton et donc du cycle biogéochimique dans l’océan Arctique, car de nombreux poissons et mammifères marins dépendent des algues qui poussent dans les canaux salins de la glace comme source de synthèse primaire de la matière organique (Niemi et al., 2019; Tremblay et al., 2012). Les cycles de prolifération de phytoplanctons, synchronisés avec le gel et le dégel de la glace, entraînent des déplacements des régions de production primaire et la migration de plusieurs espèces tout au long de l’année (Barber et Massom, 2007; Heide-Jørgensen et al., 2013; Meltofte et al., 2013; Tremblay et al., 2012). Les eaux libres des polynies (zones des pôles libres de glace) permettent également aux mammifères marins, tels que les phoques et les baleines, d’accéder à l’eau libre et à l’atmosphère; leur présence a attiré les communautés inuites et a constitué la base de la chasse de subsistance pendant plus de 4000 ans (Heide-Jørgensen et al., 2013; ITK, 2004; National Snow and Ice Data Center, 2020; Niemi et al., 2019; S. D. Smith et al., 1990).


2. CONTEXTE CANADIEN POUR LA CONSERVATION ET DE LA PRÉSERVATION DES MILIEUX MARINS

Les écosystèmes marins de l’Arctique canadien sont actuellement confrontés à de multiples menaces dues à des facteurs de stress d’origines environnementales et anthropiques (Williams, 2008). Premièrement,
l’Arctique est particulièrement sensible au changement climatique, lequel modifie déjà considérablement la dynamique des glaces de mer (ex. perte de glace pluriannuelle, amincissement, fonte plus précoce, gel plus tardif) et menace la survie des espèces adaptées au froid et aux conditions de glace (MPO, 2020; IPCC, 2013; Niemi et al., 2019; Oceans North et al., 2018). Le réchauffement de la planète et la variabilité climatique qui y sont associés ont déjà affecté les environnements marins de l’Arctique et continueront d’affecter directement et indirectement les écosystèmes arctiques; ils constituent de loin les menaces les plus importantes puisqu’ils exacerbent également toutes les autres menaces (Conservation of Arctic Flora and Fauna, 2013). Les facteurs anthropiques ayant des impacts potentiellement délétères sur l’environnement arctique sont également la source de préoccupations permanentes (Narvik University College, 2010). Les principales menaces anthropiques qui pèsent sur l’environnement marin arctique sont la pollution et les pressions anthropiques dues aux activités humaines, telles que l’augmentation du transport maritime, les menaces locales de déversement de carburants fossiles, la pollution terrestre atteignant l’environnement marin ainsi que la chasse et la pêche commerciales (Derraik, 2002; Macdonald et al., 2005; Meltofte et al., 2013; Niemi et al., 2019; Oceans North et al., 2018; IPCC, 2019).

3. ENGAGEMENTS CANADIENS POUR LA CONSERVATION DE LA BIODIVERSITÉ


Le Canada a été le premier pays industrialisé à signer et à ratifier la CDB (Environment and Climate Change Canada, 2015). Le Cadre axé sur les résultats en matière de biodiversité du Canada a été mis à jour en 2015 en réponse au Plan de la CDB et aux objectifs d’Aichi; il présente un ensemble de nouveaux objectifs (4) et cibles (19) à moyen terme, qui reflètent le contexte canadien et ses priorités en matière de conservation.
de la biodiversité (voir Annexe 2) (ECCC, 2016). En réponse à l’Objectif d’Aichi 11, l’objectif 1 du Canada stipule :

« D’ici 2020, au moins 17 % des zones terrestres et d’eaux intérieures et 10 % des zones côtières et marines sont protégées par l’entremise de réseaux d’aires protégées, et d’autres mesures efficaces de conservation dans des superficies clairement définies. » (ECCC, 2016)

L’initiative nationale En route vers l’objectif 1 du Canada a été créée avec pour tâche d’établir un plan et d’émettre des recommandations pour réaliser cet engagement par le biais d’un réseau coordonné d’aires protégées, d’APCA et d’autres mesures de conservation (Pathway to Canada Target 1, s. d.). En 2017, dans le cadre de cette initiative, le Cercle autochtone d’experts (CAE) a été créé pour élaborer un rapport sur la conservation dirigée par les autochtones et pour émettre des conseils pour les tous les niveaux de gouvernement sur la manière d’atteindre l’Objectif 1 du Canada par la création d’APCA dans l’esprit et la pratique de la réconciliation. En mars 2018, le CAE a publié les résultats de ses travaux dans le rapport Nous nous levons ensemble, lequel décrit et définit la nature, la portée et les caractéristiques de ce que devraient être les APCA au Canada (CAE, 2018). L’expression « aire protégée et de conservation autochtone » est celle choisie par le CAE pour désigner une approche des aires protégées et conservées soutenant les droits, les responsabilités et les priorités des peuples autochtones au Canada. Dans son rapport, le CAE formule des recommandations (voir Annexe 3) pour jeter les bases de la création d’APCA lesquelles sont définies comme « des terres et des eaux où les gouvernements autochtones jouent un rôle primordial dans la protection et la conservation des écosystèmes grâce aux droits, à la gouvernance et aux systèmes de savoirs autochtones » (CAE, 2018).

4. OUTILS CONVENTIONNELS DE PROTECTION DU MILIEU MARIN AU CANADA

En août 2019, 13,81 % des zones marines et côtières du Canada étaient protégées, ce qui signifie que le Canada a atteint son objectif de conservation marine de 10 % des aires marines et côtières, notamment grâce à d’importantes contributions apportées ces dernières années par des efforts de conservation significatifs dans la région arctique (MPO, 2019b). Le Canada dispose actuellement de quatre outils juridiques pour protéger les zones ou les espèces marines et pour promouvoir la gestion durable des ressources marines sous des désignations spécifiques : les zones de protection marine (ZPM), les aires marines nationales de conservation (AMNC), les réserves nationales de faunes (RNF) et les refuges d’oiseaux migrateurs (ROM). Ces désignations et leur contribution à la protection du milieu marin sont résumées dans le tableau 4.1.
Tableau 4.1 Désignations et cadres de conservation des aires protégées à l'échelle fédérale et contribution approximative des aires désignées dans l’Arctique aux objectifs de conservation marine du Canada (MPO, 2019b; Loi de 1994 sur la Convention concernant les oiseaux migrateurs; Loi sur les espèces sauvages du Canada, 1994; Loi sur les océans, 1982; Politique sur les aires marines nationales de conservation, 1986)

<table>
<thead>
<tr>
<th>Désignation de protection fédérale</th>
<th>Loi habilitante</th>
<th>Ministère responsable</th>
<th>Aires désignées au Canada et contribution approximative (taille) aux objectifs de conservation marine</th>
<th>Aires désignées dans l’Arctique au Canada et contribution approximative (taille) aux objectifs de conservation marine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone de protection marine</td>
<td>Loi sur les océans</td>
<td>Pêches et Océans Canada</td>
<td>14 (350 000 km²)</td>
<td>3 (323 519 km²)</td>
</tr>
<tr>
<td>Aire marine nationale de conservation</td>
<td>Loi sur les aires marines nationales de conservation du Canada</td>
<td>Parcs Canada</td>
<td>3 (112 746 km²)</td>
<td>1 (108 000 km2)</td>
</tr>
<tr>
<td>Réserve nationale de faune</td>
<td>Loi sur les espèces sauvages du Canada</td>
<td>Service canadien de la faune (Environnement et Changement climatique Canada)</td>
<td>12 (17 214 km²)</td>
<td>5 (+1 proposée) (5 630 km²)</td>
</tr>
<tr>
<td>Refuge d’oiseaux migrateurs</td>
<td>Loi de 1994 sur la Convention concernant les oiseaux migrateurs</td>
<td>Service canadien de la faune</td>
<td>49 (13 992 km²)</td>
<td>17 (13 587 km²)</td>
</tr>
</tbody>
</table>

L’Arctique représente une contribution disproportionnée aux objectifs de conservation marine et à la couverture des zones de protection et de conservation marine du Canada. Les zones marines et côtières du Canada sont également protégées par des portions de refuges marins, de parcs nationaux et de lieux historiques nationaux ayant des composantes marines (MPO, 2019b). Il est important de noter que, dans l’Arctique, l’établissement d’une aire de protection sous l’une des désignations mentionnées doit être conforme aux accords sur les revendications territoriales, car ceux-ci exigent que les organismes fédéraux négocient directement avec les communautés inuites et les organisations de revendications territoriales.

5. RECONNAÎTRE LES DROITS ET LES TITRES DES INUITS DANS L’ARCTIQUE CANADIEN

La nécessité de reconnaître et de mettre en œuvre les droits inhérents et collectifs des peuples autochtones, qui découlent de leur utilisation continue et de leur occupation initiale des terres, suscite une attention croissante aux niveaux international et national (Office of the Prime Minister of Canada, 2018). La législation internationale comprend des déclarations qui engagent les États membres à protéger la culture et le mode de vie des peuples autochtones. La Déclaration des Nations Unies sur les droits des peuples autochtones (DNUDPA) est un instrument international établissant un cadre de normes minimales reconnaissant et protégeant les droits des peuples autochtones à l’autodétermination et au développement durable et équitable conformément à leurs propres besoins et intérêts, et promouvant les droits des peuples autochtones affirmés dans les traités et accords existants. L’article 19 de la DNUDPA
introduit le concept de consentement libre, préalable et éclairé (CLPE), qui exige que les États membres consultent et coopèrent avec les peuples autochtones pour obtenir leur CLPE avant d’adopter et de mettre en œuvre des mesures législatives ou administratives susceptibles de les affecter, notamment leurs droits sur leurs terres, territoires et ressources. La DNUDPA reconnaît également que les connaissances, la culture et les pratiques traditionnelles des peuples autochtones contribuent à la conservation de l’environnement. (UN General Assembly, 2007) Bien que pendant près d’une décennie le Canada ait refusé d’approuver tous les principes de la DNUDPA, celle-ci a finalement été adoptée dans son intégralité en 2016 (Indigenous and Northern Affairs Canada, 2011).

Les engagements internationaux du Canada à respecter et à promouvoir les droits des peuples autochtones sont également inhérents à l’endorsement de la CDB, de ses objectifs stratégiques et des objectifs d’Aichi en matière de biodiversité. Les objectifs d’Aichi 14 et 18 soulignent la nécessité de reconnaître les droits des peuples autochtones, leurs connaissances traditionnelles, leurs innovations, leurs pratiques et leurs intérêts quant à la conservation et à leur utilisation durable coutumière de la biodiversité, ainsi que la nécessité d’intégrer ces droits dans la législation des États membres. L’objectif 18 souligne également que la CDB devrait être mise en œuvre avec la pleine participation des peuples autochtones. (UNEP, 2010) Au Canada, l’article 35 de la Loi constitutionnelle de 1982 reconnaît et affirme officiellement les droits inhérents des peuples autochtones ainsi que les droits existants, ancestraux ou issus de traités des peuples autochtones au Canada (The Constitution Act, 1982). L’adoption de l’article 35 a donc formellement inscrit dans la Constitution canadienne les droits inhérents et les droits issus de traités des peuples autochtones au Canada, y compris les droits existants ou acquis par le biais d’accords sur des revendications territoriales (The Constitution Act, 1982).

5.1 Accords sur les revendications territoriales ayant une composante marine

gouvernement territorial ou provincial afin de permettre la gestion intégrée des ressources de certains aspects dans les zones de revendications territoriales, tels que l’utilisation des terres et des eaux et la protection du territoire et de l’environnement. En outre, ces accords reconnaissent et prévoient spécifiquement les droits légaux des Inuits de chasser et de pêcher selon leur utilisation traditionnelle et actuelle du territoire et reconnaissent spécifiquement les droits préférentiels des Inuits de chasser et de pêcher certaines espèces à des fins de subsistance. (Government of Newfoundland and Labrador, s. d.; Inuvialuit Regional Corporation, 2016, s. d.; Labrador Inuit Land Claims Agreement Act, 2005; Nunavik Inuit Land Claims Agreement Act, 2008; Nunavut Act, 2019; Nunavut Land Claims Agreement Act, 2004; The James Bay and Northern Quebec Agreement (JBNQA), 1975; Western Arctic (Inuvialuit) Claims Settlement Act, 2003)

5.2 Culture, mode de vie et épistémologie des Inuits dans l’Arctique canadien

Les Inuits habitent l’Arctique canadien depuis 4000 à 5000 ans, période durant laquelle ils ont été pour la plupart entièrement autonomes, ayant acquis les connaissances, les compétences et la technologie nécessaires pour utiliser les ressources terrestres, marines et côtières et en dépendre en toute saison (M. A. Freeman, 2020; ITK, 2004; Pauktuutit Inuit Women of Canada, 2006). La chasse, le piégeage et la pêche sont façonnés et régis par la vision du monde des Inuits; ces activités sont également au cœur des traditions et coutumes de la subsistance, de la culture et de la spiritualité des Inuits (ITK, 2004; Pauktuutit Inuit Women of Canada, 2006). L’épistémologie inuite, l’ensemble des croyances et des valeurs honorées et soutenues par les Inuits, est spirituellement centrée sur la croyance en l’interconnexion des esprits animaux et humains, telle que la croyance que les humains font intrinsèquement partie de la nature (Pauktuutit Inuit Women of Canada, 2006). L’épistémologie inuite façonne la façon dont les Inuits interagissent avec le monde qui les entoure, y compris la terre, les animaux et les gens, et est transmise de génération en génération par la tradition orale. La transmission d’histoires et d’informations par les aînés inuits fait partie de la culture et de la façon d’apprendre des Inuits. Les lois coutumières des Inuits ne sont généralement pas écrites et ne s’inscrivent pas dans les concepts juridiques modernes. Les lois coutumières régissent le comportement des sociétés inuites avec un ensemble complexe de valeurs, de croyances et de tabous. Comme le mode de vie traditionnel des Inuits s’articule autour d’un rythme saisonnier de la vie communautaire, la prise de décision par consensus, la coopération et la conservation sont des valeurs inuites importantes. Ces valeurs sont impératives pour renforcer la capacité des communautés à relever les défis imposés par la vie dans l’Arctique avec innovation, ingéniosité et persévérance et ainsi garantir leur autonomie. (ITK, 2004; Pauktuutit Inuit Women of Canada, 2006)
5.3 Réconciliation avec les peuples autochtones au Canada


En 2008, la Commission de vérité et réconciliation (CVR), lancée par le gouvernement du Canada pour découvrir la vérité et l’héritage des problèmes des pensionnats indiens, définit la réconciliation comme :
...an ongoing individual and collective process, and will require commitment from all those affected including First Nations, Inuit and Métis former Indian Residential School (IRS) students, their families, communities, religious entities, former school employees, government and the people of Canada. Reconciliation may occur between any of the above groups. (CVR, 2015c)

Les « appels à l’action » publiés dans le rapport de la CVR invitent tous les niveaux de gouvernement fédéral, entre autres, à adopter et à mettre en œuvre pleinement la DNUDPA en tant que cadre de réconciliation; à s’engager à reconnaître et à mettre en œuvre les systèmes de justice et de législation autochtones d’une manière compatible avec les traités et les droits ancestraux des peuples autochtones, la Loi constitutionnelle de 1982 et la DNUDPA; ainsi qu’à rejeter les concepts utilisés pour justifier la souveraineté européenne sur les peuples et les terres autochtones (CVR, 2015b).

Les conclusions des deux commissions soulignent qu’un travail important est encore nécessaire pour modifier fondamentalement les approches nationales concernant les peuples autochtones au Canada, afin de passer d’une culture de domination et d’oppression à une culture de décolonisation, de respect, de compréhension et d’inclusion des peuples autochtones (QIA, 2014; CVR, 2015c).

6. **AIRES PROTÉGÉES ET DE CONSERVATION AUTOCHTONES : UN CONCEPT ÉMERGENT AU CANADA**


L’Annexe 4 présente les catégories d’aires protégées et les types de gouvernance définis par l’UICN.
6.1 Exemples internationaux de désignations de conservation dirigées par les autochtones

À l’échelle mondiale, il existe de nombreuses initiatives de conservation régies par des peuples autochtones sous des termes et des désignations variés (Ashish Kothari, 2008; Ashish Kothari et al., 2012; Oviedo, 2006; Smyth, 2006). En Australie, les aires protégées détenues et gérées par les autochtones sont apparues comme une nécessité afin d’inclure des terres autochtones d’importance biorégionale dans le système de réserves nationales (Szabo et Smyth, 2003). Depuis l’établissement de la première aire protégée autochtone (APA) désignée sur des propriétés appartenant aux autochtones en 1998, un total de 76 APA a été ajouté au système de réserves nationales australien, lesquelles couvrent 67 329 778 millions d’hectares, soit 43,9 % du système (Borrini-Feyerabend et al., 2004; National Indigenous Australians Agency, 2018, 2020). En Amérique du Sud, plusieurs pays ont des dispositions juridiques reconnaissant les droits des peuples autochtones et traditionnels à gérer leurs terres, leurs eaux ou leurs ressources, incluant le Brésil, la Bolivie, la Colombie et le Panama (« Convention C169 - Indigenous and Tribal Peoples Convention, 1989 (No. 169) », 1989; Ashish Kothari, 2008; Oviedo, 2006). Il existe toute une série d’autres protections autochtones dans le monde, mais peu d’entre elles concernent les droits et la gestion des autochtones en matière de protection des milieux marins (Ban et Frid, 2018; Oviedo, 2006). Cependant, des préoccupations croissantes concernant le déclin de la biodiversité marine ainsi que les impacts négatifs des zones protégées établies sur les eaux coutumières et traditionnelles des populations autochtones et leurs impacts potentiels sur le bien-être des écosystèmes et des communautés autochtones ont incité un certain nombre de pays à travailler avec les peuples autochtones pour établir des accords de gestion et de gouvernance partagées pour la protection des milieux marins (Ban et al., 2018; Lyver et al., 2014; Rist et al., 2019).

6.2 Définition et caractéristiques du concept d’APCA au Canada

Au Canada, les APCA ont le potentiel de renforcer les droits des autochtones tout en atteignant les objectifs et les résultats en matière de conservation de la biodiversité (Buscher, 2019; CAE, 2018; Zurba et al., 2019). Bien que les objectifs de gestion et de gouvernance des APCA individuels puissent varier, les APCA partagent tous trois éléments essentiels, comme le souligne le CAE :

4. Elles sont dirigées par les autochtones : les gouvernements autochtones ont le rôle, les responsabilités et les droits principaux dans la détermination des objectifs, des limites, des plans de gestion et des structures de gouvernance des APCA (CAE, 2018);
5. Elles représentent un engagement à long terme en faveur de la conservation : les visions du monde autochtones considèrent la conservation comme une responsabilité d’intendance multigénérationnelle de leurs territoires (CAE, 2018; Ashish Kothari, 2008); et

6. Elles élèvent les droits et responsabilités des autochtones : la reconnaissance des droits et responsabilités des peuples autochtones en matière de gestion de leurs territoires traditionnels affirme, affirme et valide les relations entre les peuples autochtones et leur territoire et l’application moderne des valeurs traditionnelles, des systèmes de connaissances, des traditions juridiques, du droit coutumier et traditionnel ainsi que des pratiques coutumières, traditionnelles et culturelles des autochtones (CAE, 2018).

Dans le contexte canadien, les APCA représentent une opportunité pour la mise en œuvre des instruments et engagements internationaux envers :

- La reconnaissance des droits et des titres autochtones;
- Le respect des lois, politiques et pratiques des gouvernements fédéral, provinciaux et territoriaux en vigueur d’une manière et sous une forme compatible avec les traités, les revendications territoriales et les accords d’autonomie gouvernementale ; et
- Pour une véritable réconciliation entre les peuples autochtones et la société canadienne. (Canadian Parks Council, 2018; CAE, 2018)

Un concept central du cadre des APCA est l’« espace éthique », qui est un principe fondamental d’engagement entre les peuples autochtones et les gouvernements visant à ouvrir la voie au respect mutuel, à la communication interculturelle et à la cogouvernance (CAE, 2018; Lesage-Corbiere et Bell, 2018). L’espace éthique est un espace de collaboration créé pour parvenir à des terrains d’entente tout en respectant les systèmes de connaissances et les mécanismes juridiques tant autochtones qu’occidentaux (CAE, 2018; Parks Canada, 2018). Dans le contexte des APCA, l’espace éthique contribue à la réconciliation en fournissant un cadre pour engager un dialogue ouvert et honnête et reconstruire ou établir des relations de confiance avec les gouvernements non autochtones (CAE, 2018; Lesage-Corbiere et al., 2018).

6.3 Mesures et initiatives actuelles de conservation dirigées par des autochtones au Canada

Au Canada, les gouvernements et les organisations autochtones sont bien placés pour faire progresser la conservation de zones considérables d’écosystèmes relativement intacts et d’autres écosystèmes ayant une valeur écologique, sociale et culturelle importante au niveau mondial (Artelle et al., 2019). Au cours des dernières décennies, les gouvernements de la Couronne (fédéral, provinciaux et territoriaux) ont
élaboré et mis en œuvre toute une série de modèles visant à inclure les populations et les points de vue autochtones dans les processus décisionnels et la gestion des aires protégées (Bujold et Simon, 2018; CAE, 2018).

6.3.1 Parcs tribaux

Dans le contexte canadien, les efforts de conservation qui pourraient entrer dans la définition d’une APCA comprennent les parcs tribaux tels que les parcs tribaux Tla-o-qui-aht et Nexwagwez?an (parc tribal Dasiqox) (Dasiqox Tribal Park, s. d.; CAE, 2018; Tla-o-qui-aht Tribal Parks Alliance, 2018). Les parcs tribaux sont des initiatives de groupes autochtones de Colombie-Britannique visant à établir des aires protégées sous la gouvernance et la gestion des autochtones (CAE, 2018; Plotkin, 2018). En général, les parcs tribaux sont des modèles d’autodéclaration d’aires protégées par les groupes autochtones et utilisent les connaissances et pratiques traditionnelles pour soutenir mutuellement les objectifs de conservation, la gestion de l’environnement et les moyens de subsistance des peuples autochtones (CAE, 2018). Des lacunes de ce modèle identifiées par les dirigeants des parcs tribaux Dasiqox en matière de planification et de gestion sont la capacité limitée du personnel ainsi que le temps et les ressources nécessaires aux dirigeants (Plotkin, 2018).

6.3.2 Engagement des communautés arctiques dans les ZPM fédérales

Parmi les avancées récentes en matière de participation des autochtones à la création et à la gestion des ZPM, citons les désignations de la zone de protection marine de Tarium Niryutait (ZPMTN) comme première ZPM de l’Arctique canadien en 2010, de la zone de protection marine d’Anguniaqvia Niqiqyuam (ZPMAN) en 2016 et de la zone de protection marine de Tuvaijuittuq en juillet 2019. La création de ces ZPM est le résultat d’efforts de collaboration entre les Inuits, le secteur privé, les gouvernements locaux et Pêches et Océans Canada (MPO), représentant le gouvernement fédéral (Beaufort Sea Partnership, s. d.-b, s. d.-a). L’engagement et la participation des Inuits se reflètent dans les objectifs de conservation de ces ZPM, lesquels sont uniquement basés sur les connaissances traditionnelles et locales autochtones pour le ZPMAN, dans le respect de la cogouvernance et cogestion, et dans l’intégration des savoirs traditionnels comme sources d’information (Beaufort Sea Partnership, s. d.; MPO et Fisheries Joint Management Committee, 2013 b, 2013 b; KAVIK-AXYS Inc., 2012; Parks Canada, 2019a).

6.3.3 Engagement des autochtones et des Inuits dans les AMNC fédérales

Dans le cadre de l’AMNC, un modèle internationalement reconnu de gestion coopérative des zones protégées est celui qui existe entre le Gouvernement du Canada et le Conseil de la Nation Haïda (Borrini-
La signature d’une entente sur les répercussions et les bénéfices pour les Inuits pour l’AMNC de Tallurutiup Imanga en août 2019 a été une étape cruciale dans le processus de création de l’AMNC. Dans sa phase finale de création, l’AMNC de Tallurutiup Imanga démontre un engagement important des autochtones en soutenant un modèle de gouvernance basé sur le consensus et en déclarant clairement que les Inuits seront pris en compte dans la prise de décision relative à la création, la gestion et l’exploitation de l’aire de conservation. (Parks Canada, 2019e) En outre, pour comprendre et intégrer la perspective inuite, l’Inuit Qaujimajatuqangit (IQ) (savoir traditionnel inuit) a été fondamental pour éclairer la création de l’AMNC de Tallurutiup Imanga. Comme l’utilisation et l’intégration du IQ est également une prémisses de la Loi sur les aires marines nationales de conservation du Canada et de l’ARTN, le IQ continuera à informer la gestion de l’aire protégée. (Parks Canada, 2019c)

On estime que cette entente ainsi que l’entente signée pour l’AMNC Tuvaijuittuq apporteront des avantages financiers et réels importants aux communautés autochtones, notamment par la création d’emplois, par le développement de nouvelles possibilités de pêches ainsi que par le soutien à la recherche, au suivi et au renforcement des capacités menés par les Inuits. Ils favoriseront également les programmes d’intendance territoriale des Inuits et créeront de nouveaux modèles de gouvernance en collaboration entre les Inuits et le gouvernement canadien, lesquels permettront le développement des capacités et la participation à la gouvernance et à la gestion des aires protégées pour les communautés autochtones impliquées. (QIA, 2020)

Il existe d’autres projets actuellement proposés qui feraient progresser l’autodétermination des autochtones et leur engagement dans les AMNC, incluant l’initiative de planification marine régionale
Imappivut dans la mer du Labrador et la faisabilité de la création d’une APCA dans Imappivut ainsi que la faisabilité d’une AMNC dans la région marine d’Eeyou. La création d’APCA permettrait de conserver la biodiversité ainsi que la culture et les traditions autochtones, et contribuerait au bien-être des communautés environnantes. Des consultations approfondies avec les communautés locales joueraient un rôle important dans les évaluations de faisabilité et pour les dispositions incluses dans les ententes sur les répercussions et les bénéfices qui devraient être négociées si les APCA sont jugées faisables (Bell, 2019; Parliament of Canada, 2017; German, 2019; Nunatsiavut Government, 2018; Parks Canada, 2019d).

6.3.4 Première APCA au Canada

L’aire protégée Edéhzhíe (APE) est la première APCA établie au Canada, couvrant 14 218 km² dans les Territoires du Nord-Ouest (ECCC, 2018; Environment and Natural Resources, s. d.). L’APE, établie en juillet 2018, est le résultat d’une collaboration entre les Premières nations du Deh Cho et le gouvernement du Canada et découle du désir des Dénés Deh Cho de protéger une partie fondamentale de la culture et des territoires traditionnels Deh Cho ainsi que divers habitats terrestres et aquatiques, comme les terres, l’eau et la faune d’Edéhzhíe qui font partie intégrante de la culture et du mode de vie des Dénés Deh Cho (Dehcho First Nations, s. d.; ECCC, 2019c). L’APE a été désignée comme une APCA par la loi Deh Cho et en vertu d’un accord pour Edéhzhíe signé par le grand chef des Premières nations du Deh Cho et par le gouvernement du Canada (Agreement regarding the establishment of Edéhzhíe, 2018; Environment and Natural Resources, s. d.). En vertu de cet accord, les Premières nations du Deh Cho et le gouvernement du Canada sont rendus responsables de la gestion et de la gouvernance de l’APE, toutes les décisions devant être prises par consensus et de manière cohérente pour protéger les terres, soutenir la relation entre les Dénés Deh Cho et les terres, et contribuer à la réconciliation, notamment en encourageant la présence des Dénés Deh Cho sur l’APCA (Agreement regarding the establishment of Edéhzhíe, 2018; ECCC, 2019c).

7. Défis pour la réconciliation et l’autodétermination des Inuits

Au Canada, les APCA pourraient être utilisées comme un outil pour intégrer les perspectives et les connaissances des Inuits afin de protéger les environnements marins de l’Arctique. Toutefois, pour atteindre ces objectifs, il est nécessaire de reconnaître, de rapprocher et de modifier les paradigmes existants dans les systèmes de connaissances et les structures de conservation. Les APCA offrent aux peuples autochtones et aux gouvernements de la Couronne la possibilité de confronter leur histoire commune et d’avancer dans des principes de réconciliation vers des objectifs communs de protection de l’environnement.
7.1 Savoirs écologiques traditionnels et Inuit Qaujimajatuqangit

Les savoirs écologiques traditionnels (SET) désignent un sous-ensemble de connaissances acquises par les peuples autochtones sur les relations entre et avec les êtres vivants à partir de leur interaction avec l’environnement (Whyte, 2013). Le respect, la reconnaissance et la pratique des SET des peuples autochtones sont essentiels pour l’utilisation, la gestion et la conservation des ressources naturelles et des écosystèmes; les liens entre la diversité culturelle et la diversité biologique sont de plus en plus reconnus (Mazzocchi, 2006; CBD, 2020a). Pourtant, les structures et les pratiques de conservation ont encore tendance à favoriser les connaissances scientifiques et les épistémologies occidentales lorsqu’il s’agit de prendre des décisions sur la gestion et la conservation des écosystèmes et des ressources ; ces attitudes discriminatoires découlent de l’ignorance et de la désapprobation souvent liées aux structures coloniales (Mazzocchi, 2006; Mistry et Berardi, 2016; White, 2006; Whyte, 2013). Plutôt que d’être considérées comme fondamentalement différentes, la science et les SET devraient être considérées comme complémentaires (Whyte, 2013). Il existe de nombreuses preuves que les savoirs traditionnels et les pratiques autochtones ont amélioré la conservation, la biodiversité et les ressources environnementales (Berkes et al., 2001; Forest Peoples Programme et al., 2016; Gadgil et al., 1993; Hill et al., 2020; Oberndorfer et al., 2020). Une compréhension globale et holistique des territoires et des codes éthiques régissant les relations entre les hommes, la terre, les eaux et les animaux, transmis de génération en génération, ont assuré la survie des Inuits dans l’Arctique canadien (White, 2006; Zamparo, 1996).

Pour les Inuits du Nunavut, le terme Inuit Qaujimajatuqangit (IQ) fait référence aux savoirs inuits sur les terres, les animaux, les noms de lieux, la géographie et leur histoire qui est transmise de génération en génération (Inuit Circumpolar Council, s. d.; Nunavut Department of Education, 2007; Nunavut Impact Review Board, s. d.). Il est important de noter que les SET et IQ sont essentiellement des épistémologies, comprenant non seulement des connaissances, mais aussi des croyances, des lois, des principes, des valeurs, des compétences, une culture, une langue, une organisation sociale, des attentes et des attitudes traditionnels (NIRB, s. d.). Pour la gestion, la conservation et la surveillance des écosystèmes et des espèces, les SET et IQ offrent une approche holistique dont les objectifs vont au-delà de l’approche scientifique consistant à se concentrer sur la conservation des populations et des espèces, et comprennent la préservation de l’ensemble de l’écosystème ainsi que de la relation des Inuits avec leurs ressources, la préservation de l’accès à ces ressources et la recherche de solutions holistiques pour accroître la résilience des communautés inuites (Berkes et al., 2007; Mistry et al., 2016). En outre, les Inuits reconnaissent le rôle et la responsabilité de l’homme dans la protection des écosystèmes, car cela est inhérent aux règles et coutumes des SET et IQ pour l’exploitation sélective et durable des ressources, ainsi qu’aux pratiques...
coutumières et traditionnelles de surveillance et de contrôle de l’utilisation des ressources et des habitats (Stephenson et al., 2014). Un des défis rencontrés lors de la création des APCA est la nécessité de réconcilier et concilier les épistémologies autochtones et occidentales (Tran et al., 2019; Zurba et al., 2019). Les APCA offriraient la possibilité de documenter et d’engager les connaissances et les processus de décision autochtones à toutes les étapes de la création d’aires protégées (Berkes et al., 2007; CAE, 2018; Tran et al., 2019). Parmi les défis à relever figurent le manque de confiance des structures non autochtones dans les SET et IQ ainsi que les difficultés et la complexité associées à l’intégration et l’application des SET et IQ dans des structures fondées sur des valeurs intrinsèquement contradictoires (occidentales, coloniales) (Artelle et al., 2019; Berkes et al., 2007; Tran et al., 2019). En donnant une place aux systèmes de savoirs autochtones et traditionnels, les APCA offrent la possibilité d’éviter la continuité et la solidification de l’héritage colonial dans les structures de conservation (Artelle et al., 2019). En donnant la priorité à l’épistémologie inuite, les APCA proposent une approche et une stratégie à long terme renouvelées pour la conservation de la biodiversité, laquelle intègre une approche holistique des systèmes impliqués dans les mesures de protection (Berkes et al., 2007; Plotkin, 2018). Les structures actuelles pour les aires protégées au Canada ont été élaborées selon un paradigme basé sur un modèle de conservation de la science occidentale qui reflète une dichotomie nature/culture (Shultis et Heffner, 2016; Zurba et al., 2019). Cette approche dissocie le système humain (culture) du système de la biosphère (nature), plaçant ainsi l’homme comme exogène à la nature et considère que seuls les environnements libres de l’influence humaine directe sont adéquatement protégés (Artelle et al., 2019; Zurba et al., 2019). Les paradigmes et les croyances qui découlent de cette dichotomie signifient souvent que la santé et le bien-être des écosystèmes sont considérés comme une cible opposée à celle des humains (Caillon et al., 2017; Shultis et al., 2016). Dans le contexte plus large de l’appropriation des terres et des ressources pendant l’expansion coloniale, les aires protégées et les parcs ont spécifiquement bénéficié de ce modèle d’exclusion (Finegan, 2018). Les peuples autochtones ont été historiquement exclus, souvent de force, de l’accès à leurs territoires et ressources traditionnels pour la création d’aires protégées (CAE, 2018; Shultis et al., 2016). Malheureusement, ces structures et paradigmes coloniaux persistent dans les pratiques et structures de conservation actuelles, en particulier celles créées avant la reconnaissance et l’affirmation des droits des autochtones par la Loi constitutionnelle de 1982 (Finegan, 2018; CAE, 2018). Après plusieurs décennies d’exclusion systématique et systémique, on reconnaît aujourd’hui de plus en plus l’importance du rôle que jouent les populations autochtones dans les décisions et les processus gouvernementaux qui les concernent, notamment en ce qui concerne la conservation et la gestion collective des écosystèmes et
des ressources naturelles sur leurs territoires traditionnels (Artelle et al., 2019; Ban et al., 2018; Borrini-Feyerabend et al., 2004; Finegan, 2018; Herrmann et al., 2012; CAE, 2018; Ashish Kothari et al., 2012).


7.1.1 Justice environnementale et autodétermination autochtone

Dans le contexte de la réconciliation au Canada et de l’application d’une approche de justice environnementale, il est important que les Inuits soient impliqués dans les processus décisionnels concernant les initiatives de conservation (CAE, 2018; Simon, 2017; Theriault, 2011). L’idée de justice environnementale est que « toutes les personnes concernées devraient participer aux décisions concernant les avantages et les charges liés à la santé publique et à l’environnement » (Olive et Rabe, 2016). La reconnaissance des droits des autochtones à l’autodétermination dans le cadre des accords sur les revendications territoriales et l’inclusion et la reconnaissance actuelles des peuples autochtones dans les approches de conservation au Canada ne sont pas suffisantes pour protéger le bien-être des Inuits (Olive et al., 2016; Tsosie, 2007). Toutefois, de récents changements de paradigmes en matière de conservation offrent la possibilité de renforcer et de développer la capacité d’adaptation et de relever les défis de l’autodétermination des Inuits au Canada (Pearce et al., 2015; Theriault, 2011).
7.1.2 La participation des Inuits à la conservation comme paysage fonctionnel pour les communautés de l’Arctique

Les APCA en tant qu’outil de conservation seraient un moyen de maintenir la capacité des Inuits en équilibrant les besoins sociaux, économiques et écologiques (Artelle et al., 2019; Simon, 2017; Tran et al., 2019). Cette approche se justifie par le fait que des systèmes de gouvernance participatifs bien conçus pour des aires protégées favorisent la justice environnementale et la réconciliation, et créent en outre des résultats positifs dans les objectifs sociaux, culturels et économiques de la communauté qui y sont effectivement liés (Murray et King, 2012; Simon, 2017).

Un examen de la littérature synthétisant les succès et les défis associés à la création d’APCA à l’échelle mondiale a révélé que les peuples autochtones peuvent tirer des avantages politiques, sociaux et écologiques tangibles de la mise en place d’APCA (Tran et al., 2019). Les APCA permettent une résurgence de la gouvernance autochtone ; la reconnaissance des APCA en tant qu’aires protégées dans les cadres nationaux de conservation, accompagnée d’un financement à long terme, permettrait de renforcer la capacité des institutions de gouvernance autochtones (Artelle et al., 2019; Ban et al., 2018; Tran et al., 2019). Par conséquent, en améliorant ainsi la capacité des organisations et des gouvernements autochtones à remplir leur mission et leurs objectifs grâce à une gouvernance solide et une gestion saine, les APCA peuvent faire progresser l’autodétermination des nations et des communautés autochtones (Artelle et al., 2019; Tran et al., 2019). En permettant aux Inuits d’avoir la responsabilité, l’autorité et la responsabilité de la gouvernance et de la gestion dans les initiatives de conservation sur leurs territoires, telles que les aires de protection marines, les APCA garantissent également la reconnaissance de leurs droits sur leur territoire et de la résilience des Inuits, et soutiennent les systèmes de droit et de connaissances traditionnels et coutumiers des Inuits dans les systèmes de gouvernance (CAE, 2018).

En donnant aux Inuits le pouvoir de déterminer leurs propres objectifs de conservation sur leur territoire et en soutenant leurs droits constitutionnellement protégés à la gestion et à la récolte de la faune, les Inuits bénéficieraient également sur le plan social et écologique, car les activités de récolte, le changement climatique et la sécurité alimentaire sont étroitement liés dans l’Arctique (Ban et al., 2018; ITK, 2019a; Tran et al., 2019). En effet, la capacité des Inuits à accéder à leur territoire et à ses ressources, à pratiquer des activités de subsistance et, par conséquent, à observer leurs traditions et coutumes de partage de la nourriture renforce les réseaux sociaux, donne accès à des sources alimentaires nutritives aux membres de la communauté qui ne peuvent pas récolter ces ressources eux-mêmes et favorise la transmission des
connaissances de génération en génération (CAE, 2018; Murray et al., 2012; Theriault, 2011; Tran et al., 2019).

L’établissement d’APCA a également le potentiel de développer une économie de conservation, offrant des avantages économiques et sociaux aux Inuits (Gardner et Dovetail Consulting, 2018). Les APCA représentent la possibilité de créer des emplois durables à long terme et de générer des opportunités de développement professionnel dans tous les aspects de l’établissement, de la gestion et de l’application de l’aire protégée (Tran et al., 2019). Une économie de conservation peut apporter de nombreux avantages, à la fois politiques, sociaux et écologiques, car elle permet une utilisation soutenue et durable de ses ressources et maintient le lien culturel et spirituel des Inuits avec leur territoire (Gardner et al., 2018).

En outre, la conservation de la biodiversité implique directement les Inuits, la justice environnementale et l’autodétermination des Inuits pour deux raisons majeures. Il a été démontré que les ressources et les connaissances des Inuits sont nécessaires pour identifier, évaluer le potentiel de risque, protéger et réhabiliter les espèces dont la conservation pose problème. Aussi, la perte de biodiversité affecte le mode de vie traditionnel et coutumier des Inuits et leur bien-être. (Olive et al., 2016; Tran et al., 2019) Comme l’épistémologie inuite implique que les hommes sont inséparables de la nature, la conservation des espèces et de leurs écosystèmes soutient forcément la survie physique et culturelle des communautés inuites (Olive et al., 2016; Tran et al., 2019). Les Inuits étant experts dans la lecture des signes et des signaux de leur environnement et se trouvant à proximité de celui-ci, ils sont dans une position privilégiée pour noter la variabilité ou les changements des conditions environnementales sur une échelle de temps continue. Ces compétences et connaissances peuvent être transférées à la surveillance des écosystèmes et contribuent fortement à une vision globale de la conservation et de la protection des espèces et de leurs habitats (Berkes et al., 2007).

7.2 Défis et opportunités pour l’autodétermination et le développement durable des Inuits

Bien que la conservation représente un paysage fonctionnel pour les Inuits, plusieurs défis doivent également être relevés pour promouvoir leur autodétermination, pour déplacer le pouvoir vers la gouvernance inuite et pour le développement durable des communautés inuites, car il existe des liens compliqués entre les APCA et les questions systémiques, coloniales, politiques, sociales, économiques et écologiques impliquant les Inuits (Finegan, 2018; CAE, 2018; Plotkin, 2018; Tran et al., 2019).

Avant tout, la participation et l’engagement des Inuits dans la gouvernance et la gestion des aires protégées continuent à poser problème. Dans le cadre d’accords de partage de gouvernance ou de co-gouvernance, le pouvoir des organes consultatifs autochtones et inuits reste limité et le pouvoir de
La décision ultime appartient au ministre; la gouvernance des aires protégées est partagée et la souveraineté n’est pas cédée aux communautés autochtones (Artelle et al., 2019; Ban et al., 2018; Plotkin, 2018). Une importante cession de pouvoir de la part des gouvernements de la Couronne au profit des gouvernements et organisations inuits est nécessaire pour avancer vers une véritable autodétermination autochtone et pour que les Inuits prennent en charge et résolvent les problèmes et besoins qu’ils jugent importants (Artelle et al., 2019; Gardner et al., 2018, 2018; CAE, 2018; Zurba et al., 2019). Aborder et corriger ces structures de pouvoir persistantes actuellement ancrées dans un paradigme colonial favoriserait un changement de perspective concernant le rôle des populations autochtones et des Inuits dans la gouvernance et la gestion des zones protégées, en les considérant comme des atouts et non comme des menaces pour la conservation de la biodiversité (Artelle et al., 2019; Ban et al., 2018; Gardner et al., 2018).

De plus, le modèle occidental de conservation sépare et déconnecte la gestion des ressources naturelles du bien-être humain et de la continuité culturelle (Zurba et al., 2019). Cette mentalité de gouvernance cloisonnée est étroitement liée à la structure des institutions de la Couronne et au manque de coopération au-delà des frontières juridictionnelles, même au sein des niveaux et des agences des gouvernements de la Couronne (Artelle et al., 2019; Tran et al., 2019; Zurba et al., 2019). En outre, la nature fédéraliste de la législation et de l’élaboration des lois canadiennes limite et définit la responsabilité et l’autorité à des niveaux de gouvernement et à des agences spécifiques avec des possibilités de collaboration limitées (Tran et al., 2019; Zurba et al., 2019). Cette structure de gouvernance cloisonnée pose problème pour la mise en œuvre des APCA, car elle ne permet pas une approche holistique de la conservation, soit qui aborde simultanément les objectifs et les besoins sociaux, politiques, économiques et écologiques liés aux zones protégées telle que définie par les Inuits (Gardner et al., 2018; Tran et al., 2019; Zurba et al., 2019). De plus, pour parvenir à l’autodétermination inuite par la conservation, la gouvernance doit être éclairée par la loi inuite et les APCA doivent être définis par des principes autochtones, lesquels guident alors la manière dont les droits et les responsabilités de gestion sont exercés au sein de l’APCA (CAE, 2018; Plotkin, 2018).

Actuellement, les mêmes lois et cadres de conservation permettant aux Inuits de participer à l’identification et à la protection des espèces en danger et culturellement importantes peuvent également menacer les moyens de subsistance des Inuits (Olive et al., 2016; Theriault, 2011). Il n’est toujours pas clair, sur une base législative, si la protection des espèces en danger constitue une raison légitime pour l’empiètement sur les droits et les titres des peuples autochtones, même s’ils sont protégés par la Loi constitutionnelle de 1982 (Species at Risk Act, 2019; Olive et Rabe, 2016). L’atteinte à ces droits et titres pourrait avoir des répercussions sociales, culturelles et économiques importantes pour les communautés...
inuites, en particulier si elle implique la protection d’espèces importantes pour la chasse ou la pêche de subsistance et entrave ainsi la capacité des communautés à accéder à ces ressources (Olive et al., 2016; Theriault, 2011). Les droits et titres autochtones doivent être reconnus comme inhérents et inaliénables, en matière de conservation ou autre, plutôt que provisoires quant à leur compatibilité avec les objectifs et cibles de conservation (Artelle et al., 2019).

Parmi les autres défis à relever, le financement et le renforcement des capacités des autochtones sont problématiques pour la gestion et la participation opérationnelles des Inuits sur le territoire et les aires protégées (Gardner et al., 2018). Les capacités opérationnelles, qu’il s’agisse de gestion ou de personnel, peuvent devenir problématiques et difficiles à gérer lorsque les sources de financement ne sont pas durables ou garanties (Plotkin, 2018; Tran et al., 2019). Les aires protégées dirigées par les autochtones sont souvent confrontées à des ressources financières et humaines limitées et à des capacités limitées pour atteindre les objectifs de conservation (Olive et al., 2016; Tran et al., 2019). Les APCA offrent un cadre et la possibilité d’obtenir des sources de financement des gouvernements de la Couronne, mais aussi de chercher des ressources au-delà de ces gouvernements afin de renforcer les capacités et la résilience des protections dirigées par les autochtones (Gardner et al., 2018; CAE, 2018; Simon, 2017). Toutefois, les solutions de financement et de gestion ne sont pas uniques et doivent être adaptées aux besoins et aux objectifs de chaque APCA, car les besoins et les intérêts des gouvernements autochtones et des communautés locales varient (Gardner et al., 2018; CAE, 2018; Plotkin, 2018).

Le plus important défi est peut-être le manque de confiance des peuples indigènes et inuites dans la possibilité d’un changement significatif, que ce soit vers la réconciliation ou vers des changements de paradigmes de conservation (CAE, 2018). Les documents, les rapports et la littérature sur les APCA au Canada plaident fortement en faveur du respect et de la mise en œuvre du CLPE et de l’espace éthique pour toutes les étapes du développement, de la planification et de la mise en œuvre des politiques et des cadres de conservation afin de faire progresser la construction de relations positives de nation à nation (Bujold et al., 2018; Gardner et al., 2018; CAE, 2018; Plotkin, 2018; Simon, 2017). Cet obstacle doit être surmonté pour que les APCA aboutissent réellement à la réconciliation et à l’autodétermination des Inuits dans le cadre de la conservation et de la protection du milieu marin au Canada.

8. **RECOMMANDATIONS**

La section suivante présente un ensemble de recommandations pour la mise en œuvre des APCA au Canada en tant qu’outil de conservation du milieu marin et pour la réconciliation avec les peuples autochtones dans l’Arctique canadien.
8.1 Étape vers la réconciliation avec les communautés de l’Arctique canadien

Le processus de réconciliation constitue la première étape de la mise en œuvre des APCA au Canada. Les aspects clés d’une reconnaissance appropriée comprennent le respect des droits et des responsabilités des Inuits, en particulier ceux concernant les droits au territoire et à l’autodétermination. La décolonisation de la conservation peut contribuer à soutenir la réconciliation avec les peuples autochtones. Afin d’avancer dans le cadre des principes de la réconciliation et vers un objectif commun de protection de l’environnement par la mise en œuvre des APCA :

Il est recommandé que les gouvernements fédéral, provinciaux, territoriaux et autochtones soutiennent davantage le concept des APCA telles que décrites dans le rapport du CAE Nous nous levons ensemble (2018), soit que les APCA devraient être dirigées par des autochtones, représenter un engagement à long terme envers la conservation et élever les droits et responsabilités des autochtones.

Bien que de nouvelles structures de conservation dirigées par des autochtones soient présentement à l’étude, les partenariats avec les Inuits et leur participation dans les efforts de conservation sont jugés insatisfaisants (Ban et al., 2018; Gardner et al., 2018; CAE, 2018). Dans les structures telles que les RNF et les ROM qui couvrent les zones visées par les accords sur les revendications territoriales, il existe des organes de cogestion entre l’agence fédérale responsable de la zone protégée et les Inuits, mais la prise de décision et l’autorité finale restent du ressort du ministre, car ces structures sont ancrées dans les principes juridiques des régimes coloniaux (Finegan, 2018; CAE, 2018; CVR, 2015c, 2015a). Cependant, les récentes démarches du gouvernement fédéral vers un engagement significatif des peuples autochtones dans les efforts de conservation démontrent une volonté de s’éloigner de l’ancien régime et une preuve que le paradigme évolue vers la réconciliation et en faveur de l’autodétermination des peuples autochtones.

Afin d’évoluer vers des relations Autochtones-Couronne positives en matière de conservation et dans un esprit de réconciliation :

11. Il est recommandé que tous les niveaux de gouvernement reconnaissent et apportent des solutions aux impacts à long terme des structures et des politiques coloniales en matière de conservation sur les Inuits, et qu’ils travaillent selon de nouvelles modalités pour collaborer avec les gouvernements et les organisations inuits pour soutenir les efforts de conservation menés et dirigés par les Inuits.
À ce titre, tous les niveaux de gouvernement devraient engager des discussions sincères sur les structures de conservation existantes et travailler à la modification ou au développement de nouveaux accords de cogestion et de gouvernance avec les communautés et les gouvernements inuits pour les zones protégées et les parcs existants. Le concept d’espace éthique peut fournir un cadre approprié pour que ces discussions aient lieu afin de co-créer un lieu de collaboration et d’atteindre des objectifs communs. Lorsque des décisions et des actions susceptibles d’avoir un impact sur les Inuits et leurs droits, y compris la désignation de leurs territoires et leurs ressources comme étant conservés et protégés, sont prises, la promulgation du concept de CLPE et travailler dans le cadre de l’espace éthique encourageraient la confiance et le respect mutuel pour avancer dans l’établissement et le maintien de relations respectueuses, dans un esprit de réconciliation, et vers la guérison des Inuits de l’héritage du colonialisme.

8.2 Relever les défis de la conservation de la biodiversité


En tant qu’outils de conservation, les APCA ont le potentiel de créer un nouveau paradigme de conservation soutenant l’autonomie, les cultures, les moyens de subsistance et les droits des autochtones. Ce nouveau paradigme renforcerait, légitimerait et assurerait la durabilité des pratiques de protection et de conservation marines en adoptant l’épistémologie, les pratiques de gestion, la culture, les connaissances traditionnelles et les intérêts des Inuits au Canada. Cependant, la mise en œuvre d’APCA nécessite de faire avancer ce changement de paradigme vers des pratiques normalisées. Les APCA doivent être mises en œuvre dans le cadre des principes de réconciliation tout en étant enracinées et guidées par
les pratiques de gestion et les systèmes de connaissances autochtones. Afin d’avancer vers la normalisation de ces pratiques :

12. Il est recommandé que tous les niveaux de gouvernements prennent des mesures significatives en vue de la mise en œuvre de l’objectif 14 d’Aichi, lequel appelle à la protection des écosystèmes fournissant des services et des ressources contribuant à la subsistance et au bien-être des communautés autochtones, en créant une législation pour les APCA.

Dans le contexte de l’Arctique canadien, cela pourrait signifier reconnaître l’importance et identifier les écosystèmes auxquels la priorité devrait être accordée afin d’assurer et de fournir un accès aux ressources culturelles, économiques, de subsistance et traditionnelles ; mettre en œuvre des pratiques de gestion écologique traditionnelle pour les aires protégées ; et avoir des organisations de gestion dirigées par des Inuits. Un financement fédéral devrait être alloué à la mise en œuvre à long terme des APCA, y compris pour les salaires du personnel et les efforts de surveillance, tout comme cela se fait pour d’autres formes de protection au Canada.

Afin de promouvoir le renforcement des capacités et le développement durable des organisations inuites dans un cadre de conservation :

13. Il est recommandé d’accorder une attention particulière à la prise de mesures significatives en vue de la mise en œuvre de l’objectif 18 d’Aichi, lequel appelle au respect et à la reconnaissance juridique des connaissances et pratiques traditionnelles autochtones pertinentes pour la conservation et l’utilisation traditionnelle et coutumière des ressources avec la participation pleine et effective des populations autochtones (CBD, 2018).

Conformément à l’Objectif 18 d’Aichi, tous les niveaux de gouvernement devraient respecter et reconnaître légalement que les savoirs traditionnels et autochtones, incluant Inuit Qaujimajatuqangit, sont complémentaire à la science occidentale et s’orienter vers le développement de mécanismes permettant d’intégrer pleinement ces savoirs dans les pratiques et les structures de conservation. Tous les niveaux de gouvernement devraient développer des mécanismes pour intégrer les savoirs traditionnels et autochtones dans toutes les étapes de la nomination, de la sélection, de la désignation, de la gestion et de la surveillance des aires marines protégées, y compris les APCA. L’intégration des savoirs traditionnels et autochtones dans les protections marines permettrait une approche holistique de la conservation qui s’aligne sur l’épistémologie inuite et l’intègre en soutenant l’interconnexion de tous les êtres vivants. Sachant que les Inuits ont contribué à la gestion durable et à la protection de l’environnement marin arctique pendant des millénaires, il est essentiel que les objectifs de conservation des aires marines
protégées existantes et futures, y compris les APCA, encouragent l’engagement total des Inuits. En complément indispensable de la recommandation précédente et afin de respecter l’utilisation traditionnelle et coutumières des terres et des eaux par les Inuits :

14. Il est recommandé que les tous les niveaux de gouvernement élaborent et mettent en œuvre une approche « pangouvernementale » pour la protection du milieu marin afin de refléter une approche holistique de la conservation et de reconnaître les efforts de conservation autochtones qui ne sont pas actuellement reconnus et signalés par la Couronne (Simon, 2017);

Afin de refléter l’approche holistique et l’intendance des Inuits en matière d’utilisation, de gestion et de conservation des terres et des eaux, les organismes gouvernementaux devraient travailler ensemble à l’atteinte d’objectifs communs et à l’élaboration d’un cadre et d’une politique intégrée pour la mise en œuvre des APCA (Lévesque, 2014; NIRB, s. d.; Tran et al., 2019). Ces cadres et politiques devraient inciter à la collaboration entre les différents niveaux de gouvernement et avec les organisations inuites pour relever les défis complexes de conservation de la biodiversité et de l’environnement arctiques. En outre, les Inuits devraient avoir le droit de désigner des aires de conservation dans régions visées par les accords sur les revendications territoriales ou sur leurs territoires traditionnels et devraient avoir le droit de décider comment ils voudraient qu’elles soient désignées.

8.3 **Inclusion des Inuits dans la gouvernance, les normes et les instruments fédéraux en matière de protection des milieux marins**

Bien que les droits des Inuits sur l’environnement marin et l’autodétermination aient été reconnus par des instruments juridiques internationaux et fédéraux, il reste des obstacles à l’application de ces principes dans le cadre des structures de protection et de conservation du milieu marin (Berkes et al., 2007; Bujold et al., 2018; CAE, 2018; Tran et al., 2019).

Afin de reconnaître le rôle des droits, des titres et de la protection des Inuits dans la législation et les engagements en matière de conservation :

15. Il est recommandé que tous les niveaux de gouvernement travaillent et prennent des mesures significatives pour comprendre, honorer, intégrer et mettre en œuvre les principes des instruments, traités, accords et autres documents internationaux existants et futurs reconnaissant les droits et titres des Inuits en matière de protection des milieux marins.

Comme le reconnaissent les accords modernes sur les revendications territoriales et comme le protège l’article 35 de la *Loi constitutionnelle de 1982*, les Inuits détiennent des droits et des responsabilités

Afin d’intégrer les droits inhérents des Inuits sur les milieux marins et l’autodétermination dans les structures de conservation existantes et futures :

16. Il est recommandé que tous les niveaux de gouvernement élaborent, en collaboration avec les dirigeants inuits, une nouvelle directive politique fédérale reconnaissant les APCA comme un nouveau type d’aire protégée et élaborent un cadre réglementaire établissant des processus de nomination, de sélection, de désignation, de financement, de gestion, de suivi et d’application des APCA pour une approche systémique de co-gouvernance vers l’autodétermination des Inuits.

Leur intégration juridique dans les protections marines nationales compléterait les objectifs des APCA (engagements à long terme en faveur de la conservation menés par les autochtones élevant les droits et les responsabilités des autochtones) en fournissant des mesures de protection et de gouvernance supplémentaires et démontrerait un plus grand soutien des gouvernements pour obtenir des résultats en matière de conservation de la biodiversité, des écosystèmes et des ressources (CAE, 2018).

Le droit, les lois traditionnelles et coutumières, les institutions, les protocoles et les processus de gouvernance inuits devraient jeter les bases des accords de cogouvernance des APCA. Il est également essentiel que la sécurité culturelle soit systématiquement intégrée dans les politiques de conservation, y compris dans les protections marines. La reconnaissance nationale du droit inuit fait toujours défaut et, même lorsqu’il est reconnu, il entre souvent en conflit entre les régimes statutaires et le droit inuit dans la gouvernance des protections du milieu marin, ce qui est en partie dû à la façon dont l’autorité et la juridiction inuites sont traitées par les gouvernements de la Couronne (Berkes et al., 2007; Finegan, 2018; Zurba et al., 2019).

Afin de reconnaître et d’intégrer les lois traditionnelles et coutumières des Inuits dans la gouvernance de la protection des milieux marins:
17. Il est recommandé que tous les niveaux de gouvernement travaillent avec les dirigeants inuits pour réformer les structures de conservation existantes afin d’inclure et de reconnaître les pratiques traditionnelles et coutumières inuites d’autodétermination et d’autogouvernance au sein de l’Inuit Nunangat, y compris pour les APCA.

Afin d’établir une véritable collaboration dans la prise de décision et la co-gouvernance avec les Inuits, ces derniers devraient être pleinement engagés dans la prise de décision pour les APCA et détenir une autorité substantielle dans le processus. Dans de véritables structures de co-gouvernance, les gouvernements inuits et de la Couronne travaillaient ensemble, de Nation à Nation, pour co-créer des modèles de prise de décision partagée qui devraient être basés sur les traditions juridiques et les institutions d’autodétermination inuites. Les modèles de prise de décision partagée concernant les communautés inuites en matière de protection des milieux marins devraient être basés sur un consensus entre les parties impliquées dans la co-gouvernance, tel qu’accepté dans les traditions juridiques et les coutumes inuites, et respecter le cadre de l’espace éthique.

En outre, tous les niveaux de gouvernement devraient collaborer pour développer un nouveau cadre de politique fédérale qui reconnaît l’autodétermination des Inuits pour les APCA au sein de l’Inuit Nunangat. Pour la prise de décision relative à la conservation des territoires appartenant aux Inuits, la participation et l’engagement total des dirigeants, des aînés et des communautés inuites sont nécessaires (CAE, 2018). Les mécanismes de conservation et de gestion intégrés dans les systèmes holistiques des SET/QI devraient servir de base à l’établissement d’APCA sur les territoires appartenant aux Inuits. Cela impliquerait que tous les niveaux de gouvernement reconnaissent et formalisent le rôle des approches de gouvernance des Inuits pour mener à bien la surveillance et l’atteinte des objectifs de gestion des aires protégées et soutenir les modèles de gouvernance et plans de gestion dirigés par les Inuits pour les APCA.

8.4 Approche socio-écologique pour promouvoir l’autodétermination des Inuits par la protection du milieu marin

Les APCA ont également le potentiel de faire progresser l’autodétermination des Inuits par la conservation, car ils adoptent une approche collective de la conservation de la biodiversité en reconnaissant le rôle intégral des peuples autochtones en tant que leaders de la conservation et en respectant leurs droits, responsabilités et priorités (Borrini-Feyerabend et al., 2004; Gardner et al., 2018; CAE, 2018; Plotkin, 2018). La mise en place d’APCA offre également la possibilité de créer des initiatives économiques durables qui renforcent et soutiennent les moyens de subsistance des Inuits par la création et la promotion d’une économie de conservation (CAE, 2018; Simon, 2017). Pour les APCA, le renforcement des capacités des
institutions et organisations inuites devrait être soutenu par un financement à long terme afin d’offrir des emplois à temps plein et des structures de carrière comme prévu pour les structures existantes d’aires protégées gérées par les agences gouvernementales de la Couronne (CAE, 2018).

Afin de promouvoir les possibilités d’autodétermination des Inuits par le biais de la protection des milieux marins :

18. Il est recommandé que tous les niveaux de gouvernement travaillent à l’élaboration de politiques, de pratiques de gestion et de financements à long terme, souples et adaptables au niveau local pour soutenir les initiatives de gestion et de conservation du milieu marin menées par les Inuits.

Grâce à l’autodétermination et à un financement approprié, les Inuits peuvent accroître leur résilience et leurs capacités par une autonomie accrue dans la protection de leurs eaux (Artelle et al., 2019; Theriault, 2011). La cogouvernance et les solutions adaptatives développées à l’échelle locale sont idéales pour la protection du milieu marin arctique, car elles attirent explicitement l’attention sur les fonctions d’apprentissage et de collaboration des systèmes de gouvernance et de connaissances des Inuits pour améliorer la résilience, comprendre les écosystèmes et répondre aux défis complexes de conservation de manière holistique (Berkes et al., 2007; Theriault, 2011). Ainsi, les APCA offrent une approche co-adaptative de la gestion des écosystèmes favorisant la résilience socio-écologique à long terme.

Afin de promouvoir des solutions communautaires et d’améliorer la résilience socio-écologique grâce à la protection des milieux marins :

19. Il est recommandé que tous les niveaux de gouvernement travaillent, en collaboration avec les dirigeants inuits, à l’élaboration de politiques et de pratiques de gestion souples et adaptables en matière de protection des milieux marins, lesquelles pourraient être adaptées aux besoins, aux intérêts et à la situation particulière des communautés de l’Inuit Nunangat.

Il est fondamental que les dispositions juridiques des APCA soient en accord avec les droits et titres ancestraux et les modes de vie traditionnels des communautés inuites ; les Inuits devraient être chargés de fixer les objectifs et les normes de conservation, étant donné que les priorités, les besoins, les intérêts et les objectifs de chaque APCA peuvent varier (par exemple, conserver les espèces à valeur culturelle importante et protéger la sécurité alimentaire) (CAE, 2018; Tran et al., 2019). Ainsi, tous les niveaux de gouvernement devraient reconnaître et respecter le fait que les APCA sont des lieux identifiés par les Inuits pour la conservation et pour lesquels les systèmes de connaissances et les traditions juridiques des Inuits seront utilisés pour garantir que les Inuits puissent maintenir leur relation avec leurs territoires. En
favorisant la résilience socio-écologique, les APCA contribuent également à la guérison et à la réconciliation en aidant les communautés et les individus à renouer avec leurs pratiques coutumières et traditionnelles, et en garantissant que certains territoires appartiennent véritablement aux Inuits et sont gérés par eux.

CONCLUSION

L’environnement marin de l’Inuit Nunangat présente de nombreuses dimensions écologiques, culturelles et sociales qui sont toutes interconnectées et bénéficient les unes des autres. La protection de toutes ces dimensions est nécessaire pour garantir que la conservation de la biodiversité et la continuité des traditions et des coutumes des communautés arctiques soient soutenues de manière adéquate. La mise en œuvre des APCA au Canada a le potentiel de créer des opportunités pour élever la reconnaissance des droits des Inuits, promouvoir leur autodétermination et leurs systèmes de connaissances, et faire progresser la réconciliation avec les peuples autochtones tout en travaillant à l’atteinte des objectifs de conservation. Bien que des initiatives récentes de tous les niveaux de gouvernement aient fait progresser l’engagement des Inuits dans la protection des milieux marins, leur portée dans l’Inuit Nunangat pourrait être étendue et renforcée par un cadre législatif pour les APCA, par des politiques pour les APCA afin d’assurer la protection efficace de l’environnement marin à long terme et par le renforcement des capacités des communautés inuites. L’application et la mise en œuvre des recommandations présentées dans cet essai représenteraient une opportunité pour le Canada de se positionner à l’avant-garde de la protection et de la conservation du milieu marin par les peuples autochtones.
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