ENVIRONMENTAL MONITORING FOR THE 21ST CENTURY: EXPLORING INDIGENOUS EVALUATIONS OF THE CANADIAN GOVERNMENT'S INDIGENOUS GUARDIANS PILOT PROGRAM

by

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Abstract

In response to the exclusion of Indigenous people from natural resources management, the Canadian federal government announced that they would provide $25 million over four years to support the development of Indigenous Guardians programs across Canada. The program was promised to "provide Indigenous Peoples with greater opportunity to exercise responsibility in stewardship of their traditional lands, waters and ice" (Government of Canada 2020). I used a case study approach to explore the role of this funding to support Indigenous communities in their Guardians initiatives. I facilitated semi-structured interviews with staff from five Indigenous Guardians programs from BC and Manitoba, Canada. Participants suggested that the federal pilot program was a step in the right direction to support environmental stewardship initiatives led by Indigenous governments or communities. In particular, this program was successful in increasing monitoring of the land, collaboration with like-minded groups, and facilitating the education of youth by community Elders.

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Chapter 1- Introduction

Historically, the management of natural resources in Canada, whether in the context of conservation or natural resources development, have been organized through bi-lateral or multi-lateral agreements between the government, either provincial or federal, and external actors or "stakeholders" (Kittmer, 2013). These arrangements, whether extractive or conservationist, have often excluded Indigenous peoples including when the natural resources are situated on their land. In the case of natural resources development, extraction is occasionally conducted on Indigenous land without permission from Indigenous groups and can sometimes cause extreme environmental damage (Waldron 2020). In regards to conservation or protected areas, Indigenous people have been excluded from the decision making process and removed from the "fortress-style enclosure of awe-inspiring 'wild' lands for the purpose of settler-colonial territorialization and tourism" (Youdelis et al. 2020, 233).

In more recent years, international frameworks have been developed to help reshape the relationship between Indigenous Peoples and colonial states (Latta 2018). These frameworks include the United Nations Declaration on the Rights of Indigenous people (UN General Assembly 2007). While great strides have been made to address the intersection of natural resources development and the rights of Indigenous people, questions and critiques regarding the degree of on the ground implementation have arisen from various scholars (Aylwin 2008; Courtis 2011; Barelli 2012).

Natural resources development, specifically, has resulted in environmental damage and pollution in close proximity with Indigenous communities. These hazardous activities include direct exposure to pollution including landfills, exposure to potential gas and oil spills, hazardous waste dumping, mercury contamination and pollution from petrochemical facilities (Waldron

2020). This reality was originally defined as "environmental racism" by Chavis (2004), and has been defined further by Ingrid Waldron as "the disproportionate proximity and greater exposure of Indigenous, Black and other racialized communities to polluting industries and environmentally hazardous activities" (Waldron 2020, 1).

Human-induced climate change has added increased strain to Indigenous communities already facing issues of environmental degradation and pollution (Redvers et al. 2022) and has been termed as "a multiplier effect" by the United Nations (2021a). Climate change has increased the difficulties of Indigenous communities who may already be facing onerous living conditions as a result of colonization. Effects from climate change include an increase of extreme weather conditions, loss of vegetation, deforestation, shifts in weather patterns and the decrease of traditional food sources (United Nations 2021b).

Conservation initiatives, on the other hand, have also reinforced the exclusion of Indigenous people from decision-making processes, and physically from the land as "Indigenous livelihoods were vilified as anti-ethical to wilderness conservation, and Indigenous Nations were violently evicted or coercively displaced from the early southern parks" (Youdelis et al. 2020; Loo 2001). This socially constructed ideology of nature was termed by Cronon (1996) as "wilderness-thinking", considering nature as something that is pristine and people-free. This mentality, as argued by Cronon (1996), developed the "fortress-style" conservation model that has been used in the past to remove all human activity from the "wilderness". Youdelis et al (2020) argued that this mentality has resulted in a violence to Indigenous people "who have lived in and shaped those environments for centuries" (Youdelis et al. 2020, 233). Indigenous communities believe, in contrast to the "fortress-style" conservation model, that humans play an

integral part of thriving ecosystems and that there is a reciprocal relationship between humans and nature (Berkes et al. 2000).

There are numerous contemporary examples of the exclusion of Indigenous voices from broad-scale conservation and natural resource decision making in Canada. Most notably, there has been considerable criticism of the Canadian Boreal Forest Agreement between the forest industry and environmental non-governmental organisations. In that case, logging deferrals occurred across much of Canada's boreal forest without direct and meaningful engagement and partnership with the affected Indigenous Nations (Smith 2015). In other cases, relationships and partnerships have evolved, often through conflict, to recognise and directly engage with Indigenous people in government to government negotiations during large-scale planning initiatives. One such example is the partnership of government, industry and First Nations on the Central and North Coast of British Columbia (i.e., Great Bear Rainforest) to establish a forestry and conservation regime based on ecosystem management (Low and Shaw 2012).

In 2015, the Canadian federal government released their Truth and Reconciliation Report that included ninety-four calls to action, and the assertion that Canada would adopt the United Nations Declaration on the Rights of Indigenous People (UNDRIP) (Denis and Bailey 2016). Following Canada's adoption of the UNDRIP in 2016, Indigenous peoples took it upon themselves to ensure that the government would follow through with their claims and shift decision-making power and the guardianship of treaty and unceded lands back to the Indigenous communities (McMillan and Prosper, 2016; Garnett et al. 2018; Lliso et al, 2020). That has included pressing for implementation of Article 23, Free, Prior and Informed Consent (FPIC) of resource development on traditional lands. The authority of Indigenous people to lead decision-making processes of natural resource management is important if Canada wants to meet a

number of the recommendations of the Truth and Reconciliation Commission as well as commitments agreed to when signing UNDRIP or parallel provincial legislation (e.g., British Columbia Declaration on the Rights of Indigenous Peoples Act). Natural resource management is directly highlighted in the preamble to UNDRIP and states that Indigenous peoples maintain a "right to development in accordance with their own needs and interests" (UN General Assembly, 2007, 2). More broadly, it is important that the federal government address the paternalistic relationship between itself and Indigenous Nations and support those Nations in making autonomous decisions about how they manage, use or conserve natural resources (Papillon and Rodon 2017).

In other areas of the globe, multi-level governance initiatives have emerged as a decision-making system that can actively include Indigenous peoples' voices and aspirations in natural resource management (Latta 2018; Papillon 2015; Alcantara & Spicer 2016). Multi-level governance has become increasingly notable in successful environmental protection initiatives. These arrangements typically bring together various governments, including Indigenous Nations, and stakeholders to establish conservation and management of natural resources (Latta 2018). However, this is most often successful when each participant has overlapping interests that align in a cooperative way (Papillon 2015; Alcantara & Spicer 2016; Latta 2018). Multi-level governance initiatives can also be successful when the participants face a multi-faceted set of social-ecological issues that are addressed best through collaborative processes (Sayer et al., 2013).

Unfortunately, Indigenous peoples often are left out, or not properly considered by stakeholders and other governments when engaging in multi-level governance processes. In some cases, Indigenous peoples are considered a "stakeholder group" instead of a self-

determining nation with their own political system and set of rights, pre-dating European colonization (Papillon 2012; Reo et al. 2017; Latta 2018). This inability to shift decision-making authority to Indigenous groups can undermine their participation and reduce their bargaining power in multi-level governance initiatives (Von de Porten & de Loe, 2013). Also, traditional ecological knowledge or TEK is often overlooked in many projects that broadly adhere to the principles of multi-level governance. For example, the International Panel on Climate Change AR5 excluded Traditional Ecological Knowledge from its official report and favoured the biophysical, sciences, and economics from countries in the Global North (Ford et al. 2012). This is despite the recommendations from scholars that TEK can help in our understanding of how the world is changing and provide valuable solutions for adaptation and mitigation methods (Ford et al. 2010; Green et al. 2009; Salick and Ross 2009; Turner and Clifton 2009).

Traditional ecological knowledge is recognised in UNDRIP and has become more valued in policy initiatives as Indigenous peoples have unique philosophies and approaches for understanding and interacting with the natural world. Through Indigenous law, groups advocated for the Whanganui River Claims Settlement and the Protection Act of 2017 which recognized the Yarra River as a living entity (Redvers et al. 2022). Recognition of the person-hood of nature, as is exemplified in some Indigenous cultures, can achieve legal protection of nature in a way that is not practiced in western common law. Proponents of TEK also emphasize the interconnectedness of humans with nature and our dependency on the earth for survival as well as the recognition that Indigenous people steward 80% of the earth's remaining biodiversity and therefore should be recognized as leaders in the environmental protection movement (Garnett et al. 2018). The ability to steward, guard, manage, and preserve the land is of great importance to some Indigenous groups and is inherent in their self-determination of their lands (Whyte et al.

2016). Failure to properly incorporate and respect TEK is unfortunate as it represents a unique cultural connection between Indigenous peoples and their environment, as well as various bodies of knowledge drawn from that relationship.

1.1 Guardians Programs

Historically and today, natural resources development can result in negative social and environmental effects with particular impacts for Indigenous peoples (Papillon 2012; Reo et al. 2017; Latta 2018). While improvements have been made to recognize the historical and ongoing injustices of colonization, including the United Nations adoption of UNDRIP, many Indigenous groups continue to lack full participation in natural resource and conservation decision making and, more broadly, the stewardship of their Traditional Lands. In response, some Canadian Indigenous groups have developed "Guardians" programs, largely inspired by similar programs in Australia (Thomson 2020). In general, Indigenous Guardians programs employ community members to act as monitors and stewards of the land. For the Australian Indigenous Guardians programs, participants patrol protected areas, monitor fish and wildlife harvests, collect data focused on environmental change, including the environmental effects of climate change, monitor and record industrial activities, and educate visitors on proper use of the land (Social Ventures Australia, 2016). While some Guardians programs are focused on environmental stewardship, in the context of the development of natural resources, they also recognize the intrinsic relationship between people and the environment that is characteristic of many Indigenous cultures. This means that some Guardians programs may aim to prevent development activities while others may embrace resources extractive activities in a way that will provide for their communities (Youdelis et al. 2020).

Guardians programs have allowed Indigenous groups to demand and establish management of their Traditional lands and natural resources, unimpeded by prohibitory government policies. These initiatives have provided positive results in both contributing to the conservation of biodiversity in a way that is socially just and enhancing the well-being of the Indigenous communities in which they operate (Reed et al. 2021). Positive results of Guardians programs, and similar Indigenous-led conservation activities, include the reduction of species loss, increased land monitoring and protection, and "locally relevant stewardship practices embedded in the culture, laws and history of their given Indigenous Nation" (Reed et al. 2021, 180).

In 2017, the Canadian government recognized the potential of Indigenous Guardians programs to increase natural resources management to a socially just standard. As such, they announced the "Indigenous Guardians Pilot Program". That initiative provided $25 million over four years to support the development of new and existing monitoring programs for Indigenous communities from across Canada. The program was promised to "provide Indigenous Peoples with greater opportunity to exercise responsibility in stewardship of their traditional lands, waters and ice" (Government of Canada 2020). That government funding contributed to a doubling of the number of Guardians programs across Canada (Thomson 2020). The funding was renewed in July of 2020 when the Canadian Government announced that it would provide $600,000 to create 10 additional Guardians programs during 2020–2021 (Government of Canada 2020). Currently, 33 Guardians programs are supported by the Indigenous Guardians Pilot Program. Those programs are located in all of Canada's provinces and territories. British Columbia is home to the largest number of Guardians programs with 7 (Government of Canada 2020).

Figure 1: The Indigenous Guardians Pilot Program Map (captured February 14, 2022) displaying the location of Guardians programs across Canada in "Year 4" of the pilot program (2021) (Government of Canada, 2020).

Guardians programs and associated land and water management strategies have been adopted by Indigenous groups in spite of extreme pressures from colonizers to alter their culture and associated land- and water-based practices (Waller and Reo 2018; Ban et al. 2019). Passed on through intergenerational knowledge, Indigenous kinship with the land emphasizes the social-ecological system that sustains the community and the culture (Berkes 2012, McMillen et al. 2017, Pascua et al. 2017). These reciprocal relationships can not only support the health of the environment, but also the health of the people dependent on the environmental resources. For example, the Lutsel K'e Guardians program in Northwest Territories, Canada, generated $11.1 million in social, economic, cultural and environmental value (Thomson 2020). That Guardians

programs led to the development of land-based training, facilitated access to traditional foods and language retention, and played a role in the decrease of both violence against women and obesity rates in the community (Social Ventures Australia, 2016; Thomson, 2020).

Indigenous people incorporate inter-generational teachings about society and human relationships into their relationships with the land. Thus, including youth into Guardians projects is of great importance as it can support and reinforce the learning of cultural practices (Reo et al. 2017). Guardians programs like the Dehcho First Nations Guardians Program (Northwest Territories, Canada) include teaching youth how to read the weather, fix boat motors, and develop other technical skills (Thomson 2020).

1.2 Need for this research

More recent studies of Indigenous Guardians programs in Canada are emerging; however, the Canadian Government's Indigenous Guardians Pilot Program has not been formally reviewed or studied. Many Guardians programs that have received federal funding for their program are still in the early stages of development and adoption. Furthermore, there has been little investigation of the limits or benefits of the Indigenous Guardians Pilot Program. That includes reviewing and identifying the discrepancies between the policy's expected and actual results. Such insights could be important given the history and ongoing colonisation that has resulted in the oppression of Indigenous peoples by the Canadian government. This research could highlight the strengths of Guardians programs and the challenges that Indigenous groups are currently facing in implementing their management plans (Barichello 2019). Research focused on the successes and challenges of participating Guardians programs can be shared informally amongst the Guardians network in attempts to help those facing similar challenges or

Indigenous groups that are considering participating in the federal program. Similar knowledge sharing efforts are being made by the Indigenous Leadership Initiative—a group of Indigenous leaders advocating for "The recognition and expansion of Indigenous-led conservation and sustainable development efforts" (Arctic Institute of Community Based Research, Accessed on February 16, 2022).

1.3 Research Objectives and Questions

I employed a case study approach to explore the role of the Canadian Government's Indigenous Guardians Pilot Program in supporting the efforts of Indigenous communities to monitor and manage their lands and waters. I used semi-structured interviews with members of 5 Guardians programs to identify the main objectives for their programs, potential barriers and limitations to achieving the Indigenous group's ideal model of Guardians, paths to success and how the federal funding was used to achieve each group's unique goals. My exploration of Guardians programs focused on three general themes:

1. Inconsistencies between goals of Guardian programs and the goals of the federal government pilot program.
2. Barriers and limitations in implementation.
3. Effectiveness of the pilot program.

Chapter 2- Methodology and methods

2.1 Theoretical Framework:

My research acknowledges major themes in political ecology, including "access to and control over resources, the importance of local histories, the disenfranchisement of legitimate local users and uses… and the imbrications of all these with colonial and postcolonial legacies and dynamics" (McCarthy 2002, 1283). My research is informed by past literature highlighting these historical and current power imbalances that have occurred as a result of both conservation initiatives and natural resources extraction on Indigenous land.

Historically, and today, natural resources have been highly sought after to generate economic revenue. However, scholars, activists, and advocates have pointed out that resource richness does not necessarily lead to improved living conditions or "development". This phenomenon is specifically termed as the resource curse (Robinson et al. 2006). The resource curse "consistently emphasizes that resource dependent economies and resource booms seem to lead to highly dysfunctional state behaviour, particularly large public sectors and unsustainable budgetary policies" (Robinson et al. 2006, 448). The state has failed to enforce policies that regulate natural resources development in a way that is not environmentally damaging due to the incentives of high economic revenue (Robinson et al. 2006).

Indigenous peoples have often faced the negative outcomes of natural resource development. That is because many communities and Reserves are found in rural areas where these activities occur. Also, Indigenous peoples often still rely on or incorporate the harvest of plants and animals for subsistence and cultural use. Often those traditional foods and medicines can be affected by forestry, mineral and energy development (Parlee 2016). Indigenous communities are increasingly burdened with unkept promises of economic revenue that would

otherwise have contributed to poverty reduction initiatives. For example, Indigenous communities in Northern Alberta, the location of the largest oil deposits in the world, are among the poorest in the country (Parlee 2016).

2.1.1 Political Ecology

I adopted a methodological framework premised in the methods and theory of political ecology. That allowed me to transcend the barrier between the ecological and social sciences. Those broad, but often disparate sciences represent important elements of the Canadian Government's Indigenous Guardians Pilot Program. Political Ecology is an "eclectic body of work" that includes various "traditions and approaches to the politics of the environment" (Robbins 2020). Political Ecology has been described by Robbins (2020) as a "Tree with Deep Roots" that began in the 1970s and continues to evolve and branch out to various disciplines (Robbins 2020). However, the central and unifying aspect of all Political Ecological theories are that they act as an alternative to "apolitical ecology" and operate under a set of assumptions that acknowledge political, economic and historical power imbalances in environmental decision-making (Robbins 2020). More recently, atmospheric chemist Paul J. Crutzen and ecologist Eugene F. Stoermer deduced that it was, and continues to be, the interactions of humans and the ecological systems that create these harms to the planet (Schulz 2017). These theorists suggested that the new era of human-ecological interaction be termed the "Anthropocene" because of the considerable effects the human population has on the Earth's systems over the past two and a half centuries (Crutzen and Stoermer 2000). However, various other theorists deduced that unequal power relations came about as a result of conflict brought upon by a capitalist economy that resulted in some human populations having more harmful relationships with the

environment than others (O'Neil, 2020). This resulted in the proposition of other terms for the new era including the "Capitalocene" (Moore 2015), "Technocene" (Hornborg 2015), or the "anthrobscene" (Ernstson and Swyngedouw 2015). While the terminology of the new human era is contested, the heart of these theories all conclude that the way humans interact with the Earth requires "an equally fundamental shift in our understanding of the human condition and its symbiotic intersections with nature, society and technology" (Shulz 2017, 127).

2.1.2 *Political Ecology and Natural Resources Management*

Over the past few decades, political ecologists have highlighted Natural Resource Management and Conservation as "neoliberal conceptualizations of nature that clash with Indigenous ontologies" (Bormpoudakis 2019, 546; Kull et al. 2015). This is due to the commodification of nature that provides goods for the wide-spread neoclassical economic model (Kull et al. 2015, 3). This neoclassical model contributes to rapid industrialization often at the expense of other environmental and ecological values. The negative outcomes of natural resource development – including forestry, energy production, and mining – can have disproportionately negative impacts for Indigenous communities. That includes the dispossession of land and resources that sustain cultural and subsistence practices, loss of opportunities to participate in the modern economy, and environmental pollution and degradation that negatively affects the physical, mental, and spiritual health of Indigenous people (McCarthy 2002). In Canada specifically, "resource-extraction-based economic development has arguably unsettled, undermined, and transformed the circumstances of Indigenous communities" (Parlee 2016, 329 in Adkin 2016). As examples, effluent from a pulp and paper mill in the territory of Sipekne'katik First Nation was actively polluting a main source of water; a pipeline constructed

directly through the Wet'suwet'en First Nation territory continues to undermine the decision making authority of the hereditary Indigenous governments; and mercury contamination from industrial facilities renders drinking water unpotable in Grassy Narrows First Nation (Waldron 2021). Consistent with the struggles of Indigenous peoples more broadly, the restrictions to developing effective and sustainable Indigenous Guardians programs are a product of historical and ongoing power imbalances brought on as a result of colonialism. Political ecology can offer an interdisciplinary perspective for studying and understanding this complicated and multi-layered subject.

2.2 Research Design:

2.2.1 Research Positionality

As a white, cis-gendered, straight, non-disabled female, I am very aware of the privilege my positionality in society has afforded me. My family consists of European settlers from Western Europe, the United Kingdom, Ireland and Scotland. Although my great, great grandmother is of Indigenous decent hailing from New Brunswick, Canada, my skin is white and my eyes are hazel—which has allowed me to thrive amongst the settler community. Furthermore, I was raised in a middle-income family in the suburbs of Dartmouth, Nova Scotia, and have had the privilege to attend post-secondary education. While having been raised in primarily white communities, I realize that I have subconsciously inherited biases and stereotypes towards Indigenous people and people of colour that I will need to continuously unlearn.

Throughout my research process I attempted to recognize these biases by reflecting on my underlying assumptions and grounding my thoughts in the literature of political ecology and

Indigenous stewardship that highlights power imbalances. I also reminded myself of my position of power in the system in relation to those who I was interviewing and who were most affected by the political imbalances. That was important so that I could place the conclusions within a broader societal or Indigenous context that was beyond my personal experiences. In an effort to formally reflect on and address those biases, I continuously journaled my thoughts throughout the project. I used that exercise to practice reflexivity, defined as "Intentional self-awareness about the reciprocal influence of the researcher-participant relationship on the research process" (Gilgun 2006; Oliphant 2020, 19). By practicing reflexivity, I continued to address how my interactions with respondents shaped data collection and analysis, and how my biases influenced the conclusions of the study. Through this process I discovered that my initial thoughts could sometimes predict a response and that I often expected a certain answer that either aligned with my own experience or with what I had discovered in the literature. Whether or not I was correct in assuming the answer, I realized how important it was to avoid assumptions so that my own biases did not skew how I interpreted a response.

Additionally, I asked respondents to explain their own understanding of key concepts like Guardianship, benefits, barriers, limitations, etc. so that their perspective could inform my perception of what they hoped to achieve with their programs. Practicing reflexivity also helped me to bridge barriers that arose due to my cultural positionality versus that of the Guardians that I interviewed.

2.2.2 Methodological approach: Qualitative case study

I employed a qualitative case study methodology. This approach allowed me to focus on the context and learning offered by each case (Yin 1981). In the social sciences, a case study often creates a micro-macro link from individual social behaviour to a larger historical occurrence (Alexander et al. 1987). Therefore, delving further into the individual case studies can help us "gain a better understanding of the whole by focusing on a key part" (Gerring 2007). This decision proved to be beneficial as each Nation that I interviewed faced unique challenges and brought unique experiences to the research. In order to record these unique experiences, I conducted semi-structured interviews of one to three participants from five Guardians programs (Table 1).

Table 1: Indigenous Guardians programs, longevity of program, and participants interviewed.

Guardian group	**Brief Description**	**Age of Program**	**Person(s) interviewed**
Anonymous	X	3 years	1 participant
Bloodvein River First Nation	"Bloodvein River First Nation is located 235 kilometres north of Winnipeg on the east shore of Lake Winnipeg. It is settled along three kilometres on the banks of the Miskwewe Ziibi (Bloodvein River)" (Pimachiowin Aki 2022).	2 years	2 participants - Land Guardian - Co-Chair of the Board of Directors
Ditidaht First Nation	"Ditidaht traditional territory is large. It stretches inland from Cowichan Lake, down through Nitinat Lake, and to the coast between Bonilla Point and Pachena Point. (Their) territory also reaches out to sea all the way to the salmon, halibut and cod banks that feed (their) people. It includes the headwaters of streams and rivers that drain to the coastline" (Ditidaht First Nation 2021).	2 years	3 participants in a group interview -Fisheries Manager - Natural Resources Manager - Environmental Consultant.
Poplar River First Nation	Approximately 450 kilometers from Winnipeg, on the east side of Lake Winnipeg. The remote community is located at the mouth of the Poplar River as it enters Lake Winnipeg" (Pimachiowin Aki 2022).	2 years	1x group interview - Traditional Land and Guardian Program Coordinator - Land Guardian
Williams Lake First Nation	"The T'exelcemc, or Williams Lake First Nation… is a member of the Secwepemc Nation (Shuswap people) located in the central interior of British Columbia" (Williams Lake First Nation 2022).	1 year	1x group interview - Project Manager for the Guardians program/ Archaeologist - Coordinator- Title and Rights

2.2.3 Group interviews

I initially intended to use semi-structured interviews to elicit the perspectives of single representatives of Guardians programs. However, a number of the programs that I contacted requested the participation of more than one person during the interview. This required that I adopt a group interview method.

Group interviews have been widely used in conservation and natural resources management research. This method became popular in the 1980s with the rise of participatory research and attempts to bridge the gap between quantitative research and individual experiences considered as "local knowledge" (Nyumba et al. 2017). Group interviews require the participation of multiple individuals. Typically, the group is involved in a facilitated discussion of a specific topic with the goal of drawing from their complex personal experiences and world-views (Nyumba et al. 2017). The group interview method has been used to explore the convergence of western knowledge with traditional knowledge, specifically when discussing natural resources management (Ajibade 2003). However, this method can sometimes lead to biased responses "in that all participants (cannot) actively take part in discussions due to intimidation of influence by dominant or aggressive participants" (Nyumba et al. 2017, 25).

There were a number of advantages to involving multiple participants in each interview session. For example, group interviews can provide social support, especially when participants discuss sensitive and difficult issues including colonization, land rights and racism experienced in the community (Peek and Fothergill 2009). Some participants appeared more comfortable in a group setting because they were able to assist one another in describing shared experiences and lean on each other to fill in gaps regarding dates and times. My interviews consisted of individuals working in various roles, and some in management positions. It is possible that

responses were skewed by existing hierarchical power structures, including employer-employee relationships. Also, the participation of multiple individuals resulted in less time, on a per person basis, for a response. I did not limit the time for each interview, but the participants were busy and likely had only a portion of their day to attend the interview.

2.3 Case Study

2.3.1 National-Level Study of Successful Guardians Programs

My research followed the methods of McKay and Johnson (2017). They employed single participant, semi-structured interviews to collect information from a sample of participants engaged in Community Based Environmental Management, across Canada. Similarly, I interviewed a sample of participants from Canadian Indigenous-led Guardians programs. I purposefully avoided a characterization of each Nation for fear of not having the adequate time or experience to fully understand the culture and context of each group that is required of an accurate representation. Each Indigenous Nation differs geographically, culturally, and historically, therefore I wanted to focus on the main similarity that each group shared—having been successfully selected to receive funding from the Indigenous Guardians Pilot Program. In implementing this strategy, I contacted a subset of the listed programs (Government of Canada 2020) to seek their formal participation in the research.

I chose semi-structured interviews as this method allowed me to interview participants in a way that was "self-conscious, orderly and partially structured" (Longhurst 2016). Semi-structured interviews are conducted by an interviewer hoping to illicit certain information from their interviewee. Typically, the interview is conversational in tone and allows the participant to discuss aspects of the topic that are most important to them (Longhurst 2016). Arguably, semi-

structured interviews are preferable when interviewing a person with a great deal of knowledge around the subject matter of the research. This allows for the participant to share information that may have not been considered in the beginning of the research (Darian-Smith and McCarty 2017).

During the interviews we explored the attributes of Guardians programs that received funding from the Canadian Government's Indigenous Guardians Pilot Program. This allowed me to record and compare each group's unique aspirations, successes, and limitations so that I could consider variations in cultural practices amongst the participating groups. The interview method supported the grounded-theory approach that was used to produce my conclusions as opposed to having developed a theory beforehand that could have reflected my biases and ultimately the results of the interviews (Thomas 2011).

2.4 Sample

I used the Canadian government's "Indigenous Guardians Pilot Program Map" (Government of Canada 2020; Figure 1) as well as a search of the internet to identify the contact information for each of the 33 active Guardians programs operating with funding from the Canadian Government. Practical concerns, including the time constraints of this project, the availability of participants (Fugard and Potts 2015) and meeting the limitations of the COVID-19 pandemic informed my decision to interview five to ten representatives of those Guardians programs. Additionally, because my research was qualitative, a smaller sample size allowed me the ability to further analyze each interview more deeply. I may have generated a larger sample if I had conducted web-based surveys. However, that approach may not have allowed for the respondents to provide underlying information that I had not considered prior to creating the

survey questions (Fugard and Potts 2015). A sample of representatives from five to ten programs allowed me adequate time to properly engage with each group of participants while maintaining my research timeline.

I planned to divide my sample group into two sub-groups based on the timeline of their participation in the Indigenous Guardians Pilot Program. The first sub-group was meant to consist of those programs who received funding from the initial distribution of funds allocated by the Canadian Government in 2017. The second sub-group was meant to consist of those who joined the program after 2019. By analyzing those groups separately, I planned to document any changes that may have occurred between the Guardians programs and the Canadian Government over time. I then planned to select groups randomly and incrementally, until I achieved 5 Guardians groups for each sub-group. However, I did not receive a response from the federal office that would inform me of when each group received their funding. Therefore, I could not identify these sub-groups prior to conducting the interviews.

2.5 Methods

I employed qualitative research methods, including single-participant and group semi-structured interviews. Those interviews were conducted via telephone and video conferencing. I then transcribed my interviews and employed a coding process to highlight relevant themes in the discussions (karjala and Sherry 2003). I chose semi-structured interviews as they allowed for the discussion to follow an organizational format while recognizing the flexibility that is required for each individual's unique cultural and societal experience (Hay 2003).

2.5.1 Telephone Interviews

Prior to beginning interviews with participants from the Guardians programs I prepared a semi-structured interview guide (see Appendix A). This guide included open-ended questions allowing for variation in the level of participant interaction. This allowed interviewees to diverge from the original question and elaborate on their individual experiences. I pilot tested the draft interview guide and interview process with a volunteer who had experience working with Indigenous Guardians programs.

I used telephone and video conference to conduct the interviews with research participants. The use of telephone communication to conduct semi-structured interviews has been critiqued as this method of interaction excludes visual cues (Garbett & McCormack 2011), can lead to data-loss or distortion due to inability to develop personal connections between the interviewer and participant (Fontana & Frey 2005) and potentially disallows lower-income individuals from participating due to the lack of access to the necessary communication equipment (Breakwell et al. 2006). However, telephone interviews have the potential to decrease costs while conducting research, provide increased access to geographically disparate subjects and increase safety for interviewers (Novick 2008). Given social-distancing requirements implemented as a result of the COVID-19 pandemic, telephone interviews seemed an appropriate choice for both myself and the participants so that the research could be conducted safely. Also, because I dealt with professionals that had access to institutional infrastructure, such as business phones and internet, access was not a significant issue. When compared to a face-to-face meeting, a telephone call could demand less of the participant and their limited time as well as provide more flexibility in scheduling (Cachia and Millward 2011). Thus, telephone interviews fit well with the busy schedules of prospective participants.

2.5.2 Transcription

Each interview was transcribed verbatim and returned to the participants to ensure that they were not misquoted or misrepresented in the research (Hay 2003). Any notes that had been manually hand-written were typed and attached to the records of their respective interviews. Each participant was emailed or mailed a copy of the final interview transcript and asked to review the transcript to ensure accurate transcription (Place 2007; Hay 2003). Respondents were given up to fourteen days to review their transcribed interview. I received 6 confirmations about interview content, at least one from each group interviewed. One respondent requested to remain anonymous after having reviewed their transcript.

2.5.3 Coding

After conducting the interviews, I used content analysis to identify dominant themes within and among the interview transcripts.

These themes included:

1) the hoped-for and realised focus and objectives of participating in the Guardians Pilot Program;
2) the ability of Guardians generally and the Guardians Pilot Program in particular to help groups to achieve self-determination and reconciliation;
3) barriers to the implementation of their Guardians program and application process to the Indigenous Guardians Pilot Program, if any;
4) associated non-monetary benefits to participating in the Guardians Pilot Program;
5) anticipated and delivered community benefits; and
6) external benefits of such programs including influences on other management regimes (e.g., Environmental Assessment).

I identified these themes with recommendations from the framework of "The Aboriginal Forest Planning Process" developed by Karjala et al. (2003) that reflected on the values of Indigenous peoples and, in particular, the interaction between those values and natural resource

management (Karjala et al 2003). This guide provides the following questions to consider when researching and analyzing primary and secondary documents related to Indigenous forest management: “What things related to the land are important to people in the community? What are community member’s concerns about how the land is managed? What solutions are they offering to address some of the problems on the land and in the community?” (Karjala et al. 2003, 52).

Similarly, I used the content analysis process formulated by Sherry and Karjala (2003) to allow themes to emerge from the data among the transcripts. This process is implemented in a series of steps including:

- Using semi-structured interviews to collect data.
- Transcribing the interviews in preparation for coding.
- Reviewing all of the transcripts multiple times as well as employing an external reviewer to offer a second perspective.
- Categorizing information into categories and themes that are consistent with the semi-structured interview or the broader goals of the research.
- Coding each theme and sub-theme, then using these codes to create categories and summarize the data.
- Finally, compare and contrast the recurring themes among the interviews in order to identify consistent patterns amongst the interviews.

Coding qualitative research is described by Elliott (2018) as “a fundamental aspect of the analytical process and the ways in which researchers break down their data to make something new” (2850). The process of coding interview text requires the dissection of collected materials

to then analyze each aspect of the text more closely and finally decide how the data fits in the context of the research (Elliott 2018). Coding is a necessary step in the research process because text data are often dense and content-heavy, therefore requiring an intentional attempt to clarify and determine the aspects contributing to the data and answers given by respondents (Creswell 2015).

I coded the transcripts manually and without automated software. I began the coding process by generating as many codes as needed in order to classify each aspect of the interview transcript to "ensure that the process was creative and exploratory" (Karjala and Sherry 2005, 6). Then, I compiled the codes into 10 major themes and sub-themes and assigned each theme an indicator code number. The definition and identification of relevant themes was executed with an inductive approach allowing the results to emerge from the data (Strauss and Corbin 1998; Thomas 2006) as it was based on the study objectives, but evolved as the participants informed my understanding of Guardians programs. I highlighted sections of the transcript with various colours and assigned each colour an indicator code representing a different theme. By using this annotated approach, I was able to make the content more visible. This also allowed me to identify relevant quotes that were directly inserted into my results section (Karjala and Sherry 2005).

2.5.4 Ethical Considerations

While conducting my research, I completed the Tri-Council Policy Statement of 'ethical conduct for research involving humans course on research ethics', provided by the Government of Canada's Panel on Research Ethics. Additionally, my proposal underwent review by the UNBC Research Ethics Board.

When conducting interviews I ensured that I presented the questions in a clear and transparent manner while also maintaining the privacy of my participants. Information letters and consent forms were sent to interviewees with adequate time to review them prior to the interview. The information letter outlined the goals of the research, how the interviews were used in the research, and how the research would contribute to our understanding of Guardians Programs. The consent form stated clearly that the interview was voluntary and confidential, and that the process could be terminated at any point. Also, should the participant wish to withdraw from the research, the form mentioned that their contributions would not be used for the project. The consent form also detailed how the data would be stored and how I would ensure the confidentiality of the participants. In addition to providing this information in written form, I reviewed the consent form and the process of confidentiality with the participant prior to each interview. This allowed the participant to inform me of any concerns they may have had with the interview or publication of their contribution, and for me to accommodate those concerns.

Chapter 3- Results and Discussion

3.1 Communications and participation rate

Due to the early stages of the Canadian Government's Indigenous Guardians Pilot Program, the majority of Guardians groups explained that they were not prepared to participate in my research as they did not have adequate time to establish their programs since receiving the federal funding. Therefore, it could be beneficial to conduct additional research of Guardians programs in future years, after the programs have become more established. Those groups that did agree to participate have been conducting natural resources based management programs alongside partner organizations prior to receiving the federal funding for a Guardians program; that could have contributed to their willingness to participate.

I used email to contact 29 of the 33 Guardians programs listed on the Indigenous Guardians Pilot Program Map (Government of Canada, 2021). I did not contact several listed programs because I could not locate their contact information online. This information may have been difficult to find because broadband infrastructure is not always available to rural Indigenous communities.

Originally, I planned to interview representatives of 10 Guardians programs. I had hoped that those programs would represent the geographic extent of programs supported through the Canadian government's pilot funding (Figure 1). In total, I interviewed nine participants from five First Nation groups whose territories fall within the provinces of British Columbia and Manitoba and who have received funding from the Indigenous Guardians Pilot Program (Figure 1).

Upon reviewing the transcripts, one of the participants requested anonymity within the research results. Additionally, in attempts to record a telephone conversation, I incorrectly used a

recording application on my personal smart phone which resulted in the loss of one interview from the Bloodvein River First Nation. To rectify this issue, I summarized the notes that I had recorded during our conversation and returned them for approval and clarification. While that contribution informed my analyses, I did not include that response in my data section for fear of misrepresenting what the respondent said during the interview.

I conducted six interviews with a total of nine participants. The roles of the nine participants included Land Guardian, Co-Chair of the Board of Directors, Fisheries Manager, Natural Resources Manager, an Environmental Consultant for the Ditidaht First Nation, a Guardians Coordinator, an Archaeologist, and a Title and Rights Coordinator (Table 1). Commonly, the interviewees served multiple roles in addition to being involved directly in the development, management, or activities of the Nation's Guardians program. The expectation that staff would fill multiple roles was often a result of limited capacity or funding within their organisations.

Prior to collecting data, I encountered a number of challenges to communicating with and identifying Guardians programs. First, a lack of functional or accessible broadband infrastructure is a known barrier that limits communication and other online activities of rural and Indigenous communities across Canada (McMahon 2011).

As a second challenge, I was unable to determine the length of time that each Guardians program had been in operation or received funding from the Canadian Government's Indigenous Guardians Pilot Program. I attempted to contact federal government staff with the pilot program, however I did not receive a response from their office. As a solution, I included a question about "program age to date" in my semi-structured interview guide.

In reply to my invitation, I received a range of responses from representatives of Guardians programs. Of the 29 programs that I contacted, 6 agreed to participate in my study. One of those 6 programs required an additional research permit that I could not accommodate due to time constraints. Of those programs that chose to not participate, some respondents mentioned that they would have liked to participate but they did not have the capacity or time, some programs did not respond at all, and some mentioned that, because they had only just received funding for their program, they did not believe they would be an asset to my research. Additionally, Guardians programs located in the North, specifically Inuvialuit, required a review and permit for all land and community-based projects (Aurora Research Institute 2019). I did undergo the application process for a research permit, but due to time constraints, I did not end up interviewing any northern communities or governments.

Three of the interviews I conducted included two to three people, while the other interviews involved the participation of one representative of the Guardians program. Interviewing multiple people at one time brought a diversity of perspectives and reduced the burden on the participating Nation by demanding less of their time. However, such group interviews could also have been dominated by individual participants. Data collected with group interviews may not have been representative of each individual in the group.

3.2 Accessing the Canadian Government's Indigenous Guardians Pilot Program

Three representatives of the Guardians programs that I interviewed reported that the application for the Canadian Government's Indigenous Guardians Pilot Program funding was relatively easy to prepare and broad enough to incorporate their specific goals for guardians. Of particular note, participants were appreciative that the Guardians pilot program was spearhead by

the Indigenous Leadership Initiative (ILI). Ray Rabliauskas of Poplar River First Nation explained the significance of this participation:

> *The Indigenous Leadership Initiative that's out of Ottawa... It's an organization that lobbied the federal government for a very, very long time for Guardians programs, Guardian funding and they still do. They helped… or they developed the actual application for the Guardians funding. So, it was very easy to follow. We had no trouble at all.* (Ray Rabliauskas, Poplar River First Nation).

Rabliauskas went on to further explain that the ILI consisted of Indigenous people from across Canada. He suggested that amalgamation of such a broad range of experiences was likely responsible for program goals and an application process that was general enough to meet the needs of the diversity of Indigenous communities from across the country:

> *The ILI and the people that are in that are from across Canada. They're not just… they're from Ottawa, there's some from B.C., there's some from Alberta… and Labrador. They're from all across Canada. And I know it's a federal government program but from what we saw was that the federal government was involved with the ILI. That it was, basically, (the government) had one person. And so (the ILI) developed the whole project. They decided how to spend it on there together. So, it was pretty much Indigenous led, the whole process.* (Ray Rabliauskas, Poplar River First Nation).

Although not all study participants were directly involved in writing the proposal, none cited federal requirements for receiving the funding as a barrier or restriction to participating in the pilot program. Whitney Spearing from Williams Lake First Nation explained her perspective of the program funding:

> *It basically is kind of take it and make it what you make it. So, I think very much so that it's malleable so that Nations can take it and make it what they need it to be in their unique circumstances and their cultural circumstances, too.* (Whitney Spearing, Williams Lake First Nation).

3.3 Objectives and goals of participating in the Guardians pilot program

The literature provides a relatively narrow review of the expectations and outcomes of Guardians programs. In most cases, Guardians are expected to protect or manage Indigenous lands in the context of tourism or development (Reed et al. 2020). When asked about their perspective of a successful program, the participants of my study reported that Guardians were expected to address a broad range of outcomes for their communities. Outcomes included maintaining and caring for the land; reporting back to the community on the health of the territory and the development of any projects occurring on the land; and facilitating the education of youth by community Elders and ensuring the continuation of Indigenous culture for future generations. The following quotes from the Williams Lake First Nation and Poplar River First Nation exemplify the wide range of expectations that were reported by the study participants:

> *The general definition for me is the establishment of people who work for the nation or a collective of Nations, who are out on the land and filling a variety of roles… it's a land-based recording, reporting and general health of the territory.* (Whitney Spearing, Williams Lake First Nation).

> *For me, the Guardianship program definition would be… doing a variety of things within the nation. Not just sort of natural resource bound tasks. I think that's a big part of it but I also think getting them present in youth camps and Elders trips and things. Just having a presence overall within the community is a really big thing for me and just making the community aware of who our Guardians are and that it's an overall, holistic, position, I think.* (Julia Flinton, Williams Lake First Nation).

> *(A Guardian is) Somebody who can represent the community that can help spread awareness for the land and with the Poplar River… land management plan.* (Norway Rabliauskas, Poplar River First Nation).

3.4 Environmental protection and stewarding

I found that Guardians programs were required to facilitate and manage a broad range of projects and activities that included environmental monitoring; emergency services for fires,

flooding, and the global pandemic; archeological excavations; administrative work and training of staff involved in a number of activities; lobbying the government for increased territorial rights and environmental protection; constructing proper infrastructure; acting as guides for private companies; and policing against poachers, uninformed visitors, and polluters. All of these activities required an understanding and knowledge of the territory that Indigenous Guardians had gained through increased time spent on the land. In Poplar River First, Nation, as well as the Ditidaht First Nation, Elders came to the current Guardians and Natural Resources stewards to let them know that their territories needed to be properly managed by the community:

> *The Elders talked to us years ago about caring for the land that went to the newer generations… Need to do something to make sure that… it would stay the way it is, clean and pristine for the future. And things have changed a lot. It used to be, with colonization and assimilation, there were lots of changes made to a lot of the way things were taught. Passed on from generation to generation. They don't exist the same way anymore. To get back on the land and start doing that again. To work with people to work with their youth to help them to understand why the land is important.* (Ray Rabliauskas, Poplar River First Nation)

In addition, Melba Green of Bloodvein River First Nation mentioned the importance of caring for the land:

> *We are keepers of the land, Anishinaabe people. We've been, always been, the Guardians of our lands in Bloodvein or anywhere else… Anishinaabe land on Turtle Island* (Melba Green, Bloodvein River First Nation).

With both increased knowledge of ways to identify environmental degradation and experience of how to safely navigate interactions with the land, Indigenous Guardians could lead cooperative projects focused on the health of their territory. Melba Green suggested that environmental knowledge and respect for the land could be passed on through an educational aspect of Guardians programs and explained the role that Guardians could play in such a collaboration:

> *The Guardians could share, you know, their ideas and concerns about being out in the land and then, advices, like you know… look out for the land and make sure you show respect when you go out there, too. Because you never know what will happen. Even experienced hunters and trappers have accidents when they are out there on the land. So safety is another issue for us Guardians.* (Melba Green, Bloodvein River First Nation).

> *If you've seen something wrong with the trees then right away I'll try to work with the other groups and see if there's something wrong with our trees with what's going on. Then we'll look for other people to try and work with us. Like, maybe conservation or any scientists to evaluate what's wrong with, just an example… trees*. (Melba Green, Bloodvein River First Nation).

In addition to leading environmental management projects, Norway Rabliauskas explained the role that Guardians could play in monitoring the impacts of visitors on their territory:

> *(The community doesn't) want to see outsiders coming into our area. Especially hunting like moose … sometimes it does happen and we don't even really know about it or there's like crews on during the winter on the road doing projects, you know… we don't really know who's part of these teams or where they're going or how they're doing it. And I think for the program to help and try to stop some of that from happening*. (Norway Rabliauskas, Poplar River First Nation).

Norway and Ray Rabliauskas gave an example of a situation where the Guardians spotted an outsider who was participating in harmful environmental activities and how the Guardians made the visitor aware of the potential harm:

> *There's a contractor who was in here, it was not far from the community, that was hauling sand away and we didn't even know they were here. They didn't ask anybody and they made a mistake. And the community likes that, now, when that happens… like, Norway went out there with the councillors and they spoke to them and they made sure that everything… and they did come to an agreement to let them know that they couldn't just do it, what they wanted to do. And that's what really, really bothers the community is that when they lose control over that territory.* (Ray Rabliauskas, Poplar River First Nation).

This is one example of where Indigenous Guardians prevented a harmful environmental activity before it occurred. This was facilitated through direct intervention with a visitor, but could take a more pre-emptive form in educational awareness programs facilitated by the Indigenous Guardians or by having Guardians at the forefront of natural resources management activities.

3.5 Bringing the culture back to the community and the incorporation of youth into the Guardians Programs

The presence of Guardians on the land was explained as not only beneficial in ensuring visitors behave respectfully when visiting the territory, but also to bring the community back out on the land. Whitney Spearing from Williams Lake First Nation shared that:

> *I do feel like the more people who are out on the land and who work on the land are more prone to reconnect to the culture and language pieces… and they're more likely to sort of pass it on to their children and families. So, re-engaging in those cultural pieces that have lost—that's huge. That's key. Involving Elders where they otherwise maybe would not have been I think is a real benefit and having the youth be able to work with the Elders, as well.* (Whitney Spearing, Williams Lake First Nation).

Research participants reported that bringing the culture back to the community was an important element of the Guardians' work. Julia Flinton, who not only worked with the Williams Lake First Nation's Guardians program but also with their Title and Rights program, mentioned that:

> *The last five years, I would say, has been really focused on bringing the culture back to the community. I know within WLFN we have a cultural coordinator and he does stuff regularly with Elders and the men's group…The teachers at the primary school are very culturally rooted… (they) make a point to take those kids out and take them out with some Elders and take them out doing some berry picking and some traditional harvesting… we have our language program, we have a language coordinator… and she's been involved in that.* (Julia Flinton, Williams Lake First Nation).

Seven participants emphasized the importance of incorporating youth in the Guardians programs. They reported that such activities played a key role in reconnecting or maintaining connections between community members and their Indigenous culture. Those 7 participants also noted that facilitating and engaging in education is one of the many roles that Guardians play in their community. Their youth outreach initiatives included facilitating culture camps and visiting the local high schools to give presentations about their Guardians program. There were other programs that brought Elders and youth together on the land. As noted by Guardian Ray Rabliauskas of the Poplar River First Nation:

> *We go with Elders and the Elders teach. They teach about why the land is important. They help with the language and they show them their territory, with the traditional names that are there… the main is to show… and our young people don't understand that anymore— That we need to get them to be able to take over when there's nobody else around to do it. And it's not just something that… they need to understand it and love it.*

Exchanging and passing traditional knowledge from Elders to future generations was reported as a way in which these First Nations communities maintained their culture. Melba Green recounted how family members passed along their knowledge to her:

> *Why I was interested is because I learned a few things from my father when we used to go to the trap line when we were kids. And I've seen a lot of things with my mum. That too, with taking care of the kids, like us. And then, when I had that knowledge with me being a Guardian is to do the best we can to protect our areas, our lands. Especially… our biggest enemies are the poachers… the illegal hunters.*(Melba Green, Bloodvein River First Nation).

Green explained that, for upcoming young generations, it's "their turn" to learn about the land and act as stewards for their traditional territories:

> *For the youth to start, you know, to start looking at our areas—their turn. But, they have to learn from us, as well. That's why I go to the school when they ask me if I wanna do a presentation or workshop—I'll go. Then I'll start talking about the Guardian program that I'm working for and then I tell them, like, what's the things that we have to do… we have to watch out for the land and anything wrong out there or a dead carcass somewhere.* (Melba Green, Bloodvein River First Nation).

However, getting youth engaged in environmental stewarding initiatives has proven to be difficult for some Guardians programs, according to participant accounts shared in this project. For example, Whitney Spearing recounted her experience of hiring youth:

> *For any sort of profession that's based in the bush, like actually out in the forest or in a stream or in a boat, we have very little uptake from younger people. Not just members, not just community members… across the board. So, when we post positions for archaeology or for forestry, we have people who are applying from, like Victoria, Ontario, you know, and they're people who, they're already in natural resources, already have a background where they want to become involved in it. But, trying to get youth organized and championing for programs that are actually out in the bush is really hard to do… they're expecting a desk-based job or working with IT a lot, crunching with i-pads and lots of the stuff that we do is that, but it can be extremely hard to find someone who will really stand the test of time in that.* (Whitney Spearing, Williams Lake First Nation).

Two participants noted that a lack of mentors was one of the reasons why it was difficult to connect youth with natural resource or land-based activities. Whitney Spearing and Julia Flinton explained:

> *We have two youth members who are community members and they work with us. Interestingly, both of their parents work for us and they're in the older bracket and so they've kind of come along behind their parents and sort of started with us and they are younger… 18 and 19.* (Whitney Spearing, Williams Lake First Nation)

> *And their parents have definitely given them that nudge to do that. So, I think when you get the youth that might not have that paternal support behind them, which is often, you don't necessarily… get into the programs just because they may not know and they may not have the push behind them.* (Julia Flinton, Williams Lake First Nation).

The lack of mentorship expressed by the respondents could be attributed to the intergenerational trauma that has come as a result of the colonization of Indigenous people in both the United States and Canada (Dupuis-Rossi 2021). Intergenerational trauma has occurred in Indigenous families whose ancestors and relatives have been victims of violent assimilation strategies including residential schools and the "Sixties Scoop" (Middelton-Moz et al. 2021).

Residential schools required the removal of Indigenous children, as young as three, from their homes to attend schools specifically aimed at assimilating the children to the colonizer's culture. Children were not allowed to speak their own language, engage in the cultural practices of their families, and were subject to daily racism and cultural shaming as well as physical and sexual abuse (Bombay et al. 2020). After the residential schools began closing in Canada, an additional mass removal of children from their communities and families occurred, and has been classified as the "Sixties Scoop". This involved Canadian government officials removing Indigenous children from their homes and placing them into the foster care system where children were then re-homed to predominantly white households (Bombay et al. 2014).

These historical occurrences could have created a generational gap between Indigenous Elders and youth. Julia Flinton spoke briefly to this issue during the interview with Williams Lake First Nation:

> *Yeah it's definitely something interesting to think about… but with that in mind, like we've definitely— we have some things in the works on title and rights to kind of combat that I think… and it's just a matter of reaching out to that age group and get them motivated to get involved. That's the biggest thing. They're kind of at the age where the choice is theirs to get involved so, yeah I dunno. I think once they hit like 30 (one could be)…disconnected and running wild and now (they are) definitely more rooted within (their) culture and getting back to it a lot.* (Julia Flinton, Williams Lake First Nation).

Successful Guardians programs led by Indigenous community members have the potential to inspire others to become more involved in cultural initiatives and develop community uptake in the Guardians program—a notion that Julia Flinton speaks more to in section 3.9.1.

3.6 Contemporary systemic barriers

All of the participants mentioned systemic barriers to the broader success of their Guardians programs that were largely the result of historical occurrences of colonialism in Canada. Systemic, contemporary colonialism has been described by Lindroth et al. (2018) as "openly unequal structures of domination, limited freedoms for some and a requirement that those under colonial rule adjust to the existing conditions in order to survive". Historical colonialism in Canada not only included the cultural genocide conducted through residential schools and the "Sixties Scoop" but also the forced integration of Indigenous people into the western culture. In addition to forced cultural integration, there is also a lack of recognition by Canadian governments and settler communities that Indigenous Nations are sovereign entities, therefore creating power imbalances in political decision-making processes (Hanrahan 2017).

Hanrahan (2017) argued that the exclusion of Indigenous people from the Canadian identity is integral in that "such exclusion is necessary for the successful maintenance of what constitutes both Canadian national identity and the neo-liberal Canadian state". The continued exclusion of Indigenous people from political systems was voiced in the responses from participants. Inadequate funding and exclusion from decision-making processes were given as examples of barriers despite recent strides, such as British Columbia's Declaration on the Rights of Indigenous Peoples Act, that have been made to include Indigenous people in political decision-making processes.

3.7 Inadequate Funding

Eight participants reported that additional and long-term funding was necessary for the success of their Guardians programs. Sustainable funding would be over a greater period and with more certainty than expected from a "pilot program". That perspective was clearly revealed by the responses of representatives from three Guardians Programs:

> *For us Natives… we go out all the time. It's just a natural thing for us. But, to work for Guardians for the community … the funding is the one that will keep this program going.* (Melba Green, Bloodvein River First Nation).

> *I think the biggest one for us is definitely funding. The pilot program is a great start, but we definitely had some internal conversations about how it probably wasn't enough to make it feasible.* (Julia Flinton, Williams Lake First Nation).

> *The biggest thing that we are always struggling with is funding. We need funds to properly run the Guardian program … Ideally, we'd want our Guardians to do training, to have boats and motors, skidoo's so they can get out on the land and do the technical knowledge and the understanding.*(Ray Rabliauskas, Poplar River First Nation).

The Canadian Government's Indigenous Guardians pilot program provided $25 million over four years for 33 programs. Participants noted that they thought the pilot program funding was a good place to start but that it was not enough to achieve the long-term goals of a successful

program. However, Whitney Spearing mentioned that without the initial funding from the Canadian Government, a Guardians program for Williams Lake First Nation would not have been feasible.

> *We wouldn't have had a Guardianship program if we hadn't received the funding. That would have been a—like to kick off a program from scratch with no funding probably wouldn't have happened. Or, at least it wouldn't have happened until sometime in the future.* (Whitney Spearing, Williams Lake First Nation).

Alternatively, Julia Flinton explained that the funding was inadequate to employ Guardians and purchase the equipment necessary to implement the projects that were required to ensure the health of the territory. That lack of funding limited hiring and training of new members of the Williams Lake First Nation's Guardians program:

> *To get (a Guardians program) off the ground it's really tough just because you're trying to train the next people to be the mentors for… the next set of guardians and there's not necessarily enough money… in the pilot program specifically, to support that, especially if you add training into the mix… I didn't even mention the cost of training and getting those people trained for the appropriate stuff is— especially if they come in and are just green. Like, they have no background in anything. That's a lot of training there to go through and so, that's a cost as well.* (Julia Flinton, Williams Lake First Nation).

Ray Rabliauskas mentioned limitations in the pilot program funding that were counter to the Canadian Government's vague, initial goal to "provide Indigenous Peoples with a greater opportunity to exercise responsibility in stewardship of their traditional lands, waters, and ice" (Government of Canada 2020). Rabliauskas explained that without adequate staffing, equipment and training, Guardians programs cannot address the numerous issues that face the Nations. Insufficient staffing was a particular challenge, as a number of participants noted that there was insufficient capacity to monitor their large territories.

> *Our territory is big, eh? Like, I don't know… two million acres? It takes a long time to travel… by water. And there's large areas to look at. People aren't trapping or travelling like they used to, so (our Elders) told us that we had to kind of re-establish a presence on that land to show people that we were looking after it, especially the government, that we were looking after it.* (Ray Rabliauskas, Poplar River First Nation)

These sentiments were also echoed by participants from Williams Lake First Nation:

> *In our area, our incremental tree line is so huge that that also plays a part. There's just so much area to cover. Whereas, like, down on the coast, it's kind of a smaller piece that's wide open. There's so many people and people everywhere. Whereas, up here, you don't have cell service ten minutes outside Williams Lake all the way to Bella Coola. So, I think that also plays a part. Remoteness and accessibility.* (Julia Flinton, Williams Lake First Nation).

A number of participants also identified the short-term funding window as a problem. The Indigenous Guardians Pilot Program, in itself, has an expiry date of four years past the initial funding distributed in 2017. Indigenous groups understand that such funding may not continue into the future. Ray Rabliauskas explained his program's frustration working with limited-term, pilot funding:

> *We're fortunate right now. We have funds from the federal government and the Indigenous Leadership Initiative funds for our Guardians program, but it's limited. It's only for three years. So, trying to get funds for the next hurdle at the moment. It's continuous. It's hard to plan when you're not so sure you're gonna be around.* (Ray Rabliauskas, Poplar River First Nation).

For some, the lack of long-term and consistent funding called into question the government's commitment to supporting Indigenous Guardians and other programs meant to address reconciliation. This perspective was reflected by Paul Sieber of the Ditidaht First Nation:

> *The biggest thing is the federal and the B.C. government needs to acknowledge that (they) haven't been taking care of the land or water in the past 200 years or so… and B.C. has acknowledged UNDRIP, so… and they're making a little bit of planning in different areas but very slow. And I don't know if they're really serious about… working with First Nations on resources protection (or) proper funding.* (Paul Siber, Ditidaht First Nation)

Participants also noted that it is difficult to recruit and retain staff to support programs when the funding is limited in scope and longevity. The short-term duration of the pilot program funding prevents long-term commitments to staff interested in contributing to the First Nations' Guardians programs. Whitney Spearing explained the hesitancy involved in hiring new staff without the ability to offer them a commitment for long-term employment:

> *So, the question too is finding that right person requires that we're self-sustainable but also, the longevity of the program as well. Because if you're going to find that correct person who's from the Nation and invest in them the time and the training and energy to get them really going. They also want to know that there's longevity in the program. They're stepping into a position where they're like, well is this going to be six months while we have funding or is this going to be the next… 20 years of my life where I'm really gonna dedicate my schooling and my professional designations towards this professional endeavour.* (Whitney Spearing, Williams Lake First Nation).

While the funding is not guaranteed in upcoming years, First Nations communities have tapped into resources from other programs in hopes of making their Guardians programs self-sustaining. Participants referenced efforts to find additional longer term funding to maintain their Guardians program. Julia Flinton from Williams Lake First Nation explains:

> *We've made it work… we have a natural resource department that's involved in forestry and various aspects of forestry such as logging, beetle probing, you name it. And the Borland Creek, our logging company, in correlation with the NR (Natural Resources) department, does that. We also have a lot of work on reserve right now. In terms of emergency services and flooding. We have wildfires and so, we've tied the Guardians*

into those different pieces such as that and we've made it work. (Julia Flinton, Williams Lake First Nation).

3.8 Flexibility in Funding Support – COVID-19 as a Barrier

In addition to challenges and constraints associated with the design of the pilot program, the current COVID-19 era, and related impacts and uncertainties, has influenced how participants can access and spend funding. For example, social distancing, the lack of face-to-face meetings, and lockdown orders prevented some of the Guardian groups from starting their programs. COVID-19 slowed the implementation of the Williams Lake First Nation's Guardians program. Whitney Spearing explained:

> *The biggest thing for us this year obviously has been Covid. It has been a huge restriction and so we've had to be super creative with what we've been able to deliver and with the Guardians program… If we have a program that's ongoing… beetle probing or we're doing some forestry… we will send someone to do a site visit. So, we've sort of used that as our Guardians program for the year. But, we haven't been able to hire a person, which is a huge limitation. Finding that person has just kind of been a struggle, again with Covid, finding the right person.* (Whitney Spearing, Williams Lake First Nation)

Spearing went on to explain how the lockdown orders limited the abilities of the Guardians and individuals from the Nation's Natural Resources department to conduct environmental stewardship initiatives:

> *Covid has been an issue. Finding new and creative ways to do the monitoring that needs to occur and do the Guardianship work that needs to occur when we can't work in groups or work in bubbles… it's not good to work by yourself in the bush, but we've had to do it several times this year because it is what it is… There's a couple of activities, like… (the) moose count and sheep count, like the wildlife population counts, that happened and we would have been really involved with as Guardians, but the provincial government have said you're not allowed to come along. Our Covid policy disallows that… it's really just a terrible time to sort of launch this program and say, here it is—we're not sure what you can do with it, kind of thing.* (Whitney Spearing, Williams Lake First Nation).

Going forward, Spearing would like to see their Guardians program continue to receive funding and support from the government to help in overcoming barriers like Covid-19 and eventually become self-sufficient:

> *Really pushing and needling at government and making sure that we have some supports underneath it is going to be like imperative for it to be a long standing program* (Whitney Spearing, Williams Lake First Nation).

3.9 Lack of proper recognition as a sovereign nation

3.9.1 Indigenous Led

While the role of the Guardians program is to "provide Indigenous Peoples with a greater opportunity to exercise responsibility in stewardship of their traditional lands, waters, and ice" (Government of Canada 2020) the Indigenous Guardians programs can also bring additional benefits and opportunities. For example, participating in such programs can contribute to healing from some of the impacts of colonialism including intergenerational trauma and cultural loss. By acting as guides, one anonymous respondent noted that Indigenous Guardians help to create culturally safe spaces on the land to help families connect with the Creator and the earth. This approach has also been introduced in literature that discusses trauma informed healing for Indigenous spiritual healing in the social sciences (Middleton-Moz et al. 2021).

Guardians programs can also contribute to the encouragement of Indigenous people to "reconstitute power relationships and thus support Indigenous governance" (Reed et al. 2020, 186). Those efforts could support Indigenous-led environmental management programs. The right of First Nations communities to steward their traditional territories is not only mentioned in the United Nations Declaration on the Rights of Indigenous People but also in the 2015 Canadian Truth and Reconciliation Report (Denis and Bailey 2016).

Ray Rabliauskas explained the generational effects that colonialism has had on his community, and, in turn, his community's Guardians program:

> *It's not so much the colonialism, itself. It's the effects… the generational effects of it that have… the way things have been done for thousands of years… that's changed and they don't exist as strongly as they were before. They (our Elders) came and told us what we needed to do. That we needed to kind of take back control over the traditional territory cause the province was doing it and the industry was trying to do things… there was no decisions made by the people in the community. …I've got this program and our lands plan have brought that back already. The fact that it's a continual struggle by the community is trying to be in a position where they can make decisions that needed to look after the land. And it's not just the land. It's the people and the youth and the whole process of understanding the land and caring for the land.* (Ray Rabliauskas, Poplar River First Nation)

Two participants reported that the Indigenous Guardians program could potentially help communities self-govern and manage the natural resources on their traditional territories because the program requires building on TEK and being out on the land. Melba Green explained:

> *Guardians would be a big help to work with that self-governance. Like, when we go out there, well when I go out there, I check all over the land—well not all over the area. As far as I can go, anyway. And I… we try to stick with the protocols that Bloodvein has and within the land use plan that we have. And that's our backup is the land use plan that we have for Bloodvein land use management.* (Melba Green, Bloodvein River First Nation)

The importance of Indigenous people leading natural resources management initiatives is not only for the recognition, application and practice of Indigenous Traditional Knowledge, but also to instill confidence in the communities that are spear-heading management of their lands and waters. Julia Flinton explained the importance having the community support their Guardians program:

> *I definitely agree with the Indigenous-led. I think the community definitely needs to buy into a program such as Guardians because without the buy-in and support from the community, overall you're not going to get the succession and the capacity that you're looking to build off of it. If you don't have the buy-in then you're not going to get the youth within the community that are in the High Schools in town participating in the programs that may be intro to Guardians or Junior Guardian type programs that we're*

> *looking at implementing within the high schools here. They're not even going to bother if they don't see the Guardians out and about and that ties into the presence and then they're also not gonna buy in… if they don't believe in the program overall.* (Julia Flinton, Williams Lake First Nation)

Hesitancy of Indigenous community members to participate in the Guardians program could come as a result of mistrust instilled by negative past experiences with government or industry (Beausoleil et al. 2021). These negative experiences have included exclusion from the decision-making and benefits associated with natural resources projects (Fernandez-Llamazares et al. 2020), and the negative effects of such projects relative to cultural or community values (Dennis et al. 2015).

3.9.2 Guardians Facilitating Indigenous Decision Making

The Canadian Government's Indigenous Guardians Pilot Program funding encourages Indigenous Nations to steward and manage their lands. However, Indigenous governments face additional barriers from the provincial and municipal governments as well as private land owners that restrict the Guardians from accessing their traditional territories. Contemporary governance of private and Crown lands limits the work and monitoring by the Guardians as well as the ability of Indigenous governments to make decisions about how natural resources should be managed. As explained by Whitney Spearing, Williams Lake First Nation:

> *It's that effectiveness portion comes from being able to implement those land management strategies, or wildlife management strategies, whatever they are. Being free to implement those strategies within the, like the construct of provincial, federal government, within those… like you say, the barriers. So yeah, in order to be effective it has to incorporate a feedback mechanism as well to those government bodies. And it has to be really Indigenous led and Indigenous… like it needs to be fulfilled by the Indigenous community. There's no point in having a Guardians program that's not fulfilled by the nation itself.* (Whitney Spearing, Williams Lake First Nation)

Restrictive legislation enacted by the provincial governments was reported by at least one participant in all of the participating programs. This restriction resulted in barriers for the Guardians program including lack of access to traditional territories. Whitney Spearing explained:

> *We're attempting to steward some of the range issues to do with traditional plants and to do with invasive species and archaeology impacts and things like that. Meanwhile, the provincial government is working on a system where we no longer get range referrals. Like they're working in a sort of counter direction. So, it's really not co-management even though we have a government agreement.* (Whitney Spearing, Williams Lake First Nation)

In addition, the Government of Canada's Indigenous Guardians Pilot Program was highlighted as unable to address the gaps in government legislation that would allow the Guardians to carry out the goals of their program. Whitney Spearing explained:

> *It's great that the program is broad and the funding is broad, but we almost need a strategy between the closest levels of government. It's the regional staff and the regional industry partners and pulling of those people in to make it successful… it's fair to throw federal money at these things but we really need uptake of the people who are regional or else it just won't hold water.* (Whitney Spearing, Williams Lake First Nation)

However, for Williams Lake First Nation, it's not only the other levels of government who are restricting their program, but also resistance from some elements of the surrounding non-Indigenous community:

> *There's definitely a lot of push back and a lot of politics with having Guardians on the land. Like, in Williams Lake we definitely have a large contingent of old school families that definitely have owned their land for a long time. And so, it makes it very adversarial in some places and so there's hesitancy to put people in a position where they would be not safe in their work environment.* (Whitney Spearing, Williams Lake First Nation)

Indigenous Guardians programs want to be recognized as legitimate environmental stewards by other governments and private actors so that they can participate in conversations surrounding natural resources and the protection of the environment. Mike Wright was hired as

an environmental consultant for the Ditidaht First Nation over four decades ago in hopes of developing collaborative relationships that would assist with the management of watersheds in the Ditidaht territory. Wright was asked by the Ditidaht representatives to be included in the conversation surrounding their Guardians. He explained the difficulties that the Ditidaht have faced under colonial rule:

> *The Nations have been trying for forever, since colonialism started. I mean, they've been trying to have influence in how people listen to what their needs are and how… governments of the day, and that, could be better managing the resources, but you know, it's like talking to a wall. They never got a response. And I certainly don't know what that response with the Guardian program is going to be in the future. How much influence the Nations are going to have, so that's going to be a challenge.* (Mike Wright, Mike Wright and Associates)

While the Indigenous Guardians program is a step in the right direction for reconciliation and regaining Indigenous sovereignty, Whitney Spearing argued there was still a lot of work that needed to be done:

> *I think that there has to be a lot of change especially with the implementation of DRIPA (B.C. Declaration on the Rights of Indigenous Peoples Act) and the TRC calls to action, like there needs to be some systemic change in the government to allow those stewardship activities to happen. If you look at a nation like Haida where they really do have a very successful government to government relationship and they really do have the ability to steward their land, then you compare it to a more rural place… well I guess it's not more rural. Haida Gwaii is fairly rural, but it's very different. The dynamics are different. I think that the Guardianship program is sort of the acting arm where it also needs a different arm to sort of politically shepherd these things through.* (Whitney Spearing, Williams Lake First Nation)

However, the ingrained colonial values are instilled in the settler community as well as the provincial laws that restrict Indigenous communities from regaining their sovereignty. Whitney Spearing shared her experience:

> *There's a lot of deeply ingrained racism and colonial values that are still very much there. So, I think while the Guardians program has some work to do, it's incumbent on this area, this district, the public here, through like all of the means that we have, to change those things so that a program like Guardians will be successful.* (Whitney Spearing, Williams Lake First Nation)

3.10 Collaboration for Shared Goals

Four participants recognised that cross-cultural collaboration could be facilitated by their Guardians program. That included collaboration with non-Indigenous and other Indigenous communities. Unfortunately, First Nations have had many negative experiences associated with the disrespectful or unethical practices of outsiders that claimed or implied that their activities were collaborative or aligned with the interests of the Nation. For example, Melba Green shared an experience of a harmful interaction with an outside professional:

> *When I was a lands coordinator an archaeologist came. So I took 'em out to the land and we went on the shoreline and he found a few things like Arrowheads, tools and pottery. So, he took those with him but I have copies, coordinates, and waypoints about the artifacts that we found. And then, we were on the work to try and retrieve those things. That was so long ago that he took those away. So, yeah they don't want archaeologists here to dig and find out why is that here and how long ago was that there. They want to leave things as is.* (Melba Green, Bloodvein River First Nations).

Despite these negative experiences, the Guardians that I interviewed expressed a willingness to work alongside private landowners, conservation officers and other government officials to ensure that the environment is properly protected. For example, both the Bloodvein River and Poplar River First Nations are working alongside other First Nations in the Pimachiowin Aki UNESCO World Heritage Site to ensure that their territory remains pristine and the water for their communities remains free from pollution (Pimachiowin Aki, 2021).

Additionally, the Guardians work alongside conservation officers who help in apprehending poachers and managing visitors to the UNESCO site. The Guardians do not have the authority to legally remove trespassers from the territories. They also do not want to incite violence, but instead to educate visitors on proper land use and problems associated with trophy or wasteful hunting. Ray Rabliauskas explained:

> *A lot of outside people don't always understand… they don't think Anishinaabe have the right to do anything. But, it's… the province actually, in that way, they support us because they don't wanna see those things happen either. Some of their laws are identical to the ones we have here… People who come through… they're generally canoers… they do call. They're starting to understand, because it's a World Heritage Site, that they do call ahead of time so we know they're there. We don't mind them around….* (Ray Rabliauskas, Poplar River First Nation).

Williams Lake First Nation has also come across potentially dangerous or illegal activities of people external to their community, but wants to improve these relationships in the future:

> *"We're not sending (the Guardians) out as police, like to police the territory, but that can often be how it's seen or perceived. Especially outsiders who are not part of an Indigenous community.* (Whitney Spearing, Williams Lake First Nation).

These types of partnerships and exploratory projects are important to help the community to preserve their history and culture and can be niche opportunities for the Guardians to work alongside external communities, towards reconciliation. Julia Flinton explained:

> *There are a ton of ranches in the area. Williams Lake is known for kind of being the hub of ranching in B.C. … and I think when the younger generations, like the sons and the daughters are, you know, right now between 25 and 40, take over that ranch from their parents that's like a great opportunity to kind of shift the conversation to a positive one… just the exercise in itself… just being very open … to letting us have a look, is a huge step in the right direction and I hope that that continues with… the historical ranches that are in the area as the younger generation takes over. They've been in school, potentially where they've been exposed to the residential schools and things like that… and they're friends with people in the area that are First Nations lineage. And so, the opinion of that is different and I think that's where you will see that major opinion shift is when that happens. So, those are kind of the niches that we take and they're a*

huge opportunity and few and far between right now. (Julia Flinton, Williams Lake First Nation).

Also, collaboration between private landowners and the Guardians provides optimism that the communities are becoming more willing to work towards reconciliation. Whitney Spearing shared her positive outlook on these collaborations:

> *I think that ultimately, it's the way we frame things up right? If we frame this in a positive manner and there's people out on the land who are having respectful communications and doing… work alongside of the government, I think those things will naturally happen. Right now it's kind of like shoving a square peg into a round hole. But, I feel like the more that our Guardians work with government, work with the public, those types of organic relationships will take off and so, it can only really be a positive.* (Whitney Spearing, Williams Lake First Nation)

Positive collaboration was also reported as being beneficial amongst like-minded First Nations Communities. For Poplar River First Nation and Bloodvein River First Nation, their relationship has been ongoing for many years:

> *We were working together already before we even thought of the World Heritage Site. We had set up a First Nations accord and it was a lands protection accord where we started meeting together regularly and talking to each other and rekindling those old… they had lots of connections years and years ago when they would travel on the land 'cause they would always see each other and help each other. They would work together and we can't… we were fortunate to be able to work with those other First Nations… they're the best resources we've had and the best partnerships we've had is with our neighbouring communities.* (Ray Rabliauskas, Poplar River First Nation).

Partnerships between First Nations communities has also been beneficial for Williams Lake First Nation who reported having not only partnered with other Nations to apply for funding but also to monitor development projects in their territories:

> *There's a couple of larger parks and groups that have been planned in a few of our waterways and one of the things we know is that there hasn't been a lot of inventory or impact assessment done in these really remote places. And so when they come forward with parks and they say we're going to send all of these people into these areas there's obviously concern. But, on the flip side of that coin is… provincial government says there's no funding to do these things. So, we applied to BC capacity initiative a couple of years in a row, jointly with the other communities at first. And then, jointly with the*

Heiltsuk in later years, really to do with governance. (Whitney Spearing, Williams Lake First Nation)

These sorts of collaboration initiatives and solidarity amongst First Nations communities is particularly helpful when communities need to remind the government that there are agreements in place granting Indigenous communities more authority than the government will permit. Whitney Spearing recounts Williams Lake First Nation's struggle, as well as the other First Nations communities affected, with the Yecweminul'ecw agreement:

> *There needs to be that huge political shift as well, too… There are other places in the province where Guardians are wildly successful. So, we work jointly with Inlailawatash and they're associated with the Tsleil-Waututh Nation. So, their archaeology people go out with different Guardian groups across Vancouver Island where it is extremely successful and people are out on the land and interacting with land owners… where, right now, we're having largely negative interactions and very few positive uptake from both the public and from government… Enacting what we have, a Yecweminul'ecw agreement, government to government agreement that has to do with stewardship with the BC government. It's about enacting that agreement. Finding the governance between the communities under that agreement and sort of sorting out some of the finer details.* (Whitney Spearing, Williams Lake First Nation).

Participants are hopeful that the lines of communication between Indigenous Guardians initiatives will remain open. Melba Green responded that she is looking forward to further collaboration in the future:

> *I think it'll be helpful to see what other Guardians have, like what they're up to. Say if they wanna like ask a question to any of us. If they're stumped about something like water. Like, sometimes too, we do water samples. Like, I wanna know, like, if this water is gonna be, like you know, drinkable or not. Invasive species in the water, things like that. Oh, and a tool of education for students. They wanna be Guardians in the future.* (Melba Green, Bloodvein River First Nation).

3.11 Hope for the future

When asked what a 'successful' Guardians program would look like, participants struggled to picture their ultimate goal, citing only the barriers that they are currently facing and the difficulties working within the capacity limitations imposed by the pilot funding.

> *I don't like talking about the future because we don't know yet, eh? They start from now until… don't worry about tomorrow.* (Melba Green, Bloodvein River First Nation)

However, they mentioned that the Canadian Government's Indigenous Guardians Pilot Program was a step in the right direction, and they were optimistic and encouraged that other Nations were also working towards establishing a program. Paul Sieber from the Ditidaht First Nation shared his optimism:

> *We got the vision but we need the funding and the capabilities and the long term funding to keep going and that's where I see this national Indigenous program going. I'm highly aware that they're having meetings right now or they will be in order to make (The Indigenous Guardians) program permanent across Canada. But, even a little bit of funding, I think it's 25 million for a five-year project, was not even enough.* (Paul Sieber, Ditidaht First Nation)

Participants hoped to see more of Indigenous ideology, in terms of environmental stewardship, embedded in natural resources management across Canada. Whitney Spearing discussed the potential that this shift in ideologies could pose:

> *I think through proper execution that could be one of the end goals, right? Uptake of Indigenous ideology into the mainstream public way of thinking about it is the end goal so they're not these two distinct ways of doing things…I think we're really poised to do a lot of unique things in this territory. One of the larger mining disasters in all of the world's history has happened in this territory. So, that's a really sad and unfortunate event but it's a unique opportunity to potentially have some Guardianship of Quesnel Lake …So I think… we're poised to do some really good things and make some huge change… and so, what I would say is, for what it's worth, funding the Guardian programs across Canada, or across the province, is fantastic.* (Whitney Spearing, Williams Lake First Nation).

3.12 Limitations of my research

Many of the participants in my research were engaged in environmental stewardship initiatives, thus, there is the possibility that the results were influenced by volunteer bias. This occurs when a set of volunteers differs from the general population and may only represent a sub-set of those who could have participated (Salkind 2010). Further, I interviewed representatives from only five Guardians programs located in two Canadian provinces, BC and Manitoba. I would anticipate regional differences in the objectives and challenges facing programs that confront the very different political and ecological landscapes found across Canada. With this in mind, I do not wish to convey the results as if they are the opinions of each Indigenous person in Canada, therefore insinuating a pan-Indigenous ideology and ignoring the unique differences of each Indigenous person, experienced over time (MacKenzie 2017).

Additionally, despite practicing reflexivity throughout my data analysis, confirmation bias may have led to some distortion of the findings. Confirmation bias is described by McSweeney (2021) as "defining, seeking, perceiving, constructing, remembering, judging, highlighting, responding to, supposing, imagining and/ or interpreting 'evidence'… in ways that give priority, even exclusivity, to confirming a pre-established, or established early in the research, favoured or focal attitude, belief, claim or message" (1064). Because of my own bias, potentially developed prior to speaking with participants, I could have developed an interpretation of the results that matched my previous understanding of issues surrounding Indigenous people and natural resources development in Canada (Greenwald et al. 1986).

These possible biases are important to consider when interviewing a small number of participants from a large sample pool. The responses from participants shared similar positive outcomes and also mentioned similar barriers. However, these insights may not be shared

amongst others who have received funding from the Canadian Indigenous Guardians Pilot Program.

Chapter 4- Recommendations

This is one of the first studies to investigate the objectives outcomes of Guardians programs in Canada. Although my case-study approach only represented five programs, past research has been limited to in-depth investigations of single programs (Reed et al. 2020). Internationally, the literature focused on Guardians is also limited (Reed et al. 2020). This is likely a result of the relatively recent support and development of such Indigenous-led monitoring and management. The conclusions of my study can provide insight into the further development of Guardians programs both in Canada and internationally.

4.1 Objectives of the Canadian Government's Indigenous Guardians Pilot Program

The information provided by participants revealed the objectives and daily operations of Indigenous Guardian programs in Canada as well as the benefits and challenges facing those programs. Guardians discussed unique issues facing their traditional territories, but there were some commonalities among programs. The Canadian programs that participated in my research had similar ambitions and objectives as those reported for other programs including employing community members to patrol protected areas and act as monitors and stewards of the land; monitor fish and wildlife harvest; collect data focused on environmental change, including the effects of climate change; monitor and record industrial activities; and educate visitors on proper use of the land (Social Ventures Australia, 2016). However, biophysical monitoring and stewarding is not the only goal of the Guardians programs in Canada. Facilitating the education of youth by community Elders and ensuring the continuation of Indigenous culture for future generations are also large aspects of the Indigenous Guardians programs that were included in my study.

The objectives of the study participants' programs aligned with the main goal of the Canadian federal government's Indigenous Guardians Pilot Program: to "provide Indigenous Peoples with greater opportunity to exercise responsibility in stewardship of their traditional lands, waters and ice" (Government of Canada 2020). Corresponding with that broad national-level goal, participants noted that the main objectives of their programs included:

- Supporting the sustainable use of natural resources through monitoring and reporting of development activities.
- Protecting ancestral lands from improper use and unwanted visitors.
- Sharing knowledge of the land with their communities.
- Returning culture back to the community through the passing of knowledge from Elders to youth.
- Developing positive relationships with outside groups for collaboration on environmental management.
- Reclaiming national sovereignty.

Despite these apparent successes, my research suggests that there are challenges to meeting the federal government's extremely broad mandate for the pilot program. In particular, there is an explicit expectation that the pilot program will facilitate Indigenous groups efforts to "exercise responsibility" of stewarding traditional lands. That assumes that the land the Guardians are stewarding is "theirs" or that they have direct decision making or shared decision-making powers over those lands. As noted by participants in the research, other federal or provincial policy and legislation may not align with this understanding and expectation. In addition to the broad barriers Indigenous communities face in achieving self-determination, my

research identified a number of other barriers that may prevent Indigenous groups from fully realising aspirations for their Guardians Programs. These other barriers include:

- Lack of adequate and long-term funding resulting in the inability of Guardian Programs to retain staff and community support.
- Insufficient flexibility in permitting the Guardians Programs to spend or allocate funding within a timeline that accounted for large setbacks, like a global pandemic.

4.2 Positive outcomes of the Guardians programs

The immediate funding provided by the Indigenous Guardians Pilot Program helped initiate or support the research participant's programs. Although alternative funding sources may have allowed the start or development of those Guardians programs, the financial support provided by the pilot program was necessary and welcomed. Participants reported a number of activities and actions that were supported by that funding. In particular, increased monitoring of the land helped Guardians to ensure that visitors were respectful of the territory and the community as well as ensure the safety of community members when they were on the land. Additionally, the pilot program encouraged and provided opportunities for collaboration with like-minded groups including conservation officers.

Beyond outcomes focused on active land management, funding helped facilitate cultural connections and revitalisation. That included the education of youth by community Elders. Participants reported that such activities were essential for ensuring the continuation of Indigenous culture for future generations. Funding could also allow the guardians to continue maintaining a presence on their traditional territories by purchasing more equipment like vehicles and hiring more staff. Land-based activities were important for developing reciprocal

relationships between people and the land and were reported as a key factor in bringing the culture back to the community.

Notably, Indigenous people advocated for the federal pilot program through the efforts of the Indigenous Leadership Initiative. This is a unique circumstance that sets the Canadian program apart from the other Guardians programs. Other non-Canadian Guardians programs have been led by the government or external funders, who focus on the need to preserve the biophysical aspects of the Indigenous community's environment. In such cases, there is much less emphasis on enhancing socio-cultural factors and addressing deep seated, systemic issues (Austin et al. 2018). Arguably, the Canadian program allows for more flexibility for the various Nations and communities to address underlying factors that limit the activities or capacity of their particular program. These positive outcomes of Guardians programs are summarised in Table 2.

Table 2: Positive outcomes of the Indigenous Guardians Pilot Program initiatives

Positive Outcomes	**Key Attributes**
Flexible application process	- The Indigenous Guardians Pilot Program Funding was advocated for by the Indigenous Leadership Initiative- an Indigenous-led organization. Because the funding was advocated for by Indigenous people, some participants believe this resulted in the funding being flexible enough for each Nation to organize their program based on their own unique needs and interests.
Guardians facilitate a broad range of activities	- Funding for Guardians programs could contribute to Indigenous-led natural resources management as well as cultural and social improvements for Indigenous communities. This is due to the broad range of activities that Guardians could take on including education, political advocacy, and helping community members increase time spent on the land.
Guardians increase knowledge of their territories and the requirements for proper and respectful land use	- Due to inter-generational knowledge as well as greater time spent on the land, Guardians have an increased knowledge of their territories and how to navigate the land safely. Participants mentioned that they would like to use this knowledge to educate surrounding communities and partner with external like-minded groups. Guardians' knowledge could also lead to additional Indigenous-led initiatives on their territory.
Guardians monitor the impacts of visitors to their lands	- Participants mentioned that Guardians monitor their land for visitors and poachers who may not be interacting with the land properly. Through education and direct contact with these individuals, Guardians have the potential to stop harmful environmental practices before they occur.
Guardians facilitate initiatives that could bring culture back to their communities	- Guardians act as guides for Elders, youth and community members who would like to spend more time on the land. Participants mentioned that increased time spent on the land has the potential to reconnect members of the community with their culture. Bringing Elders together with community members and youth can help in facilitating the intergenerational passing of knowledge.
Guardians help Indigenous communities improve self-governance	- Guardians initiatives can create opportunities for positive interactions with external groups, including other governments. These positive interactions have the opportunity to lead to further recognition of Indigenous groups as self-governing Nations.

4.3 Barriers to the Indigenous Guardians Pilot Program

4.3.1 Inadequate Funding

Inadequate funding was noted by 8 research participants as a barrier to the further development or activities of their Guardians programs. Lack of funding resulted in insufficient staffing, including the inability to hire and train new employees. Also, there was no guarantee of renewal from the federal pilot program, thus, Guardians programs could not offer permanent positions to Guardians that they did hire. The lack of continuous employment limited the recruitment and retention of Guardians.

Insufficient funding is not a barrier that is unique to the Canadian model of Indigenous Guardians. The Australian Guardians model, in particular, also lacked proper economic supports resulting in "…narrowly defined, short-term, piecemeal, non-investment oriented, cross-agency funding" (Woodward 2008, 248; Reed et al. 2020). This was due to the lack of a cohesive agreement between external funders and Indigenous groups as to what an "effective" model of environmental management looked like. Also, the level of support varied among the types or foci of Guardians programs. Investors were less likely to fund programs that assessed the socio-cultural benefits of an environmental management program as opposed to the biophysical elements of the environment (Austin et al. 2018). Arguably, the federal government's pilot program is an improvement as it allows for Indigenous groups to identify success on their own terms and to address socio-cultural and environmental benefits. Ultimately, however, Guardians Programs in Canada, Australia and elsewhere (Reed et al. 2020) are not receiving adequate or long-term funding to achieve their objectives.

4.3.2 Lack of proper recognition as a sovereign nation

Indigenous communities have worked as activists, advocates and alongside governing bodies in Canada to settle comprehensive land claims and Aboriginal Title. Similar arrangements are demonstrated in other countries, such as the determination of Native Title in Australia (Borrows 2002; Reed et al. 2020). These agreements have allowed Indigenous groups to steward their ancestral territories. However, all of the participants mentioned that their provincial governments were actively working against their stewardship initiatives by not abiding by legislation that was already in place, or enacting policies that would limit stewardship by the Guardians. Additionally, during the interviews some of the participants reported an inability to implement the goals of their Guardians program due to a lack of proper recognition as a sovereign nation. This was demonstrated in the two potentially dangerous encounters with visitors on the territories of Williams Lake First Nation and the Poplar River First Nation, as well as a lack of understanding by external groups of Indigenous peoples' ability to steward their lands.

Around the world, alternative strategies exist regarding land claims and Native Title. These include collaborative efforts for consensus decision making and addressing conflict (Maclean et al. 2015). Such approaches include two-way, iterative communication between the First Nations groups and established government bodies, not unlike that of the Indigenous Guardians Pilot Program. Consensus-based decision making for Indigenous and non-Indigenous governments attempts to achieve mutually beneficial outcomes through co-management, collaborative resource management, and community-based initiatives (Peterson et al. 2005; Natcher et al. 2005 in Maclean et al 2015). However, this method has been criticized for not having the ability to transform the system that it is operating within. As noted by Maclean et al.

(2015), “consensus building risks legitimizing the hegemonic power of the state and reduces power inequalities to simply ‘differences of opinion’” (198). Established government bodies arguably are not acknowledging the right that Indigenous people have to steward their ancestral lands by directly controlling their territories. Although not a direct outcome of my research, government institutions will need to grant more autonomy of traditional lands to Indigenous groups if their broader aspirations for land management and decision making, including greater powers and control by Guardians, are to be achieved (Peterson et al. 2005).

4.4 Limitations and future directions

The Guardians that I interviewed represented a range of individuals and Indigenous cultures. However, the results of those interviews do not reflect the views of all Guardians programs in Canada. The Canadian context is broad and consists of various other land, water and ice management programs that were not included in this study. Therefore, further research is necessary to create a more complete understanding of the successes and challenges facing Guardians programs here in Canada and beyond.

Conducting this study during the global COVID-19 pandemic created an additional strain on Guardians programs as well as the participation of representatives in this research. Guardians groups were made to switch to virtual communication and were unable to hire additional staff or conduct group activities. Because of the broad requirement for social distancing the interviews were conducted via telephone or Zoom. Poor internet connections proved to be an issue for both myself and the participants, which sometimes interrupted the flow of conversation. With limited capacity and insufficient broadband infrastructure, the global pandemic proved challenging to navigate.

Looking beyond Canada, there has been an increase in research focused on the objectives and workings of Guardian programs. That includes countries such as the United States, New Zealand and Australia where relatively high-profile programs have been in place for well over two decades (Reed et al 2020). Although, case studies focusing on the Australia Guardians programs are increasing, following the first study in 1995 "Australian Caring for Country" (Reed et al. 2021; Rose 1995). Indigenous Protected and Conserved areas (IPACS) or "tribal parks" are emerging as a way to address the colonial management of natural resources (Carroll 2014; Rist et al. 2019; Zurba et al. 2019). As these initiatives become more popular there has been an effort to understand the role of Guardian programs in monitoring and managing those lands. As noted by Reed et al. (2020, 187), "further efforts are needed to understand the implications of Guardian programs for indigenous self-determination as well as indigenous decision-making institutions and knowledge systems when embedded within broader western environmental governance structures".

Going forward, alternative models of studying and reporting on Indigenous Guardians programs have also been proposed as a means to move away from a colonial academic model and towards Indigenous forms of knowledge sharing. Such strategies are meant to "decenter research away from the academy and toward those indigenous leaders on the ground" (Reed et al 2020, 187). As the number of Guardian programs increases, a collaborative effort between scholars and other types of researchers should be made to ensure that colonial programs like the Canadian Government's Indigenous Guardians Pilot Program are able to address the formal and informal restrictions imposed on Indigenous people to steward their traditional lands.

4.5 Short-term recommendations

Participants in this project provided a number of criticisms and limitations of the Canadian Government's Indigenous Guardians Pilot Program that indirectly suggested improvements. Also, they implied remedies for a number of those limitations. Both inferred or implied recommendations were broadly focused on identifying models for long-term, self-determined sustainable funding as well as changes in the historic relationship between Indigenous peoples and other levels of government (Table 3).

4.5.1 Sustainable funding policies

Sustainable funding requires a guaranteed funding base. This will remove pressures, as has been witnessed in other jurisdictions, for Indigenous people to seek ad hoc or short-term private or institutional funding to subsidize government grants (Austin et al. 2018). Also, sustainable funding would reduce the fear that government funding will be discontinued or withdrawn based on shifts in political will. Ultimately, such assurances will support Indigenous people in achieving "the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State" (UN General Assembly, 2007).

More research needs to be conducted in Canada to identify funding models that could lead to the long-term support of Guardians programs. That might include the identification of governance models that allow Indigenous peoples control over the allocation of funding and evaluation of proposals to such a program. Also, there are opportunities to explore partnership agreements between Indigenous peoples, other levels of government and the private sector in supporting Guardians programs. Such arrangements have been developed in the context of large

and long-term resource extractive projects. For example, the Ni Hadi Xa agreement between six Indigenous Nations and De Beers Canada is designed to support environmental and traditional knowledge monitoring of the Gahcho Kue Diamond Mine in the Northwest Territories (Ni Hadi Xa 2022). Although, there is the risk that these agreements could further long-term dependencies between funding and projects designed to increase local livelihoods as well as paternalistic relationships with federal and provincial governments. Ultimately, such agreements could hinder self-determination. One solution to that challenge is for Indigenous Nations to prioritise self-funding of their Guardians programs, similar to the case of the rural Indigenous communities in South Africa (Thakhathi 2019). Of course such budgetary decisions require increased creativity from the Indigenous communities and has not been extensively researched.

Nature United, an organization working towards collaborative efforts of conservation in Canada, are developing a "sustainable conservation financing model… that supports Canada's commitment to the Aichi Targets by ensuring Indigenous co-management can be sustainably financed for years to come" (Nature United 2020). The Aichi Targets were adopted at the United Nations Convention on Biological Diversity (CBD) in 2010 and work towards the reduction of biodiversity loss, globally (UNEP 2010). This funding model is designed to incorporate "a multi sector approach to expanding (the) amount and diversity of funding for conservation actions" (Nature United 2010, 1). There is some potential that such a model could facilitate long-term and stable support for Indigenous Guardians program.

In various international contexts, some have questioned the ability of federal funding to support decision-making authority of Indigenous communities over their natural resources management programs (Pathak et al. 2004). Pathak et al. (2004) reported that the Australian Indigenous and Community Conserved Areas (ICCA) have been recognised as positive examples

of governmentally supported initiatives. This is because the Indigenous communities are able to regulate the extent to which external governments are included in the implementation of their programs. In addition, the Australian government provides financial support to the Indigenous groups after receiving a land management plan from the Indigenous or community program (Pathak et al. 2004). Some argue that ICCAs are categorized as "co-management" programs due to the fact that these initiatives are regulated by the government's conservation policies, and therefore the programs are under constant threat of government intervention. This calls into question the genuine shift of decision-making authority to Indigenous groups and the potential continuation of challenges faced by ICCA's including the ability to manage natural resources through traditional practices and secure land tenure (Berkes 2004). A more sustainable model of funding support is required to ensure that there is a genuine shift in decision making power to Indigenous natural resources management programs.

The current Indigenous Guardians Pilot Program allocates short-term government funding to Guardians programs. This model arguably continues to uphold the systemic paternalism that has been imposed upon Indigenous people since the onset of colonization in Canada (Alfred 1999; Coulthard 2014 in Reed et al. 2020). However, further freeing up such programs to Indigenous governance would require bold commitments from political leaders that will lead to legislative change at the federal, provincial and municipal level. While this sort of systemic change will take much time and is dependent on sincere collaboration, governments can implement policy initiatives on a smaller-scale, within a shorter time-line, to immediately address barriers inherent to the Indigenous Guardians Pilot Program or other similar government support. That includes increasing funding to Guardians groups, ensuring that the funding

continues long-term, and formally recognizing the right that Indigenous Guardians have to manage their ancestral territories. These recommendations are further explained in Table 3.

Table 3: Short-term recommendations for overcoming barriers to achieving the objectives of Indigenous Guardians programs.

Barriers	Recommended short-term solution
Insufficient Funding	- Formally recognise (e.g., policy statements) and promote the positive outcomes of Guardians programs that were supported by the Canadian government. Direct recognition of success will support future funding decisions. - Given the interest and success of the pilot program, increase the funding to support a larger number of Guardians programs across Canada. - Conduct a budgetary review of supported programs to determine sufficient funding levels. - Recognise that pilot programs are designed for short-term developmental support. Transition successful programs from "pilot" funding to longer term support (>5 years).
Low employee retention and staff capacity	- Fund training programs for Guardians in alignment with TEK. - Fund youth mentorship programs in Indigenous communities to bridge cultural gaps and provide recruitment opportunities for future Guardians.
Poorly structured intergovernmental relationships that limit shared environmental stewardship	- Improve communications or protocols that allow for regular dialogue among Indigenous, federal, provincial and municipal governments when making decisions that influence land-use or monitoring. - Include Indigenous groups in decision-making processes regarding the territory that the group is stewarding. - Revise current provincial and federal legislation to allow some authority to Guardians (e.g., Peace Officers that could enforce various Wildlife Acts).
Lack of autonomy and decision-making authority of traditional lands	- Outreach and education to non-Indigenous people in the broader community. - Formal agreements with other governments and tenure holders to allow and facilitate the extension of the work of Guardians to non-treaty/reserve lands.

Chapter 5- Conclusion

The Indigenous Guardians Pilot Program (2017) is a step in the right direction to support environmental stewardship initiatives led by Indigenous governments or communities. In particular, this program is successful in increasing monitoring of the land, increasing collaboration with like-minded groups, and facilitating intergenerational knowledge transfers between Elders and youth. This federally funded program is unique in that it was lobbied for by Indigenous people. Indigenous Guardians Programs have the potential to contribute to the facilitation of opportunities for reconciliation amongst settler communities, ensure that natural resources management projects are conducted properly, serve as a vehicle to maintain or revitalise Indigenous cultures, and achieve national sovereignty for Indigenous groups. All of these benefits are apparent in the early stages of the pilot program, despite significant set-backs brought on by the COVID-19 pandemic.

Employing a Political Ecology framework helped to inform the findings and interpretations of the research. The contemporary systemic barriers that each participating group faced are consistent with the struggles of Indigenous peoples more broadly, including the historical and ongoing power imbalances brought on as a result of colonialism (McCarthy 2002). Political ecology offered an interdisciplinary perspective for studying and understanding this complicated and multi-layered subject. Many of the foundational elements of political ecology, including access to and control over resources shifting as a result of colonial and postcolonial legacies (McCarthy 2002), were particularly suited for exploring the interconnections between Guardians programs and natural resources management. The literature and responses from study participants strongly suggest that independence in natural resource and conservation decision making is essential if Indigenous Nations are to become self governing and to have control over

their participation in the modern economy. For some Indigenous Nations, this could also mean guarding or stewarding traditional land in a way that facilitates a reciprocal relationship that may not align with the contemporary colonial practices of either excluding people from nature for conservation efforts (Cronon 1996) or commodifying nature for rapid industrialization (O'Neil 2020).

Unfortunately, the pilot program continues to operate within the context of ongoing colonialism. Although there are now efforts to address those long-standing injustices, including the BC Declaration on the Rights of Indigenous Peoples Act, many impacts and inequities in power still exist. In response to these restrictions, both the 2015 Canadian Truth and Reconciliation Report as well as the United Nations Declaration on the Rights of Indigenous People (UNDRIP) provide recommendations and guidelines on how to overcome systemic colonization. Scholars in the field of Indigenous Guardians argue that "governments use their acceptance of the UN Declaration and the minimum standard of free, prior, and informed consent to catalyze domestic conversations intended to decolonize conservation policy and practice" (Tuck & Yang 2012; Domínguez & Luoma 2020 in Reed et al. 2020, 187).

My research has illustrated positive outcomes from Guardians programs, many of which are still in their infancy. The potential benefits and opportunities that Guardians programs are working towards (e.g., Table 2) could make a strong case for direct recognition in policy of the value of Guardians programs and, by extension, a sustainable funding model that is either largely independent of government or more concretely supported by future government policies. However, even a greatly improved funding model will not overcome systemic barriers to decision-making of traditional lands. While there have been positive interactions between Guardians, non-Indigenous Canadians, like-minded organizations, and external governments on

a small scale, a larger collective movement is required. Fully adopting the recommendations of UNDRIP, in addition to increasing support to Guardians programs can result in achieving the objectives of both the Indigenous Guardians and the federal government program.

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Appendix A- Information letter/ Consent form

Information letter/Consent form- Draft

For national participants of the Canadian Government's Indigenous Guardianship Pilot Program

Environmental Monitoring for the 21st Century: Exploring the Role of Community Based Guardianship Programs to Facilitate Local-Level Natural Resources Management

Date: _____

Researcher:

Abby Dooks

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Phone: 250-960-5357 E-mail: dooks@unbc.ca

Faculty Supervisor:

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Phone: 250-960-5357; E-mail: chris.johnson@unbc.ca

Purpose of research

My research is designed to use a case study approach to explore the role of Guardianship Programs in facilitating or enabling Indigenous communities to monitor and manage their lands and waters. The main objectives of my project are:

1. *Develop criteria of what constitutes effective Indigenous Guardianship Programs from the perspective of Indigenous communities. Criteria will address both the establishment*

Appendix B- Interview Guide

Interview Guide- Indigenous Guardian Participants

Definitions: - Barriers: any process or limitation that is internal or external to a community or Indigenous government that restrains or restricts progress in initiating or maintaining a Guardianship program; examples of barriers include: a lack of funding; insufficient community or program capacity; restrictions imposed by other governments or funding agencies

Guardianship- General
- What is your definition of a Guardianship program? How would you define an effective Guardianship program?
- What external barriers or limitations do you foresee that would inhibit an effective Guardianship program?
- A large barrier that Indigenous communities have faced, as a result of historical colonialism, is the inability to steward their lands as a self-governing Nation. Do you believe this to be true?
- How might a Guardianship program address the inability of groups to steward their lands as a self-governing nation?

Guardianship Programs Process of Development Application process:
- Where did you learn about the Canadian Government's Indigenous Guardians Pilot Program Funding?
- Why did your community decide to apply for the Guardianship Pilot Program Funding?
- Did you encounter any challenges when applying for or accessing the Pilot Program Funding? If so, what were these?
- Which characteristics of a Guardians program do you feel are more likely to contribute to successfully obtaining the Guardians Pilot Program funding?

Program Development:
- How long has your community been engaged in the process of operating as a Guardianship program?
- Do you think the Indigenous Guardians Pilot Program is effectively addressing the issue of lack of proper recognition in natural resource management and political decision-making for Indigenous communities?
- Which resources from the Indigenous Guardians Pilot Program have most contributed to the success of your Guardianship program (e.g., funding, facilitating information exchange)?
- Are there any downsides or negative impacts that come with participating in the Guardianship program?

Guardianship Program- Results
- What community benefits would you like to see from the Guardianship program?
- What benefits do you think the community would like to see from the Guardianship program?
- Do you consider the Government's Indigenous Guardianship Pilot Program to be flexible enough to adapt to each nation's unique cultural circumstances?

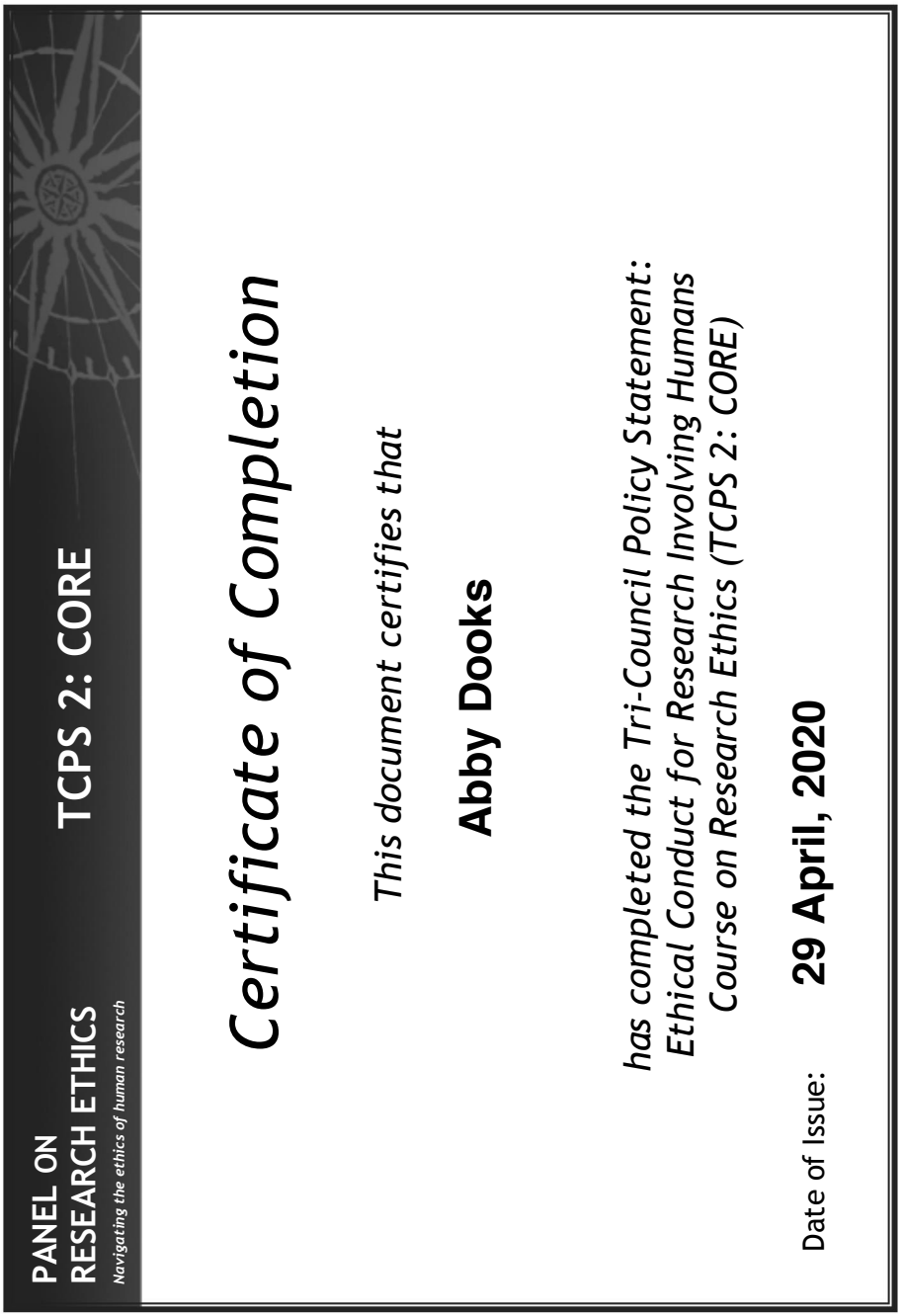
- Do you think the Guardianship program could influence how non-Indigenous people manage natural resources?
- How do you think your Guardianship Program will influence the relationship that you have with other governments or industry when discussing or managing natural resources found across your territory?

Guardianship Program- Other Information
- Is there anything else that you would like to share about the purpose, strengths, benefits or challenges facing your Guardianship program?
- Do you have any other thoughts or comments in describing the role of the Federal Government's Indigenous Guardianship Pilot Program?
- Are there any other comments you would like to make?

Thank you for taking the time to discuss your views on the Canadian government's Indigenous Guardians Pilot Program. I am extremely grateful for your insights and the invaluable information that you provided. Transcripts of your interview will sent back for approval and any updates to the research project will be shared via email. Additionally, I will return a final copy of my thesis to you and provide a brief video outlining my findings that I hope you will share with your program and others in your community or beyond that might be interested in Guardianship.

All the best,
Abby

Appendix C- Certificate of Completion: Panel of Research Ethics Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics



Appendix D- Research Ethics Board Approval Letter

UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA

RESEARCH ETHICS BOARD

MEMORANDUM

To: Abby Dooks
CC: Chris Johnson

From: Davina Banner-Lukaris, Chair
Research Ethics Board

Date: March 17, 2021

Re: **E2021.0209.003.00**
Environmental Monitoring for the 21st Century: Exploring the Role of the Canadian Government's Indigenous Guardians Pilot Program Funding to Facilitate Local-Level Natural Resources Management

Thank you for submitting revisions to the Research Ethics Board (REB) regarding the above-noted proposal. Your revisions have been approved.

We are pleased to issue approval for the above named study for a period of 12 months from the date of this letter. Continuation beyond that date will require further review and renewal of REB approval. Any changes or amendments to the protocol or consent form must be approved by the REB.

During the COVID-19 pandemic, no *in-person* interactions with participants are permitted without an approved Safe Research Plan and the protocol mitigations for COVID-19 being submitted as an amendment and approved by the REB. Please refer to the Chair Bulletins found on the REB webpage for further details. If questions remain, please do not hesitate to contact Isobel Hartley, Research Ethics Officer at Isobel.hartley@unbc.ca or reb@unbc.ca.

Good luck with your research.

Sincerely,

Dr. Davina Banner-Lukaris
Chair, Research Ethics Board

3333 University Way, Prince George, BC, V2N 4Z9, Telephone (250) 960-6735