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Walking in Both Worlds: Learning about Youth Priorities and Indigenous Food Sovereignty with Dél̨inę's Youth Council

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by

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Abstract

Indigenous food sovereignty is vital to the protection and restoration of Indigenous food systems and to many Indigenous peoples' health, culture, and traditions. Working towards Indigenous food sovereignty can also help to enable the protection and continued development of Indigenous knowledge and worldviews, which are becoming increasingly recognized for their potential to help transform unsustainable food systems and combat climate change. In Dél̨ı̨nę, Northwest Territories (NWT), re-establishing intergenerational knowledge transfer to today's youth is an essential aspect of food sovereignty and the continuation of Dene worldviews. However, this is challenging for many youth as they face conflicting pressures from Western and Indigenous cultures and ways of life. This thesis, grounded in community-based participatory action research and an Indigenist research paradigm, explores the perspectives of youth in Dél̨ı̨nę, including those involved with the newly formed Tsá Tué Youth Council. Through a thematic analysis of youth recommendations made at a community visioning session and in-depth interviews, the priorities of youth, barriers they face in engaging and affecting change, strengths they have to build off of, and potential solutions are explored in relation to Indigenous food sovereignty.

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List of Acronyms

CBPAR – Community-Based Participatory Action research

DGG – Délįnę Got'įnę Government

DKK – Délįnę K'aowedo Ke (Délįnę Main Council)

IFS – Indigenous food sovereignty

PAR – Participatory action research

CBPR – Community-based participatory research

NWT – Northwest Territories

IPCA – Indigenous Protected and Conserved Area

FSGA – Final Self-Government Agreement

Translations[1]

Délı̨nę – Where the water flows

Délı̨nę K'aowedo Ke - Délı̨nę Main Council

Dene béré – Land food

Dene kədǝ́ – Dene language

Dene náoweré – Dene knowledge

Dene Ts'ı̨lı̨ Dahk'ǝ́ – Department of Culture, Language, and Spirituality

Sahtuót'ı̨ne Dene – People of Great Bear Lake

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[1] The traditional language spoken in Délı̨nę is recognized as a dialect of North Slavey (GNWT - Education, Culture and Employment, n.d.). As some community members prefer the term *Dene kədǝ́ (Dene language)* for referring to the traditional language (personal communication, 2019), it is the term I will use throughout this thesis. As there is no official standardized spelling for Dene kədǝ́ *(Dene language)*, I relied on the spelling used by community partners, as well as within Harnum et al. (Harnum et al., 2014) and the locally created Sahtúot'ı̨ne Dictionary (Ayha & Takazo, 2012).

1 INTRODUCTION

1.1 Background

The food systems of Indigenous peoples around the world are based on close relationships with the Land and extensive traditional ecological knowledge (Dawson et al., 2020; Pawlowska-Mainville, 2020; Settee & Shukla, 2020). While there is great diversity among Indigenous food systems, they are all grounded in Indigenous worldviews which are also diverse but have common features, including a relational view of the world which recognizes humans as a part of nature. As such, Indigenous food systems are based on reciprocal relationships between people and the Land, are closely tied to culture, identity, and spirituality, and are ecologically regenerative (Gilpin & Hayes, 2020; Settee & Shukla, 2020). This is in sharp contrast to the industrial agri-food system which is extractive, dependent on the exploitation of migrant labour, contributes significantly to environmental degradation and biodiversity loss, and is resulting in increasing levels of food insecurity and malnutrition (De Schutter, 2017; FAO, IFAD, UNICEF, WFP and WHO, 2020; IPCC, 2019; Ritchie, 2020).

Around the world, many Indigenous peoples have fought to protect and regenerate their traditional food systems. The rights of Indigenous peoples to the revitalization, adaptation, and self-determination of their food systems can be described as Indigenous food sovereignty, although various definitions of the term exist as the concept holds different meanings in different contexts (Settee and Shukla, 2020). For many Indigenous youth, connecting with their culture, including the knowledge and skills needed to harvest traditional foods, is of great importance since intergenerational knowledge transfer has been intentionally disrupted by the Canadian settler colonial state (T. R. Martens & Cidro, 2020; Salusky et al., 2021; Truth and

Reconcilliation Commission of Canada, 2015; Ulturgasheva et al., 2015). The significance of Indigenous knowledge and Indigenous food sovereignty is also being increasingly recognized by non-Indigenous peoples as it becomes increasingly clear that alternatives to the industrial agri-food system are needed to both mitigate and adapt to climate change (HLPE, 2019; Lugo-Morin, 2020; Settee, 2020).

For the community of Délįnę, in the Northwest Territories, Great Bear Lake is at the heart of local food system as well as the identity, spirituality, and way of life of the Sahtuót'įne Dene *(People of Great Bear Lake).* As in many northern Indigenous communities, the traditional food system in Délįnę largely consists of hunting, fishing, and gathering. The basis of this food system is the Dene náoweré *(Dene knowledge)* that has been passed down and developed by the Sahtuót'įne Dene *(People of Great Bear Lake)* throughout generations, allowing them to adapt to environmental changes and live sustainably since time immemorial (Harnum et al., 2014). Since European contact, however, and particularly within the last century, rapid socio-economic changes have been imposed on the Sahtuót'įne Dene *(People of Great Bear Lake)* and other Northern Indigenous communities. Délįnę's food system has adapted in response to these changes, and now includes a mix of market food and Dene béré *(Land food) (Harnum et al., 2014)*. Harvesting practices have also changed as the Sahtuót'įne Dene *(People of Great Bear Lake)* shifted from living on the Land and travelling around the lake in family groups to living in a settlement and incorporating the use of new equipment and technology. Despite these changes, the harvesting of Dene béré *(Land food)* remains greatly important culturally and nutritionally (Harnum et al., 2014; Ramirez Prieto et al., 2022; *Summary of NWT Community Statistics*, 2019).

Within communities in the Sahtú region, including Délı̨nę, there has been a decrease in the harvesting and consumption of Dene béré *(Land food),* particularly among younger generations (Ramirez Prieto et al., 2022). This trend has been reported in many Indigenous communities around the world, and is often attributed to the interruption of intergenerational knowledge transfer and other impacts of settler colonialism (McCartan et al., 2020). In Délı̨nę, the impacts of settler colonialism have restricted the ability of the youth to learn the traditional language, Dene náoweré *(Dene knowledge)*, and cultural skills of their ancestors, and impacted their ability to harvest Dene béré *(Land food)* (Bayha & Spring, 2020). In addition, Délı̨nę, along with other Northern communities, is now facing the effects of climate change and resource development which further impact the community's ability to access Dene béré *(Land food)* (Parlee et al., 2018; Wesche et al., 2016). Many of the youth are eager to learn the traditional skills and knowledge of their ancestors but face significant challenges in doing so. One such challenge is the pressure to be well educated in both Dene náoweré *(Dene knowledge)* and the western education system. This challenge, which is often referred to as living or walking in 'both worlds', is one faced by many Indigenous youth today (Harnum et al., 2014; McCoy, 2009; Trout, Wexler, et al., 2018, 2018; Young & Di Battista, 2019b).

This research looks at the perspectives and priorities of Sahtuót'ı̨ne Dene *(People of Great Bear Lake)* youth and what they reveal about Indigenous food sovereignty and the challenge of walking in two worlds. Throughout the research process, I attempted to learn about and from Indigenous methodologies and worldviews and apply what I learned to my research process and writing, while acknowledging my limitations in doing so as a non-Indigenous researcher. To give further context to this research, I will discuss my positionality as a

researcher. The literature on climate change, food systems, and youth engagement will then be discussed.

1.2 Style Notes

There are a few aspects of the writing style used in this thesis that should be noted. As is further discussed in the methodology chapter, I intentionally write in the first person. This is meant to draw attention to my positionality and is called for within Indigenous methodologies (Wilson, 2008). I also occasionally refer to an author I am citing using the third-person pronoun 'they'. I use the pronoun 'they' rather than 'she' or 'he' to avoid assuming authors' pronouns, reduce the chances of unconscious bias, and normalize the use of 'they' in this context. The pronoun 'she' is used, however, when referring to an interviewee who chose to be identified and whose preferred pronoun is known to me.

It should also be noted that throughout this thesis I capitalize the words Indigenous, Elder(s), and Land. This decision was inspired by the works of various Indigenous authors (Gilpin & Hayes, 2020; Gregory Younging, 2018; Wall Kimmerer, 2016). In capitalizing Indigenous and Elder(s) I aim to convey respect as well as reject Canadian society's history of not recognizing the sovereignty of Indigenous peoples. With the capitalization of the word Land, I aim to challenge the Western understanding of Land as inanimate and draw attention to its importance.

I also included the use of some Dene terms, as outlined in the Translations section. The translations of these terms will also be provided in text the first time they are used in a section of the thesis.

1.3 Locating Myself

The ontological and epistemological approach to this research is largely influenced by the Indigenous scholars and knowledge holders I have had privilege to learn from. As is common within Indigenous worldviews, I am considering knowledge to be relational, meaning that one's research is shaped by one's "own relationships with our environment, families, ancestors, ideas, and the cosmos around us" (Wilson, 2007). Within this view, it is considered important to locate oneself by describing these relationships in order to build trust and counter "objectivity and neutrality with subjectivity, credibility, accountability, and humanity" (Absolon & Willett, 2005; Wilson, 2007). As such, I believe it is important to explain my own background as a researcher and how I came to this research.

I was raised on the traditional territory of the Temiskaming Anishabeg (in Kerns, ON), and later the Land of the Saugeen Ojibwe, Odawa and Pottawatomie Nations (in Owen Sound, ON). From my mother's side of the family, I carry Scottish ancestry and some East Coast traditions from the generations my ancestors spent on the traditional territory of the Mi'kmaq people (on Prince Edward Island) before moving to Ontario. From my father's side of the family, I carry Irish and French ancestry, and French-Canadian traditions.

Before I was born, my parents spent 5 years living in Moose Factory, a Cree community on the coast of James Bay. My father worked for the Mushkegowuk Tribal Council in economic development and my mother as a teacher. They later formed their own business as community development consultants and have primarily worked for Indigenous clients throughout my lifetime. As a result, I grew up hearing many positive stories about their time in Moose Factory and their Indigenous friends and clients from across Canada, as well as nuanced stories about the

injustices that Indigenous peoples face in this country. My impressions of Indigenous peoples and worldviews are grounded in these stories of my parents' experiences and relationships.

Throughout my time in the public school system, I became increasingly aware of the lack of content about Canada's history and relationship with Indigenous people. I also realized how different many of my classmate's impressions of Indigenous people were from my own. I grew up in predominately white communities but during my undergraduate degree had the opportunity to travel to Cree communities with my parents and to Indigenous communities in Panama on a field course. From these experiences, and from studying environmental science from a Western perspective and learning about all the negative impacts humans have on the Earth, I found myself very drawn to Indigenous teachings and worldviews and the hope they provided me with as they showed a different way of seeing the world and the place of humans within it. As I have worked towards my master's degree, I have had more opportunities to read the works of Indigenous scholars and authors, as well as attend classes, workshops, and talks by Indigenous Elders and knowledge holders and feel that I have benefited greatly from these opportunities. In addition to these academic sources, my views are informed by the Indigenous voices I have sought out through podcasts, novels, events, and social media.

While I recognize that Indigenous worldviews are diverse and vast, and that my understanding of them and of Indigenous knowledge is extremely limited, what I have learned has taught me to look at the world in a different way and question my assumptions. I have also begun to reflect more critically, not only on the systemic inequalities Indigenous peoples face, but on how I, as a white settler Canadian, have benefited from these inequalities my entire life. The many privileges I have as a middle-class white woman have helped me to do well in school and allowed me the opportunity to attend university, for example. These privileges continue to

benefit me as I pursue my masters as my formal Western education has been recognized and rewarded through opportunities, including the opportunity to do this research in the Northwest Territories.

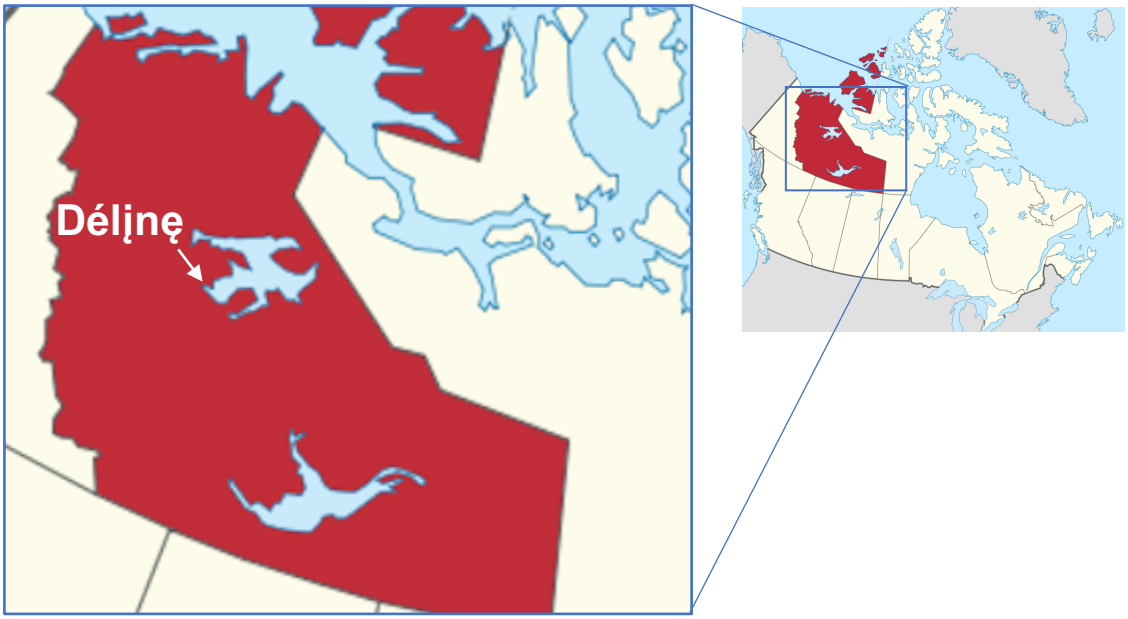
While I initially had hesitations about doing research with an Indigenous community, as an outsider and given the history of researchers inflicting harm on Indigenous peoples, I decided to pursue this opportunity due to the participatory action research (PAR) approach of my supervisors. Their research appeared to be based in true partnership with the communities they worked with which was extremely important to me. My engagement with the community of Déljnę began the summer before I formally began this master's program, when I was hired as a Research Assistant. I was able to spend two months in the community, working with the Déljnę Got'įnę Government Lands Department, participating in community events including a youth canoe trip and on-the-Land camp, and forming relationships. I am extremely grateful to have had this opportunity. Personally, I am grateful for the friends I made, the experiences we had together and the stories and knowledge that were shared with me. Academically, this time I spent in the community was essential to forming the foundational relationships and knowledge behind this research. As I write, I aim to be very aware of the narratives I am telling and to uphold my accountability to everyone I had the honour to meet and learn from in Déljnę.

The time that I spent in Déljnę became even more essential to this research since I was not able to return the following summer, as planned, due to the emergence of the COVID-19 pandemic. The pandemic has greatly impacted this project, changing what was feasible as well as informing my viewpoints in various ways. The pandemic is in many ways a result of our broken food systems and an indicator of the downsides of our globalized economy. Lockdowns also gave me more time to think about and grieve the environmental degradation that is

happening around the world. The pandemic also highlighted the limitations of our food systems caused by social inequalities and systemic racism. The topic of racism was brought even more to the forefront in May of 2020 when Black Lives Matter protests erupted in the United States in response to police killings and began to spread around the world. A year later, in May 2021, Indigenous children's remains at residential school sites began to be verified across Canada. As Indigenous peoples across the country dealt with this trauma and grief, many non-Indigenous Canadians seemed to start to become aware of the harm done to Indigenous peoples by settlers for the first time, having never had the opportunity to learn or taken the time to listen to Indigenous voices. These are some of the major events that have shaped the world and my mindset as I conducted this research.

1.4 Study Area

Figure 1 – Dél̨ı̨nę Location



Modified from: https://en.wikipedia.org/wiki/Northwest_Territories

Délįnę is the only community on the shores of Great Bear Lake and home to the Sahtuót'įne Dene *(People of Great Bear Lake)*. The community can be accessed by flight and, for a short period each year, by a winter road. The population of Délįnę is around 530 people, the vast majority of whom are Dene. The community has a young population, with around 45% of the community members under 30 years of age (Statistics Canada, 2017). Throughout this thesis the use of the term 'youth' primarily refers to those in the 12-30 age range, following the community's common use of the term. This demographic makes up approximately 27% of the population, while Elders (above 65), make up only 8% of the population (Statistics Canada, 2017).

Délįnę is part of the Sahtú Dene and Metis Comprehensive Land Claim Agreement, which came into effect in 1994 (Indian and Northern Affairs Canada, 1993). As provided for in this agreement, communities within the land claim region have the right to negotiate community-based self-government agreements. Délįnę chose to pursue self-government and in 2016, after nearly 20 years of negotiations with the Government of Canada and the Government of the Northwest Territories, the Délįnę Got'įnę Government became the first community level self-government in the region (Délįnę Got'ine Government, n.d.; *Délįnę Final Self-Government Agreement*, 2015).

Great Bear Lake is the heart of the community. It is the largest lake entirely within Canada and the largest freshwater lake in as pristine condition in the world. The Sahtuót'įne Dene have always depended on Great Bear Lake and remained living primarily on the Land until less than a century ago, although trading posts were established in the area around 1800. Délįnę was only established as permanent community around 1950, when a mission and school were

opened (*Délįne*, n.d.). Due to settlement and other imposed changes, including the forced placement of children in residential schools, the Sahtuót'įne Dene have had to adapt greatly over the years. As a result of these changes, the last three generations of Sahtuót'įne Dene have grown up "under radically divergent life circumstances" (Trout et al., 2018) resulting in many differences between the generations. This includes the existence of a language barrier between many of today's Elders and youth, as is the case in many northern Indigenous communities (Trout, Wexler, et al., 2018).

1.5 Research Significance

Re-establishing intergenerational knowledge transfer to today's youth is an essential aspect of food sovereignty. However, this is challenging for many Indigenous youth since Western and Indigenous ways of life are often dichotomized and youth report feeling a great pressure to succeed in both worlds at once (Trout et al., 2018). While the importance of youth re-connecting with culture and traditional knowledge is generally recognized, little research has been done on the double bind identified by Trout et al. and there is a need for examples of how young people are navigating this challenge (Trout, Wexler, et al., 2018). The literature specific to the role of youth in Indigenous food sovereignty is also sparse.

The youth participating in the Tsá Tué Youth Council are young leaders within their community who are motivated to create positive change for themselves and other youth in Déljnę. There is much to be learned from their perspectives, the way they themselves are navigating the challenge of walking in both worlds, and the support they need in doing so. Our community partners within the Déljnę Got'įnę Government are eager to support the youth, including through our research partnership. Déljnę is also unique as the first community to

establish self-government in the North. As the Dél̨ı̨nę Got'ı̨nę Government continues to develop and increase youth involvement in their governance structure through the Youth Council, other communities can learn from their example.

Within academia there is also much to be learned about bringing Indigenous and Western knowledge together and how non-Indigenous researchers can learn from Indigenous worldviews without appropriating Indigenous knowledge. Since most often "dominant system academics are not required to be bicultural or to even recognize that other ways of thinking or being exist", it is usually left to minority scholars to bridge worldviews and justify their work (Wilson, 2008, p.132). By turning the lens on settler colonial narratives, however, non-Indigenous researchers can make underlying assumptions explicit and make space for counter-narratives and nuance (Tuck & Yang, 2014). This could help to create space for Indigenous youth, researchers and knowledge holders, and Indigenous worldviews in general. This could also be an important step in making food systems research align with Indigenous worldviews and in supporting Indigenous food sovereignty (Dawson et al., 2020).

1.6 Objectives

My overarching objectives for doing research in this field are to contribute to climate change mitigation and adaptation, and to increasing equity among all people. I aim to do so by working towards the transformation of our current food systems to sustainable food systems. I choose to approach my overarching objectives through a food systems lens because the way food is produced, harvested, shared, and consumed is an indicator of relationships among humans, between humans and the Land, and between humans and all other beings, including past and future generations. I am particularly interested in Indigenous food systems because I believe that

Indigenous food sovereignty is the only way that sustainable food systems can be achieved and that “Indigenous leadership is necessary to restore balance amongst all relations” (Gilpin & Hayes, 2020).

The Western worldviews and knowledge systems of North America are rooted in positivist, linear, reductive logic and the settler colonial structure (Wolfe, 2006) and are inextricably linked to present day destructive and exploitative food systems. It seems to me that healthy, reciprocal relationships among people and between humans and the Land are unlikely to arise from this same knowledge system. I see it as imperative that these worldviews and knowledge systems change, and in particular that settlers learn humbly from Indigenous worldviews and knowledge systems if there is to be any hope of actually addressing climate change and restoring balance to the earth (Gilpin & Hayes, 2020). This is challenging, however, as the assumptions held within worldviews are often invisible to those who hold them and “academic knowledge disguises itself as universal and common” (Tuck & Yang, 2014).

Centuries of the Canadian state’s attempts to assimilate Indigenous people (including residential schools and their mandate to “kill the Indian in the child” (Truth and Reconcilliation Commission of Canada, 2015) have failed, due to the strength and resilience of Indigenous peoples. They have, however, resulted in many Indigenous peoples today having much work to do to heal and to restore their cultures and knowledge systems. I am interested in supporting Indigenous communities in working towards food sovereignty as it can be a pathway towards the restoration of traditional knowledge and balanced reciprocal relationships with the Land (Morrison, 2020). Supporting youth in facing the challenge of walking in two worlds and re-connecting with their culture is an important aspect of this (T. R. Martens & Cidro, 2020; Wexler, 2009).

I have also come to see the investigation of settler colonial narratives as an important aspect of supporting Indigenous food sovereignty and Indigenous youth. This includes Western academic narratives and knowledge which needs to be "understood as settler colonial knowledge, nothing less and nothing more" for appropriate limits to be placed on it, and for its inherent limits to be recognized (Tuck & Yang, 2014). The understanding of settler colonial knowledge as but one approach to knowledge, with both strengths and weaknesses, is also necessary in creating the space for Indigenous knowledge and for counter-narratives to be taken seriously. Dawson explains that when it comes to understandings of food and food systems, "counter-narratives based in local Indigenous foodways, reflecting local ways of knowing and the cultural values of sacred, respectful relationships, reciprocity, and interdependency, can resist the dominant narrative and form the foundation for Indigenous food sovereignty" (Dawson et al., 2020).

Based on my collaboration with community partners in Délı̨nę, and these overarching goals and considerations, my specific objectives were as follows:

- Contribute to the building of food sovereignty by assisting the Tsá Tué Youth Council in supporting each other and other Sahtúot'ı̨ne youth in connecting with their culture and reviving intergenerational knowledge transfer and Dene worldviews
- Explore the perspectives and priorities of the youth and what can be learned from them about walking in two worlds and Indigenous food sovereignty
- Work to make space for Indigenous knowledge by learning from Indigenous worldviews as a non-Indigenous researcher, amplifying Indigenous voices, and reflecting critically on

dominant narratives about Indigenous peoples and knowledge including Indigenous food systems

- Critically reflect on my methodological approach

To achieve these objectives, the following research questions were developed in collaboration with research partners to assist in the development of the Tsá Tué Youth Council and youth programming in the community: What are youth in Déljnę concerned about and what are their priorities for change within their community? What are the barriers to youth engagement in Déljnę, including connecting with their culture, having their voices heard, and participating in opportunities offered to them? What supports are needed to address these barriers and what role can the Youth Council play? Finally, how can these perspectives inform food sovereignty work?

2 LITERATURE REVIEW

2.1 Climate Change

Human beings have existed for hundreds of thousands of years, interacting and co-evolving with the other species on earth (Boivin et al., 2016; Stringer, 2016). Within the Western academic system of knowledge, there is evidence of humans having significant impacts on the landscape and on other species for over 10 000 years. While this includes negative impacts such as the extinction of certain species, there is also significant evidence of humans having positive impacts and contributing to the generation of thriving, sustainable ecosystems (Boivin et al., 2016). In the last couple hundreds of years, however, the impacts of humans on the rest of the planet have been predominantly negative.

It is now widely accepted that human activities including deforestation and the burning of fossil-fuels have led to unprecedented concentrations of atmospheric greenhouse gas, leading to climate change (Meinshausen et al., 2017). Biodiversity loss is also happening at an unprecedented rate and is of great concern. For example, there was a 36% decline in the abundance of vertebrate species populations between 1970 and 2010 (Goethem & van Zanden, 2021). Climate change and biodiversity loss are now having, and will continue to have, significant impacts around the world. In Northern Canada, rates of warming are accelerated at 3-4 times the global average, greatly affecting the Canadian boreal zone (IPCC, 2018). The current and anticipated impacts include both the direct and indirect effects of increased temperatures, changes in water availability, and increased atmospheric CO_2 concentrations. The most severe threats anticipated include the rapid expansion of insect pest species, increased severity of forest fires, and degradation of permafrost (Price et al., 2013).

The impacts of climate change, in Northern Canada and around the world, significantly impact food production and access to food. While food production is not inherently harmful to the Land, deforestation and agriculture have contributed greatly to biodiversity loss and climate change (Arroyo-Kalin, 2010; Goethem & van Zanden, 2021; Meinshausen et al., 2017). Currently around half of all habitable land is used for agriculture and on fields where conventional tillage is practiced, soil erosion is estimated to be more than 100 times greater than soil formation (IPCC, 2019). Agri-food systems are also estimated to contribute 31% of all human-caused greenhouse emissions and 70% of freshwater withdrawals globally are used for agriculture (IPCC, 2019; Tubiello et al., 2021). Transforming the way that we produce and access food, from destructive to sustainable or even regenerative, while adapting to the impacts of climate change is therefore essential.

2.2 Food Systems

A food system can broadly be defined as the "aggregate of all food-related activities and the environments (political, socioeconomic, and natural) within which these activities occur" (Pinstrup-Andersen & Watson II, 2011). Local food systems around the world are place-based and diverse, include a wide variety of actors involved in everything from the production and processing of food to its consumption and disposal, and are continuously changing and adapting (Braun et al., 2020). However, food systems overall have become increasingly industrialized, uniform, and globalized, with large corporations controlling much of the world's food production (Pinstrup-Andersen & Watson II, 2011; Rotz & Fraser, 2015). Although these qualities allow food systems to be highly productive and to offer low food prices to consumers, concerns have been raised over the high environmental costs and lack of resiliency they also lead

to (IPCC, 2019; Rotz & Fraser, 2015). In addition, although production levels are high within our global industrial food systems, a significant portion of the global population is not accessing adequate, healthy food. An estimated 821 million people remain undernourished and another two billion adults are overweight or obese (IPCC, 2019). Rates of food insecurity further increased with the emergence of the COVID-19 pandemic and related economic crashes, highlighting the vulnerability of the world's food systems (Blay-Palmer et al., 2020; UN-Food and Agriculture Organization (FAO), 2020).

Food systems scholar Irena Knezevic defines a sustainable food system as "one that sustains, rather than depletes. It's a system that looks differently in different contexts but is never exploitative…." and "nourishes humans and their health, ecosystems, communities, and diverse systems of knowledge" (Young & Di Battista, 2019a). Although the COVID-19 pandemic has been extremely challenging around the world, it is also seen by some as an opportunity to spark change and move away from destructive food systems and towards diverse, sustainable food systems (Blay-Palmer et al., 2020). The value of Indigenous knowledge is being increasingly recognized within the field of sustainable food systems and could play an important role in the shift that is needed (FAO et al., 2021; Ford et al., 2016; Lugo-Morin, 2020; Spring et al., 2021).

2.2.1 Indigenous Food Systems

Indigenous food systems are also diverse and culturally specific. The Indigenous Food System Network (2018) defines them as including the following:

> All of the land, air, water, soil and culturally important plant, animal and fungi species that have sustained Indigenous peoples over thousands of years. All parts of Indigenous food systems are inseparable and ideally function in healthy

> interdependent relationships… Indigenous food systems are best described in ecological rather than neoclassical economic terms… an Indigenous food is one that has been primarily cultivated, taken care of, harvested, prepared, preserved, shared, or traded within the boundaries of our respective territories based on values of interdependency, respect, reciprocity, and ecological sensibility (Indigenous Food Systems Network, n.d.).

Indigenous food systems, grounded in these values, can go beyond just being sustainable to in fact being regenerative. For example, intact Amazon rainforest is widely known a hotbed of biodiversity and from a Western perspective commonly considered to be untouched nature, free from human influence. However, a positive feedback cycle between the historical settlement of Indigenous peoples in the Amazon and soil fertility has been found, indicated that the agricultural methods used in that region actually benefited the soil (Arroyo-Kalin, 2010). This finding contradicted earlier Western theories of the Amazon's Indigenous peoples surviving solely through hunting and gathering and not impacting the landscapes around them. The possibility of humans having positive, reciprocal relationships with the Land is well understood within Indigenous worldviews but often unheard of within Western worldviews and dismissed within the Western scientific community (Wall Kimmerer, 2016). Therefore, Indigenous food systems and worldviews can offer extremely important knowledge and perspectives towards efforts to build sustainable food systems globally.

2.2.1.1 Délįnę's Food System & Mixed Economy

Currently, food systems in Northern Indigenous communities are characterized by high rates of food insecurity and mixed economies, in which both land foods and market foods play

important roles (Abele, 2009; Chabot, 2003; Council of Canadian Academies, 2014; Harnum et al., 2014). In Northern Canada, the hunting, fishing, and gathering of local species was central to traditional food systems and economies and continues to play an important role today. In the Sahtú region caribou are a key food source and of great cultural significance. However, there are many other important species as the traditional Dene way of life includes "Dene béré kats'ı nı̨we (harvesting a wide variety of country foods), including fish, moose, beaver, muskrat, small game, game birds, and berries during specific times of the year and depending upon what is most abundant" (Délı̨nę Ɂekwę́ Working Group, 2015). In Délı̨nę and other Indigenous communities, European contact and colonization had significant impacts on the local economy and food system. While many of these impacts were harmful, the traditional way of life of Dene people has always "evolved to adapt to the various impacts it has encountered…. the development of the mixed economy is a prime example of such innovation" (Harnum et al., 2014, p. 56).

Mixed economies are not simply in transition from traditional economies to market economies. Rather, the mixed economy is an innovation based on the two systems which are intricately bound in many Indigenous communities and support each other in a variety of ways (Abele, 2009; Chabot, 2003; Harnum et al., 2014). For example, a study on the mixed economy in Délı̨nę found that the wage economy supports the traditional economy as money is needed for equipment and materials for hunting, trapping, fishing, gathering, and traditional crafts. It was also found that land-based skills are transferable to a number of natural resource jobs (Harnum et al., 2014).

The traditional economy is also relied on by the Sahtuót'ı̨ne Dene *(People of Great Bear Lake*) and other Indigenous peoples as a safety net. Even while participating in the wage

economy, the Dene way of life "has always been their safety net through times of boom and bust, which have come and gone numerous times in their homeland" (Harnum et al., 2014). This has been noted within the Indigenous food systems literature. For example, Pawloska-Mainville (2020) references Usher (Usher, 1982) in explaining the tangible reasons that Indigenous people rely on the Land:

> One is security. Native people have seen many economic boom and busts, and know that even in the best of times, they are the last hired, first fired and get the lowest paid jobs. Consequently, wage employment, even though people may want it, is not considered a permanent or secure source of livelihood. The land, on the other hand, provides exactly that anchor of security because, properly cared for, it will yield food forever.

This sense of relying on the Land as the true source of security was reinforced in Délįnę during the COVID-19 pandemic. As "all the false senses of security in the settlement [began] to fall away, many in the community [realized] what is truly important" (Bayha & Spring, 2020). While people around the world had to stay home to social distance and avoid contact with others, community members in Délįnę did so by going out on the Land. "It was instinct. The traditional way of life provides the ability to both survive and thrive on the Land. The complex and rich knowledge system holds all the information and skills needed to take care of the community including the physical, mental, emotional, and spiritual aspects" (Bayha & Spring, 2020). Overall, both the market and traditional economies play important roles in Délįnę, but the traditional way of life has the greatest potential for providing true security.

2.2.2 Food Security

Food security is one kind of security that traditional economies often contribute to. It is commonly defined as existing "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (*Rome Declaration on World Food Security*, 1996). Availability, access, stability, and utility are often referred to as the pillars of food security (EC - FAO Food Security Programme, 2008). Indigenous people consistently face elevated rates of food insecurity in Canada, particularly in northern regions (Council of Canadian Academies, 2014). For example, the 2011 Canadian Community Health Survey reported rates of food insecurity of 27.1% in households identified as Aboriginal, as compared to 11.5% in non-Aboriginal households (Tarasuk et al., 2013). This is in spite of the fact that Canada has a duty to respect, protect, and fulfil the right to food as a party to the International Covenant on Economic, Social and Cultural Rights and the Convention on the Rights of the Child. In addition, as a signatory of the United Nations Declaration on the Rights of Indigenous Peoples, Canada has affirmed the fundamental human rights of Indigenous people in relation to their particular historical and contemporary circumstances (De Schutter, 2012).

Within the food security literature, the importance of traditional foods has been recognized, often from a nutritional perspective. For example, the Council of Canadian Academies notes that the consumption of traditional food is associated with better health outcomes and higher levels of food security in northern communities (Council of Canadian Academies, 2014). The consumption of traditional food has also been found to be associated with lower intake of carbohydrates and fat, and higher intake of calcium, vitamin A, folate, and dietary fiber in a study on 16 Dene and Métis communities in the Northwest Territories

(Receveur et al., 1997). It has also been documented that traditional food is often shared, further contributing to community food security (Skinner et al., 2013).

The cultural importance of traditional foods and interconnected nature of Land, culture, and food has also been recognized and many agree that a broader or more holistic approach to food security is needed in the north. For example, Guyot et al. recognize that beyond simply contributing to food and nutrition security, the harvesting and consumption of traditional food is central to many northern Indigenous people's relationship to the Land and cultural identity (Guyot et al., 2006). Another study highlights the importance of food sharing as a cultural practice which creates social bonds through reciprocity (Abele, 2009). Due to these important factors, Power argues that standard food security definitions and assessment tools do not account properly for traditional food or food sharing and that a distinct conceptualization of the term is needed for Indigenous communities. Cultural food security is also proposed by Power as a distinct level of food security, beyond those of individual, household, and community (2008) and Spring et al. contend that a more a more holistic approach is needed to food system assessment in the north, with the health of the Land as the foundational element (Spring et al., 2019).

2.2.2.1 Causes of Food Insecurity

Food security is often measured using the Household Food Security Survey Module which generally consists of 18 questions relating to conditions and behaviours associated with food insecurity (Health Canada, 2010; Willows et al., 2009). As the survey specifies lack of money or the inability to afford food as the reason for the conditions and behaviours, food insecurity is closely linked to household poverty. The United Nations Report of the Special Rapporteur on the right to food, De Schutter cites the "long history of political and economic

marginalization" as a reason for the high levels of poverty and low access to adequate food that Indigenous peoples in Canada face relative to the general population (De Schutter, 2012). Along with higher rates of poverty, food prices are elevated in the north. While this can partly be attributed to high transportation costs, it is also due to the fact that there is limited retail competition, leading to an oligopoly market (Skinner et al., 2016). Although there is a federally run food subsidy program which is meant to improve food security in the north, Nutrition North Canada, it has been described as a band-aid solution that does not address the source of food insecurity which is rooted in colonialism (Burnett et al., 2015).

Poverty and high food prices in the North have received much attention. However, the importance of traditional foods, and the culture and traditions around them, are often overlooked or not properly accounted for within food security metrics and literature (Spring et al., 2019). Traditionally, the knowledge and skills needed to harvest land foods were passed down by families through the generations. This knowledge system has been severely impacted by colonization, however.

> The colonial powers attacked virtually every aspect of our knowledge systems during the most violent periods of the past five centuries by rendering our spirituality and ceremonial life illegal, attempting to assimilate our children and destroy our languages through the residential school system, outlawing traditional governance, and destroying the lands and waters to which we [belong] intrinsically (Simpson, 2004)

The forced placement of children in residential schools and other acts of colonialism have greatly impacted younger generations' ability to harvest traditional foods and their ability to pass

traditional harvesting knowledge on to their own children (Morrison, 2020). The imposition of the formal Western education system has also diminished the role of Elders and other family members, as children spend more time away from their families, further impacting traditional knowledge transfer (Harnum et al., 2014, p. 74). As a result, there is a decrease in traditional harvesting skills and knowledge among younger generations which is of great concern to communities and has been noted in the food systems literature (Kuhnlein & Receveur, 1996; Receveur et al., 1997).

While historical acts of colonialism have shaped northern food systems and restricted access to traditional foods, current colonial policies also have significant impacts. For example, resource development and mining projects have detrimental effects on the Land, which in turn has significant impacts on food access, as the health of the Land is central to northern food systems (Spring et al., 2019). For example, resource development projects have been linked to the decline of the Bathurst caribou population due to the degradation and fragmentation of habitat (Parlee et al., 2018). Despite this, management policies have focused on restricting subsistence harvesting rather than on limiting resource development (Parlee et al., 2018). The resulting policies that ignore the evidence and place the blame on subsistence harvesting undermine communities' traditional management systems and food sovereignty (Parlee et al., 2018).

Another challenge to food security in the mixed economy is that rigid schedules, typical of the wage economy, do not allow for the time or flexibility needed to harvest out on the Land. In fact, when the COVID-19 pandemic began, the shutting down of workplaces actually provided opportunities for some community members in Délı̨nę to reconnect with traditional

harvesting practices as the pressures of the formal economy were temporarily relieved (Bayha & Spring, 2020).

The pandemic also revealed vulnerabilities in Délįnę, however, and the barriers that some community members face in accessing Dene béré *(Land food)*. Those who did not have the equipment or knowledge and skills to go out on the Land had to remain in town and were more vulnerable to COVID-19 (Bayha & Spring, 2020). This situation demonstrated that more resources and programming are needed for youth to re-connect with Dene culture, language, and spirituality and maintain the traditional harvesting skills and knowledge that provide security in difficult times (Bayha & Spring, 2020).

The security provided by intimate knowledge of the Land is becoming increasingly important in light of climate change, which further impacts food security. The impacts of climate change on northern food systems have been found to significantly impact all the pillars of food security, often relating to harvesting of traditional foods (Ford et al., 2006; Wesche et al., 2016). These impacts include greater weather variability making conditions difficult to predict, increasing safety risks, warmer temperatures impacting food storage and preparation, and changes in the environment impacting the availability of species, timing of migration, and health of food species (Ford et al., 2006; Guyot et al., 2006; Spring et al., 2018). Traditional knowledge which was developed in the past, and has not been adapted as much over the past few decades, is becoming less relevant in a quickly changing environment (Ford et al., 2006). The market economy in Délįnę is also impacted by climate change, particularly due to the community's reliance on the winter road. The Délįnę access road is open from January 15-March 31 on average (Government of Northwest Territories, 2020). Community members rely on the winter

road to drive south and stock up on dry goods and groceries at lower costs (Young & Di Battista, 2019b). With warming temperatures and less reliable weather patterns, however, there is great concern over the decreasing reliability of winter roads. In 2019 warm temperatures caused many vehicles to be stuck on the road for hours and for the road to be closed weeks early (Lee, 2019; Young & Di Battista, 2019b). Dél̨ı̨nę is one of many northern Indigenous communities that are serviced by winter roads and feeling the effects of climate change on local food systems. To adapt to climate change, culture and connection to Land are key. Traditional knowledge and building social connections, including between Elders and youth, to improve the transfer of this knowledge, have been found to facilitate adaptation to climate change (Ford et al., 2006; Spring et al., 2018).

2.2.3 Food Sovereignty

The concept of food sovereignty goes beyond the concept of food security by explicitly considering the cultural, political, and environmental aspects of food systems, as well as the people and power dynamics involved (T. Martens et al., 2016). The recognized need for food sovereignty grew out of the work of La Via Campesina, an international peasants' movement. Food sovereignty is commonly defined as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agricultural systems". The Declaration of Nyéléni, in which it was formally defined, emphasized the rights of locals, rather than markets and corporations, to define food systems, as well as the rights of the next generation (Nyéléni Steering Committee, 2007).

While understandings of food sovereignty and food security are continuously evolving, the two concepts are described by some scholars as being completely at odds and by others as

having the potential to be complementary (Blay-Palmer et al., 2014; Jarosz, 2014). In particular, food security is seen by some scholars as "embedded in dominant technocratic, neoliberal development discourses" (Jarosz, 2014) which favour large scale agri-business and governments and focus on increased supply. In contrast, food sovereignty can be seen as necessary precisely because of "the global method of development that includes modern-day industrial agriculture, which has destroyed and continues to destroy Indigenous homelands and ways of life" and is also at the heart of climate change (Settee, 2020). In some contexts, however, food sovereignty can also be seen as a means to food security (Levi, 2020). In addition, there are many approaches to food security which do not reinforce neoliberalism and there are many spaces in which the concepts represent similar values and contribute to food system transformation in complementary ways (Blay-Palmer et al., 2014).

2.2.3.1 Indigenous Food Sovereignty

The concept of food sovereignty is relevant to many Indigenous communities. However, Pawlowska-Mainville contends that although La Via Campesina's concept of food sovereignty can help bring First Nations communities forward and the pillars of food sovereignty are embodied by Indigenous harvesting systems:

> …they are not sufficient in meeting the local needs of numerous Indigenous hunters, trappers, and harvesters in the boreal… The agrarian emphasis on growing food, be it through greenhouses, gardens, or raising livestock, applied to northern communities is bound by agro-centric understandings of what it means to produce food. This understanding implies that *aki* (land and living things on it) requires transformation in order to create edible products… because the

> harvesting mode of production is often viewed as a form of merely *taking from* the land rather than *working with* the land, boreal forest Indigenous communities tend to be omitted from the global understandings of food "production" (Pawlowska-Mainville, 2020)

As such, understandings of Indigenous food sovereignty, better suited to diverse food systems which include hunting, fishing, and gathering as primary food sources, have emerged.

Most simply, Indigenous food sovereignty can be defined as "Indigenous people having access to and control over their traditional and cultural food" (Settee, 2020). This seemingly simple concept can hold great significance. For example, Dawn Morrison refers to Indigenous food sovereignty as "one of the most basic yet profound ways in which we express Indigeneity" and sees it as "a deeply meaningful strategy for remembering our original instructions encoded within our kin-centric relationships to the land, water, people, plants, and animals that provide us with our food" (2020). Indigenous food sovereignty has similarly been referred to as a practice of resurgence which "encourages actions, discourses, and dialogues related to the cultural restoration and land rights of Indigenous Peoples" (Kamal & Ithinto Mechisowin Program Committee, 2020). It is also seen as having the potential "to combat colonization of Indigenous food systems" and restore a non-capitalistic relationship between humans and other species (Kamal & Ithinto Mechisowin Program Committee, 2020). The holistic and relational nature of Indigenous food sovereignty gives it greater potential to contribute to climate change mitigation and adaptation than approaches based solely in food security usually offer.

It has also been argued that biomedical understandings of food and nutritional health, in which food security is typically based, reproduce settler colonialism. Counter-narratives based

on Indigenous foodways are therefore needed in order to address food insecurity and promote Indigenous food sovereignty (Dawson et al., 2020). Emerging understandings of Indigenous food sovereignty create the space for these counter narratives which often centre on themes such as Land, culture, and relationality rather than nutrients and individual behaviour. While varying and context specific understandings of Indigenous food sovereignty exist, I will draw on Morrison's four guiding principles of Indigenous Food Sovereignty: Sacred Gift of Food, Participatory, Self-Determination, and Policy. These principles were proposed by Morrison based on 10 years' worth of conversations with Indigenous peoples across Canada and can also be applied in context specific ways (Morrison, 2020).

In discussing the first principle, Sacred Gift of Food, Morrison describes Indigenous food sovereignty as "a gift from the ultimate life force (Creator/Great Spirit)" and as being "guided by the higher intelligence of nature, which transfers regenerative life-giving energy through the forests, fields, and waterways" (Morrison, 2020). This principle also encompasses "our sacred responsibilities and relationships to one another and the land" (Morrison, 2020). The second principle, Participatory, describes how daily, active participation in Indigenous food practices is essential to Indigenous food sovereignty (Morrison, 2020). Self-Determination is described as occurring at different scales but includes everyone being "self-reliant in their ability to respond to their own needs for food" since self-reliance allows people to "be free to give to the collective health and well-being of the larger whole of the tribe or community" (Morrison, 2020). Morrison also relates this principle to the context of global food systems, in which self-determination is seen as possible through a "co-operative economy that cross-fertilizes subsistence with small-scale, market-based values, where the community works together to be free from corporate control and oppressive land, water, and social policies and practices" (Morrison, 2020). The final

principle is Policy because although earth-based practices are seen as the foundation of Indigenous food sovereignty, the current reality is that these practices are greatly affected by colonial policies and "Indigenous food sovereignty requires a balanced approach to addressing underlying structural issues and inequality in privilege and power in the policy, planning, and governance of our ancestral homelands, where we hunt, fish, farm, and gather our foods" (Morrison, 2020).

Governance and policy impact access to traditional foods in the Northwest Territories in many ways. In the Northwest Territories, the various levels of government and their interactions can make this particularly challenging since, as explained by Johnston and Andrée, the area can be considered to be both heavily and lightly governed:

> It is heavily governed by many layers of jurisdictional interest in the North, from municipal, territorial, and federal governments to several Comprehensive Land Claim Agreements (between the federal and territorial governments and Indigenous peoples) that define Indigenous self-government and co-management of resources in parts of NWT. It is lightly governed by virtue of the fact that only 40,000 people live on a territory ten times the size of England, and that devolution of governmental responsibilities of the NWT from federal to the territorial elected assembly only started in 1967, with the final devolution occurring in 2013. As a result of the above factors, governance bodies responsible for managing resources and people, including the territories' food systems, have limited capacity and are "light" on the ground (Andrée & Johnston, 2019)

This may be particularly true in Délı̨nę, the first community in the Northwest Territories to establish self-government at the community level. Délı̨nę's self-government, the Délı̨nę Got'ı̨nę Government (DGG), began operating in 2016 after around 20 years of negotiating an agreement with the Governments of Canada and the Northwest Territories (Délı̨nę Got'ine Government, n.d.; *Délı̨nę Final Self-Government Agreement*, 2015). The establishment of the DGG helped to restore the community's self-determination. At the same time, there are many challenges the DGG faces due to the many overlapping levels of government at play in Délı̨nę.

The establishment of the DGG is also one of many steps the community has taken to help protect the Land, Great Bear Lake, and their way of life. Ensuring that the environment is protected and that it continues to be possible to harvest Dene béré *(Land food)* is of great importance to the Sahtuót'ı̨ne Dene *(People of Great Bear Lake)* (Harnum et al., 2014). As restoring and passing on Dene culture, language, and spirituality to the younger generations is an essential aspect of this work, the DGG recently created a new department dedicated these themes. The Director of the Dene Ts'ı̨lı̨ Dahk'ə *(Department of Culture, Language, and Spirituality)* works closely with the youth in the community and was involved with the creation of the Tsá Tué Youth Council.

The community has also worked to create policy plans such as the 'Water Heart Plan' to protect Great Bear Lake and the 'Caribou for All Time' management plan (Délı̨nę ʔekwę́ Working Group, 2015; Great Bear Lake Working Group, 2005). Additionally, in 2016 the community achieved a United Nations Educational, Scientific and Cultural Organization (UNESCO) Biosphere Reserve designation for Great Bear Lake and part of its watershed, the Tsá Tué Biosphere Reserve. The Tsá Tué Biosphere Reserve is the largest of Canada's 18

UNECSO Biosphere Reserves and the only one in the world fully managed by Indigenous people (Gignac, 2020). Presently, Déljnę is working towards establishing Great Bear Lake as an Indigenous Protected and Conserved Area (IPCA). IPCAs are areas that Indigenous peoples have a strong cultural connection to, have asserted their rights and responsibilities to through a leading role in its management, and where environmental protection is an implicit or explicit goal (Tran et al., 2020). IPCAs are often an approach for reclaiming traditional management practices and "are one way that Indigenous Peoples are taking steps to assert their self-determination and responsibilities to lands and waters, even within colonial legacies" (Tran et al., 2020). For Déljnę, working toward the establishment of an IPCA is one of many approaches being taken to protect Great Bear Lake which is an essential aspect of food sovereignty.

Déljnę is also working towards establishing a Guardians program, which is another emerging strategy for Indigenous nations to protect the Land, and often tied to IPCAs. Guardians programs have been described as "essentially our moccasins and mukluks on the land. They are the people who are there to watch and care for the land, in a formal way through an actual job" (Kakfwi et al., 2018). Guardians programs have also been described as "a modern take on an ancient tradition of caring for the land" (Indigenous Leadership Initiative, n.d.-a). There are currently at least 30 Guardians programs in Canada which are diverse and reflect the laws, culture, and history of the nations and communities they are established by (Reed et al., 2020, p. 181). In the Dehcho region of the Northwest Territories, for example, Guardians activities include patrolling protected areas, monitoring fish and wildlife harvests, collecting data on climate change, monitoring industrial development, and educating visitors (Dehcho First Nations et al., 2016). Other roles of Guardians can include creating land-use plans, engaging with other land users, industry, and governments, and connecting youth with Elders (Indigenous Leadership

Initiative, n.d.-b). The Dél̨ı̨nę Got'ı̨nę Government is working towards creating a Guardians program within the community, as part of their work to protect Great Bear Lake and its watershed. The 2019 youth canoe trip was a part of the preliminary training for youth interested in becoming Guardians (Young & Di Battista, 2019b).

Chief Marilyn Slett, Chief Councillor of the Heiltsuk Tribal Council, highlights how Guardians programs not only "contribute to conservation and stewardship, they also form the basis of a new approach to economic development—one that places Indigenous values front and centre." (Durkan, 2021) An analysis of the value of Guardians programs in the Northwest Territories, which focused on the Guardians program in Lutsel K'e and the Dehcho region, found that for every $1 invested there was $2.5 worth of social, economic, cultural, and environmental value created for stakeholders (Social Ventures Australia Consulting, 2016). The benefits found included contributions to biodiversity conservation and climate change adaptation and opportunities for Dene people to build connection to their culture and the Land through meaningful employment that values traditional knowledge and pays them "to be Dene, to be who they are" (Social Ventures Australia Consulting, 2016). Other benefits of Guardians programs include addressing intergenerational trauma, language and culture revitalization, and improving health outcomes (Reed et al., 2021).

Stephen Kakfwi, a senior advisor with the Indigenous Leadership Initiative, describes the Guardians program as an on-the-Land program with more permanence that will provide opportunities not only to "reconnect with the land but to watch over it using the latest technologies as well as the traditional knowledge of our people. To know this land the way we should and have done for the last thousands of years**"** (Kakfwi et al., p. 24). This bringing

together of traditional knowledge and Western science and technology shows how Guardians programs embody the concept of Two-Eyed Seeing. This can support various levels of Government in learning how to combine traditional knowledge and Western scientific knowledge to allow "for a stronger and more comprehensive knowledge base with which to make decisions" (Dehcho First Nations et al., 2016). For youth, learning both traditional knowledge and Western science can help them succeed not only as Guardians but in many professions (Indigenous Leadership Initiative, n.d.-a).

In this way, and others, empowering young people is an important aspect of Guardians programs. They make it possible for Indigenous youth to spend time on the Land "and help instill a sense of purpose and leadership. Becoming a guardian strengthens young people's pride in their culture" (Indigenous Leadership Initiative, n.d.-a). These programs also help to restore intergenerational knowledge transfer and secure Indigenous ways of life for future generations (Social Ventures Australia Consulting, 2016). Sending youth out on the Land also gives them opportunities for healing (Kakfwi et al., 2018). However, there are many barriers which prevent youth from being involved in opportunities such as Guardians programs.

2.3 Youth Engagement

Youth engagement is a broad term but generally refers to the "meaningful and sustained involvement of a young person in an activity focusing outside the self" (The Centre of Excellence for Youth Engagement, 2007). Youth engagement is known to be a protective factor associated with many positive outcomes such as higher graduation rates and improved health (Crooks et al., 2010). Youth engagement should not simply be thought of as providing programs

for youth but rather as “an attitude of having respect for and including young people in decisions that affect their lives” (Formsma, 2013).

The involvement of youth in protecting the Land, food sovereignty, and climate change mitigation and adaptation is critical. Younger generations will be most affected by climate change in their lifetimes and Indigenous youth play a crucial role in the restoration of intergenerational knowledge transfer, including traditional harvesting practices. Although there is a recognized need for meaningful youth engagement in policy and program design, cultural revival, and climate change adaptation (Liebenberg et al., 2017; Lines et al., 2019; MacDonald et al., 2013), youth voices are often left out of decision-making processes. For example, in Northern Canada the role of Indigenous youth in governance is not well understood, and it is sometimes assumed that youth have little to offer to climate change and land management discussions (MacKay et al., 2020). In addition, the intergenerational impacts of colonial violence and current colonial policies and structures create many challenges for youth in participating in programming, governance, and policy. Among these challenges is that of living “between two worlds”: Indigenous and Western. Youth councils are one avenue through which youth can be involved in decision making processes and engage with other youth.

2.3.1 Youth Voice

Since youth are often left out of decision-making processes, their voices and opinions are often left unheard. This can contribute to stereotyping of Indigenous youth and other minorities since the public and media only see “the plight of Indigenous young people, but not the strength and determination they have in trying to create a better community for themselves, their peers and, oftentimes, their children” (Formsma, 2013). In many Indigenous communities “youth were

traditionally called on as leaders to voice opinions in decision making, act as role models to increase positive outcomes for the next generation, shelter responsibilities for the community, and act on behalf of the community" (Lines et al., 2019). These traditional roles have been impacted by residential schools, other acts of colonialism, and ongoing colonial policies, however. Déljnę Elder Alfred Taniton explains that "since the modern school came, there's a separation from our young people. Separation from our way of life. And the government makes the rules, so it's a burden on us and on our Elders and our youth..." (Harnum et al., 2014). Due to the rapid changes that have been imposed on Northern Indigenous communities, some adults feel "uncertain about how to support youth in becoming successful and responsible men and women in a modern context" (Wexler et al., 2014). Given this separation between older and younger generations, and the fact that youth now spend more of their time with peers due to the imposed school system, peer to peer support and youth leadership are extremely important.

There are many examples of support and leadership by Indigenous youth. In one suicide prevention project in Manitoba, for example, a youth-for-youth leadership model was found to be effective in providing "the strength to overcome barriers" and as "a way to implement the changes the youth identified as needed. The youth worked on many levels simultaneously to achieve the goals, engaging with key stakeholders, leadership and government agencies, and advocating for what the youth wanted" (Sinclair et al., 2011). During the establishment of this project, some adults "were reluctant to have the heavy burden of suicide prevention placed on young shoulders" (Sinclair et al., 2011). However, others recognized that "the youth already felt the burden, and that they needed to take action to help their brothers and sisters" (Sinclair et al., 2011). Youth already play important roles in each other's lives and can be important leaders and sources of support for each other. Learning how other Indigenous youth are creating change in

their communities can also be important in helping to inspire young leaders. Social media can be an important tool in doing so as it provides opportunities for youth "to be able to access information, reach out to other youth, and share their voices and organize themselves in different ways" (Formsma, 2013).

2.3.2 Youth Councils

Governance structures and policies imposed by the Canadian state have significant impacts on the ways in which youth can participate in their culture and in decision-making processes. Youth councils are one strategy that can be used to increase youth participation. Many national Indigenous political organizations have youth councils, for example (Formsma, 2013). Youth councils can take different forms but are often advisory councils where youth provide consultation and represent youth voices (Camino & Zeldin, 2002). In other cases, however, youth may have the same rights and responsibilities as adults withing governance structures, including full voting rights. For example, some municipal governments have youth councils or boards which decide how to distribute youth development program budgets (Camino & Zeldin, 2002). Youth councils can create space for exchanges of "giving advice and direction and receiving knowledge and experience" between youth and adults (Formsma, 2013). Roles on youth councils are usually voluntary positions, however, which can require a lot of work and time from youth, as well as carry high expectations (Formsma, 2013). Participating on youth councils may take time and energy away from other responsibilities such as school or paid jobs (Formsma, 2013).

2.3.3 Youth Participation

Time and energy constraints are one of the challenges to youth participation (Crooks et al., 2010; Formsma, 2013). It has been found that youth are “well-aware of the benefits and constraints to participation”, or what some refer to as “hidden costs” (Switzer, 2020). These costs can include taking time and energy away from other commitments as well as “feeling uncomfortable when discussing certain topics, negative impacts on mental health, or breaches in confidentiality”, which at times are due to the power dynamics between participants, program staff, and researchers (Switzer, 2020). As these costs are rarely acknowledged, the burden of finding ways to get their needs met is left to youth (Switzer, 2020). Framing young people who choose not to participate in programming as agentic individuals “who come to projects with a sophisticated understanding of calculated risks", rather than as deviant, can create opportunities to generate new questions about the constraints to participation and the desires of youth (Switzer, 2020).

A study on youth civic engagement found that three defining qualities of successful youth engagement are ownership, youth-adult partnership, and facilitative policies and structures (Camino & Zeldin, 2002). Ownership refers to youth owning “the assets with which they work, and the fruits of their success or failure in solving the collective problems they face” (Camino & Zeldin, 2002). In terms of youth-adult partnership it was found that “youth want and expect certain types of support. These include coaching, dialoguing, and connections to institutional resources and community leaders… Adults look to youth to provide legitimacy, “on the ground” knowledge and perspective, and cause-based passion” (Camino & Zeldin, 2002). The availability of adult support and role models can be a challenge in Indigenous communities, however, as

adults who make strong role models are often "already very busy within their own organizations or family life and committing additional time for volunteer work is often a challenge" (Crooks et al., 2010). Facilitative policies and structure are also key as "pathways for youth civic engagement are often transient and difficult to sustain at the local level. Typical problems include lack of financial resources, staff turnover, youth burnout, well-meaning adults who control or co-opt the agenda, and poor group chemistry" (Camino & Zeldin, 2002).

2.3.3.1 Living in "Two Worlds"

> My generation, we were all born in tents, so our connection to the Land is very real and very intense. And it was pure luxury to live on the Land the way we did. Today, we live in a world that is so different from the world we grew up in and I think that we owe it to the new generation coming, to grow up in the luxury we grew up in (*Striking Balance - Tsa Tue Biosphere Reserve*, n.d.).

This quote from Dëlįnę Elder Fibbie Tattie, in a documentary film on the Tsá Tué Biosphere Reserve, summarizes how today's youth in Dëlįnę are growing up under circumstances that are "radically divergent" (Trout et al., 2018) from the previous two generations and as a result face some unique challenges. It was found in an Inupiaq Alaskan community that youth are pushed by the dominant socio-political system to succeed in Western institutions and participate in wage labour while simultaneously being asked by their Elders to carry on their culture, be good hunters, and "to ''be'' Inupiaq—in a world that no longer allows for the full expression of what that has historically meant" (Trout, Wexler, et al., 2018). The youth have a strong desire to connect to their culture but also experience these conflicting pressures as a huge challenge (Trout et al., 2018). Youth "often feel stuck between two worlds,

not belonging to either" (Sinclair et al., 2011). Despite these challenges, youth in the Sahtú have expressed a strong desire to learn traditional skills and knowledge, and reconnect to the Elders and the Land (Harnum et al., 2014). As discussed, during the COVID-19 pandemic, it became clear just how important it is to do so for security and wellbeing as well as cultural continuity. It also became clear, however, that more resources and training are needed to help the youth "to strengthen and preserve the way of being as Dene and remember again how to walk in the footsteps of grandfathers and grandmothers" (Bayha & Spring, 2020).

One reason that youth need more support is that they often must give up opportunities to develop skills in one "world", to develop them in the other (Trout et al., 2018, p. 11). For example, youth in northern communities often must leave home and give up opportunities to be with Elders and on the Land if they want to pursue post-secondary education. This also means giving up opportunities to hear and speak Dene kədǝ́. Language skills are particularly important to the continuity of cultures and worldviews as language is the "dwelling place of ideas that do not exist anywhere else. It is a prism through which to see the world" (Wall Kimmerer, 2016, p.258). There is often a language barrier between Indigenous youth, many of whom grow up primarily speaking English, and Elders, some of whom only speak their traditional language. This language barrier restricts intergenerational knowledge transfer and youth's access to the worldviews, wisdom and support of their Elders (Trout, Wexler, et al., 2018). As shown by the language barrier, these two worlds "have come to exist—quite literally, within the same house" and "these worlds must now be navigated independently, or else reconciled in some hoped for but hard to achieve way" (Trout, Wexler, et al., 2018). The pressure to succeed in both these worlds has been described as a double bind for today's youth, the resolution of which "may be

an important event distinct from how precisely it is resolved—though the ‘‘how’’ remains a question of deep social and moral significance” (Trout et al., 2018).

It is common for Indigenous and Western culture and ways of life to be described using this framing of distinct and dichotomized worlds, with Indigenous people framed as “‘living between two worlds’ or ‘caught between two worlds’ and even ‘suspended between two worlds’” (Bomberry, 2013; McCoy, 2009; Trout, Wexler, et al., 2018). Speaking to the Australian context, McCoy acknowledges that there are distinct social values at the hearts of Indigenous and Western cultures and significant cultural differences, but also contends “that there is not always great separation between the two” as “Indigenous and settler societies have each changed over their centuries of contact with one another” (McCoy, 2009, p. 21). McCoy suggests that the framing of Indigenous people as being “between” two worlds, by non-Indigenous people, can portray underlying ideas of assimilation and the assumption that Indigenous peoples should become part of mainstream Western society but have failed to fully do so (McCoy, 2009). The dichotomization of Indigenous and Western culture can also frame culture as fixed and static. While it seems to be widely accepted that mainstream culture changes and adapts over time (often through the appropriation of other cultures) “Indigenous culture can be perceived as only having integrity when it lives in some idealized and ancient past. In this understanding, culture cannot change” (McCoy, 2009).

While these points are important to consider, many Indigenous people also use the language of two worlds and of making the best of both worlds. It is a common theme in creative writing by Indigenous youth, demonstrating the relevance of this concept to the identity of these youth (Lisk, 2018; McArthur, 2016; Sault-Hartwick, 2019; Sidarous, 2019; Smoke, 2019).

Identity formation is influenced by individuals' understandings of what it means to carry given identities such as White or Indigenous and for some Indigenous youth, "images of the "noble savage" or the "drunk Indian" make it hard for them to construct salient identities within the larger society without a strong sense of their group history" (Wexler, 2009). While Indigenous adults and Elders often view historical events and experiences as the root causes of the health and social problems currently faced by communities, Indigenous youth are more likely to see these challenges as results of "personal and collective failure, rather than emerging from historical trauma and ongoing colonization. This is perhaps because contemporary oppression is ambiguous, embedded in the everyday structures", often making it invisible (Sinclair et al., 2011; Wexler, 2009). Therefore, a strong cultural identity and understanding of their community's history, also referred to as social and historical consciousness, may be especially important for Indigenous youth as they search for a resolution of the double-bind (Wexler, 2009).

As there is little academic research that explores this topic or shares the perspectives of Indigenous youth, I turned to creative writing by Indigenous youth to further my understanding of it. Many of the top placing stories in the *Indigenous Arts & Stories* creative writing competition related to this theme. These stories demonstrate how Indigenous youth are finding unique and creative ways to share their voices.

Through these short stories, youth speak to the pressure they face and how "being native in these modern times means new things. It means that we must live in two worlds; a native world and a non-native world**.** The native world is one of cultural revitalization, where we feel a pressure so strong to help keep our cultures alive that it approaches a life or death desperation.

The non-native world, where we must get an education and have good, high-paying jobs to make money in order survive, is becoming necessary" (Smoke, 2019).

They also speak to the challenge of having to give up one kind of education to gain the other. Sidarous writes from the voice of an Indigenous youth speaking to a cousin who left home to go to school: "You say you're learnin' so much, yet you don't even know how to speak Mi'kmaw! It's okay though, we're all loosin' the language down here too… we dunno really how to speak English either. Nobody really knows how down here, so we supposed to learn? I bet they taught you though… (Sidarous, 2019).

Another writer describes the shame that accompanies these conflicting and impossible to meet expectations: "I have felt much shame from myself and others about not knowing my culture to a high degree that is expected of me. I know others feel the same shame because it always feels like we have so much to do to save our culture, and we only have constant reminders that we're not doing enough… We have so much to learn, but we shame others for not knowing things they "should know"… And the same shame is reflected towards people who know their culture because they are shamed for not pursuing education" (Smoke, 2019).

Lisk speaks to the frustration and anger they feel at the judgement they face from society and the irony of this judgement. "I wrote invisible indian out of frustration of the balancing act that all Indigenous people seem to have to do between recovering what their family has lost while incurring the judgement of greater society for not knowing, not being enough, not looking enough of the part… The double edged sword of them taking everything from my family and then scoffing at us for what we don't have now. I will not settle for being what they dreamed of. I will be what my ancestors dreamed of" (Lisk, 2018).

Through these stories the youth also identified pathways forward. “Even under that pressure, we must learn to help and encourage the positives in one another so that we are a proud people again. Shame will never be helpful to us… Whether someone is just learning their culture, or has lived their life immersed in it, we must encourage them” (Smoke, 2019). In another example, McArthur writes “we must educate the world and ourselves about what it means to be Indigenous, not fifty years ago, not one-hundred years ago, but what an Indigenous person is today. What our depth, intellect, and resiliency looks like” (McArthur, 2016).

2.4 Chapter Conclusion

While re-establishing intergenerational knowledge transfer to today’s youth is an essential aspect of food sovereignty in Dél̨ı̨nę and around the world, it is challenging for many youth, in part due to the double bind of Western and Indigenous ways of life being dichotomized and youth feeling great pressure to succeed in both worlds at once (Trout et al., 2018). While the importance of youth re-connecting with culture and traditional knowledge is recognized, little research has been done on the double bind identified by Trout et al. Examples of how young people are navigating this challenge are needed (Trout, Wexler, et al., 2018). The literature specific to the role of youth in Indigenous food sovereignty in general is also sparse. This research will aim to expand the body of literature on youth engagement in Indigenous food sovereignty and the challenge of walking in two worlds.

3 METHODOLOGY AND METHODS

"… research is ceremony. And so is life. Everything that we do shares in the ongoing creation of our universe" (Wilson, 2008, p.138).

In this chapter I outline the theoretical approach, methodology, and methods used in this research. The basis of my theoretical approach is an Indigenist research paradigm which draws on Indigenous ontology, epistemology, and values. To inform my understanding of an Indigenist research paradigm, I draw on desire-based inquiry and settler-colonial theory. In addition to summarizing the literature on each of these, I explain how I apply them to my research, including my limitations in doing so. In the methodology section I discuss the theory and application of Community Based Participatory Action Research (CBPAR). Finally, I describe the methods used within these approaches, which consisted of community engagement and observations, secondary data analysis, interviews, and reflexivity.

3.1 Theoretical Approach

In conducting this research I applied an Indigenist research paradigm which was informed by settler colonial theory and Eve Tuck's conceptualization of desire-based inquiry (Tuck, 2009). The methodological approach was grounded in community-based participatory action research (CBPAR). To apply CBPAR within an Indigenist research paradigm I also drew on the concept of Two-Eyed Seeing. I will detail these contributions to my theoretical approach in the following sections.

3.1.1 Indigenist Research Paradigm

Cree scholar Shawn Wilson describes a research paradigm as the value laden principles, beliefs, and assumptions about reality that make up the framework of a research project (2008). While acknowledging my limitations in understanding Indigenous research paradigms, I draw largely on Wilson's *Research Is Ceremony: Indigenous Research Methods* (2008) in framing this research. Within Indigenous worldviews, reality and knowledge are both seen as sets of relationships. Wilson describes how Indigenous ontology (theory of the nature of reality) and epistemology (theory of the nature of knowledge) are then equivalent, elaborating to describe how these include relationships "with the cosmos around us, as well as with concepts. They thus include interpersonal, intrapersonal, environmental and spiritual relationships, and relationships with ideas" (Wilson, 2008, p.74). Within Indigenous research paradigm the axiology (aims and values) and methodology of a project are then based on accountability to those relationships and building further relationships (Wilson, 2008).

Included within the concept of accountability is the understanding that researchers build and influence relationships between communities and the concepts being researched. In addition to being accountable to themselves, the communities they work with, and the environment, researchers must form respectful relationships to the ideas and concepts they research, as their relationships to concepts are more important than the concepts themselves (Wilson, 2007, 2008). One aspect of forming respectful relationships to concepts is focusing on the positive. Wilson describes learning from Elders "that focusing on the positive in Indigenous research focuses on harmony. It forms a relationship that pulls things together… Making a connection in this way

allows for growth and positive change to take place" (2008, p.109). This is in contrast with research that focuses on revealing or quantifying problems, such as rates of food insecurity.

Some common research paradigms in social science, such as critical theory and constructivism, have similarities to Indigenous research paradigms. However, Wilson highlights how all the dominant paradigms in social science research are based on a common assumption that knowledge is individual in nature. This contrasts with the Indigenous view "where knowledge is seen as belonging to the cosmos of which we are a part and where researchers are only the interpreters of this knowledge" (Wilson, 2008, p.38). Indigenous scholars have questioned "whether, in fact, it is even possible for dominant system researchers to understand this concept [of relationality] with the depth that is required for respectful research with Indigenous peoples" (2008). *Research is Ceremony* was written with Indigenous scholars as the main intended audience, and to substantiate Indigenous research and remove barriers to the use of Indigenous research paradigms and methodologies.

While Wilson does not speak to the use of an Indigenous research paradigm by non-Indigenous scholars in *Research is Ceremony,* they do address this question in previous work. Wilson differentiates between an *Indigenist* research paradigm and an *Indigenous* research paradigm, presenting the Indigenist paradigm as one that does not belong only to Indigenous people, but "can be used by anyone who chooses to follow its tenets" as it is "the choice to follow this paradigm, philosophy, or world view that makes research Indigenist, not the ethnic or racial identity of the researcher" (Wilson, 2007). Wilson compares this to how one "does not need to be female to be a feminist" (Wilson, 2007). Drawing on this description, I attempt to

learn from the Indigenous research paradigm presented by Wilson, which was written by and for Indigenous scholars, and apply my learnings through an *Indigenist* research paradigm.

My ability to understand Indigenous worldviews and apply an Indigenist research paradigm is limited by my understanding of this philosophy as I am a non-Indigenous person and have primarily been educated within Western worldviews. Despite these significant limitations, I felt that attempting to carry this project out within an Indigenist research paradigm would be beneficial and appropriate, as I believed that doing so could help ensure that the research I engaged in was respectful and beneficial to the community. I also believe that, for myself and other non-Indigenous people, attempting to learn about and understand Indigenous worldviews is a necessary step in repairing our relationships with Indigenous people and the Land.

For myself, and with regards to this specific project, applying an Indigenist research paradigm meant considering knowledge to be relational, and as such writing in the first person, prioritizing reading and citing Indigenous scholars and other Indigenous sources, and considering accountability to my relationships as the main priority and method of validation. I also followed many of the tenets of an Indigenist research paradigm described by Wilson including conducting research with kindness, honesty, and compassion, seeking to benefit the community, the research question being based in the reality of Indigenous experience, taking responsibility for the outcomes of research including transformation of all participants, and recognizing Indigenous cultures as living processes (Wilson, 2007). I must also acknowledge the tenets which I was unable to follow, which are grounding theories developed in an epistemology supported by the Elders of the community and working with a team of Indigenous scholars and with the guidance of Elders. While I had the honour of meeting and learning from some of the

Elders in Déljnę, I primarily worked with the youth throughout the research project. As will be later discussed, working remotely due to the COVID-19 pandemic for most of this project also limited my ability to consult with Elders or other community members in Déljnę.

It is important to acknowledge that the paradigm presented by Wilson is just one interpretation of an Indigenous research paradigm. While there are some common themes among descriptions of Indigenous research paradigms, such as relationality, there is variation as well. For example, some scholars place greater emphasis on the spiritual and sacred elements of Indigenous intellectual traditions, contending that "if the spiritual and sacred elements are surrendered, then there is little left of our philosophies that will make any sense" (Hart, 2010). Indigenous epistemology has also been described as follows:

> A fluid way of knowing derived from teachings transmitted from generation to generation by storytelling, where each story is alive with the nuances of the storyteller. It emerges from traditional languages emphasizing verbs, is garnered through dreams and visions, and is intuitive and introspective. Indigenous epistemology arises from the interconnections between the human world, the spirit, and inanimate entities (Hart, 2010, p. 8).

Descriptions such as these remind me to approach this work with humility as my interpretation of relationality is limited by the worldview I have been raised with. While I do believe I can learn from Indigenous worldviews, I also acknowledge that I will only ever scratch the surface in truly understanding them. In forming my understanding of an Indigenist research paradigm, I drew on the work and theories of Indigenous scholars. In particular, I drew on Eve

Tuck's descriptions of desire-based inquiry and on settler colonial theory in developing my approach.

3.1.2 Desire-Based Inquiry

As described in the previous section, Wilson describes focusing on the positive in order to strengthen relationships and build harmony, as an important aspect of Indigenous research paradigms (Wilson, 2008). In applying this concept, I drew on the literature on desire-based inquiry. The call for a focus on the positive among Indigenous scholars is often framed as a response to the tradition of deficit or damage-based research on Indigenous peoples. Unangax̂ scholar Eve Tuck explains how damaged-centered research approaches operate "from a theory of change that establishes harm or injury in order to achieve reparation" (Tuck, 2009). While this approach is often well intended and can draw attention to needs, "it also works its way into a classist agenda that disfavors poor and/or indigenous populations" (Kana'iaupuni, 2005). The view of Indigenous peoples as damaged "works its way into legal, policy, and service delivery arenas—and eventually, most devastatingly, into the psyche of our people" (Kana'iaupuni, 2005). In addition, these approaches often ignore the expertise within communities and reinforce paternalistic ideas of outside experts being needed to fix problems (Kana'iaupuni, 2005). While acknowledging that there was a time and place for this kind of research, Tuck questions not only the effectiveness of this approach in current times, but also whether the cost of Indigenous peoples thinking of themselves as damaged is worth the potential benefits (Tuck, 2009).

Even participatory research approaches, where communities are involved in the design of research projects, can perpetuate narratives of damage (Tuck & Yang, 2014). Although studies often involve "social and historical contexts at the outset, the significance of these contexts is

regularly submerged. Without the context of racism and colonization, all we're left with is the damage" (Tuck, 2009). I see this being very relevant to food systems literature, despite a move away from *explicitly* damage-centered approaches within the field. For example, from a Western knowledge perspective, poor nutrition and food insecurity are often framed as individual behavioural issues or as poverty issues. However, the significance of the social and historical contexts (including racism and colonization) which led to poor habits or conditions of poverty in Indigenous communities are often submerged. Literature which emphasizes the high rates of food insecurity in Indigenous communities (the damage) without being explicit about the colonial roots of this issue and also demonstrating the resilience, knowledge, and hope within communities, can continue to perpetuate the widespread and persistent stereotypes of Indigenous people and communities being lesser. This has been referred to as "much more politically tolerable racism" (Tuck & Yang, 2014).

Desire-based research, presented as an antidote to damaged-centered research, seeks to understand the "complexity, contradiction, and the self-determination of lived lives" (Tuck, 2009). This approach acknowledges and "accounts for the loss and despair, but also the hope, the visions, the wisdom" (Tuck, 2009) of individuals and communities. Tuck highlights how within social science people are often framed as either reproducing or resisting inequities. This binary can be seen as "underestimating the immense and totalizing power of systematic oppression on the one hand and the radical power of the human spirit and human agency on the other" (Tuck, 2009). Desire goes beyond this binary by acknowledging how all people "at different points in a single day, reproduce, resist, are complicit in, rage against, celebrate, throw up hands/fists/towels, and withdraw and participate in uneven social structures" (Tuck, 2009). A desire-based framework, therefore, takes a more nuanced look at agency, resistance, and "a

present that is enriched by both the past and the future" (Tuck & Yang, 2014). It is also important to note that desire-centered research is not about ignoring trauma or pain, but acknowledging the wisdom and experience gained from such experiences. This may be particularly important for research involving Indigenous youth, as they are more likely to internalize the challenges they face rather than see them as a result of trauma and colonization (Wexler, 2009).

> "…placing the high rates of violence, substance abuse, and poverty experienced by First Nations families into the appropriate context of colonization and assimilation policies… shifts the perceived deficits away from the individual and allows us to focus instead on the resilience many of these youth have demonstrated" (Crooks et al., 2010)

Desire-based research offers a way of building upon participatory approaches. This approach appealed to me as it offered a way to account for, and be explicit about, settler colonialism and racism and the harms they have caused, while also centering Indigenous experiences including agency, resistance, joy, hope, and wisdom. I attempted to apply this approach by focusing on the positive while also being explicit about the harm, attempting to look beyond binaries to the complexity and contradiction within all individuals and communities, and acknowledging the youth as the experts in the challenges they face. As with the Indigenist research paradigm, I am sure I have applied this approach imperfectly. Including agency, resistance, joy, hope, and wisdom feels absolutely necessary in writing about the community of Délı̨nę, however, and I hope that it is a step in the right direction.

3.1.3 Settler Colonial Theory

In seeking to be explicit about settler colonialism, as is called for within desire-based inquiry, I draw on understandings of it as "a persistent societal structure, not just an historical event or origin story for a nationstate" (Rowe & Tuck, 2017). This distinction is important as the pursuit of Land by settler society is ongoing but often made invisible or relegated to the past as:

> Scenes of dispossession instruct those in settler colonial nationstates to forget the persistent presence and value of Indigenous life, the imbrication of Indigenous life and land, and the persistent presence and value of Black geographic life. This instruction goes unnoticed for the most part, so that drawing attention to Indigenous life and land is presumed to be historical, and expressing that Black Lives Matter is presumed to be confrontational (Rowe and Tuck, 2017)

Thus, it is important to frame settler colonialism as a structure to emphasize that "its history does not stop—or, more to the point, become relatively trivial" (Wolfe, 2006). The pursuit of Land is the primary motivation of settler colonialism and drives the "logic of elimination" (Wolfe, 2006) or settler societies' need to eliminate Indigenous peoples by one means or another (Rowe & Tuck, 2017; Wolfe, 2006). Assimilation is one such strategy of elimination which has a variety of forms and is described by Wolfe as a kind of death; "have our settler world, but lose your Indigenous soul" (Wolfe, 2006). While attempts of assimilation were explicit during the era of residential schools, there has been a shift in the past few decades from the "active repression of indigeneity to its incorporation by recognition" (Veracini, 2011). The objective of this is not the true recognition of Indigenous sovereignty and autonomy but rather to

benefit the settler state by managing and neutralising the differences between Indigenous peoples and settler society (Veracini, 2011).

The logic of elimination and drive to legitimize settler claims to Land and resources "shapes settler imaginaries of Indigenous peoples… through numerous modes of social reproduction, settlercolonial states (re)produce pervasive racist discourses by constructing Indigenous peoples as vanishing, inferior, and less-than-human" (Sylvestre et al., 2018). Thus, within the settler colonial structure "'settler' is characterized by permanence and 'indigenous' by fragility" (Veracini, 2011, p. 6). Indigenous resistance and survival are seen as foundational to moving beyond settler colonialism, however "only when the original demand to disappear is at last abandoned can a post-settler condition supersede the need for indigenous survival… indigenous people must cease being and being understood as inherently vulnerable" (Veracini, 2011, p. 9).

I believe this understanding of settler colonialism is important to bear in mind in the context of this research. First, as touched upon in the section on desire-based approaches, research narratives often perpetuate the framing of Indigenous peoples as fragile or vulnerable. As this idea is deeply ingrained in many of us within settler colonial societies, I believe that actively working to avoid perpetuating it is essential. In addition, I believe that in discussing the themes of walking in two worlds or Two-Eyed Seeing, it is important to ensure that this is not done in a way that promotes assimilation or simply fitting Indigenous knowledge or ways of life into settler colonial structures. Rather, I aim to do so in a way that promotes Indigenous sovereignty and autonomy and promotes the reformation of settler colonial structures.

3.2 Methodology

3.2.1 Community Based Participatory Action Research

The methodological approach to this research is community-based participatory action research (CBPAR). CBPAR brings together participatory action research (PAR) and community-based participatory research (CBPR) approaches. While distinctions can be made between PAR and CBPR, they are based in similar values and both common approaches for working with Northern Indigenous communities and youth (Castleden et al., 2012; Liebenberg et al., 2019; Lines et al., 2019; Spring et al., 2018). Both have also been applied with Indigenous methods or within Indigenist research paradigms (Peltier, 2018; Rix et al., 2014).

PAR emerged as a "radical epistemological challenge to the traditions of social science, most critically on the topic of where knowledge resides" (Fine, 2008). PAR recognizes the wisdom of people who have been systematically oppressed, and seeks to drive social change, address inequities, and "break the monopoly on who holds knowledge and for whom social research should be undertaken**"** (Fine, 2008). CBPR also seeks to create positive change and to shift imbalances in knowledge and power. The co-creation of knowledge and shared decision-making and ownership of research between communities and researchers are at the heart of CBPR (Castleden et al., 2012). At times, PAR and CBPR have been used interchangeably or combined into CBPAR, as I will do here as this research draws on both approaches (Maiter et al., 2008).

CBPAR fits well within an Indigenist research paradigm as it is based on a view of knowledge as relational, challenging positivistic views of knowledge as objective and value free

and aligning with the axiology of Indigenous research paradigms (Brydon-Miller et al., 2003; Rix et al., 2014; Wilson, 2008). Strong relationships based on trust, listening, being present, exchanging knowledge, genuine collaboration, strong ethical guidelines and "creating avenues for Indigenous peoples, communities, and organizations to determine the level of involvement they want to take in research processes and outcomes" (Castleden et al., 2012) have all been identified as important aspects of CBPAR (Tondu et al., 2014). Reciprocity, defined as "an ongoing process of exchange with the aim of establishing and maintaining equality between parties" has also been identified as an important ethic to guide CBPAR (Maiter et al., 2008). As part of this reciprocity, researchers contribute to the activities of the community in addition to making observations to answer community-defined questions and respond to the needs of the community, while also advancing the goals of social science through the co-creation of knowledge (Castleden et al., 2012). Maiter et al. emphasize that CBPAR and reciprocity are cyclical processes as relationships evolve over time and that "knowledge, skills, and support are exchanged among all parties, but these exchanges may occur at different points in time" (Maiter et al., 2008). Reciprocity and equality do not mean homogeneity in this case, but balance based on differing types and amounts of power and interests in various situations (Maiter et al., 2008).

Although CBPAR strives for balance, reciprocity, and respect, there are "many incompatibilities between the tenets of CBPR and the structure of the academy" (Castleden et al., 2012) which can lead to issues in its application. For example, Northerners have jokingly compared researcher to snow geese, as both show up in the summer without invitation, make a mess, and leave without saying goodbye (Castleden et al., 2012). Within the academic structure, summer is often the easiest time for researchers to conduct fieldwork. However, for many Indigenous communities, summer is when the most time is spent out on the Land, and therefore

not the ideal time to be participating in research. It has also been noted that while CBPAR aspires to involve communities in every stage of the research process, the reality is that community members are much less often involved in the analysis stage. At times, this may be due to researcher's hesitancy to give up control over the analysis stage (Castleden et al., 2012). In line with the concept of working for balance rather than homogeny, however, it has also been noted that youth engaged in CBPAR may prefer to share the research process and only contribute to certain aspects based on their interest (Liebenberg et al., 2017).

My CBPAR approach for this project built upon the work of my supervisors who, along with various graduate students, have been working with the community of Délįnę for more than five years. As building relationships is such an essential part of CBPAR and Indigenist research, my supervisors provided me with the opportunity to spend two months in the community in the summer of 2019, prior to beginning any research of my own. During this time, I worked as a research assistant to support the Délįnę Got'įnę Government's Environment and Lands Department with ongoing projects, participated in events such as a youth canoe trip and on-the-Land cultural camps, and made connections within the community. This type of engagement did follow the "snow geese" researcher pattern and the busyness of the summer months did present some challenges. I was fortunate, however, to be invited to join multiple on-the-Land trips which allowed me to form more connections to community members as well as to Great Bear Lake and the surrounding Land.

My intention following the summer of 2019, was to continue working with our community partners in Délįnę from a distance throughout the year, and then return to Délįnę in the summer of 2020 and develop a research project based on the interests and needs of the

community and opportunities at that time. Due to COVID-19, I was unable to return to Déljnę but did continue to engage with community partners, when possible, from a distance. At the time, the DGG's Dene Ts'ılı Dahk'ǝ *(Department of Culture, Language, and Spirituality)* was working to form the Tsá Tué Youth Council. The Youth Council was created partly in response to the recommendations made by the youth at the 2019 and 2020 on-the-Land camps, the first of which I attended. At these camps the youth expressed that they wanted more opportunities to have their voices heard within the community, to support each other, and to be involved in decision making. I was asked to support the Youth Council project and did so by working with the Youth Council Coordinator on tasks such as planning meetings and events, writing meeting agendas and minutes, and brainstorming youth engagement activities and leadership activities. I was also granted permission to analyze the youth recommendations and was able to support the Youth Council and the Dene Ts'ılı Dahk'ǝ *(Department of Culture, Language, and Spirituality)* by providing them with the thematic analysis of these recommendations to be used in future visioning and planning.

Working with the Youth Council also provided me with a unique research opportunity. My research is a part of my supervisors' ongoing collaboration with Déljnę to support food security and food sovereignty. Through attending the 2019 cultural camp and working with the Youth Council, I was able to get an in depth look at the priorities of the youth in Déljnę. I felt that this was important, as it is essential that youth are involved in efforts to support food sovereignty and food security. However, there is often an abundance of work to be done in Indigenous communities, such as Déljnę, and individuals are often pulled in many directions at once. We have seen examples of this throughout our research efforts. For example, community members who were eager to work on food sovereignty projects have been hired as community

researchers, but then left the position when asked to fill another role in the community. Therefore, it is important that research, projects, and programming, align well with community members' priorities. Based on these observations, I decided to support the broader goal of food sovereignty by further exploring the topics brought up by the youth at a visioning workshop at the 2019 camp and seeing what could be learned about food sovereignty by doing so. As most of this research was done remotely, due to COVID-19, it was not as participatory of a process as I initially intended or would have liked, in terms of the data collection and analysis. However, I do feel that the overall process, development of the research focus, and "action" side of the research through which I supported the Youth Council were strongly grounded in CBPAR methodology.

3.2.2 Two-Eyed Seeing

With growing global concern over climate change and biodiversity loss, there has been increasing interest in Indigenous knowledge. Indigenous knowledge is based in Indigenous worldviews and is diverse, but has some common features such as being place-based, relational, and holistic (Hart, 2010).

> Indigenous knowledge transcends the spiritually deficient Euro-Western worldview and acknowledges the Land, Waters, medicines, and animals not as a series of objects to be consumed but as sovereign Nations to be honoured. Community wellness, healing, and sovereignty are predicated on the relationship with the Land, and can therefore only exist with a healthy Land base (Gilpin & Hayes, 2020)

The relational nature of Indigenous knowledge arguably makes it better suited to examining complex systems than Western knowledge which was primarily developed to answer

true or false questions (*Marrying Indigenous Wisdom and Scientific Knowledge*, 2019). This, along with the fact that Indigenous knowledge is based on close relationships to the Land, makes Indigenous knowledge much better suited to addressing climate change.

Although Indigenous knowledge is becoming increasingly recognized in environmental studies, however, it is often only specific empirical information about the environment that is valued, rather than Indigenous worldviews and knowledge as a whole. Western scientists often treat traditional ecological knowledge as simply another resource to gain information from "since a greater volume of factual knowledge is equated with the better management of natural resources, primarily because it affords humans greater control over those environment" (Simpson, 2004). This occurs because in human geography and related fields, "the predominant and implicit conceptualizations" of the relationships between humans and their environment continue to be "grounded in Cartesian ontology wherein humanity is not seen as an implicit part of biodiversity", but instead seen as separate from the rest of nature (Williams et al., 2011).

Western academic knowledge comes from this particular worldview but has been presented as being universal and objective while marginalizing all other ways of knowing and worldviews (Tuck & Yang, 2014). There are countless examples of Western research being used to steal Indigenous knowledge, perpetuate racist theories, and be used as a tool of settler colonialism in Canada and around the world (Smith, 2013). While many of the early examples of this come from scientific exploration, it has also been observed that "many social science disciplines emerged from the need to provide justifications for social hierarchies undergirded by White supremacy" (Tuck & Yang, 2014). While the value of Indigenous knowledge is being increasingly recognized, particularly with regards to certain topics such as climate change,

Indigenous peoples continue to be drastically underrepresented in Western academic institutions and dominant Western worldviews and ways of knowing continue to be privileged (Simpson, 2004).

So long as Western worldviews and ways of knowing continue to be held as superior, racism will continue to be perpetuated and society's ability to address climate change, food insecurity, and other systemic issues will be limited. However, many academics are exploring new ways of looking at Indigenous and Western knowledge, bringing the two together, and changing dominant narratives. For example, Tuck and Yang suggest that "by making the settler colonial metanarrative the object of social science research, researchers may bring to a halt or at least slow down the machinery that allows knowledge to facilitate interdictions on Indigenous and Black life" (Tuck & Yang, 2014).

Another approach gaining popularity is Two-Eyed Seeing, a principle for bringing Indigenous Knowledge and Western knowledge together. The term was coined by Mi'kmaw Elder Albert Marshall who describes Two-Eyed Seeing as a "gift of multiple perspective" (Bartlett et al., 2012).

> …learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all (Bartlett et al., 2012)

Marshall also emphasizes that Two-Eyed Seeing is a guiding principle that relates to all aspects of life, rather than a particular subject area. Bringing Indigenous and Western knowledge

together is seen as essential by Bartlett et al. in the context of environmental crises in today's world (Bartlett et al., 2012).

Robin Wall-Kimmerer also speaks to the need to bring together Indigenous and Western knowledge and draws on an analogy of the three sisters garden, in which corn, beans, and squash grow in harmony, to explain how the two can work together. Wall-Kimmerer explains this analogy as follows.

> "…corn is our ancient Traditional Knowledge… the intellectual scaffold. Then Western knowledge is like the bean but if the bean doesn't have something to climb on it just goes haywire, it becomes a monoculture, kind of like the Western worldview has become a monoculture… but if we hold up and be aware of these principles of Indigenous land based knowledge then these other ways of knowing that we have made central could have a context, a context of values" (*Marrying Indigenous Wisdom and Scientific Knowledge*, 2019).

Squash, in this analogy, represents the knowledge of plants and the earth, which help create the conditions for all other knowledge. Wall-Kimmerer points in particular to "the five Rs... respect, responsibility, reciprocity, relationship, reverence" as the principles of Indigenous Knowledge which "become the intellectual scaffold" (*Marrying Indigenous Wisdom and Scientific Knowledge*, 2019). This analogy outlines one possible approach to Two-Eyed Seeing, which I attempt to apply in this research by drawing on Indigenous values as my guiding principles.

3.3 Methods

3.3.1 Participant selection

This research included community engagement, observations, reflexivity, secondary data analysis, and semi-structured interviews. The community engagement, observations, and reflexivity drew from my interactions with a wide variety of community members while in Dél̨ı̨nę in 2019, as well as my remote work with the Youth Council and the Dene Ts'ı̨lı̨ Dahk'ǝ́ *(Department of Culture, Language, and Spirituality)* since then. The secondary data consisted of youth recommendations which were drawn from the perspectives of all youth who attended the community's 2019 and 2020 cultural camps and chose to participate in the visioning workshops. These youth were within an age range of approximately 12-30 years old.

The interview participants included two members of the Youth Council and the Youth Council Coordinator, all of whom are within an age range of 18-30 years old. The youth recommendations and interviews are not meant to be representative of all Dene youth, but rather to generate insights from the perspectives of youth in Dél̨ı̨nę who are publicly and actively engaged in helping the other youth in the community and addressing the challenges their generation faces. As there are similarities in the challenges faced by many Indigenous youth in Canada and around the world, such as that of walking in both worlds, there is much to be learned from those youth who are taking leadership roles within their communities (Trout, Wexler, et al., 2018).

The Director of the Dene Ts'ı̨lı̨ Dahk'ǝ́, Mandy Bayha, also participated in an interview. It should be noted that while Mandy is not within the 12-30 age range and does not identify as a

youth, she is younger than most DGG employees and works very closely with the youth in the community. As such, she speaks from the perspective of the youth at some times, and from the perspective of an adult community member and DGG Director at other times. While it is not assumed that she speaks for all youth, adults, or DGG staff in the community, her perspective as someone who has played many different roles in the community provides significant insights.

The final interview participant was an adult community member who expressed interest in the research and has worked closely with the youth and the DGG. Their perspective was used to give further context to the experiences of the youth where relevant.

3.3.2 Community Engagement and Observations

Both Indigenist research paradigms and CBPAR emphasize the importance of building and maintaining relationships (Castleden et al., 2012; Wilson, 2008). Community engagement is essential for building relationships between people, but also for gaining more nuanced understandings of the research context. In addition, it allows researchers to build relationships to ideas as spending time with community partners outside of research activities and ideas developed during informal conversations can be crucial parts of the research process (Liebenberg, 2017). As such, community engagement and observations were essential parts of this research process. During the two months I spent in Déljnę in 2019, I lived with a host family and worked with the DGG Lands Department, supporting ongoing research projects and everyday activities. I was invited to participate in many community events such as the high school graduation, Sahtú Day celebrations, and on-the-Land camps. One of the most memorable experiences I had was joining a youth canoe trip to one of the on-the-Land camps. It was the first youth canoe trip that had been held in years, and I had the good luck of being welcomed to join

in when an extra space opened. Getting to know the youth and guides while paddling on Great Bear Lake over the course of three days each way was an experience of a lifetime and absolutely foundational to this research. Since being in Délįnę, I continued the community engagement and observations aspects of this research by working remotely with the Youth Council and the Dene Ts'įlį Dahk'ə *(Department of Culture, Language, and Spirituality).*

3.3.3 Secondary Data

At cultural camps held in the summer of 2019 and 2020, youth from Délįnę were given the opportunity to speak about the challenges they face and their vision for the future of Délįnę and changes they would like to see. I was able to attend the first of these sessions, in 2019, and assist with recording for the DGG. The recommendations were written down by one of the youth during the workshop. I was granted permission to analyze these recommendations as part of my research. As the visioning workshop was open ended, youth were free to speak to the topics that were most relevant to them. As such, the recommendations provide great insight into the hope and vision the youth have for the future as well as some of the challenges they face. Once I completed the thematic analysis of the recommendations, I returned this to the Dene Ts'įlį Dahk'ə *(Department of Culture, Language, and Spirituality)* to use as they saw fit in their planning.

3.3.4 Interviews

Semi-structured interviews were conducted to further explore the perspectives of the youth involved with the Youth Council and to help guide the future work of the Youth Council. The questions asked were developed based on observations made through community engagement, including conversations with the Director of the Dene Ts'įlį Dahk'ə *(Department of*

Culture, Language, and Spirituality) and the Youth Council Coordinator, and initial observations drawn from the Youth Recommendations. The interview questions related to the themes of Two-Eyed Seeing, connecting with culture (including the harvesting of Dene béré *(Land food)*), youth voice, and the Youth Council. The questions asked were approved by the Director of the Dene Ts'įlį Dahk'ǝ and the Youth Council Coordinator prior to their finalization.

Five interviews were conducted in total, ranging in length from half an hour to an hour and a half. The Director of the Dene Ts'įlį Dahk'ǝ, Mandy Bayha, granted permission for direct quotes to be used from her interview and for her to be identified as the source of her quotes. All other interview participants granted permission for direct quotes to be used from their interviews but chose not to be identified as the source of their quotes.

The limited number of interviews was due to the challenges of conducting research remotely during the COVID-19 pandemic. If I had been able to conduct the research in person, I would have hoped to primarily gather data through methods other than formal interviews. For example, talking circles, photovoice, or other arts-based methods. I believe this would have allowed me to gain perspective from a wider variety of youth in the community. However, since I had to conduct my research remotely and on a shorter timeline, this was not possible.

The opportunity to participate in interviews was offered to all members of the Youth Council. While around half the members expressed some interest, I was only able to conduct interviews with two members. Other members did not follow up or were not able to find a time to conduct the interview at. The members who did participate seemed to be among those who were more familiar and comfortable with academic institutions.

The fact that many members did not express any interest in participating, or showed some interest but chose not to participate in the end, indicates the limitations of using formal interviews as a method of data collection when working with Indigenous youth. While the interviews I was able to conduct were certainly not representative of all youth on the council, let alone all youth in the community, I do believe they add significant value to this research. The participants were able to share nuanced insights that supplemented the data collected through the recommendations. The fact that Délįnę is a small community, with a population around 530 people (Statistics Canada, 2017) makes the perspectives of five highly engaged members of the community more meaningful. The perspectives of the youth, through the recommendations and interviews, are particularly important given that nearly half the population is within the under 30 age group (Statistics Canada, 2017).

3.3.5 Reflexivity

Reflexivity has been identified as an appropriate and effective method within Indigenist and CBPAR research as it can allow non-Indigenous researchers to acknowledge how their identity and experiences shape the research while attempting to incorporate Indigenous worldviews through Indigenist research paradigms (Rix et al., 2014). In this research I attempted to reflect on my experiences, my biases, and the narratives within the field as well as my own writing as "the formal scholarly pursuits of knowledge and the informal, imaginative, anecdotal constructions of the Other are intertwined with each other and with the activity of research" (Smith, 2013, p.2). In doing so, I sought to respond to Tuck & Yang's call to make "the settler colonial metanarrative the object of social science research" to "bring to a halt or at least slow down the machinery that allows knowledge to facilitate interdictions on Indigenous and Black life" (2014). I also saw the need to reflect on narrative through Dawson's argument that "settler

colonialism is reproduced through biomedical narratives of food and nutritional health" (Dawson et al., 2020). I attempted to apply this thinking by reflecting on my experience in Délı̨nę and working with the Youth Council, the thoughts and emotions they evoked, what these revealed about my assumptions and biases, and how these were being reflected in my writing as well as how they fit within broader patterns within academic discourse.

3.3.6 Analysis

In analyzing the data, I conducted a thematic analysis of the youth recommendations and interviews. An iterative process was applied, as the initial analysis of the recommendations as well as observations and informal discussions were used to form the interview questions. Once the interviews were complete, I returned to the recommendations to analyze them alongside the interview data. I hoped to get feedback on the themes that emerged and involve the youth in this aspect of the analysis. However, this was not possible as I was working remotely and contact was limited during the pandemic. While I would have liked to make this stage of the research more participatory, I did seek to uphold relational accountability throughout the analysis stage. Wilson contends that "the researcher must ask how the analysis of these ideas will help to further build relationships" (Wilson, 2008, p.119). This was the guiding principle that I applied to my analysis by attempting to analyze the data in a way that would further build relationships between the youth and the themes and ideas that emerged from the data, as well as between myself and the council.

While involving communities in all stages of research is often identified as a key tenet of CBPR, it has been found that the level of engagement of community members and community researchers during the analysis stage is substantially less compared to other research stages

(Castleden et al., 2012). However, it has also been noted that youth “don’t necessarily want to own the entire research process; they prefer to rather share the responsibility with others; where we can each do our part, and make sure that rigorous research is conducted, producing meaningful results, that are disseminated in equally meaningful ways to relevant audiences" (Liebenberg et al., 2017).

3.3.7 Data Validation

My theoretical approach to data validation for this project drew once again on the work of Shawn Wilson and the concept of relational accountability. “Right or wrong; validity; statistically significant; worthy or unworthy: value judgements lose their meaning. What is more important and meaningful is fulfilling a role and obligations in the research relationship—that is, being accountable to your relations” (Wilson, 2008, p.77). Wilson highlights how this includes not only being accountable to research partners and participants but also yourself. “You have to be true to yourself and put your own true voice in there, and those stories that speak to you. That is retaining your integrity; it’s honouring the lessons you’ve learned” (Wilson, 2008, p.123). COVID-19 greatly limited how much I was able to directly work with the Youth Council and other community members. Therefore, trying to stay true to what I felt was right based on the relationships I formed in Déljnę in 2019 and the concepts I learned about throughout this process largely guided my work and my application of relational accountability.

Within the limitations of working remotely, the method I applied to data validation was to provide participants with drafts of the sections where their direct quotes were included. I requested feedback on whether any quotes should be removed and/or if any editing was needed.

Three of the five participants chose to make changes to their interview data in this way. This helped to ensure that the quotes I used were not completely misunderstood or misrepresented.

3.3.8 Knowledge mobilization

It was not possible to complete the knowledge mobilization phase of this project prior to the completion of this thesis, in part due to the delays caused by COVID-19. However, the results will be reported back to the Youth Council following its completion. A presentation will be made to the Youth Council, summarizing the findings of the research. They will be presented as a starting point for discussion, rather than as conclusive findings. Drawing on the methods of Trout and colleagues, I hope to use the findings to spark a conversation in which the Youth Council can interpret the results and decide how they want to apply them, build upon them, and/or share them further within the community (Trout, McEachern, et al., 2018).

3.3.9 REB and Licenses

This research was approved by the Wilfrid Laurier University Research Ethics Board (REB 6556). Northwest Territories Scientific Research License 16812.

4 RESULTS

To explore the priorities of the youth I began with recommendations made by Dél̨ı̨ę youth at the community's 2019 and 2020 on-the-Land camps and visioning sessions. These sessions were organized by the Dél̨ı̨ę Got'ı̨ę Government (DGG) to give community members the chance to share their thoughts and concerns about any aspect of the community and help create the DGG's vision moving forwards. Being granted permission to attend the 2019 camp and youth visioning session, and to use the recommendations as data, provided me with a unique opportunity to explore the youth's concerns and perspectives without any influence or prompting from myself or other researchers. These recommendations sparked changes in the community including the creation of the Youth Council.

In this chapter, I will present the recommendations made by the youth at the two camps. Tables 1-6 contain the recommendations, as they were recorded at the camps. The tables present the recommendations within six themes that emerged through thematic analysis: healing and support, culture and traditions, land, education and programming, governance and voice, and language. As similar themes were brought up at the two camps, there is some repetition among the recommendations that were made.

4.1 Healing and Support

Table 1: Youth Recommendations – Healing & Support

Youth love one another and provide support to each other and will continue to do so
We take care of each other and stick together - not much guidance or support from the community
Help each other and support each other all the time
Celebrate together - more of this to lift our spirits

Move forward and let go of the past - look to the positive future
Mentorship
Healing
Daycare for young parents
No time for youth
Young people are hurting and have nowhere to turn to - no support
Need support and encouragement
Respect - youth need to be respected from where we are, not from where we ought to be
Dealing with difficulties/healing - how did our ancestors heal and help themselves?

Healing and support was one of the most prevalent themes identified through the recommendations, interviews, and observations. In this context, healing largely refers to healing from intergenerational trauma caused by residential schools and other forms of colonial violence which have led to many negative outcomes for youth.

> *There are much needed supports and we're finding that it's not just for self-determination… it's to support the negative effects of these changes over time. A lot of our young people, you know, are dealing with a lot of things with addiction, mental health, and wellness and so we were finding that we really need to find ways to support them now. A lot of these things really stemmed from, again, over time, systemic oppression, intergenerational trauma, all of these really big things. So our young people… were born into how things are right now and sometimes when you don't have the context of the deeper issues it sometimes gets internalized. And so, sometimes you don't even understand… why am I getting depressed? Why am I feeling these things? Why am I triggered*

by certain things? So, it's really sort of evident that we need to have conversations, to talk about things, to process and begin healing (Mandy)

In facing these challenges, the youth identified a strong support network as something they need but are currently lacking. For example, in one recommendation *'not much guidance or support from the community'* was identified as an issue. An interviewee explained further how this affects youth.

…there's still no support system whatsoever and so it's so easy for the youth to turn to substances… to escape whatever the feeling… I think the only way for that to end is to create some kind of support system where the youth can come and get help… and, like, without being criticized (Interviewee iv)

The need for support without criticism was reinforced by the recommendation that youth need support '*from where we are, not from where we ought to be'.* Having strong role models and mentorship programs were examples of desired supports that were mentioned in the interviews. However, this can be a challenge since older generations are often healing from having their children taken away from them or attending residential schools themselves. The effects of this are felt throughout the generations. For example, one interviewee shared that addiction and gambling also prevent parents from being able to teach their children at times.

Although youth felt that they lacked a support system, multiple recommendations identified the support they provide *each other* as a strength and referred to the love and care the youth have for each other. Youth also referred to wanting to learn from their ancestors by posing the question *'how did our ancestors heal and help themselves?'.* This demonstrates how youth are looking to hold on to aspects of the past and learn from their ancestors. At the same time,

there are aspects of the past that youth are working to move beyond, as expressed in the recommendation to '*move forward and let go of the past'.* Being out on the Land was also mentioned as a strategy for healing in the recommendations and is a way the youth reconnect with their ancestors and traditions. This was observed during the 2019 canoe trip when youth spoke of how healing it was being on the Land and following the footsteps of their elders and ancestors (personal communication, 2019).

4.2 Culture and Traditions

Table 2: Youth Recommendations – Culture & Traditions

Decolonize and be Dene again - want support on this journey, we will not give up!
Be kind and respectful - we want to be like our ancestors and our Elders
Keep the culture strong and learn from each other
Cultural way of being is important
Traditional and cultural camps for youth
Traditional stories/legends - interested in ancient and historical stories and legends
Rites of passage for both young men and women
Opportunities to learn about traditional ways of parenting for young parents or single parents
Youth mentorship for cultural skills - one to one
Cultural skills
Drumming for youth
Dene spirituality
Dene mapping and stories
Dene medicines
Elders' stories

Another strong theme among the recommendations was the youths' desire for opportunities to learn Dene culture and traditions. In particular, the topics referred to in the

recommendations included Dene drumming, spirituality, mapping, medicines, ways of parenting, stories, and legends.

> *I'd say they're important because they're part of our Dene identity… it's always been like that, for a long time, until it got interrupted by the colonial systems. But not completely… most traditions are still practiced (Interviewee iii)*

Dene identity was a theme reinforced by the recommendation to *'decolonize and be Dene again – we want support on this journey, we will not give up'*. The use of the language *'be Dene again'* demonstrates the dichotomization of Dene and Western ways of life. The second half of this recommendations demonstrates the determination of the youth and the hope they carry despite the many challenges to connecting with culture and traditions. Many of these traditions are primarily learned out on the Land, however, interviewees explained that one of the challenges is that some families don't have the resources to go out on the Land such as skidoos, quads, or cabins.

In the recommendations on culture, youth also referred once again to supporting each other by learning from each other to keep the culture strong. An interviewee also shared that despite the challenges, including the language barrier between youth and elders, some youth continue to practice their traditions.

> *I see they're... at least some of them, that they're out there all the time and they're, like, still practicing our cultural traditions and knowledge (Interviewee iii)*

The theme of learning from, and striving to be like, their ancestors and Elders was also mentioned again. Cultural camps and one-on-one mentorship were two potential avenues for learning that were identified by the youth.

> *I really like the idea of mentorship; it is a really good idea. I know a lot of younger kids lack the mentorship, the little ones, a lot of them are really smart, but they just don't have that… that person to kind of help them along (Interviewee i)*

Another participant shared how one-to-one mentorship is the traditional way of transferring knowledge.

> *…the challenge is that in order to gain [traditional] skills… in the traditional way… it's your uncles that show you how to be out on the Land and do those things. So, its one-to-one mentoring… Same thing with the young women, it's the mothers and aunties and grandmothers that showed us how to do those things out on the Land (Interviewee ii)*

The need for *'rites of passage for both young men and young women'* was also mentioned in the recommendations.

4.3 Land

Table 3: Youth Recommendations – Land

Fortunate for all the traditional foods - we are blessed
To live off the Land

Follow the trails of our ancestors - want to know all the trails and follow them, to know their skills, to know the gravesites, the Land, water, traditional place names, and all the knowledge needed to be connected to the Land
Travel around the lake and learn all the place names
More canoe trips, trapping, getting wood and hunting excursions
More trips out on-the-Land
More out on-the-Land trips
On-the-Land training camp at Whiskey Jack
Longer on-the-Land trips
Hunting trips
All season on the Land
Healing out on the Land
Healing program for young men and women - trapping skills/out on the Land
Some families and youth don't have resources to go out on the Land

One of the topics mentioned most often within the youth recommendations was on-the-Land trips. The youth referred to wanting more on-the-Land trips, longer trips, opportunities to be on the Land in all seasons, and specific kinds of trips including training camps, hunting and trapping trips, and canoe trips. They also expressed gratitude for Dene béré *(Land food)*, and the desire to be able to live off the Land. Another recommendation referred to wanting to follow the trails of their ancestors, to learn their skills and the knowledge needed to be connected to the Land such as traditional place names and the location of gravesites. The theme of Land is closely related to culture and spirituality as the traditional Dene way of life is closely tied to Great Bear Lake and the surrounding Lands. The fact that some youth and their families do not have the resources needed to go out on the Land, such as skidoos, ATVs, or cabins, was mentioned as a challenge in both the recommendations and interviews.

…the young people don't go out on the Land anymore, you know, they don't hunt or fish, they don't set traps, like all that is decreasing and that's what our Elders did, what our ancestors did for thousands of years and that's why it's sad to see that it's decreasing because what if someday it's all gone… it's really important for us to hang on to it and to like, try to just revive our culture for the future (Interviewee iv)

Mandy described seeing this a bit differently.

We have a lot of young people, especially the boys, that go out on to the Land a lot and find that that's something that they actually connect to, they hunt and harvest quite a bit… (Mandy)

At the same time, she recognized how youth are pulled in different directions.

…we have young people who are sort of in the midst of a lot of changes in the new generation… social media is huge, media, mainstream culture is huge, so in a lot of ways they see the world outside of them that they kind of want to connect to, that they want to be part of (Mandy)

Youth want to connect to mainstream culture while also wanting to connect to their Dene culture and seeing its continuity as important. Another interviewee elaborated on the changes the community has seen and the impact this has on Land-based skills.

Everything has changed, our workforce for example… you need to work and what kind of work is available in the communities? It's all office work. There's nothing that I see that's based on the Land or anything like that, there's nothing

that is skill based for you to do cultural things out on the Land… it's all office based and its 9 to 5 (Interviewee ii)

The pressures of school and work can be another barrier to youth learning and maintaining Dene culture.

The on-the-Land camps run by the community were spoken about very highly by the youth and seem to be an effective strategy for engaging youth.

…it's good that the community does these annual out on-the-Land trips, it gives a chance for those people who don't go out all the time, so it's their chance to go out and it's good to see (Interviewee iv)

Another interviewee spoke about the difference they saw in youth while on a canoe trip.

I was able to see most of the youth, how they're, like, alive and they're connecting and… more at peace… it was beautiful (Interviewee iii)

4.4 Education and Programming

Table 4: Youth Recommendations – Education & Programming

Education is challenging due to two worldviews (Western/Dene) - it is an enormous challenge
Education support - need school counsellor, school mental health support to succeed
Post-secondary school - more support is needed
Better supports for youth who want to pursue higher education, especially young parents or single parents
More certification and courses
Training Opportunities - chainsaw safety, small engine repairs, firearm safety course, wilderness first aid, canoe training and water safety, land, and water navigation
Wilderness first aid and canoe training

Elders/ancestors are role models and great teachers - they are the rightful teachers
Culture camp in Délı̨nę and/or Dene school
More traditional skills workshops: fish cutting, meat cutting, wood harvesting, etc.
Women's Camps
Leadership training
More organized sports
Better facilities in the community for youth: Arena, gym, fitness centre, etc.
Young people are growing up and growing up fast – we need to be prepared and teach now

Youth in Délı̨nę are also very concerned about education. Through the recommendations they expressed the desire for mores support within the local school as well as with post-secondary education. The desire for sports teams as well as facilities such as a fitness centre were also expressed.

One interviewee expressed concerns over low literacy leading to communication challenges within the community.

> *…there's a lot of people who don't know how to read or write in the Community… a lot of things get missed in translation (Interviewee i)*

Mandy explained this further, expressing that although there are many leaders in the community who are well versed in both Dene kədǝ́ *(Dene language)* and English, this is not the case for many of the youth.

> *…right now, as it stands, our young people aren't strong in either, not really of the fault of their own, but you look at our education system and there are reports*

from the Ministry, evaluations and things that have been done recently, there is a really big problem (Mandy)

Due to the limited curriculum offered in Délįnę, high school graduates have to do more courses to upgrade before attending postsecondary education.

...graduates from our school they end up having to upgrade for years before they can even enter into university and then we have to leave our territory to even pursue higher education anywhere else so like it's almost a system of, you're swimming up against stream or the current all the time… it's very commendable, the ones that actually make it into higher education. Succeed or not it's, like, nothing short of a miracle (Mandy)

Another interviewee described some of the many challenges associated with having to leave the community for education, including being away from family, culture, and traditions, as well as securing housing again upon returning to the community. Considering all these barriers to formal education, it is clear that work needs to be done to remove the barriers and that the youth in Délįnę need more support with education than they are currently receiving. Through the recommendations the youth reinforced the need for mental health support for students and support for pursuing post-secondary education, particularly for young or single parents such as the availability of daycare.

These many challenges can result in a lack of confidence in the education system, which Mandy explains as intergenerational.

We knew that these systems were not for us…I think that also is something that the young people also feel… that they don't necessarily belong in the system and these systems aren't for them, but that's something that's intergenerational. (Mandy)

At the same time, another interviewee explained how going away to school provided an opportunity for self-development and helped them to learn about and recognize the systemic issues faced by their community.

…everything is ingrained into the systems and … I've mostly seen it, not from a systemic view but just mostly personal but I wasn't aware of colonization and all that so I'm glad I went [to school] (Interviewee iii)

Another participant spoke of how pursuing one kind of education means giving up opportunities for the other.

…if you want to have that Western education, you'd have to leave and you'd be gone for a while, whereas if you'd like to stay you might have more traditional knowledge but then you're lacking… that education that you get from going to the South and miss out on developing skills and abilities one would need to be successful in the workforce (Interviewee i)

This challenge was summarized in the recommendation *'education is challenging due to two worldviews (Western/Dene) - it is an enormous challenge'*.

While it is certainly a huge challenge, many in the community also see walking in both worlds as the objective.

To walk in both worlds… could bring many opportunities for that person and their people if they choose to use their knowledge in the right way to help their people… that's what the Elders want for the young people (Interviewee iv)

The adult interviewee shared how they feel that the experience that today's youth have with walking in both worlds gives them a unique skill set.

They are very gifted because they're exposed to both worlds, so they have a lot of the skills from the traditional way of life and they also have lots of skills, particularly in terms of computers and technical equipment… they have the potential. We are very fortunate here in Délı̨nę, we have a strong group of youth who can take huge strides in terms of having their voice heard and paving a way for themselves (Interviewee ii)

The unique way that youth are looking to combine different kinds of technology and formal education with land-based skills and knowledge was also demonstrated through the recommendation for training and certification opportunities including *'chainsaw safety, small engine repairs, firearm safety course, wilderness first aid, canoe training and water safety, and land and water navigation'*. While these courses are offered through formal institutions, they can help give youth the skills needed to be out on the Land and could also enable them to learn more Dene náoweré *(Dene knowledge)*. Some skills like these are also translatable between Dene culture and the formal wage economy.

Although walking in both worlds is seen as the objective by some, it can also seem out of reach to the youth given the current circumstances.

Ideally, it'd be really good to have both, but I think that's … like, a very long journey considering where we're at in terms of our school and the way we teach. Especially since our Elders are getting… they're getting older (Interviewee i)

Based on individual interest and because walking in both worlds is such a challenge, some youth may prioritize pursuing one kind of education over the other. Traditional culture, knowledge, and skills are the priority for some, but not all, youth.

…some of the youth really want to learn about those things, but we don't have enough, like, the capacity to learn about it and I think that's why a lot of youth are asking for it… some youth do not have the same interests nor do they have the same skills and abilities meaning that not all youth want to go out on the land to learn traditional knowledge, but in saying that, here in the North we don't have the capacity to be able to accommodate both areas of interest (Interviewee i)

Regardless of their priorities and goals, the youth need support in pursuing them. Through the recommendations relating to education the youth once again expressed concern for each other and for the younger children in the community stating *that 'young people are growing up and growing up fast – we need to be prepared and teach now'*.

In Délįnę one popular idea for transforming the education system is that of a bush school. The idea behind this is to build a school out on-the-Land, where students can stay for periods of time and study both Indigenous and Western knowledge at once. The creation of a bush school near Délįnę is currently being worked towards by the Délįnę Got'įnę Government one of the youth interview participants expressed support for this idea.

We could just focus on a bush school and creating our own Dene curriculum I think that would be a nice… like a nice approach to teach the young people about our Dene knowledge (Interviewee iv)

Mandy further elaborated on the idea of the bush school, which she is helping to establish through her position with the DGG.

We'd spend semesters out there, you know, learning based on the connection and living out on the Land itself… create a new pathway for graduation (Mandy)

She also explained that teaching youth the subjects taught through the Western education system out on the Land is not a new idea but was actually done in the Sahtú in the past.

There were, you know, teachers or a lot of times missionaries that came in with certain families in the traditional territories and taught children how to read and write (Mandy)

This is seen as a potential way forward for the community and part of the solution to the challenge of walking in two worlds.

4.5 Governance and Voice

Table 5: Youth Recommendations – Governance & Voice

Youth need to be heard and to have a voice
Government employees – lots of employees in the government are youth but they are not given the same status as the other older employees because of age and experience
Youth in meetings
Work as a Dene team and for our government
Youth council

Youth camp (Private forums)

During the 2019 visioning workshops and through the recommendations, as well as the interviews, youth expressed that they feel their voices are not heard by decision makers. For example, one interviewee felt that decisions are often made on behalf of the youth.

...they assume that's what we want when most of the time it isn't (Interviewee iv)

Another interviewee shared that it can be difficult for youth to speak up due to a lack of confidence or lack of support.

They probably don't feel like they have enough power or like a strong social group to voice their opinions or to back them up with (Interviewee iii)

This participant also shared that when youth are trying to find their voices, they may shut down if they aren't taken seriously when they do try to speak up. This idea was reinforced by another participant.

[The youth each] have their own unique ideas and interests, but no one will make time to listen to what they have to say, so, I think that really discourages them… They say their voices aren't being heard, but then, when they do [speak up] sometimes they get criticized and then that discourages them and, you know, it makes them not want to speak up anymore (Interviewee iv)

This reinforces the need for judgement free spaces where youth can voice their opinions. Another interviewee spoke to the importance of youth having attention and having their voices heard.

…in growing up attention plays a big role in confidence and security and a lot of youth do not have that here in the North which could explain why the majority of Northern youth can be deemed troubled… When it feels like we're being ignored, we definitely try to compensate in other areas… it's really hard on our youth (Interviewee i)

This participant also spoke about the potential youth have, however.

…it's really good to speak to some of our youth. You know, I think a lot of them are really smart and they have really good ideas and they're really motivated (Interviewee i)

Another shared that changes to the social structure of the community may be contributing to the lack of opportunities for youth to share their voices. In the traditional Dene way of life youth had an important role in families but now spend much more time in school and away from their families.

I think the youth are somehow left behind. They're going to school and being on their own so… unless you have a really strong family, they are left out of that altogether (Interviewee ii)

This speaks to how the rapid social changes that have occurred in Délı̨nę have impacted social ties and support systems.

The local government was another area where youth felt they lacked voice. Although there are youth employed by the DGG, they feel that *'they are not given the same status as the*

other older employees because of age and experience'. Power dynamics were mentioned in one interview as a reason for this.

Délįnę's establishment of self-government was a great achievement and helped restore much of the community's self-determination. At the same time, there are challenges that go along with establishing a new system of governance. The structure of the DGG had to fit within the existing settler colonial systems and be agreed upon by the federal and territorial governments. It took nearly 20 years of negotiations for the DGG to be established and as the DGG is only a few years old, it is continuing to develop in many ways. While being self-governed provides more opportunities for Délįnę to make systemic changes and revive Dene ways of life, these changes take time.

> *When we look at the settlement itself, and the way that it functions, it's not really based on traditional way of life. It's a new, completely new, introduced way of living and it supports a different worldview and system… we need to make changes by moving or taking away things that don't really, you know, suit us… that's really hard to do with systems that are really tough to change…. for instance, the DGG works with the entire territory, the entire territory and all the communities within that territory, so it's very rigid and tough to move… it took 150 years to get to where we're at… so it's going to take some time and a lot of effort and partnerships amongst all of us to kind of make these changes (Mandy)*

Despite the challenges, the youth expressed that they wanted opportunities to have their voices heard by the DGG and the community through avenues such as youth forums, opportunities to participate in meetings and to work for the government, and a youth council.

The recommendation for a youth council was realized in 2020 with the formation of the Tsá Tué Youth Council. Introducing young people to government processes and providing a voice for youth in the community were some of the objectives behind its establishment and the creation of the council was met with enthusiasm from many of the youth. Another objective behind the creation of the Youth Council was to help young people develop the skills needed to participate in formal decision-making processes at any level throughout their lives.

The DGG and Elders Council were also very excited when the Tsa Tue Youth Council formed. They have agreed to create a seat for a youth council representative, with voting capacity, on the Délįnę K'aowedo Ke *(Délįnę Main Council)* to give the youth more of a voice within their governance structure.

> *We have to literally… make an amendment to our FSGA [Final Self Government Agreement]… So they're talking about literally changing or are basically amending the entire FSGA to include youth (Mandy)*

Mandy also explained that members of the DGG are realizing that not creating a spot for youth in the first place was an oversight. This oversight occurred during the years of complex negotiations that went into the establishment of Délįnę's self-government and can be seen as highlighting what a huge challenge the DGG has in working to re-assert the Sahtuót'įne Dene *(People of Great Bear Lake)*'s self-determination while also having to work with existing settler governance structures. The youth hope that the creation of the Youth Council can help bridge the current gap between the government and the youth.

> *I saw it as, kind of… an opportunity to kind of fill in the gaps between our younger people and our older Councils and our local government with our*

Elders Councils and our DKK [Délı̨nę K'aowedo Ke (Délı̨nę Main Council)]… to be, kind of, a mediator between our younger people and our Elders, to kind of like… be advocates for younger people. I know a lot of us struggle to speak up, and I think the Youth Council… is a really good area to, kind of, be the voices for our younger people, those who don't know how to speak up really… It's a lot easier for younger people to speak to people our own age… (Interviewee i)

Another participant shared that they hope the members of the Youth Council can support the other youth in the community.

The Council can start by communicating with the youth in the community, you know, just kind of receive their feedback on what their interests are or their needs, or just to let them know that, you know, that they can come to us for anything, to feel they can approach us (Interviewee iv)

These examples demonstrate how listening to each other and helping each other to have a voice is another important role youth play for each other in the community, and a strategy the youth are using to overcome the challenge of not having their voices heard.

4.6 Language

Table 6: Youth Recommendations – Language

Still strong language among some young people and willing to teach peers
Language is very important
Opportunities/programs for traditional language revitalization
Sahtúot'ı̨nę language - no interpretation services offered to youth that require it
Suffering loss of language - want to learn the language

The final theme that emerged from the recommendations was language, in reference to Dene kədǝ *(Dene language)*, the traditional language of the Sahtuót'ı̨ne Dene *(People of Great Bear Lake)*. Within the subject of language, a lack of support was brought up again in terms of both learning the language and translation services.

> *...some youth they can't understand at all and it's so sad because they really want to learn their language, and you know they probably don't have anybody to turn to or like to help them just learn their language (Interviewee iv)*

The language gap between the youth and Elders has led to a disconnect between the generations and a lack of intergenerational knowledge transfer. There was a break in the transmission of the traditional language just a few decades ago in the early 1990s.

> *...before that the language was being transmitted, the culture was being transmitted, but something was happening in the early 90s, something happened that really pushed this break (Mandy)*

Today, the language gap and lack of interpretation or translation services is a significant challenge for youth.

> *It's hard for us to keep quiet when we don't really understand what's being said… the language barrier is a huge thing, it gets pretty frustrating… when they don't have any translators around it's almost sometimes like they expect us to understand and to know and then kind of do it on our own, which is next to impossible (Interviewee i)*

Another youth participant spoke to the importance of language to identity.

> *I remember what my grandma or my grandpa told or said in a story… because that's our history, that's our identity, we need to know who we are. So our stories are usually part of who we are as Dene people, especially our language (Interviewee iii)*

This participant also expressed a desire to see introduction to Dene language classes offered to the youth, in particular focused on teaching the meaning behind words. Through the recommendations the desire for more language revitalization programs was also expressed.

Despite the many challenges that were discussed in terms of language, it was also noted in the recommendations that language is important and that there is *'still strong language among some young people and [they are] willing to teach peers',* once again demonstrating the importance youth place on supporting each other. Many other community members also spoke of the importance of language skills. For example, another community member shared with me that, for them, learning Dene kədǝ́ has been the key that opens the door to learning all the other Dene knowledge and traditions (personal communication, 2019).

5 DISCUSSION

Northern Indigenous communities have experienced rapid socio-economic changes in the past few decades and have adapted their food systems in response to these changes. Many within these communities are working to maintain and restore Indigenous worldviews, culture, and knowledge, and to re-establish food sovereignty and food security. The involvement of youth is an essential aspect of this work, however, rapid socio-economic changes and the intergenerational trauma caused by residential schools and other forms of colonial violence have damaged social ties and created unique challenges for today's youth.

This research explored the perspectives of youth in Délı̨nę on their priorities, the changes they would like to see in their community, the barriers to youth engagement, what supports are needed, and what role the Youth Council can play. In the previous chapter, the results were presented within the six themes of healing & support, culture, Land, education, voice & governance, and language. In this chapter, I will discuss how these results address my research questions, fit within the literature on youth engagement, and what they reveal about Indigenous food sovereignty.

5.1 Youth Priorities

Through the recommendations presented in the previous chapter the youth in Délı̨nę expressed many changes that they would like to see and work towards in their community. While these were presented within 6 separate themes, there is a great deal of overlap between them. Overall, the youth expressed a strong desire to be connected with their culture and traditions including knowing their language and being connected to the Land. This is consistent with the finding that being on the Land can be calming for youth, bring families together, give youth new

perspectives, and be healing (Ulturgasheva et al., 2014). In addition, youth "associate time spent on the land with cultural strengths, spirituality, continuity across generations, and family" (Salusky et al., 2021). These impacts may be particularly important for the youth in Dél̨ı̨nę as they expressed feeling that they lack support systems and opportunities to heal.

The youth in Dél̨ı̨nę also raised significant concerns about the education system and the challenges they face in pursuing education. These challenges are exacerbated by the pressure they face to be successful in "both worlds" and education systems, Dene and Western (Trout, Wexler, et al., 2018). While the youth in Dél̨ı̨nę have the desire to participate in decision making and make changes in their community and education system, they feel that their voices are not heard.

While the youth mentioned many challenges, they also talked about the positive changes they desire, and strengths that they have to build on. Many of the barriers they face relate to the challenge of walking in both worlds. In terms of strengths and solutions, youth supporting each other, social & historical consciousness, Indigenous frameworks, and the Tsá Tué Youth Council emerged as overarching themes. I will discuss each of these and what they reveal about Indigenous food sovereignty in the following sections.

5.2 Barriers to Youth Engagement

While the youth in Dél̨ı̨nę expressed a clear desire to connect with their culture, share their voices, and make positive changes within their community, there are many barriers that restrict their ability to do so. One of these barriers is the mental health issues that have been caused by colonial violence and intergenerational trauma.

A lot of us have a hard time in showing up and… a lot of youth do show up, but those who don't I think there's a lot of different factors… I think it starts from the parents not supporting their children. When this happens, our children go out looking for the things they didn't have in their homes. In saying this, I realize that the parents may have trauma and have trouble dealing with that in a healthy way hence adding to the cycle, but it is not for parents to burden their children with their trauma... (Interviewee i)

A lot of our young people, you know, are dealing with a lot of things with addiction, mental health, and wellness… A lot of these things really stemmed from again, over time, systemic oppression, intergenerational trauma, all of these really big things (Mandy)

While connecting with culture and being on the Land can be healing for youth (Gilpin & Hayes, 2020; Kakfwi et al., 2018; Ulturgasheva et al., 2014), a lack of mentorship and support can prevent them from being able to do so. Lack of resources and equipment was also mentioned as a barrier to going out on the Land and learning traditional skills and knowledge. However, as resources and equipment are usually accessed through family ties, lack of equipment is often closely tied to a lack of mentorship and support.

It's different for a lot of people, it all depends on the social support they have and the resources there are to have access to… Most of the youth… don't have access to resources… that they need to learn and go out on the Land. Yeah, and the ones who do are the ones that are actually learning and being out there (Interviewee iii)

The current lack of social support for youth is likely a result of the intergenerational trauma caused by residential schools, and the rapid socio-economic changes that have been imposed on Northern Indigenous communities in the past few generations (Truth and Reconcilliation Commission of Canada, 2015). One example of this is that the formal education system has diminished the role of Elders and families (Harnum et al., 2014; Salusky et al., 2021). Another example is the language barrier that exists between generations and creates further challenges, in particular when it comes to the support Elders are able to provide to youth (Wexler et al., 2014). In addition, the older generations themselves are working to heal from trauma and to re-establish their self-determination. In Déljnę, this had led to some youth not getting the support they need.

> *I think a lot of it has been focused lately our government and just our Elders and that's… it's a good thing, but we've lost a sort of balance in trying to include our younger people and having projects and programs, in order to support our younger people (Interviewee i)*

Today's youth are also pulled in different directions by Dene and Western culture, walking in two worlds with often conflicting demands. This is in line with Wexler et al.'s observations about the different Inupiaq generations of today.

> The Inupiaq generations of today speak different languages and have had to respond to very different tensions and pressures of growing up. These historically situated experiences structured each generation's ideas about and pathways to becoming adults, and there is little continuity between them. Young Inupiaq people are thus navigating issues that arise from village schooling,

> balancing the (sometimes conflicting) demands of Western and family life, and participating in a global youth culture, all of which are challenges that are quite distinct from those faced by their Elders (Wexler et al., 2014).

Wexler et al. explain that while Indigenous adults traditionally had stable roles, traditions, and contexts over time from which they confidently guided youth as they entered adulthood, in today's world adults often feel unprepared to support youth as they develop (Wexler et al., 2014). Therefore, Indigenous youth "must learn as they go, negotiating various (sometimes competing) value systems, developing strategies for dealing with everyday problems and significant challenges, and figuring out how to find and take advantage of opportunities that were not available to their Elders" (Wexler et al., 2014).

The youth in Déljnę also described many problems with the local school and with pursuing higher education including a lack of support and opportunities. While Indigenous youth must spend a significant portion of their time in school and often see success at school as important to their future, many do not find meaningful learning in the material taught and the school environment (Salusky et al., 2021; Ulturgasheva et al., 2014). In many ways, this is another of the challenges of walking in two worlds. Schools are largely run by non-Indigenous people and from Western perspectives. As a result, "time at school is largely divorced from relevant and cultural understandings, patterns of behavior and traditions, and is organized in ways that do not connect to the reality of Indigenous young peoples' lives" (Salusky et al., 2021). The disconnect between academic material and the everyday issues Indigenous youth deal with was clearly stated by one youth participant in the work of Salusky et al. (2021).

> A lot of kids, they're just like sitting there, the teacher's talking to them. I mean I think they've got way bigger things on their mind than trying to figure out what two times two is (Salusky et al., 2021)

While the youth identified their Elders and ancestors as the *'rightful teachers'* in one of the recommendations, they may not know exactly who or how to ask for the mentorship they desire.

> *Yeah, I think it just goes back to having like, good leaders, people who are willing to take on those roles to teach youth… we have a lot of broken families in the community with a lot of youth… not having a lot of good teachers in their lives. So, I think one of the main ones is not having enough people who are willing to teach and take on that responsibility to teach the Youth in our community. And that… It's on both sides, it's also up to the youth to come and speak up a bit… I know there's a lot of us who asked for these things, but we don't speak up enough about it enough to be heard, I guess (Interviewee i)*

The difficulty youth face in asking for mentorship or to be taken out on the Land has been noted in the literature. For example, in one study it was found that Inuit youth wanted more time on the Land and opportunities to learn their culture but did not tell their caregivers or Elders this. "None of our young people were able to articulate why they did not tell adult family members that they wanted to spend more time together on the land" (Salusky et al., 2021). Another study found that "young interviewees complained of never being asked or told to go hunting" (Ford et al., 2006).

In both the recommendations, the youth also stressed that they need *'to be respected from where we are, not from where we ought to be'.* I also observed while in the community, in that it often seemed easier for me to ask Elders or other community members to teach me about their culture, such as how to say something in Dene kədǝ́ *(Dene language)* or how to fillet a fish, than it was for the community's youth to ask such things. For me there was no expectation that I already knew, and therefore no shame in asking. However, it seems that some youth in Délı̨nę may experience shame over what they do not already know and that this may hold them back from learning, creating a barrier to youth engagement.

Walking between both worlds without sufficient support in either may also cause youth to feel like they aren't good enough in either. For example, as discussed, when it comes to language many of the youth aren't currently strong in either Dene kədǝ́ or English. This challenge, of youth not being strong in *either* their traditional language or English, was also portrayed in one of the *Indigenous Arts & Stories* entries (Sidarous, 2019). The idea of feeling shame about not knowing their culture well enough and the pressure to save it was expressed in another of the short story entries (Smoke, 2019). It is possible that one of the reasons the interview participants emphasized needing to be respected for where they are is that they experience feelings of shame which create a further barrier to participation, sharing their voices, and learning.

I hypothesize that this may be the case for some youth in Délı̨nę because feelings of shame are often caused by conflicting social pressures (B. Brown, 2006).

> Participants most often experienced shame as a web of layered, conflicting, and competing expectations that are, at the core, products of rigid socio-cultural

> expectations… The participants often found themselves in situations where feeling trapped was inevitable; the shame web entangled them with unattainable expectations or multiple conflicting expectations that could not simultaneously be met; therefore, connections had to be severed or forfeited (Brown, 2006)

It seems likely that the conflicting socio-culture expectations the youth face, to leave home and get a Western education and good job, as well as to stay home and learn their culture, could lead to shame, the effects of which can be significant. Shame can be defined as "an intensely painful feeling or experience of believing we are flawed and therefore unworthy of acceptance and belonging" and is known to produce "overwhelming and painful feelings of confusion, fear, anger, judgment, and/or the need to hide" (Brown, 2006). It is also known to contribute to a range of issues including "a wide range of mental and public health issues including self-esteem/concept issues, depression, addiction, eating disorders, bullying, suicide, family violence, and sexual assault" (Brown, 2006). Therefore, if it is in fact something the youth in Dél̨ı̨nę experience, it may be a significant barrier for them.

5.3 Strengths and Solutions

In this section I will be discussing what areas it might be beneficial for the Youth Council, and others looking to support the youth in Dél̨ı̨nę, to focus on. I want to make it clear that I do not see myself as the expert on this and there is a great deal of knowledge that the members of the Youth Council and other community members have that I do not. However, I did have the opportunity and time to read the literature, spend time in the community, speak to the youth, and analyze the recommendations and interviews. I hope that as a result of this, some of

the observations I make may be generative for the Youth Council and community moving forward and contribute to the broader literature.

5.3.1 Peer Support

Through the recommendations and interviews it was very clear that youth play an extremely important role in each other's lives. In the recommendations, youth talked about loving and supporting each other and sticking together, wanting to be prepared to teach the next generation, and how there are youth who are strong in Dene kədǝ *(Dene language)* that are willing to teach their peers. Many in the 18-30 age group also have children of their own who they want to be able to teach their culture and Dene náoweré *(Dene knowledge)* to. Multiple participants mentioned the desire to help the youth in the community with learning their culture and through general support as reasons they joined the Youth Council. There are likely many reasons that youth in Délı̨nę play such an important role in each other's lives. One reason is that as discussed, the youth have both unique opportunities and challenges to navigate. Mandy spoke to this while sharing how she views the youth.

> *...so much potential. So much light, so much talent and joy to express itself in different ways. They're pretty amazing and I think, again… they have a lot of big things, you know, that they face and that they have to find a way to move forward through… a lot of new challenges that, you know, my generation and generations before haven't had to face (Mandy)*

Through her work as the Director of the Dene Ts'ı̨lı̨ Dahk'ǝ *(Department of Culture, Language, and Spirituality)*, she has also observed the importance of youth mentorship and

spoke about how they influence each other when some youth do not want to go out on the Land or be engaged.

> *How we sort of tackle this, is that no matter what your experience is as a young person, your peers are the ones… to set the standards… when we create this youth mentorship and focus solely on youth and we make the opportunity just for youth we find that they are showing up. We have people every year who paddle that have never paddled, that have never been in the bush, and they really enjoy the time because we made a space, specifically for youth. That was something different that we've been doing (Mandy)*

Of course, youth should also be supported in other ways and by older generations. However, emphasizing the importance of peer support does not necessarily place any increased burden on youth, as they clearly already feel the responsibility to support each other. This is consistent with the findings of research done on a suicide prevention project in Manitoba.

> While the Grand Chief and some leaders and Elders recognized the leadership role of the youth, others were reluctant to have the heavy burden of suicide prevention placed on young shoulders. It seemed that such adult leaders did not realize that the youth already felt the burden, and that they needed to take action to help their brothers and sisters before any more tried this escape route (Sinclair et al., 2011)

The support that the youth provide each other could be further encouraged and facilitated through the creation of more youth specific spaces such as youth forums. It is important that the support Indigenous youth provide each other is celebrated and documented since although the

youth often do a great deal to support each other and their communities, this is not usually reflected by dominant narratives about them.

> What is not well documented is the extent to which Indigenous young people are actively engaged in improving their own lives as well as the lives of their peers, families, and communities (Formsma, 2013, p. 103)

5.3.2 Social & Historical Consciousness

The results of this research also revealed the importance of Dene youth being able to contextualize their experiences by having a clear understanding of their history and of the present-day systems that impact their lives.

> *I think [the youth] also internalize a lot of things, good and bad, and that's exactly what it is. That we have this history, this trauma, but we also have powerful ancestors, powerful presence, and we've adapted. So, they just internalize what's there. There's a lack of opportunity, there's strong culture… unhealed parts of residential school history… whatever is there is what they internalize and then bring out (Mandy)*

This description is in line with Sinclair's observation that "many First Nations youth grow up without a sense of cultural identity and spirituality, without ever realizing that the deep roots of what they experience lie within the history of colonization, and government policies and actions" (Sinclair et al., 2011) and Wexler's finding that while Indigenous adults and Elders often view historical events and experiences as the root causes of the health and social problems currently faced by communities, Indigenous youth are more likely to see these challenges as

results of "personal and collective failure, rather than emerging from historical trauma and ongoing colonization" (Wexler, 2009). This demonstrates how social and historical consciousness, such as understanding the impacts of intergenerational trauma, is an important part of healing, one of the youth's biggest priorities.

Another interview participant described how learning about the Sahtuót'ı̨ne Dene *(People of Great Bear Lake)*'s history has helped them.

> *…one Dene Elder I look up to is the late George Blondin… I love his books. He writes about these legend stories that occurred in Dene history. I just find it all so fascinating. It also helped me understand a little bit more of what our ancestors had to overcome for us to be here today (Interviewee iv)*

Another participant described learning to see the challenges they face as systemic by leaving the community and pursuing post-secondary education.

> *…everything is ingrained into the systems and … I've mostly seen it, not from a systemic view but just mostly personal but I wasn't aware of colonization and all that so I'm glad I went (Interviewee iii)*

This participant also described wanting to educate the younger generations about colonial systems and being allies. These examples demonstrate how learning both their own people's history and about the broader issues associated with colonization can help youth to situate themselves and their own challenges and identity. While this participant had the chance to learn about the systemic challenges caused by the colonial state including intergenerational trauma, not all youth in the community have had the same opportunities to learn. For example, a

friend I made on the canoe trip explained to me that, until very recently, she did not really know anything about residential schools. It shocked me to realize that I grew up knowing more about these "schools" than someone whose parents were likely forced to attend them. However, the reality is that this history has only very recently been talked about within Canadian society and many residential school survivors may be unable to talk about this past or choose not to as a strategy to protect their children or for other personal reasons.

Having a strong social and historical consciousness can have many positive impacts. It has been correlated with better mental health and helps youth to "sustain a sense of connectedness and commitment to their future" (Wexler, 2009). It can also be an important factor in overcoming shame. Shame resilience theory proposes "the level of critical awareness regarding social/cultural expectations and the shame web" as one of four critical factors in overcoming shame (Brown, 2006). Critical awareness is described as connecting personal experience with broader, socio-cultural issues (Brown, 2006) and is therefore very similar to the concept of social and historical consciousness.

5.3.3 Indigenous Frameworks

In many ways, Délįnę is working to create new frameworks in order to adapt to the latest changes the community has seen and create a way forward for themselves. Adaptation is not a new tool but something that has always been important to the Sahtuót'įne Dene *(People of Great Bear Lake).* For example, the Dene way of life has always been adapted "to the various impacts it has encountered… the development of the mixed economy is a prime example of such innovation" (Harnum et al., 2014).

We've always been masters at adaptation and we're going to continue to be, because that's just our spirit, that's who we are. We'll find different ways of telling our story, we'll find different ways of carving our space… we'll find ways to continue to protect what's important to us from our Land, our families, our children, to our future. Whatever ways and tools come to us we'll find ways to use that for that same purpose (Mandy)

Currently, the community is working to adapt to the challenges of walking in both worlds and re-establishing their self-determination. The establishment of the DGG is one example of this. The current efforts to amend the self-government agreement and add a seat for youth is another such example. Having a seat for youth brings the present structure of the government more in line with traditional Indigenous values and is a common approach in Indigenous communities and organizations (Formsma, 2013). Despite everything that has already been accomplished, there are a lot of systemic changes still needed to overcome the negative impacts of colonization.

The real harsh reality that we have to look at is that we need to, more now than ever, look at re-establishing and creating something that's going to… help our children succeed across the board in western and traditional ways and that's a vision of the Elders… to be strong in both. So that's a vision towards total wellness in a sense, as two roads coming together as one, that's how they describe it and that's what we're trying to do… We're talking about creating a new framework that's going to incorporate these two worlds, the two worlds as one model in everything from governance, education, to health (Mandy)

As discussed, education is one area that youth are particularly concerned about in this regard.

> *Ideally it'd be really good to have both, but I think that's a really long journey like a very long journey considering where we're at in terms of our school and the way we teach… (Interviewee i)*

The efforts being made to create a bush school could make a significance difference to the education system in Délįnę by giving students consistent opportunities to learn out on the Land and alternative pathways to graduation. This could also give students a better learning environment where they tend feel more connected with their culture and at peace (Salusky et al., 2021).

> *You only have one life and there's two ways of education, two ways of life, what we want to do is bring the best of those two things together and go from there. And we're not recreating anything new, this is how education was brought into the Community, there were, you know, teachers or a lot of times missionaries that came in with certain families in the traditional territories and taught children how to read and write (Mandy)*

Incorporating the teaching of Western curriculum into an on-the-Land setting could be seen as aligning with Wall-Kimmerer's Three-Sisters model in which traditional knowledge (the corn) is the intellectual scaffold, the knowledge of plants and the Land (the squash) gives context, and western scientific knowledge (the bean) is guided by the scaffold of Indigenous knowledge and fits within the context created by the Land (*Marrying Indigenous Wisdom and Scientific Knowledge*, 2019; Robin Wall-Kimmerer, 2020). In Délįnę, bringing the Western

curriculum into the context of the Land could give students opportunities to be more grounded in their Dene knowledge, culture, and values. The Western curriculum they learn could then be placed within the context of those values and the knowledge of the Land.

Another example of Dél̨ı̨nę fitting Western tools into a Dene context is the visioning workshops that were held on the Land in 2019. The government hired a facilitator and gave community members a chance to voice their concerns while out on the Land. It appeared that doing so gave community members who might not be comfortable participating in governance in the settlement a chance to participate. A community member also shared with me that they feel it is easier to keep in mind what is most important when out on the Land rather than in a boardroom (personal communication, 2019). Therefore it is a better space to make decisions from, where families feel more connected to each other and the Land (Salusky et al., 2021).

> *What we're talking about is, we just want to be Dene. We want to have our way of life and be able to teach that. To have time to live our lives like our ancestors did, to have the time in our lives, and the spaces to just continue on the teachings that were passed on to us. To have our children also speaking our language, living that way of life. We just want to be Dene, just want to enjoy the Land, to continue that connection and pass it on, and that very beautiful, very simple, for us, thing, it means systemic change, essentially, it means reconciling, making right this horrible history of forced colonization, assimilation through policy, through residential schools, all of these things just to go back, just to live as Dene people, it means so many things… What it means to live and be as a Dene means, you know, that we are stewards. We are the original*

conservationists; we are the stewards of our Lands. We are self-determining and we can make decisions for ourselves, hence the self-government (Mandy)

As being stewards of the Land is a core part of what it means to be Dene, many of the frameworks Délįnę is working to create have to do with protecting Great Bear Lake and the surrounding Lands. The efforts being made to establish a Guardians program demonstrate how the community using new tools to stay true to who they are. These programs have been referred to as "a modern take on an ancient tradition of caring for the land" (Indigenous Leadership Initiative, n.d.-a). It could also be greatly impactful for the youth in Délįnę.

One of the visions for the Guardians program is to provide an opportunity for young people who want to make a living out on the Land (Interviewee ii)

This could help to achieve the two roads as one model, referred to by Mandy, by giving some youth the opportunity to make a living while practicing traditional skills and building Dene náoweré *(Dene knowledge)*. Guardians programs also highlight how Two-Eyed Seeing can be a strength, as they can make use of use the latest technologies and traditional knowledge together to watch over the Land (Kakfwi et al., 2018), support governments in learning to combine the knowledge systems (Social Ventures Australia Consulting, 2016), and help youth "to become not just today's guardians but also future educators, lawyers, scientists, and legislators" (Indigenous Leadership Initiative, n.d.-a).

This program would also provide opportunities for healing and building social support, one of the youth's biggest priorities.

> When Indigenous youth are asked what would inspire them, their response is time on the land; Guardian programs make that possible and help instill a sense of purpose and leadership. Becoming a guardian strengthens young people's pride in their culture. For too long, government policies and legislation has tried to strip Indigenous Peoples, particularly youth, of their cultural identity—causing generations of pain and despair. (Indigenous Leadership Initiative, n.d.-a)

Opportunities to be connected to the Land and develop Dene náoweré are becoming increasingly important in light of climate change which can make being on the Land more dangerous (Ford et al., 2006; Guyot et al., 2006)

> *There's an opportunity for them to learn both but, you know, I see the traditional cultural way as a way of life… it's not just learning the theories its actually doing it… it takes a lot more time and it takes a lot more focus, it actually takes all of your attention to do it and to do it well and especially now because as our Elders tell us because of climate change that skill and that focus has got to be more sharp than ever before and that takes a real intimate knowledge of the Land for you to know what the differences are and how to be careful when you're out there (Interviewee ii)*

As the Sahtuót'ı̨ne Dene are working to create new frameworks, they are realizing that there is a need for dedicated youth spaces where youth aren't afraid of being criticized when sharing their opinions or learning new skills. As discussed, the youth may feel shame about not already having certain knowledge or skills.

They want to feel that they are fully welcome and improving and that they will be treated in a good way so if they're learning something they don't know, they're not going to be shamed for it (Mandy)

This finding reinforces Formsma's conceptualization of youth engagement as consisting not only of providing programs to young people but as "an attitude of having respect for and including young people in decisions that affect their lives" (Formsma, 2013). At the 2019 on-the-Land camp, the lack of space for youth was brought up and as a response the community held a visioning session specifically for the youth. Other community members sat back to listen while a physical space was opened up for the youth to gather in and share their perspectives. Mandy described how this ending up being a very important shift.

When we gave that space to the young people to speak it just brought down the entire camp… people were crying, it turned into like some sort of like healing and revival, you know, in the end, like, after the youth were able to speak… we realized that we have to carve out specific space for young people to physically come into but to also, you know, bring their experience or to put their experiences of the things that they want at the heart of it. So as we're shifting and doing that, we're finding that we're getting so many people, so many new young people, that are coming into the experience (Mandy)

5.3.4 Youth Council

The Tsá Tué Youth Council was formed in response to some of the concerns raised by the youth at Déljnę's 2019 visioning session. It was formed tSaco give youth more of a voice within the community and create opportunities for them to help create the changes youth want to

see. The members of the Youth Council joined out of desire to create positive change and support the youth in their community and the formation of the council was met with great excitement from the community including the DGG and the Elders.

> *What's really exciting is how crazy everyone went when the Youth Council formed. They don't really see, you know, the internal struggles that are happening but… just the fact that we just established was something that created huge waves and excitement… (Mandy)*

The youth themselves were also very excited, however, consistent participation from members has been a challenge. Participating in youth councils often requires significant time and work and carries high expectations (Formsma, 2013).

> *We have a really core, good group that are really consistent, that show up consistently, they're committed, great ideas, they're ready to go, but we also have a few that are struggling a little bit with commitment. Struggling a little bit with, you know, showing up for different reasons and then that's something that we're trying to learn from too… it's not, like, a total fail, it's something to learn from. How come some youth are a lot more committed than others? What are the barriers? What are the things that are here, that are, you know, in the way? (Mandy)*

This perspective is in line with Switzer's finding that youth have sophisticated understandings of the costs and benefits of participation and are often left to addressing the costs on their own, a lack of participation can be understood as an indication that youth's needs are not being met rather than as deviancy (Switzer, 2020). It has also been recommended that

evaluations of youth programs should consider longer time frames in order to capture incremental change as some failures are "an inevitable part of running youth programs in demanding conditions" (Formsma, 2013). One of the challenges the council is facing is trying to learn the formal governance processes used by the DGG in order to be able to participate.

> W*e've decided to sort of formalize in a sense, mostly because it's part of leadership trainin*g*, really, for them as well, because we realized that we need to equip our young people. Essentially, they're leaders, so we need to train them in ways of being able to navigate through the ways that, you know, the system is currently… there's a lot of things that we've done in the last year, from the time that we've established but there's a bit of a struggle… there is a whole history and background of processes of things that they need to learn about. How do we make that fun, you know, how do we make that something that they can connect to? That's always a tough challenge… (Mandy)*

This can also be particularly challenging in the North because of the overlapping levels of governance making governance in the North more complex (Johnston & Andrée, 2019). The limited mentorship available in the community in general is also impacting the Youth Council. Research has shown that youth-adult partnership is a quality of successful civic youth engagement (Camino & Zeldin, 2002). However, in Déljnę and many Indigenous communities, the adults who are strong role models are often "already very busy within their own organizations or family life and committing additional time for volunteer work is often a challenge" (Crooks et al., 2010). While there is some support for the Youth Council from DGG staff, and from our research partnership, more mentorship might be needed as the council gets

established. In addition, holding discussions around the conflicting pressures they are facing could help the Youth Council members to empathize with each other and find pathways forward.

Although there have been challenges, the Youth Council also has strengths to build off. The members are passionate about creating positive changes and supporting each other. As the Youth Council becomes more established, it can help to improve youth engagement in the community by creating space for exchanges of advice, direction, and knowledge between youth and adults in the community (Formsma, 2013). The Youth Council also hopes to help create safe spaces for other youth in the community and to help share their voices. By sharing the perspectives of the youth with the DGG, the Youth Council can support the DGG in establishing new frameworks. The council members could also help create opportunities for youth to increase their social and historical consciousness. For example, workshops or media content on themes such as Dene history and intergenerational trauma.

5.4 Youth Engagement for Indigenous Food Sovereignty

In exploring how the youth's perspectives relate to food sovereignty, I'll use the framework of Morrison's four principles of indigenous food sovereignty: Sacred Gift of Food, Participatory, Self-Determination, and Policy (Morrison, 2020). It is interesting to note that this framework itself could be viewed as an example of Two-Eyed Seeing. Sacred Gift of Food and Participatory relate to sacred relationships to the Land and actively participating in traditional food practices, drawing on Indigenous ways of being. Policy, on the other hand, is recognized as a necessary tool for maintaining earth-based practices in today's world. Therefore, the strengths of Western knowledge and navigating Western systems are also necessary to Indigenous food sovereignty. Self-determination involves the strengths of both perspectives. For example, being

self-reliant in order to be able to contribute to the wellbeing of the community can be seen as an Indigenous value. However, Morrison also refers to building self-determination in the context of global food systems which could require both types of knowledge.

Referring to the first principle, Sacred Gift of Food, Morrison describes food sovereignty as a "gift from the ultimate life force" and "guided by the higher intelligence of nature" and as encompassing "our sacred responsibilities and relationships to one another and the land" (Morrison, 2020). In the recommendation *'Fortunate for all the traditional foods - we are blessed',* the sacredness of Dene béré *(Land food)* is recognized by the youth. Other than this recommendation, the youth did not focus much on food or spirituality directly. However, connection to Land, and to Great Bear Lake in particular, is central to the spirituality of the Sahtuót'ı̨ne Dene *(People of Great Bear Lake)* (Great Bear Lake Working Group, 2005) and the youth did clearly express their desire to spend more time on the Land. This highlights the importance of supporting opportunities for youth to simply be out on the Land as a key strategy for building Indigenous Food Sovereignty. As discussed, establishing a Guardians program could help to create a context in which it's possible for young people to both make a living and connect with their culture and Dene náoweré *(Dene knowledge)*. Having more youth actively engaged in protecting the Land can help to build food security and food sovereignty as health of the Land is central to northern food systems (Spring et al., 2019). It was also found in Délı̨nę and other Indigenous communities (Ford et al., 2006; Salusky et al., 2021) that although youth desire mentorship and to be taken out on the Land, they may struggle to express this to family members or other potential mentors. Therefore, strategies to build new networks of mentorship beyond familial networks may also be beneficial.

The second principle, Participatory, refers to every day, active participation in Indigenous food practices from harvesting and gathering, to sharing and consuming traditional foods (Morrison, 2020). As was demonstrated through the interviews, there is a range of experience among youth with some of them commonly involved in the harvesting of Dene béré and others lacking the opportunities and skills to do so. The youth in Déljnę need opportunities to practice traditional harvesting skills in spaces where they are welcomed and supported, and where it is acknowledged that not all of them have had previous opportunities to learn. Opportunities for the youth to learn about the past and the external forces affecting their food system could also help to build their social and historical consciousness and strengthen their identity and participation in traditional food practices. The youth are also keen to support each other and the younger kids in the community. This peer support can be facilitated through allocation of resources. As many of the youth in the 18-30 age group also have children of their own, opportunities could be created for both parents and their children to learn together.

This research also highlighted the importance of youth engagement including respect for youth and their involvement in decision making (Formsma, 2013). Language use can be an important aspect of this. For example, while the term “capacity building” is commonly used, one youth food sovereignty research project chose instead to use the term ‘deskilled’ and emphasized the youth’s capacity to learn.

> “We did not need to "build capacity" with our participants. They were not empty vessels void of skills and knowledge. Despite feeling deskilled, the participants adapted these new food skills easily. These skills are a part of culture, however disconnected we are from it” (T. R. Martens & Cidro, 2020).

The third principle, self-determination, includes people being able to respond to their own food needs, or being self-reliant. This allows them to "be free to give to the collective health and well-being of the larger whole of the tribe or community" (Morrison, 2020). It also includes the context of global food systems, in which self-determination is seen as possible through a "co-operative economy that cross-fertilizes subsistence with small-scale, market-based values, where the community works together to be free from corporate control and oppressive land, water, and social policies and practices" (Morrison, 2020).

Self-determination is a common theme in Déljnę, from the self-government to the Youth Council, and Mandy refers to it as a tool of their ancestors.

> *...if we really want change to continue, you know, what we're talking about as young people, we have to literally go and do it ourselves because, again, there is no space within the settlement, the community... we know that we can only do it ourselves for it to happen so this is why the Youth Council [was needed]... So we're picking up... our ancestors' tool really, basically, of self-determination and we have to do things for ourselves. If we want something we have to be the ones to make it happen and work together... these are traditional things that we're reconnecting to and they're becoming really important (Mandy)*

All the different ways Déljnę is working to create their own frameworks, including the Youth Council, are practices of self-determination and help the community to fight back against oppressive colonial policies. For example, IPCA's have been described as "one way that Indigenous Peoples are taking steps to assert their self-determination and responsibilities to lands and waters, even within colonial legacies" (Tran et al., 2020). In many ways it seems that

currently, for youth in Dél̨ı̨nę and other Indigenous youth, self-determination means discovering what it means to be Indigenous in today's world (McArthur, 2016). The themes of healing and building social and historical consciousness can therefore be important aspects of self-determination by helping youth build their self-reliance and therefore be better able to contribute to the community as a whole.

Youth can also become more self-reliant as they re-connect to their culture and traditional food practices and have the chance to define their own food system. The youth's desire for self-reliance was expressed through the recommendation '*To live off the Land'.* This is particularly important in the North where market food options are limited and there is a lack of competition within the retail market, creating an oligopoly (Skinner et al., 2016). As was highlighted by the COVID-19 pandemic, having the knowledge and skills to harvest from the Land also provides security (Bayha & Spring, 2020; Harnum et al., 2014).

The final principle is Policy as Land based practices are greatly impacted by colonial policies and there are many structural inequalities that need to be addressed (Morrison, 2020). There are many examples of the impacts of colonial policies in the North, such as caribou management policies which tend to blame subsistence harvesting for population decreases despite clear evidence that resource development is a more likely cause (Parlee et al., 2018)

Policy can be a challenging area for youth to participate in as their voices are often left out of governance and decision making processes and participating in them can require new skill sets (Formsma, 2013; Liebenberg et al., 2017; Lines et al., 2019; MacDonald et al., 2013). However, understanding the impacts of colonial policies and structural inequalities can be an important aspect of building social and historical consciousness (Wexler, 2009). Learning to

navigate the formal structures and procedures of systems of governance can be a barrier for youth in participating in governance. As Mandy explained, this has been a challenge for the Youth Council. However, not all youth need to participate directly in governance for their voices to be heard. Spaces can be created for youth to share their voices in, such as the DGG did at the 2019 visioning camp, and then applied to governance. Further, those youth who are interested in participating in more formal governance processes can do so and help to share the voices of their peers, as the Youth Council is working to do.

6 CONCLUSION

This research project built on ongoing food systems research in Délı̨nę. Youth engagement, including through the Tsá Tué Youth Council, was the focus of this project as youth engagement is an important aspect of food sovereignty, as well as stewardship and climate change adaptation, and a current priority of the Délı̨nę Got'ı̨nę Government. In this section I will summarize the results of my research questions.

What are youth in Délı̨nę concerned about and what are their priorities for change within their community?

The youth in Délı̨nę face many unique challenges from the generations before them, and from non-Indigenous youth in Canada, because of colonization and the rapid socio-economic changes that have occurred in the North in the last century. They expressed a strong desire for more opportunities to connect with their culture and the Land, including learning their traditional language. However, they also expressed that this is very challenging to do because of many barriers they face, including intergenerational trauma, and the pressure that is on them to become experts in both Dene and Western knowledge systems. Education is another major concern among the youth because of this pressure and the dichotomization of the two knowledge systems in their lives. In dealing with these challenges the youth expressed that they are lacking a sufficient support system and opportunities to heal and that they do not feel that their voices are heard on these issues and that space needs to be made for them within the community's governance. The youth showed determination to create the changes they want to see and to create opportunities for the younger kids in the community and for future generations.

What are the barriers to youth engagement in Délįnę, including connecting with their culture, having their voices heard, and participating in opportunities offered to them?

Youth in Délįnę have, in a sense, grown up with a foot in each world, Dene and Western. They want to, and are asked to, know their culture and Dene náoweré *(Dene knowledge)* and be connected to the Land to save Dene ways of life from being lost. At the same time, they are told by their community and by Western culture that they need to get higher education, which requires leaving home for long periods of time. Attempting to become an expert in either knowledge system comes with its own challenges. For example, a lack of resources and equipment can prevent youth from being able to go out on the Land and the language barrier between generations makes learning from Elders difficult. In terms of Western education, one example is that the limited courses offered at the local school mean that upgrading is necessary before pursing higher education. The dichotomization of the two ways of life and kinds of education, and the pressure to pursue both simultaneously creates further challenges. For example, the daily structure of the school system restricts youth's ability to go out on the Land.

On top of the challenges of walking in two worlds, youth are dealing with the intergenerational trauma of residential schools and present-day structural inequalities. As the truth of residential school history has recently begun to be broadly recognized, and the current school system is largely run by non-Indigenous people and fails to teach the history of colonization in Canada in a meaningful way, the youth in Délįnę often lack the social and historical consciousness to situate the challenges they face and therefore internalize them. Given these challenges, many Indigenous youth face mental health issues and feel unable to manage them, contributing to addiction. In Délįnę, the older generations are also dealing with many of the same challenges. Overall, youth feel that they lack support and spaces for them to participate,

learn, and share their voices without fear of being criticized. As conflicting and unattainable socio-cultural expectations are known to lead to shame, shame may also be a significant barrier to youth participation in Dél̨ı̨nę. The challenge of participation among the Youth Council members demonstrates that lack of motivation is not the primary issue, but that even among youth who are most eager to participate, further support is needed.

What supports are needed to address these barriers and what role can the Youth Council play?

While the youth did describe many challenges they face, they also spoke about the hopes, strengths, and determination they have. Based on the perspectives of the youth and other interview participants I identified peer support, social & historical consciousness, and Indigenous frameworks as potential strategies for building the support the youth in Dél̨ı̨nę need.

Throughout the different themes explored, it was very clear that youth play an extremely important role in each other's lives for many reasons. Efforts to encourage and support this existing strength, such as the creation of the Youth Council, could be an effective strategy. It was also emphasized that having spaces created specifically for youth, where they feel safe to learn and share their voices without being judged, is an important aspect of this.

Having a strong understanding of the social and historical context of their own lives also appears to be an important factor in youth's ability to overcome the barriers they face. It can allow them to understand the struggles they face as part of a larger context rather than as individual weakness or failure. This may be particularly important given the negative stereotypes that exist about Indigenous peoples. It can also be an important factor in overcoming shame, if that is something the youth are experiencing.

The creation of Dene frameworks, or Indigenous frameworks more generally, can help to alleviate the challenge of walking in two worlds. Drawing on the ideas of Two-Eyed Seeing, and the Three-Sisters model, I believe that walking in two worlds can be a great strength but that Western ways of knowing need to be put in the context of Indigenous ways of knowing, which are broader and include values explicitly. The Dél̨ı̨nę Got'i̯nę Government is working to create new models that work for their community, such as the creation of a bush school and through the development of the self-government itself.

The Tsá Tué Youth Council is working to create opportunities for youth and be a voice for other youth in the community. With the knowledge that they have of their peers' needs they can help to create spaces where youth feel comfortable going on the Land, learning their culture, and sharing their voices. The Youth Council can also help provide peer support and facilitate opportunities for youth to build their social and historical consciousness. By helping to share youth's voices, they can support the Dél̨ı̨nę Got'i̯nę Government in creating Dene frameworks that meet the needs of the youth. In addressing the challenge of participation within the Youth Council itself, facilitating conversations around barriers to participation and supporting each other may be beneficial.

How can these perspectives inform food sovereignty work?

To explore how these findings can inform food sovereignty work, I applied Morrison's framework of Indigenous food sovereignty which is made up of four principles: Sacred Gift of Food, Participatory, Self-Determination, and Policy (Morrison, 2020). With regards to the first principle, it was found that youth did not speak much about spirituality but did refer often to connection to Land. This highlights the importance of supporting opportunities for youth to

simply be out on the Land. In terms of supporting everyday participation in the traditional food system, this research highlighted the importance of safe, youth specific spaces being created, peer support being facilitated, and opportunities to gain social and historical context being offered so that youth can more freely admit what they do not know and would like to learn. Self-determination is a theme that the Youth Council also identified as important to them. The restoration of intergenerational knowledge transfer of land-based skills is one important aspect of self-determination and self-reliance which provides security in the North. The creation of Dene frameworks and discovering what it means to be Dene in today's world are also important aspects. The final principle, Policy, can be a challenging area for youth as it can at times require learning a whole new skill set. As demonstrated by the work of the Youth Council, learning the structures of policy and governance work can be a barrier. However, appropriate spaces can be created for youth's voices to be heard and then applied to policy. Those youth who are interested in participating in governance can help to support other youth by sharing their voices.

6.1 Reflection on Methods

At the on-the-Land camp I attended, visioning workshops were held by the Déljnę Got'įnę Government and the youth spoke about the challenges they face and their visions for the future of Déljnę. Hearing the youth speak and getting to know them through my time in the community, I caught glimpses of the complexities of the challenges they face. I am embarrassed to admit that looking back on my time in Déljnę I realized that I had felt a degree of surprise hearing the various, complex perspectives of the youth and other community members on the challenges they faced and the hopes they had for creating change moving forward. I think that while I theoretically knew that there is great wisdom in lived experience, I subconsciously

assumed that community members would be busy dealing with the challenges at hand, leaving no time to analyze them, when in fact they were doing both.

I also realized that there was a discomfort I often felt reading northern food systems literature, including even that which was carried out through community-based methods and in collaboration with Indigenous communities. I felt that while colonialism was usually mentioned, it was often written about passively, as a thing of the past, or without clear connections to the challenges faced by Indigenous peoples today. As noted by Māori scholar Linda Tuhiwaih Smith, "the formal scholarly pursuits of knowledge and the informal, imaginative, anecdotal constructions of the Other are intertwined with each other and with the activity of research" (Smith, 2013, p.2). All narratives, including academic literature, contribute to peoples' constructions of self and other and I believe that the literature I had read contributed to my biases. I often feel that there is a paternalistic undertone to literature written by non-Indigenous scholars, and I believe that this, along with the stereotypes of Indigenous peoples that are so prevalent in Canadian society had sunk in, creating an unconscious bias within me.

When I started writing about the food system in Déljnę, I also found myself uncomfortable with my own writing as I was largely drawing on the style of, and citing, the very literature I was not entirely comfortable with. I felt that there was a disconnect between my experiences in Déljnę and what I was reading (and writing) about Indigenous peoples and northern food systems. Writing in 2020 while the disproportionate effects of COVID-19 on certain populations were becoming clear, and the Black Lives Matter movement gained momentum, caused me to reflect further on the systemic nature of racism and white supremacy, and the impact that narratives can have.

In chapter five of *Indigenous Food Systems: Concepts, Cases and Conversations*, Leslie Dawson argues that settler colonialism is reproduced through biomedical narratives of food and nutritional health and that counter-narratives based on Indigenous foodways are needed in order to address food insecurity and promote Indigenous food sovereignty (Dawson et al., 2020). Reading this work helped me to begin to identify the discomfort I felt with some food systems literature. My thoughts on this matter were further expanded by Eve Tuck's critique of damage-based frameworks. Tuck highlights how although "damage-centered research involves social and historical contexts at the outset, the significance of these contexts is regularly submerged. Without the context of racism and colonization, all we're left with is the damage" and proposes desire-based frameworks as an antidote (Tuck, 2009). These reflections are what led me to attempting to apply an Indigenist research paradigm informed by Tuck's desire-based framework.

In part due to the limitations caused by COVID-19, my methodological approach to this research did not result in the use of unique or noteworthy methods. However, attempting to work within an Indigenist research paradigm did significantly impact the way I approached this project and wrote this thesis. Most of my life I have been educated from a Western perspective and this is still the primary lens through which I see the world. However, I believe that every attempt I made to learn about Indigenous worldviews and to apply that lens to my research helped me to find new ways of thinking. I attempted to make the impacts of colonialism explicit, and to always link the challenges faced in Délı̨nę to the broader context. I also tried to avoid linear, reductive thinking in my analysis and learn from principles common to Indigenous worldviews, such as relationality, by reflecting on my own relationship to concepts and ideas.

The main message I took away from Tuck's work was the need for nuance in research by including context, and the hope, joy, and strength of Indigenous people as well as the challenges. This message is echoed by many, particularly when it comes to youth.

> "Young people have a lot of knowledge and expertise about the matters that affect them. What typically receives public and media focus is the plight of Indigenous young people, but not the strength and determination they have in trying to create a better community for themselves, their peers and, oftentimes, their children" (Formsma, 2013)

I also found many points of connection between Tuck's descriptions of desire-based inquiry (Tuck, 2009, 2010) and Wexler's explanations of social and historical consciousness (Wexler, 2009). For example, Wexler contends that "when young people have a clear understanding of their cultural past, present, and future, it is easier for them to sustain a sense of connectedness and commitment to their future" (Wexler, 2009) while Tuck describes desire as being "about a present that is enriched by both the past and the future" (2010). In a sense, I think of desire-based inquiry as research with social and historical consciousness.

I believe that by ensuring that research includes social and historical consciousness, we can create, and create space for, counternarratives in food systems research based in Indigenist and Indigenous understandings of food systems. Included in this can be counternarratives about what it means to be Indigenous in today's world. I believe that the best way non-Indigenous researchers can contribute to the creation of counternarratives is by making space for Indigenous researchers and amplifying the voices of Indigenous people. While I am sure I have made many

mistakes along the way, I believe that attempting to apply an Indigenist research paradigm, including learning from and citing many Indigenous scholars, is one way to do so.

I have also been reflecting on how meaningful it was for the youth to have a specific, physical space opened up for them at the visioning workshops, and on the Three-Sisters model of Western knowledge fitting within an Indigenous framework rather than the other way around. It seems that Indigenous scholars are often only welcomed in Western academic spaces if they are willing to adapt and fit in the Western system. We need to truly make space for Indigenous peoples and worldviews in academia and this doesn't just mean giving them a seat at the table; it means that we need to create spaces in which the rest of us leave the table and sit quietly in the back of the room (when invited) to listen and learn.

In applying an Indigenist research paradigm, I relied on relational accountability to determine the rigor of my research. At times I found myself questioning this, as from a Western lens, it can seem like an excuse for not meeting the rigor of Western methods. However, I believe that to truly be accountable to your relations, including other people, the Land, and yourself, actually requires a far greater degree of rigor. This is precisely why space needs to be made for Indigenous people and worldviews. The more that Indigenous knowledge and worldviews are fit into Western frameworks and viewed through a Western lens, the more chance there is for them to be misinterpreted and dismissed.

Having spent much time thinking about the dichotomization of Western and Indigenous culture, I was also struck by Indigenous scholar Thomas King description of the dichotomy as "the elemental structure of Western Society... Rich-poor, white-black, strong-weak, right-wrong, culture-nature, male-female, written-oral, civilized-barbaric, success-failure, individual-

communal... we trust easy oppositions, we are suspicious of complexities... " (King, 2003, p.25). As highlighted by McCoy, although Western and Indigenous cultures have distinct social values, “there is not always great separation between the two. Indigenous and non-Indigenous people continually cross between these two cultures as they shift across different timeframes, relationships, entertainments, sports, religions, labour and political life” (McCoy, 2009). It is clear from this research that the dichotomization of the cultures and knowledge systems can create many challenges for Indigenous youth. As highlighted by King, dichotomization is in many ways embedded in Western society, and often the Western academic system in which we seem to spend a great deal of time trying to define and contrast concepts, at the cost of nuance and context. In exploring the importance of context, Wilson draws on the work of Terry Tafoya.

> An idea cannot be taken out of this relational context and still maintain its shape. Terry Tafoya (1995) describes this in his Principle of Uncertainty. Just as Heisenberg theorizes in his Theory of Uncertainty in physics, that it is impossible to know both the velocity and the location of an electron at the same time (you would have to stop it to measure its location, or you would lose its location if it maintains its velocity), Tafoya postulates that it is not possible to know exactly both the context and definition of an idea at the same time. The closer you get to defining something, the more it loses its context. Conversely, the more something is put into context, the more it loses a specific definition (Wilson, 2008, p.8, also see Tafoya, 1995).

This explanation highlights the danger of fixed ideas and of focusing too much on defining concepts. Wilson also describes how ideas and concepts are not as important as the relationships that went into them and our relationships to them (Wilson, 2007, 2008). This kind

of thinking is demonstrated through the thinking of Blay-Palmer et al., regarding the debate over the distinctions between food security and food sovereignty. They argue that "while theoretically the terms are often very differently nuanced, practically they commonly provide valuable and complementary foundation for food system transformation" (Blay-Palmer et al., 2014). Perhaps more progress can be made when it comes to food systems and climate change if we spend less time defining and re-defining terms, and more time embracing complexity and place-based, context specific knowledge.

Another lesson that I learned in Déljnę, that was reinforced during the pandemic, is the importance of letting things happen when they are supposed to happen. In 2019 I went on a canoe trip with youth in Déljnę. The morning we were supposed to leave it was too windy and we were delayed multiple times. My host had two words for me: nįhts'i k'áowə or 'wind boss'. The wind was outside of our control, and it would have been dangerous to travel at that time. Instead, we waited for the right conditions to begin our trip. Similarly, with my research it simply didn't make sense to push to get things done in the summer of 2020 when everyone had other concerns and priorities due to the pandemic. This value is usually not reflected in Western institutions, which tend to enforce strict timelines and push for productivity despite the circumstances. In many ways, the delays that I faced were what allowed me to explore Indigenous worldviews and methodologies and reflect more deeply on how I was writing, in a way that typical master's degree timelines would not have allowed for. Better education on colonization and the history and worldviews of Indigenous peoples at every level of the education system would help to give graduate students a proper foundation to build their research out of.

6.2 Future Research

Délįnę is a very interesting community to work with as it has many unique qualities and is in many ways a leader in adaptation, conservation, and governance. Many other northern communities may be interested in or working towards self-government, youth councils, and Guardians programs and can look to Délįnę's example to learn. Further community-based research that documents these topics can help to further Délįnę's work as well as share knowledge with other communities.

Given the importance of social and historical consciousness to youth engagement on food sovereignty, there are also opportunities for future CBPAR research to support youth in building their collective understandings of history, colonialism, culture, and identity. In doing so, research efforts can support youth in determining what it means to them to be Indigenous in today's world. I see this as an important next step for CBPAR research in Délįnę and with the Youth Council. I see the methods of (Trout, McEachern, et al., 2018), in which research findings are shared and then interpreted by community members themselves to find context specific solutions, as a potential way of doing this.

The youth also have many ideas that they want to implement, such as using digital storytelling to share traditional knowledge. These ideas and processes could be supported and shared with other communities through research. The youth could also be supported in creating new social networks through which they can seek out mentorship. If the idea of shame being a barrier to youth participation resonates with the youth in Délįnę, this is another potential area for future community-led research.

I believe that when it comes to working with youth, this research highlights the importance of meeting youth where they are at. While some youth are eager to work with researchers, others may not be for many reasons. CBPAR emphasizes the importance of building relationships and trust, which is certainty essential. However, thinking back to the Three-Sisters model and discussion on Indigenous frameworks, I think that researchers can aim to go beyond this by working to find moments and spaces where it is appropriate to fit Western research into existing community contexts, rather than trying to bring Indigenous youth into the context of Western research. For example, given the importance of Land to youth, supporting more on-the-Land camps, and then facilitating conversations, or listening in on community discussion (when invited) while on the Land would be one great way to do this. This is what I was able to do with the recommendations part of my research, and what I hoped to do again in later stages but was unable to due to the constraints caused by COVID-19. However, it could be prioritized in future research with Déljnę. Of course, "as much as researchers work to be 'community-based' they are at the same time 'university-based'" (Sylvestre et al., 2018) which can create barriers to working with youth in innovative ways. Working to build Indigenous understandings of consent into research ethics approvals for example could help to better facilitate this.

Finally, there is an abundance of work to be done in responding to Tuck & Yang's call to "employ social science to turn back upon itself as settler colonial knowledge, as opposed to universal, liberal, or neutral knowledge without horizon" (Tuck & Yang, 2014). I believe that at least some level of reflection on settler colonial knowledge can be built into all CBPAR projects in which researchers are working with Indigenous communities.

In the fields of food security and food sovereignty, specifically, I believe that emphasis should be placed on making space for and amplifying Indigenous narratives of food and food sovereignty (Dawson et al., 2020). I truly believe that doing so is one of the most important things we can do, to create a vision for sustainable food systems and restored relationships to Land globally. In the words of Robin Wall-Kimmerer:

> We know how to do this, to live in reciprocity with the world, and so we have to re-imagine it and hold it up as something that is so beautiful and whole that we want to move toward it, not just that we have to move away from extractive property materialism, the dangers of the western worldview but we have to move, and dance, towards something... toward that feeling of the joy of justice that comes with reciprocity (*Marrying Indigenous Wisdom and Scientific Knowledge*, 2019)

7 REFERENCES

Abele, F. (2009). The state and the northern social economy: Research prospects. *The Northern Review*, *30*, 37–56.

Absolon, K., & Willett, C. (2005). Putting ourselves forward: Location in aboriginal research. In L. Brown & S. Strega (Eds.), *Research as resistance: Critical, Indigenous and anti-oppressive approaches* (pp. 97–126). Canadian Scholars' Press.

Andrée, P., & Johnston, C. (2019). Pathways to co-governance? The role of NGOs in food governance in the Northwest Territories, Canada. In P. Andrée, J. K. Clark, C. Z. Levkoe, & K. Lowitt (Eds.), *Civil society and social movements in food system governance* (1st ed.). Routledge. https://doi.org/10.4324/9780429503597

Arroyo-Kalin, M. (2010). The Amazonian Formative: Crop Domestication and Anthropogenic Soils. *Diversity*, *2*(4), 473–504. https://doi.org/10.3390/d2040473

Ayha, A., & Takazo, A. (Eds.). (2012). *Sahtúot'ı̨ne Gokedé—Sahtúot'ı̨ne Dictionary—Délı̨ne Kədə́*. 73.

Bartlett, C., Marshall, M., & Marshall, A. (2012). Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences*, *2*. https://doi.org/10.1007/s13412-012-0086-8

Bayha, M., & Spring, A. (2020). Response to COVID in Délı̨nę, NT: Reconnecting with our community, our culture and our past after the pandemic. *Agriculture and Human Values*. https://doi.org/10.1007/s10460-020-10059-z

Blay-Palmer, A., Carey, R., Valette, E., & Sanderson, M. R. (2020). Post COVID 19 and food pathways to sustainable transformation. *Agriculture and Human Values*, *37*(3), 517–519. https://doi.org/10.1007/s10460-020-10051-7

Blay-Palmer, A., Knezevic, I., & Spring, A. (2014). Seeking common ground for food system transformation. *Dialogues in Human Geography*, *4*(2), 185–189. https://doi.org/10.1177/2043820614537154

Boivin, N. L., Zeder, M. A., Fuller, D. Q., 傅稻镰, Crowther, A., Larson, G., Erlandson, J. M., Denham, T., & Petraglia, M. D. (2016). Ecological consequences of human niche construction: Examining long-term anthropogenic shaping of global species distributions. *Proceedings of the National Academy of Sciences of the United States of America*, *113*(23), 6388–6396. https://doi.org/10.1073/pnas.1525200113

Bomberry, M. (2013). Negotiating two worlds: Learning through the stories of Haudenosaunee youth and adults. *Canadian Journal of Education*, *36*(2), 248–284. https://go.gale.com/ps/i.do?p=AONE&sw=w&issn=03802361&v=2.1&it=r&id=GALE%7CA344496891&sid=googleScholar&linkaccess=abs

Braun, J., Beckie, M., & Caine, K. (2020). “Trust us, we feed this to our kids”: Women and public trust in the Canadian agri-food system. *Agriculture and Human Values*, *37*(2), 495–507. https://doi.org/10.1007/s10460-019-10002-x

Brown, B. (2006). Shame resilience theory: A grounded theory study on women and shame. *Families in Society*, *87*(1), 43–52. https://doi.org/10.1606/1044-3894.3483

Brydon-Miller, M., Greenwood, D., & Maguire, P. (2003). Why action research? *Action Research*, *1*(1), 9–28. https://doi.org/10.1177/14767503030011002

Burnett, K., Skinner, K., & LeBlanc, J. (2015). From Food Mail to Nutrition North Canada: Reconsidering federal food subsidy programs for Northern Ontario. *Canadian Food Studies / La Revue Canadienne Des Études Sur l'alimentation*, *2*(1), 141. https://doi.org/10.15353/cfs-rcea.v2i1.62

Camino, L., & Zeldin, S. (2002). From periphery to center: Pathways for youth civic engagement in the day-to-day life of communities. *Applied Developmental Science*, *6*(4), 213–220. https://doi.org/10.1207/S1532480XADS0604_8

Castleden, H., Morgan, V. S., & Lamb, C. (2012). "I spent the first year drinking tea": Exploring Canadian university researchers' perspectives on community-based participatory research involving Indigenous peoples: Researchers' perspectives on CBPR. *The Canadian Geographer / Le Géographe Canadien*, *56*(2), 160–179. https://doi.org/10.1111/j.1541-0064.2012.00432.x

Chabot, M. (2003). Economic changes, household strategies, and social relations of contemporary Nunavik Inuit. *Polar Record*, *39*(1), 19–34. https://doi.org/10.1017/S0032247402002711

Council of Canadian Academies. (2014). *Aboriginal food security in Northern Canada: An Assessment of the State of Knowledge*. The Expert Panel on the State of Knowledge of Food Security in Northern Canada, Council of Canadian Academies. https://foodsecurecanada.org/sites/foodsecurecanada.org/files/foodsecurity_fullreporten.pdf

Crooks, C. V., Chiodo, D., Thomas, D., & Hughes, R. (2010). Strengths-based programming for First Nations youth in schools: Building engagement through healthy relationships and leadership skills. *International Journal of Mental Health and Addiction*, *8*(2), 160–173. https://doi.org/10.1007/s11469-009-9242-0

Dawson, L., Settee, P., & Shukla, S. (2020). “Food will be what brings the people together”: Constructing counter-narratives from the perspective of Indigenous foodways. In *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

De Schutter, O. (2012). *Report of the Special Rapporteur on the right to food on his mission to Canada (6 to 16 May 2012)* [Data set]. United Nations General Assembly. https://doi.org/10.1163/2210-7975_HRD-9970-2016149

De Schutter, O. (2017). The political economy of food systems reform. *European Review of Agricultural Economics*, *44*(4), 705–731. https://doi.org/10.1093/erae/jbx009

Déljnę Got’ine Government. (n.d.). *Deline Self-Government History*. Retrieved September 16, 2021, from https://www.deline.ca/en/about-us/deline-self-government-history/

Déljne (https://spectacularnwt.com/destinations/sahtu/deline). (n.d.). Spectacular Northwest Territories; SpectacularNWT. Retrieved September 16, 2021, from https://spectacularnwt.com/destinations/sahtu/deline

Déljnę final self-government agreement. (2015). https://www.deline.ca/wp-content/uploads/2016/10/Deline-Final-Self-Government-Agreement.pdf

Déljnę Ɂekwę́ Working Group. (2015). *Belarewíle Gots’ę́Ɂekwę́—Caribou for all time*. https://www.srrb.nt.ca/document-repository/public/public-hearings-registry/2020/3-1-relevant-documents-barren-ground-caribou/1844-16-01-08-de-l-ne-belare-w-le-gots-e-ekwe-caribou-for-all-time-plan-approved/file

Durkan, S. (2021, August 12). Canada invests $340 million in Indigenous-led conservation and stewardship. *Boreal Conservation*. https://www.borealconservation.org/stories-1/investmentinindigenousledconservation

EC - FAO Food Security Programme. (2008). *An Introduction to the Basic Concepts of Food Security*. https://www.fao.org/3/al936e/al936e.pdf

FAO, Alliance of Bioversity International, & CIAT. (2021). *Indigenous Peoples' food systems: Insights on sustainability and resilience in the front line of climate change*. FAO, Alliance of Bioversity International, and CIAT. http://www.fao.org/documents/card/en/c/cb5131en

FAO, IFAD, UNICEF, WFP and WHO. (2020). *The state of food security and nutrition in the world 2020. Transforming food systems for affordable healthy diets*. Rome, FAO. https://doi.org/10.4060/ca9692en

Fine, M. (Ed.). (2008). An epilogue, of sorts. In *Revolutionizing education: Youth participatory action research in motion*. Routledge.

Ford, J. D., Cameron, L., Rubis, J., Maillet, M., Nakashima, D., Willox, A. C., & Pearce, T. (2016). Including indigenous knowledge and experience in IPCC assessment reports. *Nature Climate Change*, *6*(4), 349–353. https://doi.org/10.1038/nclimate2954

Ford, J. D., Smit, B., & Wandel, J. (2006). Vulnerability to climate change in the Arctic: A case study from Arctic Bay, Canada. *Global Environmental Change*, *16*(2), 145–160. https://doi.org/10.1016/j.gloenvcha.2005.11.007

Formsma, J. (2013). Indigenous youth voices and the role of philanthropy. *The Philanthropist*, *25*(2), 8.

Gignac, J. (2020, October 4). First Indigenous-led biosphere reserve in the world featured in new Canadian TV series. *The Narwhal*. https://thenarwhal.ca/tsa-tue-biosphere-reserve-striking-balance/

Gilpin, E. M., & Hayes, M. (2020). A collection of voices: Land-based leadership, community wellness, and food knowledge revitalization of the W̱JOŁEŁP' Tsartlip First Nation garden project. In P.

Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

GNWT - Education, Culture and Employment. (n.d.). *Languages overview*. Government of the Northwest Territories. Retrieved March 15, 2022, from https://www.ece.gov.nt.ca/en/services/le-secretariat-de-leducation-et-des-langues-autochtones/languages-overview

Goethem, T., & van Zanden, J. L. (2021). Biodiversity trends in a historical perspective. In OECD (Ed.), *How was life? Volume ii: New perspectives on well-being and global inequality since 1820*. https://www.oecd-ilibrary.org/sites/2c94883d-en/index.html?itemId=/content/component/2c94883d-en#:~:text=A%20historical%20perspective%20may%20help,000%2D7%20000%20years%20ago.

Government of Northwest Territories. (2020, November 9). *Winter roads average open/close dates*. Government of the Northwest Territories. https://www.inf.gov.nt.ca/en/services/highways-ferries-and-winter-roads/winter-roads-average-openclose-dates

Great Bear Lake Working Group. (2005). *"The water heart": A management plan for Great Bear Lake and its watershed*. Directed by the Great Bear Lake Working Group and facilitated and drafted by Tom Nesbitt. https://sahtulanduseplan.org/sites/default/files/31.05.05_gblmgmtplanca.pdf

Gregory Younging. (2018). *Elements of Indigenous style: A guide for writing by and about Indigenous peoples*. Brush Education.

Guyot, M., Dickson, C., Paci, C., Furgal, C., & Chan, H. M. (2006). Local observations of climate change and impacts on traditional food security in two northern Aboriginal communities. *International Journal of Circumpolar Health*, *65*(5), 403–415. https://doi.org/10.3402/ijch.v65i5.18135

Harnum, B., Hanlon, J., Lim, T., Modeste, J., Simmons, D., & Spring, A. (2014). *Best of both worlds: Sahtú goné̹né̹ t'áadets'enı̨tǫ dependending on the land in the Sahtú region* (Discussion Document Volume 1; p. 98). Prepared with The Pembina Institute for ʔehdzo Got'ı̨nę Gots'ę́ Nákedı (Sahtú Renewable Resources Board).

Hart, M. A. (2010). *Indigenous worldviews, knowledge, and research: The development of an Indigenous research paradigm*. *1*(1), 16.

Health Canada. (2010, June 25). *The Household Food Security Survey Module (HFSSM)*. https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/household-food-insecurity-canada-overview/household-food-security-survey-module-hfssm-health-nutrition-surveys-health-canada.html

HLPE. (2019). *Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition, a report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security* (HLPE Report No. 14; p. 163).

Indian and Northern Affairs Canada. (1993). *Sahtu Dene and Metis comprehensive land claim agreement* (Volume 1; p. 159).

Indigenous Food Systems Network. (n.d.). *Indigenous Food Systems Network*. Retrieved November 5, 2021, from https://www.indigenousfoodsystems.org/

Indigenous Leadership Initiative. (n.d.-a). *A national Indigenous Guardians network*. Indigenous Leadership Initiative. Retrieved November 15, 2021, from https://www.ilinationhood.ca/publications/backgrounder-a-national-indigenous-guardians-network

Indigenous Leadership Initiative. (n.d.-b). *Guardians*. Indigenous Leadership Initiative. Retrieved November 15, 2021, from https://www.ilinationhood.ca/guardians

IPCC. (2018). *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* (V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okai, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, & T. Waterfield, Eds.).

IPCC. (2019). *Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems* (P. R. Shukla, J. Skea, E. Calvo Buendia, V. Masson-Delmotte, H.-O. Pörtner, D. C. Roberts, P. Zhai, R. Slade, S. Connors, R. van Diemen, M. Ferrat, E. Haughey, S. Luz, S. Neogi, M. Pathak, J. Petzold, J. Portugal Pereira, P. Vyas, E. Huntley, … J. Malley, Eds.).

Jarosz, L. (2014). Comparing food security and food sovereignty discourses. *Dialogues in Human Geography*, *4*(2), 168–181. https://doi.org/10.1177/2043820614537161

Johnston, C., & Andrée, P. (2019). *Civil Society and Social Movements in Food System Governance* (P. Andrée, J. K. Clark, C. Z. Levkoe, & K. Lowitt, Eds.; 1st ed.). Routledge. https://doi.org/10.4324/9780429503597

Kakfwi, S., Courtois, V., & Enzoe, G. (2018, July). Indigenous Guardians: Moccasins on the ground & in the boardroom. *Northern Public Affairs*. http://www.northernpublicaffairs.ca/index/volume-6-special-issue-1-the-pan-territorial-on-the-land-summit/indigenous-guardians-moccasins-on-the-ground-in-the-boardroom/

Kamal, A. G. & Ithinto Mechisowin Program Committee. (2020). Cultivating resurgence from the Indigenous food sovereignty lens: A case study from Northern Manitoba. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

Kana'iaupuni, S. M. (2005). Ka'akālai Kū Kanaka: A call for strengths-based approaches from a Native Hawaiian perspective. *Educational Researcher*, *34*(5), 32–38. https://doi.org/10.3102/0013189X034005032

King, T. (2003). *The truth about stories: A native narrative*. House of Anansi Press.

Lee, D. (2019, March 20). Mackenzie Valley Winter Road closes amid mild temperatures. *CBC News*. https://www.cbc.ca/news/canada/north/mackenzie-valley-winter-road-closed-1.5064202

Levi, E. (2020). Indigenous philosophies and perspectives on traditional food systems including food as cultural identity: Maintaining food security in Elsipogtog First Nation, New Brunswick. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

Liebenberg, L. (2017). Editor's introduction: Special issue: Understanding meaningful engagement of youth in research and dissemination of findings. *International Journal of Qualitative Methods*, *16*(1), 1609406917721531. https://doi.org/10.1177/1609406917721531

Liebenberg, L., Sylliboy, A., Davis-Ward, D., & Vincent, A. (2017). Meaningful engagement of Indigenous youth in PAR: The role of community partnerships. *International Journal of Qualitative Methods*, *16*(1), 160940691770409. https://doi.org/10.1177/1609406917704095

Liebenberg, L., Wall, D., Wood, M., & Hutt-MacLeod, D. (2019). Spaces & places: Understanding sense of belonging and cultural engagement among Indigenous youth. *International Journal of Qualitative Methods*, *18*, 1609406919840547. https://doi.org/10.1177/1609406919840547

Lines, L.-A., Yellowknives Dene First Nation Wellness Division, & Jardine, C. G. (2019). Connection to the land as a youth-identified social determinant of Indigenous Peoples' health. *BMC Public Health*, *19*(1), 176. https://doi.org/10.1186/s12889-018-6383-8

Lisk, S. (2018). *Indigenous Arts & Stories—Invisible Indian*. http://www.our-story.ca/winners/writing/6676:invisible-indian

Lugo-Morin, D. R. (2020). Indigenous communities and their food systems: A contribution to the current debate. *Journal of Ethnic Foods*, *7*(1), 6. https://doi.org/10.1186/s42779-019-0043-1

MacDonald, J. P., Harper, S. L., Cunsolo Willox, A., Edge, V. L., & Rigolet Inuit Community Government. (2013). A necessary voice: Climate change and lived experiences of youth in Rigolet, Nunatsiavut, Canada. *Global Environmental Change*, *23*(1), 360–371. https://doi.org/10.1016/j.gloenvcha.2012.07.010

MacKay, M., Parlee, B., & Karsgaard, C. (2020). Youth engagement in climate change action: Case study on Indigenous youth at COP24. *Sustainability*, *12*(16), 6299. https://doi.org/10.3390/su12166299

Maiter, S., Simich, L., Jacobson, N., & Wise, J. (2008). Reciprocity: An ethic for community-based participatory action research. *Action Research*, *6*(3), 305–325. https://doi.org/10.1177/1476750307083720

Marrying indigenous wisdom and scientific knowledge: Reimagining the human place in nature. (2019, February 27). https://www.youtube.com/watch?v=ucNmu-WNNDk

Martens, T., Env, M., Cidro, J., Hart, M. A., & McLachlan, S. (2016). *Understanding Indigenous food sovereignty through an Indigenous research paradigm*. *5*(1), 20.

Martens, T. R., & Cidro, J. (2020). Rebuilding cultural identity and Indigenous food sovereignty with Indigenous youth through traditional food access and skills in the city. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

McArthur, K. (2016). *Indigenous Arts & Stories—Dispirited*. http://www.our-story.ca/winners/writing/5649:dispirited

McCartan, J., van Burgel, E., McArthur, I., Testa, S., Thurn, E., Funston, S., Kho, A., McMahon, E., & Brimblecombe, J. (2020). Traditional food energy intake among Indigenous populations in select high-income settler-colonized countries: A systematic literature review. *Current Developments in Nutrition*, *4*(11). https://doi.org/10.1093/cdn/nzaa163

McCoy, B. (2009). 'Living between two worlds': Who is living in whose worlds? *Australasian Psychiatry*, *17*(1_suppl), S20–S23. https://doi.org/10.1080/10398560902948647

Meinshausen, M., Vogel, E., Nauels, A., Lorbacher, K., Meinshausen, N., Etheridge, D. M., Fraser, P. J., Montzka, S. A., Rayner, P. J., Trudinger, C. M., Krummel, P. B., Beyerle, U., Canadell, J. G., Daniel, J. S., Enting, I. G., Law, R. M., Lunder, C. R., O'Doherty, S., Prinn, R. G., … Weiss, R. (2017). Historical greenhouse gas concentrations for climate modelling (CMIP6). *Geoscientific Model Development*, *10*(5), 2057–2116. https://doi.org/10.5194/gmd-10-2057-2017

Morrison, D. (2020). Reflections and realities: Expressions of food sovereignty in the fourth world. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars

Nyéléni Steering Committee. (2007). *Declaration of Nyéléni: Declaration of the forum for food sovereignty*. Nyéléni. https://nyeleni.org/IMG/pdf/DeclNyeleni-en.pdf

Parlee, B. L., Sandlos, J., & Natcher, D. C. (2018). Undermining subsistence: Barren-ground caribou in a "tragedy of open access." *Science Advances*, *4*(2), e1701611. https://doi.org/10.1126/sciadv.1701611

Pawlowska-Mainville, A. (2020). Aki miijim (land food) and the sovereignty of the Asatiwisipe Anishinaabeg boreal forest food system. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

Peltier, C. (2018). An application of two-eyed seeing: Indigenous research methods with participatory action research. *International Journal of Qualitative Methods*, *17*(1), 160940691881234. https://doi.org/10.1177/1609406918812346

Pinstrup-Andersen, P., & Watson II, D. D. (2011). Toward a dynamic global food system. In *Food policy for developing countries: The role of government in global, national, and local food systems*. Cornell University Press. https://doi.org/10.7591/9780801463433

Power, E. M. (2008). Conceptualizing food security for Aboriginal people in Canada. *Canadian Journal of Public Health*, *99*(2), 95–97. https://doi.org/10.1007/BF03405452

Price, D. T., Alfaro, R. J., Flannigan, M. D., Fleming, R. A., Hogg, E. H., Girardin, M. P., Lakusta, T., Johnston, M., McKenney, D. W., Pedlar, J. H., Stratton, T., Sturrock, R. N., Thompson, I. D., Trofymow, J. A., & Venier, L. A. (2013). Anticipating the consequences of climate change for Canada's boreal forest ecosystems. *Environmental Reviews*, *21*, 322–365.

Ramirez Prieto, M., Ratelle, M., Laird, B. D., & Skinner, K. (2022). Dietary intakes of traditional foods for Dene/Métis in the Dehcho and Sahtú regions of the Northwest Territories. *Nutrients*, *14*(2), 378. https://doi.org/10.3390/nu14020378

Receveur, O., Boulay, M., & Kuhnlein, H. V. (1997). Decreasing traditional food use affects diet quality for adult Dene/Métis in 16 communities of the Canadian Northwest Territories. *The Journal of Nutrition*, *127*(11), 2179–2186. https://doi.org/10.1093/jn/127.11.2179

Reed, G., Brunet, N. D., Longboat, S., & Natcher, D. C. (2021). Indigenous Guardians as an emerging approach to Indigenous environmental governance. *Conservation Biology*, *35*(1), 179–189. https://doi.org/10.1111/cobi.13532

Ritchie, H. (2020). *Environmental impacts of food production*. Our World in Data. https://ourworldindata.org/environmental-impacts-of-food#citation

Rix, L., Barclay, L., & Wilson, S. (2014). *Can a white nurse get it? "Reflexive practice" and the non-Indigenous clinician/researcher working with Aboriginal people*. *14*(2). https://doi.org/10.22605/RRH2679

Robin Wall-Kimmerer. (2020, September 30). *Dialogue 3: Braiding ways of knowing*. https://www.youtube.com/watch?v=ru7aixURn0U&t=295s

Rome Declaration on World Food Security. (1996). https://www.fao.org/3/w3613e/w3613e00.htm

Rotz, S., & Fraser, E. D. G. (2015). Resilience and the industrial food system: Analyzing the impacts of agricultural industrialization on food system vulnerability. *Journal of Environmental Studies and Sciences*, *5*(3), 459–473. https://doi.org/10.1007/s13412-015-0277-1

Rowe, A. C., & Tuck, E. (2017). Settler colonialism and cultural studies: Ongoing settlement, cultural production, and resistance. *Cultural Studies ↔ Critical Methodologies*, *17*(1), 3–13. https://doi.org/10.1177/1532708616653693

Salusky, I. R., Kral, M., Amarok, B., & Wexler, L. M. (2021). Navigating between two the worlds of school and 'being on the land': Arctic Indigenous young people, structural violence, cultural

continuity and selfhood. *Journal of Youth Studies*, *0*(0), 1–23. https://doi.org/10.1080/13676261.2020.1858040

Sault-Hartwick, H. (2019). *Indigenous Arts & Stories—Whole*. http://www.our-story.ca/winners/writing/7074:whole

Settee, P. (2020). The impact of climate change on Indigenous food sovereignty. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

Settee, P., & Shukla, S. (2020). Introduction. In P. Settee & S. Shukla (Eds.), *Indigenous food systems: Concepts, cases, and conversations*. Canadian Scholars.

Sidarous, S. (2019). *Indigenous Arts & Stories—Between two worlds and living in three*. http://www.our-story.ca/winners/writing/7255:between-two-worlds-and-living-in-three

Simpson, L. R. (2004). Anticolonial strategies for the recovery and maintenance of Indigenous knowledge. *American Indian Quarterly*, *28*(3/4), 373–384. http://www.jstor.org/stable/4138923

Sinclair, S., Meawasige, A., & Kinew, K. (2011). Youth for youth - a model for youth suicide prevention: Case study of the Assembly of Manitoba Chiefs Youth Council and Secretariat, Canada. In E. Blas, J. Sommerfeld, & A. S. Kurup (Eds.), *Social determinants approaches to public health: From concept to practice*. World Health Organization. https://www.semanticscholar.org/paper/Youth-for-youth-a-model-for-youth-suicide-case-of-Sinclair-Meawasige/08a5b07697f209013fe72a46d2e7f5fb6ac0b6a2

Skinner, K., Burnett, K., Williams, P., Martin, D., Stothart, C., LeBlanc, J., Veeraraghavan, G., & Sheedy, A. (2016). Challenges in assessing food environments in northern and remote communities in Canada. *Canadian Journal of Public Health*, *107*(S1), eS60–eS63. https://doi.org/10.17269/CJPH.107.5324

Skinner, K., Hanning, R. M., Desjardins, E., & Tsuji, L. J. (2013). Giving voice to food insecurity in a remote indigenous community in subarctic Ontario, Canada: Traditional ways, ways to cope, ways forward. *BMC Public Health*, *13*(1), 427. https://doi.org/10.1186/1471-2458-13-427

Smith, P. L. T. (2013). *Decolonizing methodologies: Research and indigenous peoples*. Zed Books Ltd.

Smoke, C. (2019). *Indigenous Arts & Stories—The Modern Native of Two Worlds*. http://www.our-story.ca/winners/writing/7065:the-modern-native-of-two-worlds

Social Ventures Australia Consulting. (2016). *Analysis of the current and future value of Indigenous Guardian work in Canada's Northwest Territories*. https://www.indigenousguardianstoolkit.ca/sites/default/files/Community%20Resource_Indigenous%20Leadership%20Initiative%20and%20Tides%20Canada_Analysis%20of%20Current%20and%20Future%20Value%20of%20Indigenous%20Guardian%20Work%20in%20Canada%27s%20Northwest%20Territories_0.pdf

Spring, A., Carter, B., & Blay-Palmer, A. (2018). Climate change, community capitals, and food security: Building a more sustainable food system in a northern Canadian boreal community. *Canadian Food Studies / La Revue Canadienne Des Études Sur l'alimentation*, *5*(2), 111–141. https://doi.org/10.15353/cfs-rcea.v5i2.199

Spring, A., Nelson, E., Knezevic, I., Ballamingie, P., & Blay-Palmer, A. (2021). Special issue: "Levering sustainable food systems to address climate change (pandemics and other shocks and hazards): Possible transformations." *Sustainability*, *13*(15), 8206. https://doi.org/10.3390/su13158206

Spring, A., Skinner, K., Simba, M., Nelson, E., Baltzer, J., Swanson, H., & Turetsky, M. (2019). *3 Taking care of the land*. 6.

Statistics Canada. (2017, February 8). *Census Profile, 2016 Census—Déline*. https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?B1=All&Code1=6102003&Code2=61&Data=Count&Geo1=CSD&Geo2=PR&Lang=E&SearchPR=01&SearchText=D%C3%A9line&SearchType=Begins&TABID=1

Striking Balance—Tsa Tue Biosphere Reserve. (n.d.). Retrieved October 4, 2021, from https://www.tvo.org/video/documentaries/striking-balance-tsa-tue-biosphere-reserve

Stringer, C. (2016). The origin and evolution of Homo Sapiens. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *371*(1698), 20150237. https://doi.org/10.1098/rstb.2015.0237

Summary of NWT Community Statistics. (2019). Government of the Northwest Territories Bureau of Statistics. https://www.statsnwt.ca/community-data/Summary%20of%20Community%20Statistics2019.pdf

Switzer, S. (2020). “People give and take a lot in order to participate in things:” Youth talk back – making a case for non-participation. *Curriculum Inquiry*, *50*(2), 168–193. https://doi.org/10.1080/03626784.2020.1766341

Sylvestre, P., Castleden, H., Martin, D., & McNally, M. (2018). "Thank you very much... you can leave our community now.”: Geographies of responsibility, relational ethics, acts of refusal, and the conflicting requirements of academic localities in Indigenous research. *ACME: An International Journal for Critical Geographies*, *17*(3), 750–779. https://www.acme-journal.org/index.php/acme/article/view/1327

Tafoya, T. (1995). Finding harmony: Balancing traditional values with western science in therapy. *Canadian Journal of Native Education*, *21*, 7–27.

Tarasuk, V., Mitchell, A., & Dachner, N. (2013). *Household Food Insecurity in Canada:* (Research to Identify Policy Options to Reduce Food Insecurity (PROOF), pp. 299–312). http://nutritionalsciences.lamp.utoronto.ca/

The Centre of Excellence for Youth Engagement. (2007). *Youth engagement – A conceptual model* (p. 3). https://www.studentscommission.ca/assets/pdf/en/publications/Youth-engagement-model_2008_e.pdf

Tondu, J. M. E., Balasubramaniam, A. M., Chavarie, L., Gantner, N., Knopp, J. A., Provencher, J. F., Wong, P. B. Y., & D., S. (2014). Working with northern communities to build collaborative research partnerships: Perspectives from early career researchers. *ARCTIC*, *67*(3). https://doi.org/10.14430/arctic4416

Tran, T. C., Ban, N. C., & Bhattacharyya, J. (2020). A review of successes, challenges, and lessons from Indigenous protected and conserved areas. *Biological Conservation*, *241*, 108271. https://doi.org/10.1016/j.biocon.2019.108271

Trout, L., McEachern, D., Mullany, A., White, L., & Wexler, L. (2018). Decoloniality as a framework for Indigenous youth suicide prevention pedagogy: Promoting community conversations about research to end suicide. *American Journal of Community Psychology*, *62*(3–4), 396–405. https://doi.org/10.1002/ajcp.12293

Trout, L., Wexler, L., & Moses, J. (2018). Beyond two worlds: Identity narratives and the aspirational futures of Alaska Native youth. *Transcultural Psychiatry*, *55*(6), 800–820. https://doi.org/10.1177/1363461518786991

Truth and Reconcilliation Commission of Canada. (2015). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconcilliation Commission of Canada.*

http://epe.lac-bac.gc.ca/100/201/301/weekly_acquisition_lists/2015/w15-24-F-E.html/collections/collection_2015/trc/IR4-7-2015-eng.pdf

Tubiello, F. N., Karl, K., Flammini, A., Gütschow, J., Obli-Layrea, G., Conchedda, G., Pan, X., Qi, S. Y., Halldórudóttir Heiðarsdóttir, H., Wanner, N., Quadrelli, R., Rocha Souza, L., Benoit, P., Hayek, M., Sandalow, D., Mencos-Contreras, E., Rosenzweig, C., Rosero Moncayo, J., Conforti, P., & Torero, M. (2021). *Pre- and post-production processes along supply chains increasingly dominate GHG emissions from agri-food systems globally and in most countries* (Earth Syst. Sci. Data Discuss) [Preprint]. https://doi.org/10.5194/essd-2021-389

Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, *79*(3), 409–428. https://doi.org/10.17763/haer.79.3.n0016675661t3n15

Tuck, E. (2010). Breaking up with Deleuze: Desire and valuing the irreconcilable. *International Journal of Qualitative Studies in Education*, *23*(5), 635–650. https://doi.org/10.1080/09518398.2010.500633

Tuck, E., & Yang, W. (2014). R-words: Refusing research. In *Humanizing Research: Decolonizing Qualitative Inquiry with Youth and Communities*. SAGE Publications, Inc. https://doi.org/10.4135/9781544329611

Ulturgasheva, O., Rasmus, S., & Morrow, P. (2015). Collapsing the Distance: Indigenous-Youth Engagement in a Circumpolar Study of Youth Resilience. *Arctic Anthropology*, *52*(1), 60–70. http://muse.jhu.edu/article/587930

Ulturgasheva, O., Rasmus, S., Wexler, L., Nystad, K., & Kral, M. (2014). Arctic Indigenous youth resilience and vulnerability: Comparative analysis of adolescent experiences across five circumpolar communities. *Transcultural Psychiatry*, *51*(5), 735–756. https://doi.org/10.1177/1363461514547120

UN-Food and Agriculture Organization (FAO). (2020). *Urban food systems and COVID-19: The role of cities and local governments in responding to the emergency*. https://www.fao.org/3/cb0407en/CB0407EN.pdf

Usher, P. J. (1982). Unfinished business on the frontier. *Canadian Geographer*, *26*(3), 187–190.

Wall Kimmerer, R. (2016). *Braiding Sweetgrass*. https://milkweed.org/book/braiding-sweetgrass

Wesche, S. D., O'Hare-Gordon, M. A. F., Robidoux, M. A., & Mason, C. W. (2016). Land-Based programs in the Northwest Territories: Building Indigenous food security and well-being from the ground up. *Canadian Food Studies / La Revue Canadienne Des Études Sur l'alimentation*, *3*(2), 23. https://doi.org/10.15353/cfs-rcea.v3i2.161

Wexler, L. (2009). The importance of identity, history, and culture in the wellbeing of Indigenous youth. *The Journal of the History of Childhood and Youth*, *2*, 267–276. https://doi.org/10.1353/hcy.0.0055

Wexler, L., Joule, L., Garoutte, J., Mazziotti, J., & Hopper, K. (2014). "Being responsible, respectful, trying to keep the tradition alive:" Cultural resilience and growing up in an Alaska Native community. *Transcultural Psychiatry*, *51*(5), 693–712. https://doi.org/10.1177/1363461513495085

Williams, L., Roberts, R. A., & McIntosh, A. (Eds.). (2011). *Radical human ecology: Intercultural and indigenous approaches*. Ashgate Pub. Company.

Willows, N. D., Veugelers, P., Raine, K., & Kuhle, S. (2009). Prevalence and sociodemographic risk factors related to household food security in Aboriginal peoples in Canada. *Public Health Nutrition*, *12*(8), 1150–1156. https://doi.org/10.1017/S1368980008004345

Wilson, S. (2007). Guest editorial: What is an Indigenist research paradigm? *Canadian Journal of Native Education*, *30*(2).

Wilson, S. (2008). *Research is ceremony: Indigenous research methods* (p. 144 Pages). Fernwood Publishing.

Wolfe, P. (2006). Settler colonialism and the elimination of the native. *Journal of Genocide Research*, *8*(4), 387–409. https://doi.org/10.1080/14623520601056240

Young, L., & Di Battista, A. (2019a, September 27). *"Because everybody eats": Exploring sustainable food systems for a better world* (No. 1). https://handpickedpodcast.libsyn.com/

Young, L., & Di Battista, A. (2019b, September 27). *"We walk in the footsteps of our ancestors": Traditional knowledge, youth engagement, and resilience in Délı̨nę* (Season 2 Episode 3). https://handpickedpodcast.libsyn.com/

Appendix A - Interview Consent Form

Principal Investigator: Dr. Andrew Spring, Research Associate and Adjunct Professor in Geography and Environmental Studies, Wilfrid Laurier University Graduate Student: Neala MacLeod Farley (MES Candidate), Wilfrid Laurier University

We are seeking your voluntary participation in a research project about building sustainable food systems in the NWT. This part of the study seeks to understand the perspectives of youth on re-connecting with culture and shaping the future of their community. The study will also seek to understand the role that the Déljnę Youth Council can play in supporting the youth and building Indigenous food sovereignty.

For this phase of the study, we are hoping to conduct semi-structured interviews with members of the Youth Council, the Youth Council Coordinator, and the head of the Déljnę Got'jnę Government Department of Culture, Language, and Spirituality. You have been identified as one of these people. Interviews will include questions about Two-Eyed Seeing, re-connecting with culture and land, youth voice, and the role of the Youth Council in creating opportunities for the youth in Déljnę. They will take approximately one hour and be recorded through Zoom video conferencing software. If you do not want to be recorded by video, you can turn your camera off during the session. For videoconference using Zoom, we cannot guarantee the confidentiality of data while in transmission on the internet however we will take precautions such as using a password protected link. Telephone interviews can be arranged if requested and will be audio recorded. The interviews will take place at a mutually agreed upon time, in June or July 2021. It may be possible that a follow up call or interview is required, and we will reach out to you to schedule a call, if needed. You will be compensated with a $25 gift card for your time and involvement in the project.

Results of the interviews will be presented to the Youth Council in Fall of 2021 and will be used as part of Neala MacLeod Farley's thesis as well as community reports and presentations or other opportunities the Youth Council identifies. It is possible that as a participant, by answering the questions in the interviews, you could make statements that could be awkward for you when made public (e.g., through academic publications or reports to the Youth Council) either by providing information or answers that you feel are not current or are taken out of context by researchers. We consider these risks to be very low, and in line with the risks encountered in your daily activities. We will mitigate these risks by preserving your anonymity in reports, and

only using your name if your consent is given, and by allowing you to review and edit relevant transcribed interview texts prior to the information therein being made public.

The researchers will keep the collected data in locked facilities or password-protected on computers. The only people that will have access to the files will be the researcher team. For videoconference interviews the confidentiality of data cannot be guaranteed while in transmission on the internet. All data collected from this research will be destroyed after 5 years. Your participation is voluntary, and you are free to withdraw at any time. If you decide to withdraw from the research at any time, all data collected will be destroyed or returned to you. You are not obliged to answer any questions that you find objectionable or which make you feel uncomfortable.

This project has been reviewed and approved by the Wilfrid Laurier University Research Ethics Board (REB 6556). If you have questions at any time about the study or the procedures or you experience adverse effects as a result of participating in this study you may contact Dr. Andrew Spring, Adjunct Professor, Department of Geography and Environmental Studies, Wilfrid Laurier University, (226) 772-3127, aspring@wlu.ca. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Jayne Kalmar, Chair, University Research Ethics Board, Wilfrid Laurier University, (519) 884-0710, extension 3131, REBChair@wlu.ca .

By checking the boxes below, you acknowledge that you understand the information described above and consent to participate in this research:

- ☐ I agree to participate in this interview
- ☐ I grant permission for the researcher to record the interview

Please select one of the options below:

- ☐ I grant permission for the researcher to use direct quotations from our interview but NOT identify me as the source
- ☐ I grant permission for the researcher to use direct quotations from our interview AND identify me as the source
- ☐ I do NOT grant permission for the researcher to use direct quotations from our interview

Name:
Date:
Signature:

Appendix B - Interview Questions

At the 2019 cultural camp youth spoke about the pressure to become an expert in both Dene knowledge and worldviews and through the Western education system – in what ways is it a challenge? In what ways is Two-Eyed Seeing an opportunity? What is needed to support youth in navigating this? Do you see either type of education as more important?

Many of the youth recommendations from the cultural camp related to reconnecting with culture, language, spirituality, being on the Land, and harvesting traditional foods – why are these priorities for youth? What challenges prevent youth from reconnecting with Dene ways of life? Why might youth choose not to participate in the programming offered? How are youth overcoming these challenges?

The youth also talked about wanting to have their voices heard more – why are youth's voices not being heard? What effect does this have on youth? How do you think that youth in Déljnę are viewed by themselves, the community, outsiders? How would you like this to change?

Why did you choose to be involved with the Youth Council? How can the Youth Council help address the needs of youth? What would make the Youth Council a success in its first term? What do you see as the Youth Council's biggest weaknesses currently? What do you see as the Youth Council's strengths currently?