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Community Resilience and Creating Capacities for Risk Reduction in First Nations Communities, Case Study in Minegoziibe Anishinabe (Pine Creek First Nation)

Brittany S. Lavallee

A capstone paper submitted in partial fulfillment of the requirements for a Master of Arts in Humanitarian Assistance and Crisis Management at SIT Graduate Institute, USA

December 2023

Advisor: Dr. Alex Alvarez

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Student Name: Brittany Lavallee

Date: December 13, 2023

Acknowledgements

I would like to start by thanking Dr. Bayan, my academic director, for providing guidance during my journey as a graduate student. I am sincerely grateful to my advisor, Dr. Alvarez. His advice and knowledge were invaluable throughout my capstone. I want to quote Jennifer Grenz's (2023) statement that resonated deeply with me and motivated me during the beginning stages of my research:

> I was aware that many barriers to my success awaited me as I began my academic appointment. My Elders, friends, and family openly worried because I was embarking on a journey in academia, an institution that is a symbol of colonization shrouded by a history of extractive and harmful research on Indigenous Peoples.

Her article was shared with me by a capstone committee member at the School for International Training (SIT). I want to take a moment to acknowledge the resilient Indigenous students who share their perspectives and values in all areas of education, creating a transformative space. I thank my academic institution for empowering and providing a sense of belonging to all students so that they can achieve their dreams. I am appreciative for the opportunity to bring my knowledge to my community. I say Gichi Miigwech (thank you very much) for the support of the Chief and Council of Minegoziibe Anishinabe *(*Pine Creek First Nation*)* who believed in me and sponsored my education. The community members, Elders, Knowledge Keepers, Chief and Council, trusted me as an Anishinaabkwe researcher, exchanging meaningful conversations and insightful interviews that made my capstone possible. In conclusion, I want to express my appreciation to my family and support network for their unconditional love and encouragement, especially during the illness and death of my mother in January 2023. My mother was a strong and courageous woman, who dedicated her life to raising her children, and encouraged me to achieve my dreams and to complete my studies as she dealt with her illness.

I dedicate this work and my achievement to my late mother, Sue Lavallee. I wish she could be here to witness my graduation and the outcome of my research. It took a village of people to help me succeed. I say thank you very much to my village.

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Key Terms and Abbreviations

Terms:

As a First Nations researcher, I am committed to incorporating the Ojibwe language in my capstone. I have integrated Ojibwe terms to preserve and share the language with those who want to learn and to those who possess a level of familiarity with it. I have used a few terms in the document that are difficult to capture the essence of the word in the English language. There are brief descriptions of terms that are expanded on throughout the paper. The words will not appear italicized to normalize the use of Indigenous languages, italicization can result in an othering effect (Native Governance Center, 2021).

Aki- Earth

Anishinaabe - This word has several spellings, means the people, and is often used to refer to Ojibwe (people)

Anishinaabekwe- Anishinaabe woman

Gitche Manitou- Great Spirit/Creator

Maamaa Aki- Mother earth

Manitou Api- Spirit/Creator sits

Miigwech- Thank you

Biimadiziwin/Minobiimadiziwin- Living a balanced good life

Sabe- This word translates to a mythical giant who is a symbol of honesty; the Sabe used to walk along the humans to remind us to remain true to our nature

Scaabe- Helper

Saulteux- An Ojibwe dialect spoken in Manitoba

Ojibwe- This word has several spellings, refers to a specific language and group of people

Abbreviations:

Assembly of Manitoba Chiefs…………………………………………………………..AMC
Bringing Our Children Home Report………………………………………………..BOCH
Child and Family Services…………………………………………………………….CFS
Community Based Adaptation………………………………………………………...CBA
Community Resilience…………………………………………………………………..CR
Disaster Risk Reduction………………………………………………………………DRR
First Nations Family Advocate Office…………………………………………...FNFAO
Indian Residential Schools……………………………………………………………IRS
Missing and Murdered Indigenous Women and Girls………………………………MMIWG
Royal Canadian Mounted Police……………………………………………………..RCMP

Abstract

The colonization of Indigenous peoples in Canada has serious consequences on First Nations, including forced removal and displacement from their ancestral lands, environmental degradation, declining resources and capacities, and human rights violations. First Nations communities are currently facing the amplified effects of human-driven climate change. Sustainability of the environment is not just a concept, but a practiced way of life, that recognizes the interdependence of all living things. This deep respect for Aki (earth) is at the foundation of First Nations cultures and continues to guide their actions to insure better futures for Seven Generations. The community of Minegoziibe Anishinabe (Pine Creek First Nation), located in Manitoba, has recently confronted life-threatening events of wildfires and floods. Like many First Nations, they have also faced the harmful social effects resulting from the legacy of Indian Residential Schools (IRS) and the epidemic of drug and alcohol use (Bombay et al., 2014). The community is creating capacities for risk reduction through taking care of their mental, physical, emotional, and spiritual well-being. Traditional roles and responsibilities of the Chief and Council, Elders, Knowledge Keepers, and community members have helped guide mechanisms for emergency response and recovery. The analysis uses a holistic approach to understand community resilience (CR) through decolonized frameworks for disaster risk reduction (DRR).

Purpose of Knowing- Objectives

First Nations communities in Canada demonstrate remarkable resilience in creating capacities to sustaining their livelihoods, while restoring their traditional knowledge and ways of life. Canada recognizes three distinct groups of Indigenous peoples: First Nations, Inuit, and Métis. Many Indigenous communities share commonalities, but it is imperative to identify and respect their diverse cultures and traditions. In this paper, I use First Nations interchangeably with Anishinaabe/Ojibwe to focus on understanding their ways of life. First Nations possess an inherent right to self-governance, recognized in section 35 of the *Constitution Act, 1982* and documented in treaty rights (Government of Canada, 2023). First Nations exercise self-governance in relation to their institutions, lands, resources, identities, languages, and traditions in respect to their communities.

Post-contact, First Nations peoples have been resilient in using traditional hunting and gathering, their traditional migration routes, and clan systems. The history of colonization brought about significant consequences for First Nations, including forced removal and displacement from their ancestral lands, damage to the environment and natural resources, economic insecurity and instability, and a range of human rights violations. These outcomes have had lasting and detrimental effects on communities, and are a painful reminder of the power dynamics and injustices that have historically characterized colonization and its aftermath. First Nations communities are currently grappling with the amplified effects of human-driven climate change that, according to environmental scientists outpace the capacities of earth's resources. The preservation and protection of the environment are integral to First Nations. Environmental sustainability is not just a concept, but a practiced way of life that recognizes the interdependence of all living things. This deep respect for Aki (earth) is at the foundation of First

Nations cultures and continues to guide their actions to insure better futures for Seven Generations.

Community resilience (CR) in new waves of resilience theories would argue that it is essential to understand the nature of adversity; this is something that was missing in the evolution of resilience studies. The literature explains the importance of creating capacities and adaptation in disaster risk reduction (DRR) while putting this into a framework communities can use to foster resilience and long-term planning. The literature review conducted on the evolution of resilience failed to recognize the effects of colonialism on impacted Indigenous populations. A decolonized framework is necessary to promote mechanisms and capacities for resilience among First Nations communities. When looking into CR, it is essential to consider several factors that can impact communities' abilities to effectively manage social and environmental risks. These factors may include, but are not limited to, socio-economic status, access to resources, and past experiences with disasters or emergencies. By considering such variables, we can gain a better understanding of a community's capacity to withstand and recover from adverse events.

The specific objectives are to understand the historical and/or recent environmental and natural disasters, and social concerns in the community causing adversity and to identify risks. Narrowing it down to four events that are common among the community. This paper examines the mechanisms and barriers in the community, in relation to their mental, physical, emotional, and spiritual well-being during these events. The main purpose of knowing is to understand how social and cultural dimensions of CR contribute to creating capacities for risk reduction and support the overall well-being (mental, physical, emotional, spiritual) of the community. The purposes of knowing are shaped by western concepts, Indigenous and First Nations beliefs. This

is also reflective in the Ways of Knowing and Understanding- Background to the Issue and Case. The Medicine Wheel is a holistic approach used to understand the mechanisms and barriers in relation to the events, CR, and creating capacities for risk reduction. The study's findings have the potential to promote growth that focuses on Anishinaabe resilience in CR literature. In addition, the shared knowledge and stories can enhance First Nations community-centered frameworks for risk reduction and emergency management.

Ways of Knowing and Understanding- Background to the Issue and Case

The research covers multilayered ideas that require a certain level of contextualization. This section emphasizes reflection and understanding of the background to the issue and case to provide ways of knowing and understanding. The research includes a personal perspective on resilience and land-based knowledge. The background goes into the next section, Anishinaabe Ways of Life, covering the sub-sections Origin Stories of the Anishinaabe, Medicine Wheel, and Land-Based Knowledge. The Medicine Wheel and Land-Based Knowledge sub-sections are important in the analysis. The next section, Collective Structures of the Anishinaabe, describes the colonial transformation of First Nations community structures and land through understanding inherit rights of self-governance and treaty rights, as further discussed. For the case study analysis, a description of the community demographics of Minegoziibe Anishinabe (Pine Creek First Nation), brief history, and geographic location are provided. Resilience theory and the evolution of resilience are considered to help the reader understand the concept of CR. Finally, DRR provides the necessary context for readers to understand the literature and procedures related to environmental and climate change events. This leads smoothly to the section on community-based adaptation and capacity, emphasizing the need to address barriers within communities when seeking recovery and resilience.

History of Anishinaabekwe Researcher

In the study of resilience, human development is a complex process that involves various mechanisms, and one of the most crucial among them is learning from experience. This process of experiential learning is fundamental to fostering resilience, with its focus on actively participating in events, reflecting on them, and using the insights gained to respond appropriately to future situations (Graveline & Germain, 2022). By internalizing the knowledge learned, individuals can create capacities to handle challenges, and develop a deeper understanding of themselves and the world around them. Specifically, we recognize that generational cultural practices, including land-based knowledge, play a crucial role in shaping our understanding. Land-based knowledge is a connection between humans and nature that can include plants, animals, spirits, ancestors, and Maamaa Aki (Redvers, 2020). It can also describe a physical location or geographical concept. Land-based knowledge is further explained in the land-based knowledge sub-section under Anishinaabe ways of life. This section provides an insightful perspective on the Anishinaabkwe researcher's experiences that have shaped the understanding of individual resilience and CR.

"Boozhoo Brittany Sage Lavallee dizhinikaaz Ozhaawakosi Animkii ikwe, Miskaadesi Indoodem. Gakina dinawemaaganag, Minegoziibeg onjiiwag."

"Hello, my English name is Brittany Sage Lavallee and my spirit name is Blue Thunder Woman. I am from the Turtle Clan. My family is from Minegoziibe Anishinabe (Pine Creek First Nation)."

The introduction above is the traditional way of introducing yourself.

As a child, I grew up in the prairies of northern Manitoba. My father retired from the Royal Canadian Mounted Police (RCMP), and our family lived in a rural detachment located in

Fisher Branch, Manitoba. We lived next to other RCMP families, who became close family friends and formed my sense of a community at the young age of five. The families practiced a communal responsibility for the children in the neighborhood. As a result, my brother and I spent the majority of our days playing outside, exploring nature in all seasons.

During my childhood, I was intrigued by the changing seasons and wondered why they varied from year to year. It did not take long for me to realize that climate change was responsible for extreme weather conditions, such as patterns of increasing heat waves in summer, shorter autumn months when it suddenly became wintertime, extreme wind-chill warnings resulting in temperatures of-50°C in the winter, and floods in springtime. In junior high, I witnessed the devastating effects of flooding when the Red River reached record heights, affecting many families in my municipality of St. Andrews, which led our principal to volunteer staff and students to help sandbag. This experience opened my eyes to the direct impacts of climate change on families' livelihoods.

My parents hold strong connections to their childhood lands of Camperville and St. Martin, Manitoba. We frequently visited our relatives in those communities. Both communities have been marked by environmental and natural disaster events. I had many questions during the severe flooding of 2011 on Lake Manitoba; how did this happen, how long will it take to recover, and what will happen to the families who lost their homes or have been displaced? The 2011 flood is known as the worst flood in Manitoba history. It caused a state of emergency, and has been called a one in 2,000-year event by engineers (Government of Manitoba, n.d.). I saw the dikes the Government of Manitoba had built to stop the water from reaching homes, one just down the gravel street from my uncle and grandmother's house. The flooding threatened many First Nations and rural towns, leading to the evacuation of 18 First Nation communities

(Government of Canada, 2022). I witnessed the building of new houses during the recovery stage. However, many families never returned home and restarted their lives in Winnipeg, the capital city of Manitoba. First Nations leaders and community members took the lead in figuring out solutions during this crisis, while the Red Cross, provincial and federal government supported their efforts. The strategies for emergency response that I observed required a great deal of collaboration. It was difficult for me to witness the near evacuation of my family and the destruction of their land, where I created most of my childhood memories.

My parents came from large families; my father has eleven siblings and my late mother came from a family of six siblings. I learned to appreciate the importance of family and the role it plays in shaping our lives. Looking back, I recall with fondness the many cherished moments spent with my mother's family on their farm in Gypsumville, located near St. Martin, Manitoba. I learned about farming wheat, barley, and oats. Equally memorable were my father's stories of his own childhood that was spent hunting and trapping with my grandfather near Minegoziibe Anishinabe (Pine Creek First Nation). Hunting and farming are very important to my parents' families, providing and instilling a sense of self-sufficiency that served them throughout their lives. The families' land-based knowledge wisdom, such as finding and picking wild saskatoon berries, has been shared among generations. This knowledge has been passed down from my parents and their families who shared this knowledge and understanding with me.

Upon reflection, the land-based knowledge gained through stories and lived experiences connected me to my culture. I learned from my auntie that First Nations cultures are deeply rooted in the land and they believe everything has a spirit. My auntie said, "people have it wrong… humans are at the bottom because we rely on the animals, plants, and the earth to survive... not the other way around and we must respect all living things because they have a

spirit and are interconnected.” I was reminded of this again later in life hiking at the Brokenhead Wetlands trail in Manitoba, reading a quote on a sign from Chief Seattle (n.d.) that says,“Gaawin bemaadizwaad ogi-onatoosiinaawa’ bimaadiziwin. Gimichi-bezhigominetaimaa, Bigogegoo endoodamang gibimaadiziwininnang, gidoodaazomin giinawind. Gakina gegoon waawiijiiwesemagadoon waawiijiiwesewan,” translating to, “Humankind has not woven the web of life. We are but on thread within in. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect.” These experiences and teachings have shaped my identity, my belief that humankind is a thread, and my understanding of how connected we are to our environment.

Learning about the history of IRS in high school was a turning point. I was unable to fathom the experiences my father and his family had to live through in day schools and IRS. The history of colonization, IRS, and systemic racism weighed heavily on me, at times making it challenging to focus on my studies. I felt completely oblivious to the fact I was First Nations and what this meant. I felt off balance and it weighed heavily on my mental, physical, emotional, and spiritual well-being. Upon further contemplation, I came to the realization that my limited understanding of the history, customs, values, and languages of the First Nations peoples is a direct consequence of the devastating impact of intergenerational trauma. The Canadian educational system had failed to recognize the impacts of intergenerational trauma and teach us about the history of First Nations people. Much of my family never spoke about the IRS that was operated by the Catholic Church in Pine Creek. As a result, there was a loss of traditional knowledge and language over time. My grandmother occasionally spoke Saulteux but she did not teach her children the fluency of the language because she believed that to succeed, you must speak English. I often felt I could not ask my family questions about IRS without the risk of

triggering them. I did not know how to cope with my own emotions. Despite these challenges, I remained committed to my education and persevered, graduating high school. After graduation, I took a year off of school to work and was not quite sure my grades in high school would allow me entrance to university. With the support of my First Nations' education councilor, I decided to apply for university. I was accepted on conditional status, meaning I was accepted with conditions I must follow because I did not meet regular status requirements. It was an inspirational moment to be the first member of my immediate family to attend university and for my First Nations community to have another enrolled student. Later, I was invited to speak to high school students from Minegoziibe Anishinabe school about my post-secondary journey and how anything can be possible.

During my final year of Human Rights studies at the University of Winnipeg, I interned at the First Nations Family Advocate Office (FNFAO), where I worked alongside a remarkable female Knowledge Keeper and First Nations lawyer. The history of the office was very inspirational, having received its ceremonial name "Abinoojiyak Bigiiwewag," meaning "Our Children are Coming Home" (Assembly of Manitoba Chiefs, n.d.). Before this office became a reality, several hundred First Nations community members were invited to community gatherings to share their personal experiences regarding the crisis of Indigenous children in Child and Family Services (CFS). These stories revealed the difficulties of navigating the system and the systemic failures in ensuring fairness and justice. After the gathering of information from the community engagement sessions, the AMC Chiefs published the Bringing Our Children Home Report (BOCH). The report firmly proposed ten recommendations to effectively address the identified issues, with the establishment of the FNFAO being the most critical and indispensable recommendation. The FNFAO has a distinct mandate given by the AMC, who represent 62 or 63

First Nations in Manitoba (Assembly of Manitoba Chiefs, n.d.). The advocacy, services, and workshops offered at the FNFAO are created from a First Nations lens that upholds First Nations natural law, principles, and natural support systems. The natural laws are the original laws of the Seven Sacred Teachings given by the Creator: Love, Truth, Respect, Wisdom, Bravery, Humility, and Honesty (Thomas, 2020). Using traditional knowledge of parenting, land-based healing (ceremonies), and First Nations approaches in their workshops has helped to foster CR and healing among families.

Figure 1

Figure 1 The Seven Sacred Teachings/Seven Grandfather Teachings

Note: This image shows the Medicine Wheel in the center with the First Nations colors: red, black, white, and yellow (Southern First Nations Network of Care, n.d.). The Seven Sacred Teachings and animals depicted in the figure are as follows: eagle (Migizi)- gifted love (Zaagidwin), beaver (Amik)- gifted wisdom (Nbwaakaawin), buffalo (Ishkode-bezhiki)- gifted respect (Mnaadendimowin), turtle (Mikinaak)-

gifted truth (Debwewin), wolf (Maiingan)- gifted humility (Dbaagendiziwin), Sabe- gifted honesty (Gwekwaadziwin), and the bear (Makwa)- gifted courage (Zoongide'iwin) (United Three Fires Against Violence, n.d.). These guiding principles and teachings have been adopted by Indigenous organizations and communities.

Shortly thereafter, I was recruited by the FNFAO as a research writer, where I continued investigating the issue of birth alerts in Canada. In 2019, 496 babies were apprehended (Malone, 2022). That dropped to 386 babies the following year when birth alerts ended (Malone, 2022). The CFS was issuing alerts known as birth alerts to the hospitals, creating notice that an apprehension of a newborn would take place. Birth alerts mostly affected pregnant Indigenous mothers and they were often unaware the alert was issued on them. The alerts could be issued for a magnitude of reasons; for example, a mother who is under the age of 18 or a mother who has aged out of care would automatically have a birth alert issued. At the Missing and Murdered Indigenous Women and Girls (MMIWG) gathering, the FNFAO advocate spoke on birth alerts. The final report of the National Inquiry into MMIWG that was published in 2019 stated that birth alerts are "racist and discriminatory and are a gross violation of the rights of the child, the mother and the community" (National Inquiry into Missing and Murdered Indigenous Women and Girls, 2019). As a result of many First Nations families, advocates, and Indigenous groups battling for years against the practice of birth alerts, the Inquiry into MMIWG supported the recommendation to end the practice of birth alerts. Birth alerts are no longer used in Manitoba. This decision was in light of the legacy of Residential Schools, day schools, and the Sixties Scoop, examples of the history of separating Indigenous children from their families and communities. I saw many cases where babies were reunited with their families from the help of advocates, creating different outcomes for their futures than what I have seen for many children in care.

A few years later, I took a position in a new FNFAO service called Rites of Passage as a Rites of Passage Scaabe (helper). I assisted First Nations youth, ages 12-21 years old, who were in care of CFS or aging out, by helping them to locate housing, addictions treatment, employment and training resources. I saw extraordinary cases of resilience and hope among these youth. I learned how to write Gladue Reports for youth and young adults in the justice system. A Gladue Report is a pre-sentencing report for Indigenous offenders recognized under the Criminal Code of Canada. The report provides detailed information on the person's background, including the impact of systemic factors. When I conducted interviews with key people, helping them map out their life stories, I often saw how IRS, the Sixties Scoop, and the CFS system had negatively impacted them. The report creates alternative recommendations that seeks restorative justice, instead of incarceration. I was profoundly impacted by my youth clients who overcame many obstacles and persisted to seek Biimaadiziwin.

The term Biimaadiziwin is used to describe both the collective and the individual (living a balanced good life). It is performative, meaning it describes the daily journey in which we balance the Medicine Wheel and the natural laws of the Seven Sacred Teachings to live the good life (King, 2013). The Medicine Wheel represents the four directions and is interconnected with our mental, physical, emotional, and spiritual well-being. In the Rites of Passage service, we implemented the Circle of Sisters workshop. The creation and implementation of the Circle of Sisters workshop for youth clients encouraged this balance of the good life. Each week, the topic of the workshop would correspond to the Medicine Wheel, rotating through taking care of our emotional, mental, physical, and spiritual well-being. This workshop was designed to promote leadership development and empowerment through the use of First Nations practices, such as beginning each session with sharing circles. A sharing circle is ceremony and is guided by using

the Seven Sacred Teachings. The sharing circles allowed each youth to share their experiences and journeys. I saw many youth practice respect and love for one another, while sharing their challenges using honesty, courage, trust, and humility. The facilitators, Elders, and Knowledge Keeper involved used wisdom to complete the circle.

These experiences allowed me to connect with many First Nations peoples and their communities. I had more understanding and awareness, as an Anishinaabekwe, of my ancestors and family's culture. In my work, I observed Elders that were living examples of Biimaadiziwin, and who were ultimately guiding communities toward resilience. Biimaadiziwin and the Medicine Wheel promotes an understanding of true sustainability for the generations to come, to help ensure their well-being. My numerous teachers who shared their knowledge trusted me to nurture and protect my sacred bundle. A sacred bundle is a physical and figurative bundle of both spiritual items and oral teachings. I am grateful for my sacred bundle that keeps growing along my journey of life. In my experiences, resilience has been rooted in my family and nation through practicing their traditions and customs. My professional and personal experiences have shown that revitalization of cultural process and healing have ultimately helped many First Nations peoples.

Anishinaabe Ways of Life

The First Nations have many traditions of knowing and being that nurture their ways of life. In this section, the reader will learn about well-known origin stories of the Anishinaabe, shared by Elders, Knowledge Keepers, and First Nations people in publications. The understanding of the Medicine Wheel and land-based knowledge are also shared by Elders and Knowledge Keepers in publications, bringing past teachings to the present, which is essential in

CR. The sub-sections will support an understanding of the interconnectedness and structure of the Medicine Wheel, land-based knowledge, and Indigenous epistemologies and pedagogies.

Spirituality is central in First Nations ways of life and is associated with their deep belief in Gitche Manitou, also known as the Great Spirit or Creator and Maamaa Aki (Gross, 2014). Spiritual customs and protocols are a gift and obligation given to the Anishinaabe from Gitche Manitou. They practice this way of life in a variety of ways, such as visiting Elders, participating in the community, attending ceremonies, smudging (burning sage), visiting the land, and laying down tobacco for prayers. Hunting and harvesting medicines for their families is seen as a spiritual practice because it is connected to Maamaa Aki. As you can imagine, these are only a few examples of spiritual practices that are connected with their everyday lives. One of the most important values that the Anishinaabe follow is to show respect for all things (creation). Living in harmony with the world around them through embracing the teachings and origin stories of Gitche Manitou allows for Biimadiziwin. The Anishinaabe people have created a way of life that is both fulfilling and meaningful to their nations. The origin stories, Medicine Wheel and land-based knowledge are all spiritual concepts that help guide the Anishinaabe. The concepts are best represented in the Indigenous languages. However, for the feasibility of the study and inability to have direct translation, the sub-sections are written in English and aim to best encapsulate the Indigenous ideologies.

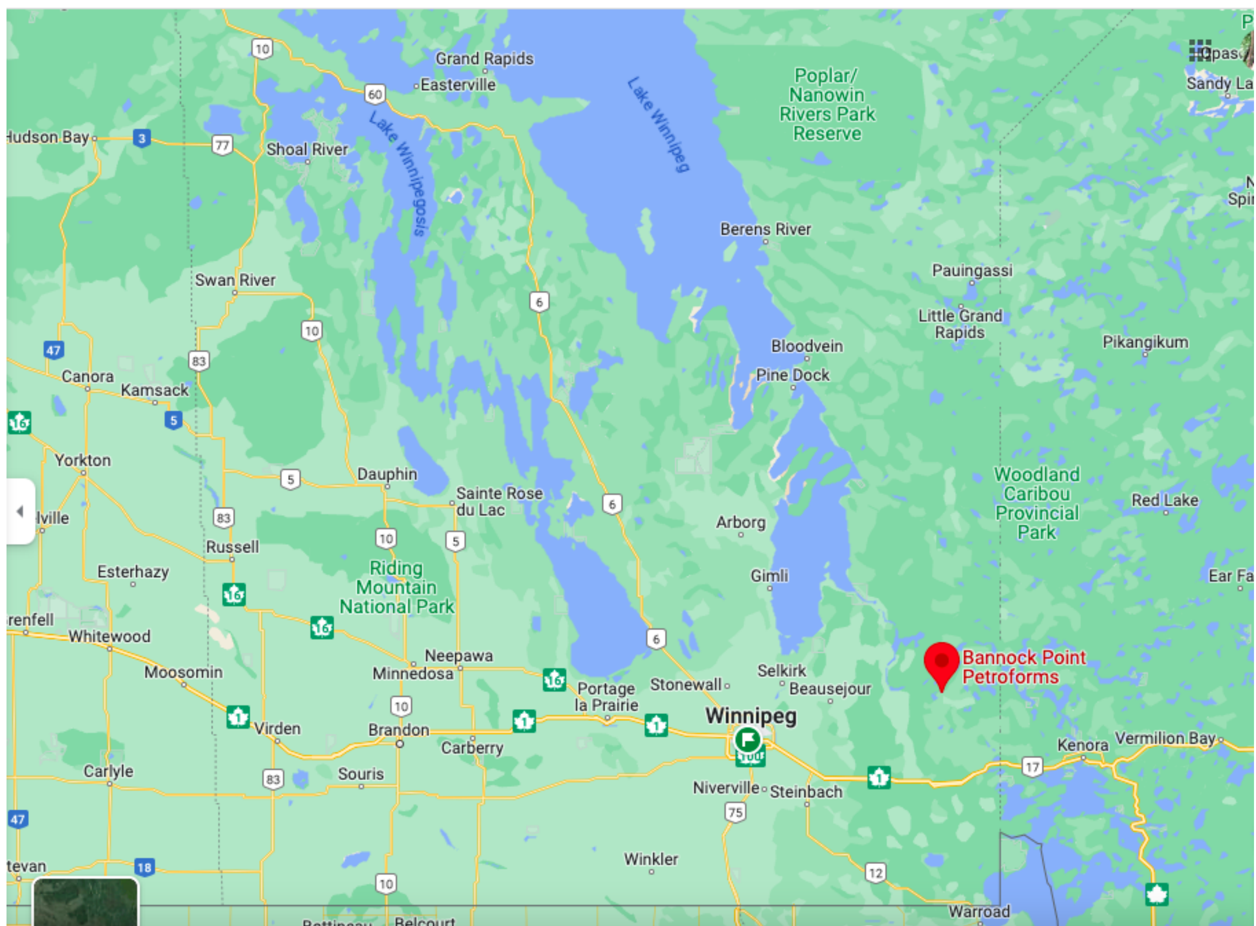
Origin Stories

The First Nations transmitted their history through oral tradition. According to Nepinak (2013), they did not have written forms of language, except for the evidence of petroglyphs, pictographs, and birch wood scrolls. Manitou Api is one of the most ancient and significant sacred sites for the First Nations people of Turtle Island (North America). The sacred site is

located in southeastern Manitoba and has been a place of gathering for Indigenous people and Nations across Turtle Island for thousands of years (Christensen & Poupart, 2012). On the land of Manitou Api, you will find petrographs (rock formations), which are records of the original instructions given to the Ojibwe people at the time of creation (Christensen & Poupart, 2012)

Figure 2

Figure 2 Bannock Point/Manitou Api



Notes: The figure shows the location on Google maps of the Bannock Point petroforms site (n.d.). This sacred site is known to hold creation stories and is a national gathering spot for ceremonies. Youth participate in vision quests at this location.

Figure 3

Figure 3 Turtle Petroform at Manitou Api

Notes: The picture shows the turtle petroform. Petroforms are also known as rock formations (Thiessen, 2022).

Figure 4

Figure 4 Eagle Petroform at Manitou Api

Notes: The picture shows the eagle petroform (Thiessen, 2022*)*.

The Anishinaabe people had their own stories about where they came from; origin stories that are passed down orally and were written on birch scrolls. The Aandi Gi Onjuuyang creation says,

> When *Ah-ki* (the Earth) was young, it was said that the Earth had a family. *Nee-baa-gee'-sis* (the Moon) is called Grandmother, and *Gee'-sis* (the Sun) is called Grandfather. The creator of this family is called *Gi'-tchi Man-i-to'* (Great Mystery or Creator). The Earth is said to be a woman. In this way it is understood that woman preceded man on the Earth. She is called Mother Earth because from her come all living things. *Nibi* (Water) is her life blood. It flows through her, nourishes her, and purifies her.
>
> On the surface of the Earth, all is given Four Sacred Directions—[*Giiwedinong*] North, [*Shaawanong*] South, [*Waabanong*] East, and [*Ningaabii'anong*] West. Each of these directions contributes a vital part to the wholeness of the Earth. Each has physical powers as well as spiritual powers, as do all things. When she was young, the Earth was filled with beauty.
>
> The Creator sent his singers in the form of [*binenshiiyag*] birds to the Earth to carry the seeds of life to all of the Four Directions. In this way life was spread across the Earth. On the Earth the Creator placed the swimming creatures of the water. He gave life to all the plants and insect world. He placed the crawling things and the four-leggeds on the land. All of these parts of life lived in harmony with each other.
>
> *Gitchi Manito* then took four parts of Mother Earth and blew into them using a Sacred Shell. From the union of the Four Sacred Elements [earth, fire, air, and water] and his breath, man was created (…). This man was created in the image of *Gitchi Manito*. He was natural man [which is what *Anishinaabe* means]. He was part of Mother Earth.

He lived in brotherhood with all that was around him. All tribes came from this original man. The Ojibway are a tribe because of the way they speak. We believe that we are *nee-kon'-nisug'* (brothers) with all tribes; we are separated only by our tongue or language (…).

Today, we need to use this kinship of all Indian people to give us the strength necessary to keep our traditions alive. No one way is better than another. I have heard [*nimishoomisag*] my grandfather's say that there are many roads to the High Place. We need to support each other by respecting and honoring the "many roads" of all tribes.

The teachings of one tribe will shed light on those of another. It is important that we know our native language, our teachings, and our ceremonies so that we will be able to pass this sacred way of living on to our children and continue the string of lives of which we are a living part (Benton-Benai, 1988, pp. 2-4, as cited in Nepinak, 2013).

Although there are many known creation stories among the diverse communities of the Anishinaabe peoples, this creation story was specifically shared in Mina'igoziibiing: A History of the Anishinaabeg of Pine Creek First Nation in Manitoba (Nepinak, 2013).

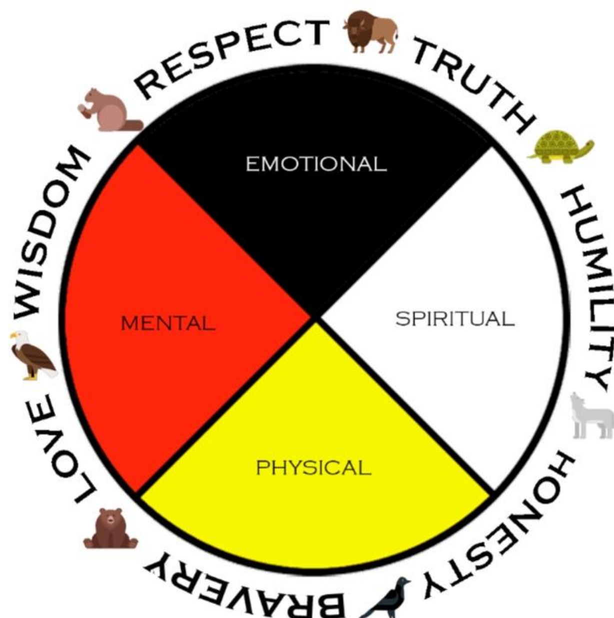
Medicine Wheel

First Nations communities hold a profound awareness that life is a sacred gift given to us by Gitche Manitou. This belief stems from their cultural and spiritual foundations, which emphasize the interconnectedness of all things. The Medicine Wheel is consistent and interconnected with the First Nations colors, directions, seasons, the four sacred medicines of the Anishinaabe, and the stages of life. The Medicine Wheel is a holistic symbol used by Indigenous peoples in North America (Williams, 2021). Anishinaabe people embrace the Medicine Wheel as a powerful symbol of their worldview, recognizing that every element of the world has a rightful

place on the wheel and is intrinsically connected to the whole. The Medicine Wheel has even been interpreted and shared among Indigenous nations, and is seen in interdisciplinary research areas. The Medicine Wheel ultimately keeps the balance of life; mental, physical, emotional, and spiritual well-being.

Figure 5

Figure 5 The Core of Emergency Management is the Medicine Wheel



Note: The Medicine Wheel was illustrated by Bizhiw nindizhinikaaz (Devin Naveau), an Indigenous youth leader and Councilor from Mattagami First Nation.

The illustration was created for a project where leading researchers and practitioners were asked, “What advice would you give to future emergency managers, resilience practitioners, and disaster risk reduction (DRR) scholars?” Yumagulova (2020) recognized that some cultures

traditionally lay a cornerstone that creates the foundation for resilient communities and wanted to create a time capsule project inspired by a time capsule project in Winnipeg, Manitoba. In May 2019, the City of Winnipeg uncovered a time capsule that had been buried for 53 years to honor the history of emergency responders. The capsule held various items, including statistics, photographs, badges, and buttons from the police, fire, and signals departments. At the time of the capsule's burial, the Signals Department was responsible for emergency telecommunications, including two-way radio, telegraph communications, traffic signals, alarm systems, and automatic controls. According to Sarah Ramsden, a senior archivist at the City of Winnipeg, the communication system was considered the most modern of its kind in the country (Yumagulova, 2020). Bizhiw nindizhinikaaz, Naveau's (2020) digital time capsule, stated:

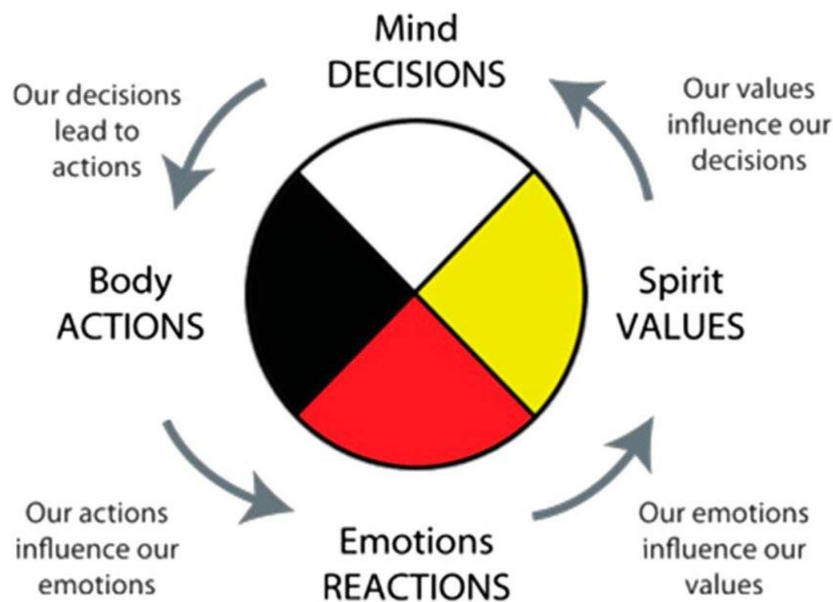
> To cultivate knowledge is to know Wisdom – To know Love is to love oneself before loving others – To honor all is to have Respect – To face fear with integrity is to know Bravery – To be true to yourself is to know Honesty – To live life selflessly and not selfishly is to know Humility – Truth is to know all of these things. These Teachings surrounding the Medicine Wheel are a reminder of our responsibilities to the world, to others around us, and to ourselves. Whether it be resilience in Emergency Management or in everyday life, I believe it is crucial to have people at the table capable of representing each virtue when making decisions for others, especially in times of emergency, as there is a tendency for division. Utilizing this framework of virtues ensures that all aspects contributing to the health and well-being of others are being considered.

There are other models of the Medicine Wheel from Indigenous nations throughout North America that have more than the four directions, but for the purpose of this study, the Ojibwe

Medicine Wheel will be shared in this paper (Williams, 2021). The direction of our mental health can greatly impact our actions and behaviors; for instance, coping mechanisms and envisioning are both examples of how our mind's direction can influence our actions (Latimer et al., 2018). Emotions, on the other hand, are expressed feelings that we experience, such as feeling sadness or crying. In addition to our mental and emotional health, our physical body also plays a significant role in our overall well-being. Ultimately, our spiritual beliefs and values shape our worldview and sense of purpose, influencing our decisions and actions in life (Latimer et al., 2018). This is seen in the Medicine Wheel, Influence and Decisions (figure 6). The Medicine Wheel recognizes land, air, fire, and water as an interconnected dimension, all aspects have a place on the wheel. Using the Medicine Wheel promotes a model for well-being that strengthens CR and capacities.

Figure 6

Figure 6 The Medicine Wheel, Influences and Decisions



Note: The Medicine Wheel is adapted from the analysis used in *Creating Safe Spaces for First Nations Youth to Share Their Pain* (Latimer et al., 2018).

Land-Based Knowledge

Land-based knowledge is an Indigenous epistemology and pedagogy that places great emphasis on the relationship that exists between people and the land. This relationship implies a connection that extends beyond mere coexistence (Redvers, 2020). In fact, it is characterized by a deep interdependence and a sense of non-separation between human beings and the natural world (Redvers, 2020). When referring to the land, the term encompasses all aspects of the natural world, including plants, animals, ancestors, spirits, and the environment (air, water, earth, fire) (Redvers, 2020). It is a holistic understanding of the world. Indigenous land-based scholars want readers to know that it is not just a pedagogy of place. Although the term can also be used to describe a physical location or a geographical concept, it must embody the idea that the land is not just a resource to be exploited, but a living entity that sustains life and deserves respect.

So, this begs the question, how do we learn from the land, and how does this shape our perspectives and understanding? In order to learn, we need to reconnect with nature, also known as land-based learning. Being on the land is essential to understanding Indigenous teachings (Simpson & Goulthard, 2014). Indigenous peoples longstanding connection to the land is often overlooked, as is the fact that the land itself is a living entity. Indigenous land-based learning incorporates ways of knowing, learning, and being, while honoring the spiritual, emotional, and physical aspects of land (Styres et al., 2013, as cited in EFTO, 2020). In order to adapt our ways of knowing, learning, and being, we use the land as the first teacher (Styres et al., 2013, as cited in EFTO, 2020). First Nations are influenced by various sources of knowledge, including language, traditions and ceremonies, natural and constructed environments, ancestors, clans,

nation, and other nations (Canadian Council on Learning, 2007; Styres et al., 2013, as cited in EFTO, 2020).

Indigenous Elders and Knowledge Keepers have always passed on their ways of knowing, seeing, and doing through storytelling, songs, ceremonies, and Indigenous languages, according to Indigenous land-based learning (EFTO 2020). They share their knowledge to help their communities live, survive, and heal. The stories and teachings come from observing and experiencing the world around us, like the changing seasons, water cycles, and animal migrations. By observing animals, they teach us how to live and survive on Aki. Indigenous ways of knowing vary by geographic region and community, showing the diversity of Indigenous worldviews across Turtle Island. Traditional values and beliefs differ among First Nations, Inuit, and Métis, but they all share commonalities, like respecting and caring for all living things, valuing traditional knowledge, and ensuring that the land is respected (EFTO, 2020). The impacts of the environment and climate change are a strong determinant of human health (Cunsolo et al., 2015; Durkalec et al., 2015; Redvers, 2020). Connection to the land is recognized as fundamental to Indigenous well-being and ways of life (Kant et al., 2013; Richmond & Ross, 2009; Redvers, 2020). Indigenous peoples believe that Aki is borrowed from future generations, and so we must act as responsible stewards to protect and respect it (EFTO, 2020). Using land-based knowledge in the analysis requires a lens where the First Nations and land are interconnected, describing social memories and values (Styres et al., 2013).

Collective Structures of the Anishinaabe

To fully understand the collective nature by which First Nations operate, it is central for the reader to understand the intricate workings of Anishinaabe collective structures. The reader will gain information from this section on the gradual transformation of First Nations

communities and land over time, including the shift from the clan system. The history of reserves and their new structures of governance will be covered in the sub-section Inherit Right of Self-Governance and Reserve Lands. This section includes the development of the treaties in the Treaty Rights sub-section, allowing for a deeper understanding of the mechanisms and barriers for CR.

First Nations peoples had their own systems of government long before Europeans and others came to what is now Canada. These systems were shaped by the diversity of First Nations peoples in terms of economy, society, geography, culture, and spirituality. It is important to remember that different groups had different forms of collective structures. The Anishinaabe followed the Dodem or clan systems. There were seven original clans and they oversaw the activities of the communities (Nepinak, 2013). However, Warren (1885[2009]) believed there was five original clans, according to the Midewiwin teachings passed on to him by the Elders. The clans were the A-wause-e or Fish, Bus-in-ause-e or Crane, Ah-ah-wauk or Loon, Noka or Bear, and Waub-ish-ash-e or Marten (Warren, 1885[2009] as cited in Nepinak, 2013). Additionally, Benton-Benai (1998) believed two other clans existed, the *Wa-wa-shesh-she* or Deer and *Be-nays* or Bird clans. Each clans had a purpose and their strengths came from the qualities and characteristics of the animal or bird that represented their clan.

According the Nepinak (2013):

> The Loon and Crane Clans were the heads or leaders of the tribes and were the spokespersons for their people. They were known for their speaking skills and good leadership skills. They made decisions by consulting the people and coming to an agreement on all issues. The Fish Clan were the teachers of the tribe and the keepers of knowledge. They were known as the intellectuals. If there was a

dispute between the Crane and Loon Clans, the Fish Clan people would be called to help. The turtle was the head of the Fish Clan. The Bear Clan were the police who looked after the welfare and safety of their people. They were also the healers and medicine people because they were close to nature and knew all about the medicines, plants, and sacred herbs that surrounded their communities. The Marten Clan were the warriors and protectors of the tribe. They came from a long line of fierce warriors and war chiefs. They protected the people from outside enemies and were very good at planning ways to defend and to ensure the survival of the tribe. In the early days of the migration, the Three Fires Confederacy had to encroach on other tribal lands and so they were not welcomed. These were times that the Marten Clan had to defend the people. The Deer Clan represented the leaders of the Hoof Clans. They were known for their gentleness and kindness and were the helpers. They were the poets and would never be mean to others. They came together to help any of the people who needed any kind of assistance. They were like the counsellors and social workers of today. They looked after the well-being of the people and families.

The Bird Clan represented the spiritual leaders of the people and they were separate from the Loon and Crane leadership clans. The Eagle was the head of the Bird clan. These clan people were knowledgeable about spiritual things such as *Gichi Manidoo*, sacred ceremonial practices such as the *Midewiwin*, rites of passage, prayers, and sacred songs. They could see far into the future to help their people to be strong and make the right decisions as a whole (Benton-Benai, 1988:76, as cited in Nepinak, 2013).

The clans allowed young people to seek out their clan identity which is received through ceremony, followed by the person's spirt name and colors. The clan system shows that the Anishinaabe were an organized nation and everyone knew their roles in the community. The knowledge helped them survive, and decisions were made in consensuses. Prophecies foretold of a time when they would meet the "light-skinned race" which would change their lives completely (Nepinak, 2013).

It was believed that prior to the arrival of Europeans, the First Nations in Manitoba relied on hunting, fishing, and gathering for survival. However, archaeological evidence has revealed that they also engaged in agriculture for a period of at least 400 years prior to European arrival (Pettipas, 2011, as cited in Nepinak, 2013). Agriculture played a crucial role in the development of human civilization by enabling societies to transition from a nomadic lifestyle to a more settled way of life. This eliminated the need for extensive travel in search of resources and provided the opportunity to return to their settlements where they safely stored various foods in underground pits. Evidence of pits have been discovered at the Lockport Site near Selkirk and the Snyder H Site on the Souris River in southern Manitoba, south of the town of Melita (Flynn & Syms, 1996, as cited in Nepinak, 2013). The First Nations established trading networks with each other, and later with the settlers. They traded goods like meat, various foods, seeds, clothing, and supplies made with copper, pipestone, and shells. Through their interactions, they shared skills and knowledge to adapt to changes when settlers arrived.

Inherit Right of Self-Governance and Reserve Lands

In Manitoba, there are 63 First Nations, also known as a communities or reserves, located mostly in rural areas (Kulchyski, 2021). Plots of land were allocated by the Government of Canada and these intergenerational homelands, known as reserves, were managed under the

Indian Act (Government of Canada, n.d.). Manitoba has five primary First Nations groups that live on reserves: the Ininew (Cree), Anishinaabe (Ojibwe), Oji-Cree, Dakota/Lakota (Sioux), and Dene peoples (Kulchyski, 2021). All First Nations peoples registered through Indigenous and Northern Affairs Canada are certified status Indians belonging to a reserve and are recognized by the Government of Canada (Government of Canada, n.d.).

The Indian Act, passed in 1876, enforced a colonial governance system on First Nations communities, leaving the federal minister with authority over them (Government of Canada, n.d.). Colonial policies were designed to eradicate First Nations culture, traditions, and ceremonies, and the use of the Dodem and clan systems declined. The First Nations people have been subjected to the Indian Act for more than 140 years (Government of Canada, n.d.).

In First Nations communities, governance is centered around complex social structures. These structures include a system of elected Chiefs and Councils that work together to lead the bands in a democratic manner. Elders, Knowledge Keepers, and healers remain respected roles in the community. The communities maintain their autonomy and self-governance through these social structures, which play a crucial role in their present ways of life.

Treaty Rights

Treaties are agreements between the Government of Canada, Indigenous groups, and frequently provinces and territories, that define the rights and obligations of all sides (Government of Canada, 2023). In 1702, the British Crown entered into treaties with Indigenous groups in the British colonies of North America (Government of Canada, 2023). The purpose of the treaties was to have economic and military peace relations. According to Nepinak, in agreeing to treaties, the First Nations hoped to gain five things:

> 1) Title of Ownership in the Whiteman's sense to certain tracts of land where they and their descendants could live in security and freedom.
>
> 2) The right to hunt, fish, trap, and gather on land surrendered to the government and that was not being occupied by the Whiteman.
>
> 3) Direct payments, whether in cash or goods or both for surrendered lands, and regular yearly payments called annuities, forever.
>
> 4) Assistance in adjusting to a new way of life. Government officials were already suggesting that the Ojibway could take up homesteading in the same manner as the White settlers. Assistance would be provided to include training in agriculture and help toward establishing farms, when they were ready; the building of schools and hiring of teachers; medical aid especially in dealing with diseases that the Whiteman himself had brought to the Indians; and special rations of food and clothing for the aged and the needy, and for all times of emergencies and pestilence.
>
> 5) The right to self-determination with respect to governance, language, and culture as independent nations (Arnot, 2007, p. 17, as cited in Nepinak, 2013).

The Crown signed treaties that defined respective rights for use of the land by Indigenous peoples and European newcomers (Government of Canada, 2023). The Crown formally established the historic treaty making process through the Royal Proclamation of 1763, whereby First Nations transferred their Indigenous title to the Crown in exchange for reserve lands and other benefits (Government of Canada, 2023). The treaties have developed from historic agreements to modern treaties. Modern treaties negotiated with First Nations include consultation and participation requirements, ownership of lands, wildlife harvesting rights, financial settlements, participation in land use and management in specific areas, self-

government and sovereignty, resource revenue sharing and measures participation in Canada's economy, and preparations for when the agreement takes effect, such as implementation planning (Government of Canada, 2023). Modern treaties also recognize the rights of Indigenous peoples to ownership of over 600,000 km² of land, protection and revitalization of their traditional cultures, languages, and heritage, access to resource development opportunities, predictability concerning land rights in around 40% of Canada's land mass, associated self-government rights and political recognition, improved social development through better outcomes in health, education, and housing, the fostering of economic development opportunities, and achievement of greater self-reliance (Government of Canada, 2023).

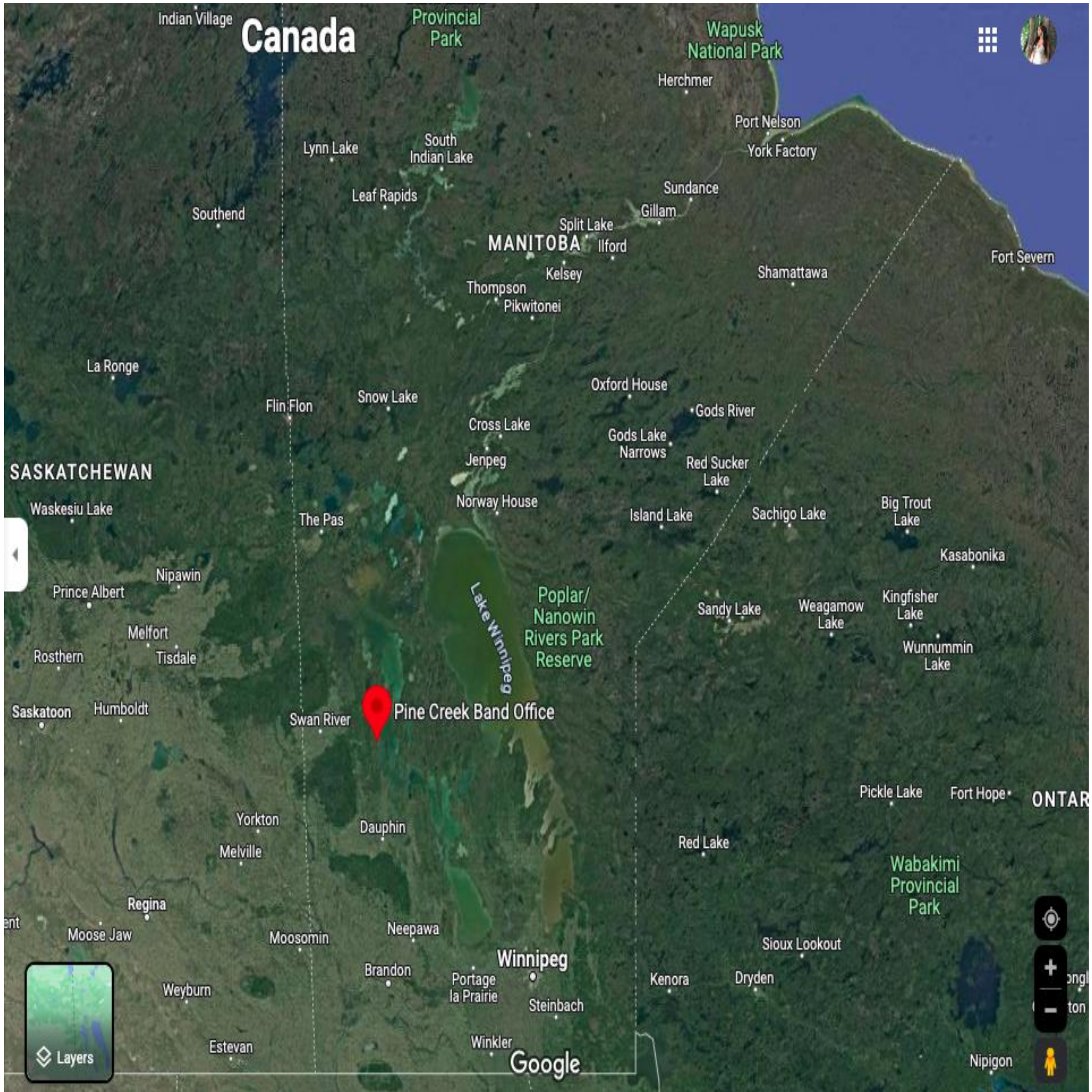
Minegoziibe Anishinabe (Pine Creek First Nation)

Minegoziibe Anishinabe*,* also known as Pine Creek First Nation, is an Ojibwe community located in Manitoba, Canada. The community's ancestral land, Pine Creek 66A Reserve, is situated approximately 110 kilometers north of Dauphin near the southwestern shore of Lake Winnipegosis (Pine Creek First Nation, n.d.). The reserve is situated between the communities of Camperville and Duck Bay. It is important to also recognized the intertwining history of the Métis people, currently living in the communities of Pine Creek, Camperville, and Duck Bay. The Pine Creek 66A Reserve spans over an area of 8,111.7 hectares (Pine Creek First Nation, n.d.). Affiliated with the West Region Tribal Council, Minegoziibe Anishinabe (Pine Creek First Nation) is signatory to Treaty #4, with a registered community membership of 3170; approximately 1200 members live on reserve land (Pine Creek First Nation, n.d). The number has since grown with new data of approximately 4,800 band members (Henry, 2023). The band members live on and off the reserve, status is recognized through a treaty card or personal

numbers that identify treaty status. The maps below show the geographical location of the northern community in relation to the provinces capital Winnipeg.

Figure 7

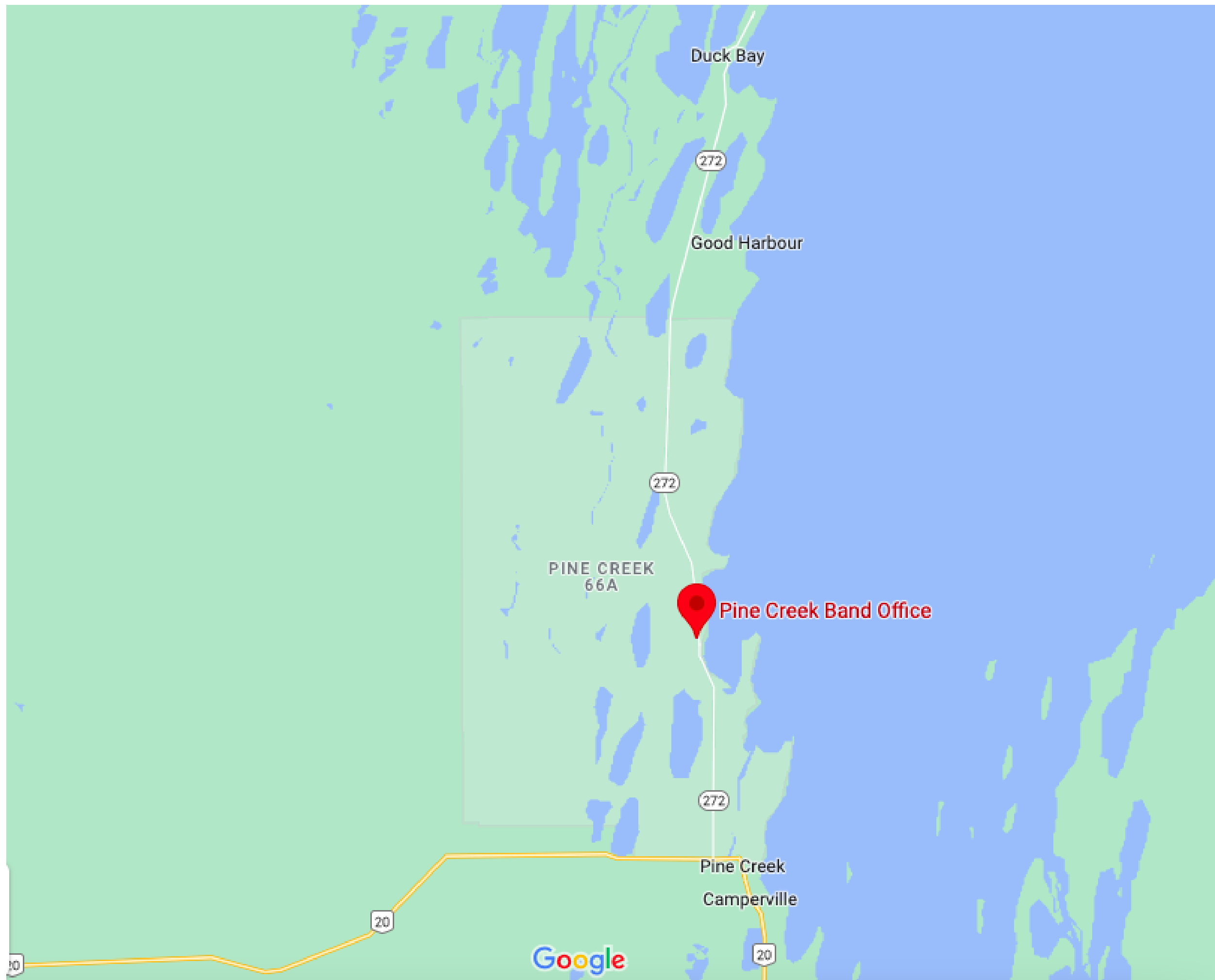
Figure 7 Zoomed out Google Map of Minegoziibe Anishinabe (Pine Creek First Nation)



Note: The figure (Google Maps, n.d.) shows where Minegoziibe Anishinabe (Pine Creek First Nation) Band Office is located in relation to the geographical location of Manitoba.

Figure 8

Figure 8 Zoomed in Google Map of Minegoziibe Anishinabe (Pine Creek First Nation)



Note: The figure (Google Maps, n.d.) shows the land of Minegoziibe Anishinabe (Pine Creek First Nation) (Pine Creek 66A), seen as a light green rectangle.

Minegoziibe Anishinabe (Pine Creek First Nation) made their home along the southwestern shore of Lake Winnipegosis. The location of their settlement was chosen to provide a wealth of natural resources, including freshwater fish, ducks, and wild game. These resources played a vital role in sustaining the community, and were a testament to the knowledge and

adaptability of the Anishinaabe people. The original language spoken on the reserve is Ojibwe and the current elected Chief is Derek Nepinak. The Pine Creek IRS was located in Camperville, opening in 1890 and closing in 1892 (Indian Residential School History & Dialogue Centre Collections, n.d.). The Government of Canada opened a larger building in 1899, which closed in 1969 (Indian Residential School History & Dialogue Centre Collections, n.d.). IRS attempted to assimilate Indigenous youth, removing them from the influence of their home, families, traditions, and cultures. IRS caused a significant number of mortalities and many children went missing during their time in IRS (RCAP, 1996, as cited in Bombey et al., 2014). IRS survivors faced many violations and neglect to their mental, physical, emotional, and spiritual well-being (RCAP, 1996, as cited in Bombey et al., 2014).

Figure 9

Figure 9 Pine Creek Indian Residential School Monument

Note: This picture is from an article published in the Winnipeg Free Press (Mackenzie, 2022).

Evolution of Resilience Theory

Resilience is a complex concept that has a rich and multifaceted history, with numerous applications in various contexts. The term has been used as a crucial area of study by many scholars globally in transdisciplinary fields (Atallah, 2016). Its origin and initial usage have been a topic of debate among scholars. This significant concept is studied in natural science and social science, rapidly growing as a vital notion used in many disciplines, including, but not limited to, developmental psychology, mental health, management, and environmental research (Fan et al., 2021). Although the concept is well studied, understandings of the term resilience vary and there is not a singular definition.

Resilience is fundamental in the lives of individuals because it is necessary to develop mechanisms to overcome hardship. Failure to develop and create mechanisms may lead to risks and detriments to physical, mental, emotional, and spiritual/religious well-being. When faced with challenging circumstances, it is not the difficulty of the situation that determines our outcome, but rather our ability to manage it effectively. This statement is reinforced by resilience theories, which emphasize the importance of adapting to adversity and persevering through difficult times. It is a well-known mechanism of human development to learn from experience and this is central to the first wave of resilience. Experiential learning focuses on experiencing the events, forming reflection, and responding appropriately to future events to build on what has been learned (Graveline & Germain, 2022). Human resilience has evolved from prevention, amelioration, and transformation (Atallah, 2016). The exploration of resilience over time shows that the use of resilience and vulnerability together is misleading. Recent studies on resilience have revealed that it is a concept that is both opposing and interdependent (Graveline &

Germain, 2022). Vulnerability contains factors that increase risk, whereas resilience consists of factors that reduce risk (Graveline & Germain, 2022). Resilience should increase adaptive capacity and decrease vulnerability. Increasing the resilience and empowerment of local communities is imperative; however, the terms resilience and vulnerability continue to be used in conjunction with each other in literature.

Resilience as an approach has created abundant interest from humanitarian actors. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA, 2013) position paper on resilience describes how all relevant partners should adopt a resilience-focused approach. OCHA (2013) stresses the importance of this "to help prevent humanitarian crises and provide faster and more sustainable solutions to crisis when they occur." OCHA articulates principles for strengthening resilience, including building national and local capacity, making long term commitments and strategic plans, and shifting away from the relief and development paradigm. The pledges of governments, humanitarian and development actors, and donors to use this resilience-focused approach will strengthen their approaches and mechanisms.

Defining Community Resilience

In the last 20 years, the term resilience in research has expanded from the individual level to domains of community, groups, cities, and environment (Fan et al., 2021). The definition of community refers to a social group whose members have a commonality, including shared government, geographic location, culture or heritage, and religion (Oxford Learner's Dictionaries, n.d.). CR is a term that encompasses the interconnected social structures of families, groups, and communities. It refers to the ability of these systems to withstand and recover from various challenges, including natural disasters, economic downturns, and social upheavals. Strong CR relies on factors such as social cohesion, effective leadership, and access

to resources, all of which work together to promote resilience and foster a sense of collective strength and well-being. Therefore, the most comprehensive definition of community resilience (CR) refers to the ability of the community to respond to and recover from adverse situations, such as natural disasters, acts of violence, economic hardship, and other challenges to the members as a whole. Although there is a significant amount of research conducted on CR, determining the reasons why some communities are more resilient than others can be a challenging task. It is crucial to understand how CR is perceived in various waves of resilience and how disaster and risk response researchers depict it.

Disaster Risk Reduction

Resilience and CR are often used interchangeably in risk and disaster management because building resilience is often community oriented. In addition, CR is related to managing disaster risks over time (Chaigneau et al., 2021). Within the sphere of humanitarian aid and assistance, there exists a critical and essential focus on DRR. This approach is paramount in constructing and developing communities that are capable of withstanding and recovering from disasters and emergencies in the 21st century. According to Graveline & Germain (2022), shifting the risk paradigm's focus from vulnerability reduction to resilience building is crucial. DRR focuses on the prevention of new risks and reducing existing risks. The literature explains CR as a vital concept in DRR because it empowers communities to understand the group's situation and identifies appropriate adaptive strategies and resources essential to improve their livelihood. The ability for resilience to be strengthened through capacity building and empowerment while managing communities' capacities is already well documented (Glass et al., 2022). Communities should take appropriate actions to utilize their livelihood assets to respond to change, contributing to sustainable community development. The study of resilience has

identified similarities across the structural aspect of the community. Similar findings regarding a community's ability to achieve survival, well-being, and long-term viability exist. All have been linked to the accessibility of resources and the ability of the community to use them efficiently (Gillespie-Marthaler et al., 2019). A case study in Fiji shows that historically, iTaukei have in-depth knowledge supporting their capacity to sustain hardships, records, and that this practical knowledge is understood (Singh, Tabe, & Martin, 2021). Indigenous women have extensive knowledge of sustainable resource management. They can make valuable contributions to developing mechanisms related to agriculture and freshwater management (Singh et al., 2022, p. 1). In this case study, resilience-building actions and interventions were primarily carried out at the community level, through community-based DRR management that represents the communities' priorities, needs, knowledge, and capacities (Graveline & Germain, 2022). This approach places social aspects and the role of communities at the center of disaster risk management.

Community Based Adaptation and Capacity

The effects of adversity and humanitarian crises impact all communities differently, even if the event is similar. One scholar discusses the fundamental concepts of CR when anticipating and preparing for disasters; the first is adaptive learning, which characterizes disaster preparedness strategies (Almedom, 2011). CR in the last wave of resilience is about a transformative change rather than a return to the previous state and is a dynamic process of learning adaptation. According to Almedon (2011), the key to resilience is overcoming catastrophic events and creating meaning from adversity by striving to maintain core identities and functions. Reviewing the concept of CR globally, it was common to find sections on community-based adaptation (CBA) and capacity. CBA is a community-led initiative that

contributes to CR by engaging communities in planning and implementing adaptation procedures. CBA's sustainability has received widespread recognition across multiple regions, solidifying its status as a highly sought-after choice.

Chaigneau et al. (2021) explains that there is need for a more process-driven, systemic, and dynamic understanding of resilience that measures persistence, adaptation, and transformation in response to multiple conflicts over time. The Delphi technique is a methodology used across various fields to engage a panel of experts in a collective approach to solving complex challenges (Glass et al., 2022). It is essential to explore CR through indicators and measurable outcomes. Exploring potential capacity factors can enhance CR and foster measurable resilience indicators of community vulnerability, sustainability, and resilience. These indicators are simple and direct characteristics that impact resilience. Communities can use resilience indicators to evaluate their ability to prepare for, respond to, and recover from disasters. These indicators should factor in risk. The Communities Advancing Resilience Toolkit (CART) is a theory-based, evidence-informed intervention designed to assess and enhance CR (Tavares et al., 2022). CART engages community representatives to be involved and discuss improving their CR; the intervention also seeks to empower communities by allowing them to collaborate. CART supports communication and public engagement in identifying local issues, problem-solving, resource sharing, and utilizing resources toward community needs when faced with an actual or potential threat (Pfefferbaum et al., 2013). The five areas of CART's foundation are connection and caring, resources, transformative potential, disaster management, information, and communication (Travares et al., 2022).

Knowledge We Want to Learn- Research Questions

- What are the historical and/or recent environmental and natural disasters, and social concerns that have caused adversity in the reserve lands and surrounding communities of Minegoziibe Anishinabe (Pine Creek First Nation), Camperville, and Duck Bay, Manitoba?
  - What happened during the events that caused risks to the communities' well-being?

- What are the mechanisms and barriers in relation to the adverse events in the community?

  Using the Medicine Wheel pedagogy (Figure 6, *"The Core of Emergency Management is the Medicine Wheel"*)

  - What are the mechanisms and barriers affecting their mental well-being?
  - What are the mechanisms and barriers affecting their physical well-being?
  - What are the mechanisms and barriers affecting their emotional well-being?
  - What are the mechanisms and barriers affecting spiritual well-being?

- How do the social and cultural dimensions of community resilience (CR) contribute to creating capacities for risk reduction and support the overall well-being (mental, physical, emotional, spiritual) of the community?

How We Gain Knowledge- Methods

How we gain knowledge includes the design, sample, setting, measures, interview guide, and data collection protocol. Interviews were chosen as the primary way to gain knowledge. The second way we gain knowledge is through literature, providing ways of knowing and understanding. The use of qualitative research methods allowed for a deep understanding of the community members' experiences, values, and perspectives, which is fundamental in achieving the knowledge that we want to learn. Qualitative research provided a meaningful exchange of information, taking into consideration respect of cultural protocols and obligations in the knowledge exchange.

The term "research" is itself indistinguishably linked to European imperialism and colonialism (Smith, 1999, p .1). This is an issue that continues to cause distrust from First Nations. According to Smith (1999), the ongoing practice of imperialism is linked to how information about Indigenous communities is collected, organized, and shared. This raises questions of how knowledge can be respectfully collected, organized, and shared. The following excerpt is from L. T. Smith's, (1999) *Decolonizing Methodologies: Research and Indigenous Peoples*:

> When Indigenous peoples become the researchers and not merely the researched, the activity of research is transformed. Questions are framed differently, priorities are ranked differently, problems are defined differently, and people participate on different terms (p. 193)

Consistent with this excerpt, I will describe the priorities that were considered for this study. The consultation of the Chief and Council were ultimately the topmost priority. As a sovereign nation and self-governing community, researchers must always seek the approval of the First Nations

Chief and Council. This was a process learned in my role as a Researcher Writer at the FNFAO; respect for First Nations leadership and communities requires consultation. The Chief and Council decide if they will allow and support a study in the community. According to Grenz (2023), it is necessary that Indigenous communities have the power to review the ethics of research projects that involve their people. As the defenders and leaders of their culture and traditions, it is their right to ensure that research conducted on their land is carried out in a way that is respectful, fair, and beneficial to their community.

Decolonizing methodology discusses that research projects in First Nations communities should establish mutually beneficial projects with First Nations peoples, as Smith (1999) points out. It is up to the researcher and First Nations leadership to establish ways in which the project will benefit the community. With great opportunity as an Anishinaabkwe researcher and Minegoziibe Anishinabe (Pine Creek First Nation) community member, this was seen as beneficial to the community to support a sponsored student and member. The outcome of the research would be brought back to the community and shared. I witnessed a remarkable outcome of shared knowledge because there was a level of inherent trust and respect. I actively set more priorities after the collection of knowledge to take steps to decolonize the research through use of the Ojibwe language as an important aspect of the study. Seeking Indigenous ideologies that inherently breakdown the standard imperialistic and colonial approaches was a measure taken to respect the organizing and sharing of knowledge. However, more experience and understanding are needed in decolonizing research methodology and sensitivity writing to fully encompass a decolonized approach to collecting, organizing, and sharing knowledge.

The design of the study utilizes descriptive phenomenology. Descriptive phenomenology is a qualitative method of gaining knowledge that digs deep into the experiences of individuals,

their actions, and the underlying motivations that drive their behavior. By challenging assumptions and conventional wisdom, this approach seeks to provide insightful and nuanced perspectives on CR. Through descriptive phenomenology, one can gain a better understanding of the factors that shape our perceptions and actions, more specifically the cultural aspects. The selection of this design was conducted for the following reasons: (a) to describe the participant's experiences in the community; and (b) to understand participant's views and understandings on the practice of community resilience (CR) and disaster risk reduction (DRR).

For the feasibility of the research that involved time constraints, it was conducted as a case study into one community. Minegoziibe Anishinabe *(*Pine Creek First Nation*)*, is one of 63 First Nations in Manitoba. The study sample of community members was found through purposeful quota sampling, allowing for the greatest viability of the study. To be eligible for the study, community members needed to be: (a) 18 years or older; (b) currently residing in Pine Creek, Camperville, or Duck Bay, Manitoba; and (c) a self-identified or treaty registered band member of Minegoziibe Anishinabe (Pine Creek First Nation). The interviews included a mixture of First Nations leadership, Elders, Knowledge Keepers, and community members with eleven total participants. Each interview lasted 30 minutes to one hour. The sample size consisted of a variety of community members working in the area of community service, as well as logging.

The interviews were held in an office space at 880 Pine Creek Indian Reserve (Band Office) and the Elders' lodge. The setting was adjusted for the comfort of the Elders. The Pine Creek Band Office was an appropriate space to conduct the interviews because it is a central location and known by all community members. The office space was private, allowing for the discussion of sensitive issues and offering of smudge (burning of sage) when needed.

A semi-structured interview guide was used to conduct interviews. The interview guide asked open-ended questions about the interviewee's community experiences, barriers of capacity and adaptation in the community, and community resilience (Appendix A- Interview Guide). Open-ended questions allowed community members to describe their feelings, experiences, thoughts, and opinions in relation to the community.

In the data collection protocol, interviews were recorded with consent of the participant (in a comprehensible consent form). All interviews were coded for confidentiality and indicators of community member's identity were used where appropriate. All interviews are stored in an encrypted personal file on a personal password protected laptop.

Respecting Cultural Protocols and Obligations- Ethical Considerations

In respect for cultural protocols and obligations, trust is an ethical consideration. Grenz (2023) claims that trust is highly valued in First Nations cultures and societies, and it is considered a privilege to be trusted. She states that there should be ethics boards specifically for Indigenous researchers and their communities that respect cultural protocols and obligations, claiming that this is not a free pass to Indigenous researchers because they have their own responsibilities when participating in research in their own communities. The issue of using a consent form is one concern from Grenz (2023), stating:

> During my PhD, I interviewed an Elder for a research project with a non-Indigenous graduate student. As our knowledge-sharing session began, the student pulled out a research release and participation form mandated by her ethics committee, explained what it was and asked the Elder to sign it. He immediately complied. But when I pulled mine out, he physically flinched and shook his head, "No. We don't do this."

For myself, as an Anishinaabkwe researcher, respect for cultural protocols and obligations is much greater because if trust is broken, it would be detrimental in both personal and professional contexts. Grenz (2023) states that if trust is broken, it creates a ripple effect that can have significant consequences, bringing shame not only to the Indigenous researcher who broke the trust but also to their family name. Moreover, it can lead to the end of community work, which is often welcomed by communities. Additionally, she says that word of the breach of trust can spread rapidly between communities, damaging relationships and causing mistrust (Grenz, 2023).

I created an all-encompassing consent form written in easy-to-read language. This would have not been my first choice in how I received consent from First Nations community members. However, I felt that, to pursue this research in a timely matter, it was necessary for the ethics of the review board. All community members were informed about the purpose of the study and made aware of their rights to refuse or participate with written consent. The participant informed consent form describes the title of the study, researcher name, purpose of study, study procedure, potential risks and discomforts, potential benefits to participants and/or society, confidentiality, future use of data, voluntary participation and withdrawal, research contact information, the rights of research participant, IRB contact information, consent to use quotes and indicator of identity from interview, and consent to audio-record interview. I always began by offering to read the consent form and help community members fill it out. Almost all community members chose this option. The form directed the community member to check boxes if they wished to have their identity known under the consent to use quotes and indicators of identity from the interview containing these identifiers: name, gender, role in the community (Knowledge Keeper, Elder, Leader), profession, and age. All community members opted for all aspects of their

identity to be known; these identifiers were often described by the community members in the beginning of the interview. This was a key aspect of the form because traditional knowledge, teaching, and stories were shared. Community members had the option to be acknowledged and honored for their knowledge.

The community speaks prominently English, and so a translator was not necessary. The collection of knowledge was done through transcribing recordings and taking notes. The initial ways I wanted to gain knowledge included facilitating two Sharing Circles as a decolonized method of collecting shared knowledge and stories. After careful consideration and further consultation with Elders and Leadership, it was decided this would not be appropriate due to Sharing Circles inherently being ceremony. It was agreed that Sharing Circles do not belong in research because it is sacred. Additionally, the role of conducting Sharing Circles is an obligation that the facilitator would have to continue for more than two sessions (a set amount for the purpose of community healing). The Sharing Circles were not used due to respect for cultural protocols and obligations. All participants were gifted a medicine pouch with the four sacred medicines (Sage, Sweet-Grass, Tobacco, and Cedar). Tobacco is traditionally passed for the exchange of knowledge. Smudging (burning sage) was offered before, during, and after the interviews to respect cultural protocols.

It was important to think of my positionality as a community member who lives outside of the community. There was another layer of trust that needed to be built in relation to the community members living on the reserve. I continue to seek experience and knowledge in decolonized methodology, especially in First Nations research. The cultural protocols and obligations created a safe space of respect and trust.

Shared Knowledge and Stories- Findings

Shared knowledge and stories from the community members' experiences describe themes and key findings in the interviews. The themes include commonalities in the community members' experiences. The community describes two recent environmental and natural disaster events and two social concerns in the community, experienced by all community members. The term "events" will be used to group and describe the environmental and natural disasters, and social concerns that have created adversity in the community. DRR looks into the risks that affect communities during past, present and future events. Risks affecting the community's well-being are described in relation to the events. The Medicine Wheel takes into consideration the cultural dimensions of the mental, physical, emotional, and spiritual well-being of the community members. To analyze shared knowledge and stories, the Medicine Wheel will be used to guide this study. The community members describe barriers and mechanisms experienced during the events. The main purpose of knowing and knowledge we want to learn is; how do social and cultural dimensions of CR contribute to creating capacities and support the overall well-being (mental, physical, emotional, and spiritual) of the community? CR is understood by the community members to include four main social and cultural dimensions that contribute to creating capacities and support the overall well-being of the community, including their ability to respond and recover from events. A majority of the quotes from the community members will be emphasized in relation to the social and cultural variables that influenced their resilience. Land-based knowledge is consistent in the community members' experiences and perspectives, acknowledging the traditional knowledge of the land and the deep belief in interdependence.

Adverse Events in the Community

In the community, there were two recent environmental and natural disasters and two social concerns described among all community members. In May of 2020, a state of emergency was issued due to wildfires that were burning out of control. Two years later, in May of 2022, an extreme flood caused disconnection in the community when the roads and bridges were washed out. Community members described many social issues. Two of the most common issues affecting all community members are the legacy of IRS and the drug and alcohol concerns. The events will be discussed in detail to gain context of the dynamic risks.

Chief Nepinak shares stories and teachings from Elders of how environmental and natural disasters have been predicted. In the interview, when asked about if he remembered any event of crisis or risk around environmental and natural disaster in the First Nation (Appendix A-Interview Guide) he stated:

> (…) we've known of impending natural disasters and challenges for all of our lives, because the Elders have told us at a young age that things are going to change, the land is going to change and there's going to be some really difficult times. There's going to be food scarcity in the future, there's going to be more fires and more floods because the wind is going to change very quickly as a result of what people have been doing (…) (Chief Nepinak, personal communication, May 23, 2023)

Climate change is now widely recognized as a real, ongoing, and rapidly-increasing phenomenon on a global scale. First Nations peoples, being deeply connected to their land and environment, have accumulated a wealth of knowledge on various weather and climate patterns over centuries. Their experiences and observations of phenomena, such as the movement of animals, birds, and insects, the changing colors of the sky, the direction and speed of winds, and the behavior of

plants, have enabled them to develop a holistic understanding of climate change (Turner & Clifton, 2009). Indigenous beliefs teach us that we simply influence climate change through our actions and values. It is now widely accepted that the industrial revolution is one driver responsible for climate change, alongside many human driven activities (Turner & Clifton, 2009). First Nations belief in all things having a spirit, relates to their relationships, and powers of the natural world. The natural world can aid or harm us depending on how well we treat them (Turner & Clifton, 2009). Recognizing other species as our relatives rather than mere objects is a fundamental shift in our perception that elevates their significance in the intricate web of life on earth. By assigning greater value to all living things, we acknowledge their importance and embrace our responsibility to protect and preserve them. Our appreciation for the natural world and its inhabitants is critical in mitigating risks and combating climate change. This belief has led First Nations to be the main actors in environmental stewardship.

Community members discussed the life-threatening event of the wildfire in 2020 that caused the former Chief and Council to declare a local state of emergency. The local state of emergency declared, collaborating with; the Assembly of Manitoba Chiefs (AMC), Red Cross, Emergency Measures Manitoba, Tribal Councils, and Indigenous Service Canada (Hatherly, 2020). This was to ensure that expertise and resources were available to Minegoziibe Anishinabe (Pine Creek First Nation) as they enacted their emergency measures provisions (Hatherly, 2020). The Canadian Red Cross assisted with the evacuation of 100 people (Hatherly, 2020). The COVID-19 pandemic was present during this time and required vigilance. Strong awareness and coordination with many actors were required in the emergency response to deal with these two co-occurring risks. The morning of the declared state of emergency, the fire was burning out of control, threatening a nearby church, cemetery, and many homes (Hatherly, 2020). Hydro poles

were also burnt in this process as the fires spread across the land. According to a fire map on the province's website, during this event, the fire spanned 10,000 hectares and burned in the area north of Dauphin, Manitoba (Hatherly, 2020). Many community members had to be evacuated during this time as the fire reached the community. The out-of-control wildfires caused poor air quality and risks to health, causing many families to flee for their safety.

The flood of 2022 caused disconnection for members of the community. Unawareness of the risks and vulnerabilities was prevalent during this time due to the physical disconnection (personal communication, 2023). The flooding displaced families on the west side of the reserve because the highway was blocked off due to the rush of the water coming through (personal communication, 2023). Flooding was caused by a number of factors, including the naturally occurring geographic factors of the region; involving tributaries, such as creeks and streams, in the west of the community draining into Minegoziibe Anishinabe (Pine Creek First Nation) and surrounding communities. This caused the low-lying lands between Duck Mountain (west) and the southern basin of Lake Winnipegosis to be overwhelmed by flooding. The bridge in the community was washed out and families had to be evacuated because they could not get any services to the west side of the community (personal communication, 2023).

Community members mentioned many social concerns including high rates of unemployment and limited employment opportunities (long term), the legacy of IRS, drug and alcohol concerns, and the health crisis (diabetes). The legacy of dispossession and family breakdown in IRS caused the loss of culture, language, and ultimately, loss of identity. Chief Nepinak has declared that Residential Schools and intergeneration trauma have contributed to the drug and alcohol concerns in the community (personal communication, May 23, 2023). Almost all community members mentioned the issue of drug and alcohol use in the community. One

community member describes the use of drugs and alcohol as an epidemic spreading all over the First Nations and the difficulties for communities to take back control due to associated risks (personal communication, 2023).

Mechanisms and Barriers in the Community

The mechanisms for the overall well-being of the community are best described through the roles and responsibilities each member could offer to protect the community and land. The barriers experienced by community members included the evolving awareness of more environmental and natural disaster events, the epidemic nature of drug and alcohol concerns, funding restraints, access to immediate external emergency services, and the legacy of IRS. The Medicine Wheel pedagogy (Figure 6, *"The Core of Emergency Management is the Medicine Wheel"*) will guide this study to establish and consider aspects of their mental, physical, emotional, and spiritual well-being.

Community members discussed the roles and responsibilities of the Chief and Council, band members, Elders, Knowledge Keepers, and youth. In the interviews, all community members described these as mechanisms to responding and recovering from the events (Appendix A- Interview Guide). The Chief and Council are responsible for the overall well-being of the community, providing safety and opportunities for the community's mental, physical, emotional, and spiritual well-being. The Chief and Council allocate different roles and responsibilities to members. The Manager of the Bison looks after the community's bison during these events by rotating them away from the wildfire and grazing the grass in each pasture to prevent wildfires, directed by the Chief and Council (personal communication, June 14, 2023). The community's Emergency Management Coordinator, in coordination with the Chief and

Council, is responsible for emergency response planning, including evacuations. When asked about the roles and responsibilities of the Chief and Council, one community member said:

> Yes, they were the ones that organize the evacuation on both and so yeah, that's right. The people that were being evacuated, they organized like a convoy. And people that didn't have their own vehicles or could not drive. That's where they met on highway 20. And that's where they were boarded on to vehicles or buses, whatever and then they were sent to Swan River, Manitoba. So they played a big part. And they also would have started looking out of the community to get like Manitoba highways to come in as soon as possible to start trying to restore that bridge. So, we were not so isolated out here without any service. And they did well, they did well. (A. Moosetail, personal communication, June 14, 2023)

A mechanism of new fireguards were put up around the community to further prevent the fire from reaching homes and the bison farm, protecting the physical well-being of the community. The community's First Nations Safety Officer and local fire department are involved in emergency responses and respond to safety concerns in the community. All allocated roles are in coordination with the Chief and Council. The responsibilities of the Chief and Council include maintaining good relations with outside communities and actors involved in the emergency response, working together to solve problems. Knowledge sharing in terms of gatherings and meetings is used to discuss issues in the community, assigning roles and responsibilities. The three communities of Minegoziibe Anishinabe (Pine Creek First Nation), Camperville, and Duck Bay shared knowledge during the events. Social concerns of community members are addressed through the Chief and Council, by creating opportunities for healing. When asked about opportunities for healing, Councilor Cindy Mckay stated:

"Well, it depends what people want like what they do for healing, some people like ceremony. Some people like to still go to church. Some people like to heal through the land like quadding and just being with family and friends. Some people use like, you know, they go fishing, they go hunting, like, all those needs to be considered as healing, as part of someone's healing and there's all kinds of healing opportunities. (personal communication, June 14, 2023)

Healing workshops supporting the community's emotional and mental well-being will be further discussed in the next section. Community members are responsible for their family's overall well-being and how they can prepare for crisis events in their home. Many families invested in generators and stocked up on canned goods and non-perishable food items in case of emergencies. One community member described her mechanisms for preparing at home during the events, in case of evacuations:

(…) I got two bags ready one for my husband, one for myself just important items that we needed and medication that we needed in case we had to leave (…). (A. Moosetail, personal communication, June 14, 2023).

Community members see their roles and responsibilities as opportunities and obligations to keep the environment and community clean, volunteering where they can to help during the events. Elders hold wisdom and teachings, a very important role in the community, participating in meetings and providing input to Leaders and band members on awareness of past situations, what was done and if it worked. The Elders in the community reinforced the significance of life in emergency situations, supporting the community's well-being and safety. When asked about how she prepares for disasters at home, Elder Mary stated:

> You will need preparation, I got what is important to me. I leave everything else I take my drum and my medicine bag. We can't take too much, life is more important. We leave everything there, only our sacred things (personal communication, May 23, 2023).

Elders and Knowledge Keepers hold specific roles in taking care of the community's spiritual well-being during ceremony. Youth took part in sandbagging during the flooding and helping around the home during events of crisis. Chief Nepinak states that the roles of the youth are much more than just that, they are very important because they are the futures of "resiliency building, sustainability, and self-determination," describing the investment into education and mental well-being as crucial in fostering future CR (personal communication, May 23, 2023). The roles and responsibilities of the community fostered mechanisms for CR and created capacities for risk reduction.

Overall, the barriers in the community included the pending awareness of more events of environmental and natural disasters due to climate change, causing disconnection and destruction to the land and the community, and the epidemic of drug and alcohol concerns spreading in First Nations communities. The barriers of funding from the Government of Canada for community services, emergency equipment and an emergency response center were also discussed. The barrier of access to external immediate emergency responses was a concern due to the lack of cell towers/service in the community, as the 911 emergency service was only recently introduced to the community. The issue of IRS causing intergenerational trauma was also discussed as disrupting the well-being of the community. These barriers, if not addressed, affect the overall well-being of the community and disrupt the Medicine Wheel. When describing the factors and resources to overcome social barriers, Chief Nepinak stated (Appendix A- Interview Guide):

> In my opinion, we have to focus on recovery. We have to focus on remembering and reclaiming language and space and culture and governance. I think those are factors that really impact quality of life in the community. And if we can emulate through our own actions in our own day to day kind of interactions with one another, the core principles and the core value systems of their way of life, I think we will be much stronger. And I think we're going there, at least from what I can see. There's people that spend time in ceremonies, understanding ceremony. And the ceremonies in the language have a lot or most of the teachings still there. So, if you can take the teachings you get in ceremony and live them every day in the community, then the ceremony becomes 365 days a year. Yeah. And, you know, that's what's important. What you take out of ceremony are the teachings of kindness, you know, and humility and honesty and respect, and love, and truth. All those very important core teachings of our people to find ways of living that way, and communities, and we'd have a strong community. (personal communication, May 23, 2023).

Community Resilience and Creating Capacities for Risk Reduction

The resilience of community members consisted of four main social and cultural dimensions, contributing to the overall well-being of the community and their ability to respond to and recover from events. The four main dimensions of CR and creating capacities for risk reduction included connection to the land and culture, helping each other out and community involvement, education and workshops, and good leadership.

The majority of community members, when asked about their connection to the land they live on, responded (Appendix A- Interview guide):

My connection to our community goes back lots of generations (…) you know, I'm connected to the land because I eat the fish out of the water sometimes. I hunt the moose in the mountains. Pick the berries and even the blueberries from the hills. To call those things connecting you to the land. Because when you consume what the land provides, you become a part of the land. My connection is tied to many different things, the interactions I have and leadership, interactions with family that live in the community. All these things are part of my connection to my home. Because that's all I really know, this is all I really care about. I know there's a lot of things happening in the world lots of complex things, but my connection here is really what keeps me going and keeps me alive (Chief Derek Nepinak, personal communication, May 23, 2023).

My connection to the land is I attend a lot of ceremonies. I plan a lot of ceremonies for our membership. My father was a fisherman, so I (…) although we don't fish today, but I have that background with my, my parents. He was a trapper, so he took us out into the trap line and he was also a hunter. So, I came from that background as well (Councilor Cindy Mckay, personal communication, June 14, 2023).

"The land that we live on is Anishinaabe Pine Creek (…) We have the highest sweet grass in the reserve (…) and we have the lots of springs, salt springs, lakes. We have five lakes in the community (L. Nepinak, personal communication, June 14, 2023)."

"(…) I started getting involved in the lands when I came back and started living on the First Nation. This meaning quadding and going out hunting. And this and that, that we

> normally did in our younger years, basically (B. Mckay, personal communication, May 19, 2023)."

> "Well, one thing for sure. For us would be to go to the wild berries, we are able to go out not far from our home we can go picking and we do a lot of outdoorsy stuff (A. Moosetail, personal communication, June 14, 2023)."

Community members talked about their connection to the land as a long-standing connection that dates back generations. All community members view the land as a way to sustain themselves and their livelihoods. Cultural practices and mechanisms of hunting and gathering, exploring the land (land-based knowledge), and fishing were mentioned by members. Additionally, the connection to land brought them closer to their traditional values. Opportunities to attend ceremony were mentioned as something that helped connect them to the land and their community. The connection to the land is a vital cultural and social dimension for CR and creating capacities for risk reduction.

When asked what being a part of a community means (Appendix A-Interview Guide), the majority of community members understood being a part of community as involvement in; community functions, helping the community by volunteering, helping raise children in the community, revitalizing the language and embracing their identity, and keeping the community safe and clean. The following are quotes from the interviews showing the value and experiences of community involvement:

> To me, being a part of community means that you've discovered your identity. And if you've discovered your identity, then you find where your identity fits into your family and into the broader community. So what it means to be part of a community is to be

grounded in who you are. That's one side of the community. (Chief Derek Nepinak, personal communication, May 23, 2023)

To be part of the community means to help others. Everybody to take responsibility in raising children, keeping our community safe and clean. And that's talking in our language, or learning how to talk (…) (Councilor Cindy Mckay, personal communication, June 14, 2023)

(…) It is moving back, from Winnipeg to Pine Creek and seeing the growth of the community, your own people. And that's nice to see. And knowing everyone in the community (…) So it's really good to be back out in the countryside, out into your community and getting involved in the functions that the community has. (A. Moosetail, personal communication, June 14, 2023)

Oh, it means that, it's great to be involved in everything that you're capable of offering the community moving forward and whether it's a little thing or a big thing, like it doesn't matter as long as you participate in it. (B. Mckay, personal communication, May 19, 2023).

It's part of the community, is to get together to work together. Just like raising a child, if the whole community is involved. (L. Nepinak, personal communication, June 14, 2023)

These themes were also interconnected in the mechanisms used by the community during the events, helping to create capacities for community collaboration. When asked about how they

would describe community resilience in their own words (Appendix A- Interview Guide), many spoke about community involvement. Community members came together to share knowledge, volunteer in the community, and participate in the community's roles and responsibilities.

Education and awareness were described by some community members to be at the center of risk reduction. Two cultural workshops offered in the community that helped address the social concerns were discussed. When asked to describe what community resilience is in their words (Appendix A- Interview Guide), community members said:

> Education. Yeah. Before we weren't allowed to go to school, grade eight was all that was offered (H. Moosetail, personal communication, June 14, 2023).

> The council should put more awareness. Not only Pine Creek but every First Nation should put in more awareness to where their geographical area is, like someone would be more prone to flooding or fires. But they should target these things, and how we can actually reach upper ground before it actually reaches our communities. But like I said, it's federal and provincial joining (…) (B. Mckay, personal communication, May 19, 2023)

Elders and community members discussed the Seven Sacred Teachings workshop and supports for IRS survivors and their families. A culturally based workshop for drugs and alcohol was also mentioned:

> The healing of the seven teaching is about healing for yourself, body and whatever that was bothering you (Elder P. Contois, personal communication, May 23, 2023).

The biggest spiritual part of your life is healing, learning how to heal your body, how to train your system to relax, to exercise to eat stuff like that (…) healing for residential stuff (Elder M. Demas, personal communication, May 23, 2023).

(…) And they're starting to talk about it. Like there's crisis lines, you could call for residential school victims and counselors, you could talk to things like that. Like, people got to get over what happened to them because it affects their kids, because it just boils down to why. Like me growing up, my parents wouldn't talk about it (…) (I. Mckay, personal communication, June 14, 2023).

"(…) they were going to get a counselor to come in and help the people that do want to quit using drugs they do have the laws I think where they said they would help. I think that's where they would set it up and keep them in there through, I don't know how many weeks, depending on how long it takes them to start healing and probably have like sweat lodges and the Medicine Man there and Elders there to help these people overcome their addiction. So, that I know there is a Committee on it, would pull together but I mean it's pretty hard, they would try their best to try to remove the drug dealers from the reserve (…). (A. Moosetail, personal communication, June 14, 2023)

All community members discussed the roles and responsibilities of the Chief and Council in the community as indispensable in creating capacities for risk reduction. The Chief and Council were heavily involved in the emergency response and recovery efforts. Chief Nepinak stated that the structure of emergency response in the community has changed because they are slowly getting better as their capacities grow, by making investments into emergency

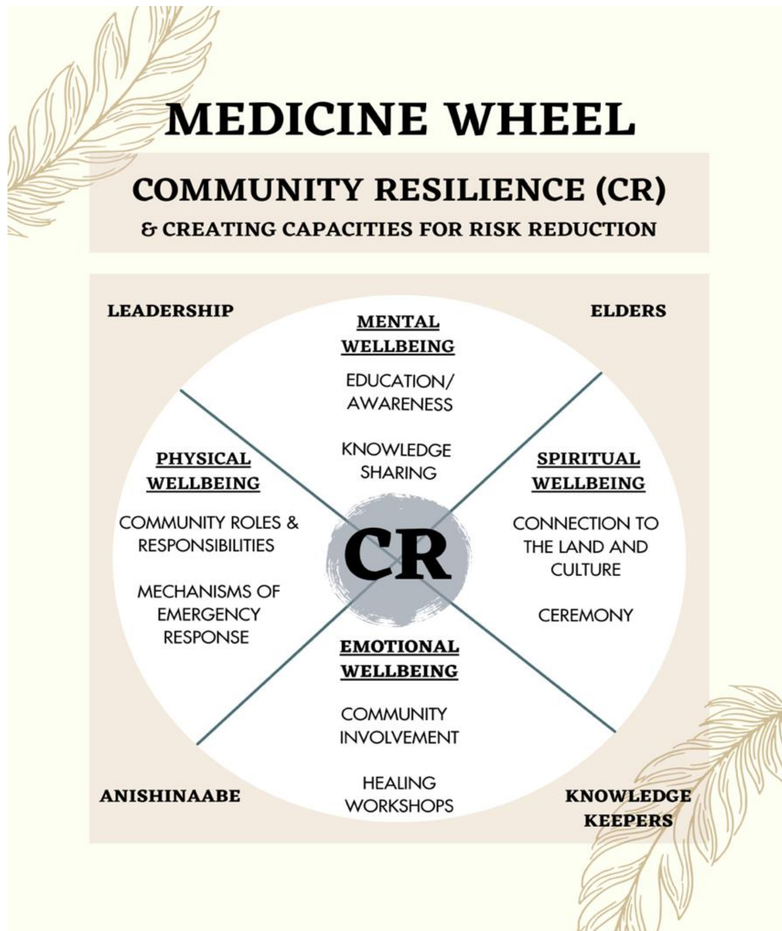
management. There was a focus on risk reduction in the emergency planning of future events based on the events experienced by the community. A community member discussed the values and importance of good leadership and how this is essential for CR:

> “(…) Couple of good Chiefs that came in that came home for the community, to come and run their community. And this is this is where it starts now. Now today it's booming. The reserve is booming, more housing, more jobs (L. Nepinak, personal communication, June 14, 2023).

The Medicine Wheel is adapted to demonstrate CR and creating capacities for risk reduction based on the shared knowledge and stories.

Figure 10

Figure 10 The Medicine Wheel, Community Resilience (CR) and Creating Capacities for Risk Reduction



Note: The illustration was created in Canva by the researcher to demonstrate the shared knowledge and stories-findings. The mechanisms and four main social and cultural dimensions were combined as variables for CR and creating capacities for risk reduction. The Leaders (the Chief and Council), Elders, Knowledge Keepers, and Anishinaabe (community) surround the circle, caring for the well-being of the community.

Discussion

Using a Medicine Wheel and land-based knowledge approach in this study allowed for an in-depth understanding of the social and cultural dimensions. Through this approach, traditional knowledge and stories from the Chief and Council, Elders, Knowledge Keepers and community members are acknowledged. This approach recognizes the generations of teachings and stories shared by the Anishinaabe*,* supporting their ways of life and collective structures. The limitations in the research are discussed, to understand the flexibility, patience, and experience of decolonized methods required in this study.

A Medicine Wheel and Land-Based Knowledge Approach

First Nations communities recognize the land as an essential aspect of healing and overall well-being. They realize the intricate relationship between the land and the people, and consider it a crucial component in the process of restoring and maintaining mental, physical, emotional, and spiritual well-being. It is necessary to consider the overall well-being of communities in the evolution of CR and DRR frameworks.

According to Williams (2021), the Anishinaabe people hold a deep respect for the Medicine Wheel, which is a central aspect of their worldview. Using a Medicine Wheel approach was therefore critical in the analysis of CR, to adapt as a researcher to their holistic approaches of creating capacities for risk reduction. This required taking into consideration the mental, physical, emotional, and spiritual wellbeing of the community, and the risks to the balance of the

wheel during adversity. The Medicine Wheel is a symbol that represents the interconnectedness of all things in the world and the belief that every element in the world has a rightful place on the wheel. The Medicine Wheel shows how each element is dependent on the others, creating a delicate balance. The community identified roles and responsibilities in the community, as mechanisms to restore the balance on the wheel.

Land-based knowledge is an integral part of First Nations ways of life, involving a deep connection between identity and the land. The practices of land-based knowledge recognizes the importance of the relationship between humans and their environment, and the role that this relationship plays in shaping cultural and social dimensions within First Nations communities. The relationship between the land is ingrained in First Nations traditional knowledge and has been recognized as a vital component of CR in the shared knowledge and stories-findings. The land provides not only physical resources, but also cultural and spiritual connections that contribute to the community's well-being. The traditional knowledge that recognizes the value of the land, and the practices that are developed based on this knowledge, are essential for promoting sustainable and resilient communities. By understanding the importance of the land, the reader can see the strong foundation for their well-being. In short, recognizing the critical role of land in well-being is crucial for achieving long-term CR of the Anishinaabe.

The concept of CR is a vital component of DRR as it empowers individuals and communities to better understand their situation and identify appropriate adaptive strategies and resources necessary to improve their livelihoods. A Medicine Wheel and land-based knowledge approach, can aid in creating capacity to cope with and recover from disasters, reduce their risks, and enhance their overall well-being. The community took proactive measures to reduce the impact of risks and improve their ability to respond effectively to risks. It is crucial to recognize

the immense significance of taking cultural context into account while devising public policies to mitigate potential risks.

Acknowledgement of Traditional Knowledge and Stories

First Nations traditional knowledge transmitted from generation to generation must be acknowledged in the discussion. I am appreciative to the Chief and Council for allowing me to gather shared knowledge and stories. A big Miigwech to Chief Nepinak and Councilor Cindy Mckay for their participation. I was honored to be welcomed into the Elder's lodge in May of 2023, and for the participation of Elders Pius Contois and Mary Demas. I would like to recognize the participation of the Bison Manager, Larry Nepinak, for his shared knowledge and stories. The significance of the bison for First Nations peoples dates back centuries as the main source of food and clothing. The bison is a sacred animal that provided them life and its cultural significance continues today in the community. Bert Mckay, the Public Works Manager at the Band Office, was an invaluable community member who took it upon himself to spread the word and recruitment poster, bringing in many community members who wanted to share. I acknowledge ancestors for the traditional knowledge that continues to be passed down and shared.

Limitations

While I encountered limitations during the process of gathering shared knowledge and stories, I was able to navigate these challenges with flexibility and patience. Although I have professional skills and knowledge in research writing, I am still limited in terms of my experience with decolonized methodology in research papers. The current written format used for presenting knowledge is constraining, as it is heavily influenced by Western formal academic methods. This approach tends to prioritize certain forms of knowledge and restricts the diversity

of perspectives and ways of thinking that can be shared. I would require guidance and training to become more proficient in this area, with more time to see through this project. That being said, it is a requirement for graduation, and is a useful tool for those who gain knowledge through reading academic papers.

The trip to visit Minegoziibe Anishinabe (Pine Creek First Nation) requires approximately five hours of driving from Winnipeg. With consideration of the prearranged time spent in the community, various constraints were out of my control. I spent two weeks in the community due to time constraints in my program. The capacity to gather shared knowledge and stories was a constraint because many community members were not available and/or accessible. Community members were not available because they travel outside of the community often, including, the Chief and Council. The difficulties of the lack of cell service posed a constraint in communication, as community members only had the option of emailing in order to schedule interviews. The Band Office is open 9 a.m.- 4 p.m., Monday to Friday, so my interviews could only take place between working hours. Community members were often recruited by word of mouth, requiring great flexibility in my schedule of impromptu interviews at the Band Office.

The ideal sample size for this research would be at least 15 participants. The sample size was limited to eleven interviews due to logistical limitations. Additional interviews with community members could have provided more information on CR and creating capacities for risk reduction. First-hand accounts add descriptive factors of mechanisms used and barriers faced by the community. While more participants would contribute to a stronger sample, the current number of community members does not discredit the findings. According to the consensus theory of purposive sampling, research participants' shared experiences shape external truth (Guest et al., 2006).

Initially, I had also planned to gain knowledge through facilitating two Sharing Circles, and I considered this a genuine decolonized method of collecting knowledge. However, after careful consideration and consultation with Elders and Leadership, it was decided that this method was not appropriate. Sharing Circles are considered ceremony; therefore, Sharing Circles were not used as a form of gathering knowledge for research. For future projects, I will explore other collective methodologies appropriate for First Nations participants. Unfortunately, due to time constraints, this was not possible for this study.

Closing and Recommendations

Colonization has had deep-rooted impacts on First Nations, and these consequences continue to have detrimental effects on communities. Climate change is taking a growing toll on First Nations, depleting resources and affecting the overall well-being of communities. Canada is contributing to the climate change crisis, which disproportionally affect First Nations communities. First Nations communities are also faced with the risks of many social concerns, including the legacy of IRS causing intergeneration trauma, and the epidemic of drug and alcohol. Communities are forced to cope with and overcome these risks, creating social barriers and dangers to their mental, emotional, physical, and spiritual well-being.

In Manitoba, there are 63 First Nations, also known as communities or reserves, located mostly in rural areas (Kulchyski, 2021). Reserves in Manitoba are intergenerational homelands that were allocated by the Government of Canada and managed under the Indian Act. These lands are home to five primary First Nation groups: Ininew (Cree), Anishinaabe (Ojibwe), Oji-Cree, Dakota/Lakota (Sioux), and Dene peoples (Kulchyski, 2021). First Nations exercise self-governance in relation to their institutions, lands, and resources and to their identities, languages, and traditions in respect to their communities. By centering First Nations ways of life,

communities are able to maintain a strong connection to their culture, while also ensuring the preservation and protection of their ancestral lands for future generations.

The Medicine Wheel and land-based knowledge are at the foundations of Anishinaabe culture and ways of life. The Medicine Wheel is a holistic symbol for their worldview, and recognizes that every element of the world has a rightful place on the wheel (Williams, 2021). When referring to the land, the term "land-based knowledge" encompasses all aspects of the natural world and its importance to the Anishinaabe for their survival and well-being. Connection to the land is recognized as fundamental and Anishinaabe believe Aki is borrowed from future generations, and they must act as responsible stewards to protect and respect it (Butler, et al., 2020).

The community members of Minegoziibe Anishinabe (Pine Creek First Nation) have shared knowledge and stories on the four major events of environmental and natural disaster, and social concerns. The events caused a multitude of risks to the overall well-being of the community. Emergency response and recovery In the community was a collaborative effort among all members. Strong leadership was seen as necessary to create capacities for risk reduction through assigning roles and responsibilities and creating opportunities to support the well-being of members. The community faced many barriers, including the evolving awareness of more events of environmental and natural disasters due to climate change, funding, access to external immediate emergency responses, and intergenerational trauma due to IRS. The community created capacities for risk reduction through (a) education/awareness and knowledge sharing supporting their mental well-being; (b) community roles and responsibilities, mechanisms of emergency response supporting their physical well-being; (c) community

involvement and healing workshops supporting their emotional well-being; and (d) connection to land and ceremony supporting their spiritual well-being.

In future studies on CR and creating capacities for risk reduction in First Nations communities, researchers should look closely at the barriers and events causing adversity in the communities in order to develop strong and effective frameworks for DRR in communities. First Nations cultural context is a crucial factor to be considered by public policies when mitigating natural and social risks. This consideration needs to be tailored to the specific sociocultural and environmental cases to ensure effective development. It would be interesting to see a Medicine Wheel approach adapted for emergency response and recovery in all First Nations communities. I believe this could be a strong representation and instrument for emergency and risk management that considers all aspects of the community's well-being and is culturally appropriate. It would also be helpful to compare this research to other First Nations communities that are doing similar work. It would be interesting to see emergency management transformed into a First Nations framework that communities can use in a developed workshop or educational project.

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Appendix

Appendix A- Interview Guide:

Community Experiences

1. Can you tell me about yourself?

2. What does it mean to be a part of a community to you?

3. Can you describe your connection to the land and community you live on?

    a. Can you explain the importance of the land you live on?

4. Do you remember any event of crisis or risk around environmental and natural disasters in your First Nation? (ex. wildfires, flooding, etc.)

    a. Can you describe the history of this event?

5. Can you describe your experiences living in your community during this event?

6. Can you describe the roles and responsibilities the Chief and Council has in the First Nation community in relation to this event and future events?

    a. Can you describe the roles and responsibilities band members have in the First Nation community in relation to this event and future events?
    b. Can you describe the roles and responsibilities Knowledge Keepers, Elders, and youth have in relation to this event and future events?

Barriers of Capacities and Adaptation in the Community

7. What social barriers does your community face? (ex. unemployment, health care availability, etc.)

    a. Can you describe what factors and resources your community needs to overcome these barriers?

8. Can you describe your experiences with evacuations in your community?

    a. How did your community respond to evacuations?
    b. Who is responsible for planning and coordination of evacuations?
    c. What supports were you offered during the evacuations?

9. How does your community usually prepare for natural disasters and environmental concerns?

    a. Can you describe how your family prepares for natural disasters and environmental concerns?

10. How have you adapted over time to any challenges you have faced living in your community?

Community Resilience

11. Can you describe how the community creates opportunities for sustainability?

    a. Can you describe how your community has recovered from the last environmental or natural disaster?
    b. What does your community need in order to recover from the last environmental or natural disaster? What resources would be helpful?

12. What strengths do you think your community has to confront these risks?

    a. What weaknesses do you think your community has to confront in these risks? Is there anything else that could help strengthen these weaknesses?

13. How would you describe community resilience in your own words?

    a. What do you think is important to your community to create resilience?