Anishinaabe & Climate Justice: An Indigenous Food Sovereignty Approach

By

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Abstract

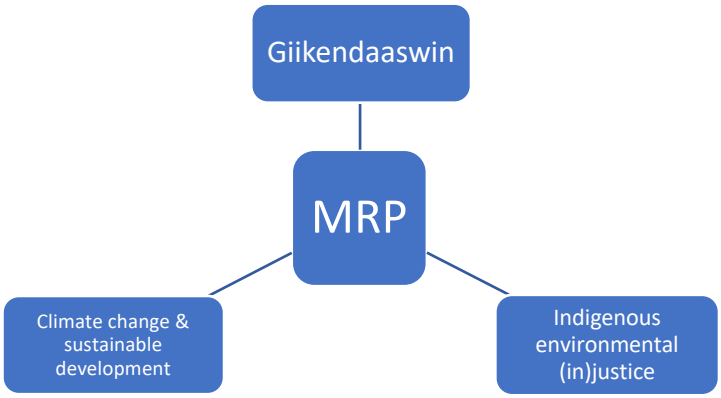
Indigenous peoples of Turtle Island are experiencing climate change at an accelerated rate, however the discussion is dominated by western science and often does not accurately reflect the situation in Indigenous communities. This paper explores the community-specific considerations of climate change through an Indigenous food sovereignty framework, with a primary focus on Youth, Elders, knowledge keepers, medicine people, and trappers/hunters. Following Indigenous research methodologies, the research undertook a one-day participation-based workshop, that established cross-community relationships between Youth, Elders and knowledge keepers followed by one-on-one conversation-based interviews, ultimately identifying the health impacts of climate change in Garden River First Nation. With results that demonstrate the interconnectivity between health and the environment, the research identified the ongoing struggles of Indigenous peoples to mitigate and adapt in culturally-appropriate ways to climate change. While determining an adaptation strategy for the community, the paper also seeks to advance discussions on how to support Indigenous Youth build and maintain healthy relationships with Mother Earth while simultaneously pursing the development of a distinct climate justice framework that centers Indigenous knowledges, laws, concepts of justice, and lived experiences.

Keywords: Climate Change, Bimaadziwin, Health Impacts, Food Sovereignty, Justice

Foreword

I began this program with hopes of obtaining a deeper understanding of Bimaadziwin, or "the good life" (McGregor 2009, 33), how bimaadziwin can contribute to a healthier Mother Earth, and how this way of life is being affected by a changing climate. Bimaadziwin is an embodied concept, meaning in order to truly understand it – *you must live it* (McGregor 2005, 104). With this in mind, I designed a plan of study (POS) that allowed for the collaboration of Anishinaabe giikendaaswin (traditional knowledge) and western academia. It was the intersection of these knowledges that urged me to engage in giikendaaswin (in the academic literature, known as Traditional Ecological knowledge), Indigenous environmental (in)justice, and climate justice and sustainable development as my main components. Through attending gatherings and ceremony, many discussions with leadership/Elders/Youth, and long hours in the bush, I undertook a community-based participatory research project focused on climate justice from an Anishinaabek perspective, with a highlight on Youth in my home community of Keteguanzeebee (Garden River First Nation), Ontario, Turtle Island.

The research project itself aligned with all identified learning components. With a primary focus on an Indigenous research paradigm, this project enabled me to demonstrate the *giikendaaswin* I gathered throughout my program both in the academic sense through following Indigenous research methodologies, and in relation to Bimaadziwin where I gained hands-on knowledge of traditional practices. The project maintained a primary focus on Indigenous led-climate justice, ultimately resonating with the remaining components. Ideally, my hope is that this work will not only contribute to the growing Indigenous climate justice field, but more importantly assist or inspire First Nations communities in their own initiatives in the climate action movement.



About the Researcher

Minaande bineshii kwe n'dizhnikaas. Keteguanzeebee n'donjibaa. Ngegoohn n'dodem. Anishinaabe kwe n'dow. My name is Jayce Chiblow. I am fish clan. I am from Garden River First Nation (Robinson-Huron Treaty). I am Anishinaabe.

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I first have to give thanks to those that worked hard so I could be here today. Miigwetch to the Creator for Mother Earth and the Anishinaabe way of life. Miigwetch *niikaaniginaa* (interpreted as all our relations – including the plants, animals, medicines, spirits – all that Mother Earth contains) for continuing to follow their responsibilities so we can have the things we have now. Miigwetch to my ancestors for thinking 7 generations ahead, providing me with access to ceremony, stories, education, health and so much more.

I can't thank my advisor, supervisor, teacher – Dr. Deborah McGregor – enough for continuous advice and support. She guided me through this institution and helped me with the balance of academia and Anishinaabe bimaadziwin, while also providing me with life lessons I will never forget. I am forever grateful to you, Deb.

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Introduction

> "This young generation is searching for their Native language. They are seeking out the few elders who have not forgotten the old ways. They are not finding meaning to their lives in the teachings of American society. They are searching for an understanding of the Earth as Mother of all things" (Benton-Banai 1988, 111)

In a society dominated by colonial constructs, Indigenous[1] peoples of Turtle Island[2] are constantly battling to maintain their way of life that sustained them through countless generations. With direct attacks on Indigenous cultures throughout the atrocious history of Canada via racist policies, residential schools, the 60's Scoop, Missing and Murdered Indigenous Women, Youth and 2SLGBTQQIA (see TRC 2015 and MMIWG Inquiry 2019), the resilience of Indigenous Youth becomes increasingly important for the survival of Indigenous cultures. As the introductory quote above explains, Indigenous Youth are continuously seeking out opportunities to learn about their cultures from the Indigenous knowledge keepers and Elders that are continuously seeking for opportunities to share their accumulated knowledge (Anishinabek Nation 2017, 41).

Contrasted from the scientific understanding of climate change, Indigenous people see climate change as a threat to the integrity of their communities' cohesion, or as changing the existential, personal, and intimate relationships with the natural world (Chisholm Hatfield et al. 2018, 2). These relationships are essential to Indigenous cultures, as the "instructions, protocols, laws, and ethics conveyed in IKS[3] guide humanity in proper conduct, and these instructions often come directly from the natural world (water, plants, wind, animals, etc.)." (McGregor 2018a, 9). Turtle Island is already feeling numerous effects of climate change (Anishinaabek Nation 2017, Government of Canada 2019), demonstrating the need for inclusion of Indigenous knowledges in mitigation and adaptation frameworks.

[1] Indigenous people in Canada refers to the First Nations, Inuit and Métis
[2] Turtle Island encompasses North and Central America (i.e Canada, The United States, and Mexico)
[3] Indigenous Knowledge Systems

This paper will venture to ethically involve Anishinaabe knowledge into a climate change adaptation strategy, while applying an Indigenous food sovereignty framework that is informed by an Anishinabek community. With the intention of centering Anishinaabe knowledge and values, it seeks to fill the existing gap in climate justice literature by fulfilling requests for Youth voices to be heard and included in future environment-related initiatives. With the awareness that meaningful relationships are a key part of Indigenous research, the project will specifically focus on the community of Garden River First Nation (GRFN) and the Youth in GRFN. Following the understanding that significant change in First Nation communities requires multi-pronged strategies for effective solutions, the paper looks closely at the strategies needed to boost the ability of Youth to build and maintain healthy connections with Mother Earth. Accordingly, it begins by engaging Youth, knowledge keepers, Elders, and community members in discussions regarding health and the impacts of climate change. Maintaining the understanding of interconnectivity, the paper then draws parallels between the health of the environment with the health of the community.

The research is positioned at the intersection of Anishinaabe health, climate justice, and food sovereignty, partly because of the lack of distinctive frameworks that can address the intersectional of these three aspects of self-determined climate futures. A wholistic approach is arguably more effective by facing issues with solutions offered by the affected community. In attempts to assist in furthering the development of such frameworks for the Anishinaabe, this paper seeks to incorporate Youth perspectives and requests for a healthy community. The interconnected objectives of the paper are:

1. First, the research seeks to explore the health impacts of climate change on the traditional foods and medicines used by the Anishinaabe in GRFN.
2. By using community-based participation based research methods centered on reciprocity, the research offered Indigenous Youth the opportunity to learn from local medicine people, trappers, knowledge keepers and Elders.
3. Provide a summary and offer recommendations for future initiatives identified by the Youth to GRFN Chief and Council

4. It aims to ensure that Youth input can be represented in the creation of a distinctive climate justice framework that draws upon Indigenous knowledge systems, legal orders, ideas of justice and the lived experiences of Indigenous people[4].

The paper begins with an introduction to *giikendaaswin*, or traditional ecological knowledge in order to provide context for the following sections, and to highlight the key differences in understandings used by academics and Indigenous people. The paper then flows to the literature focused on (in)justice. Through the introduction of Indigenous environmental justice (IEJ), it draws upon Indigenous concepts of justice before moving into the more specific field of climate justice. I, then, describe contemporary climate change impacts experienced by Indigenous peoples on Turtle Island. Furthering the intersectionality between injustice Anishinaabe people face, the paper introduces the concept of food injustice before quickly jumping to introduce the framework applied in the research: Indigenous food sovereignty. Throughout the paper there are connections to GRFN, in order to provide insight into the study location. To meet the objectives, this research involved a full day workshop with sixteen GRFN community members as the main data gathering exercise. The findings from this knowledge sharing workshop will be highlighted. The results, discussion and implications for the community are analyzed, before concluding with suggested contributions for an Indigenous climate justice framework and cross-referencing with similar findings from other Indigenous research activities.

Reflection

Throughout the time spent trapping/harvesting/tanning animals with my mom and Mukunuk, I was reminded that I am simply a vessel that knowledge passes through – none of this knowledge is mine. I also acknowledge that there are many Indigenous Nations throughout Turtle Island, and that I do not represent those other Nations. I can only express **my understanding** of experiences, stories, teachings, ceremonies, dreams and visions. The majority of the experiences I have, are from the Anishinaabe worldview I have come to understand

[4] See ongoing effort by the Indigenous Environmental Justice Project, a 5-year SSHRC-funded initiative based out of York University led by Dr. Deborah McGregor, that this paper will contribute to.

throughout my young life. This is only a snapshot of my learning journey, as my learning will continue after completion of my Master's Program.

Chapter 2: Literature Review: Understanding Anishinabe Climate Justice

Park I - Giikendaaswin, Traditional Ecological Knowledge

Traditional ecological knowledge (TEK), traditional knowledge (TK), Aboriginal traditional knowledge (ATK), and Indigenous knowledge (IK); the concept has many definitions and understandings depending on the context subject matter and author involved. Considering the many Indigenous nations in Canada and the varying worldviews accompanied, it is apparent that an agreeable definition is impractical. Nicolas Houde explains, "TEK connects such varied dimensions as the type of knowledge, the identity of knowledge holders, and the process of knowledge acquisition that there exists a great variety of definitions and an extensive nomenclature for TEK" (2007, 3). Anishinaabe scholar, Dr. Deborah McGregor, explains TEK as "the body of environmental or ecological knowledge that Indigenous people have that has sustained them over thousands of years" (2005, 104). Comparatively, some non-Indigenous scholars' understanding of TEK is based on data collection on a specific area or environment (Houde 2007; Lertzman 2010). The concept according to Indigenous peoples is much deeper than most non-Indigenous academics discuss, providing a different understanding that is more holistic in approach.

Although more recently introduced to academia and policy circles, the concept of TEK has been around since Creation (Genuisz 2009, 11). Many Indigenous scholars argue that terms like "traditional ecological knowledge" do not adequately recognize the ways in which communities refer to their knowledge and way of life (Chief et al 2015, McGregor 2005, Williams & Hardison 2013, Whyte 2013). Consequently, the approach utilized in this paper is from an Anishinaabe perspective, where TEK is referred to as Anishinaabe *giikendaaswin*[5], which can be interpreted as knowledge (Geuisz 2009, xi, Chiblow 2019, 1). When you lose the English translation and use Anishinaabemowin to describe the concept, it sustains its essential action, or verb-based description. It is to no wonder why Indigenous scholars and community people do not wish to constrained by the term "TEK" (Danard 2010, 10). McGregor divides the many understandings and definitions into a simplified binary for ease of understanding the

[5] For simplicity, throughout the paper I will refer to Anishinaabek giikendaaswin as giikendaaswin.

differences: academics that study TEK and TEK issues, and the Indigenous peoples live according to TEK teachings (2005, 103). This is further supported by Nicholas J. Reo, Anishinaabe scholar from the Sault Ste. Marie Tribe of Chippewa Indians, when he explains how numerous Indigenous scholars (McGregor 2005, Whyte 2013, and Wall Kimmerer 2013) have been noting for over 15 years that "the point of Indigenous knowledge is not understanding ecological relationships, but participating in and tending to relationships – with plants, animals, mountains, waters, and with one another" (2019, 68). This understanding is significant when utilizing Anishinaabe worldview, where beings like trees and plants have spirit (Genuisz 2009, 117), as opposed to the broader academic society that views these beings as objects to be studied. It is from the Anishinaabe understanding, and from the understanding applied in this paper, that *giikendaaswin* provides much more than knowledge about the environment, it provides a sustainable and meaningful way of life.

Indigenous academics will say that TEK, or *giikendaaswin*, is an embodied concept, and that in order to gain a meaningful understanding, it must be lived (McGregor 2005, 104). Contrary to the transmission of Western knowledge, giikendaaswin is maintained and used in many ways, such as stories, songs, oral teachings, apprenticeships, personal notebooks or historically birch bark scrolls, and pictographs (Genuisz 2009, 73-86). Non-Indigenous academics, scientists, and policy makers have had increasing interest into giikendaaswin, with a primary focus on resource management, conservation biology, and ecological restoration (Wall Kimmerer 2013). Although it is great that there is an increased interest, there are Indigenous academics stating that TEK cannot be confined to the limits of resource management (Bannister & Hardison 2006; Lavery 2006; Lertzman 2010; McGregor 2014). Indigenous organizations, such as the Chiefs in Ontario, have identified that giikendaaswin should be included in all strategic planning initiatives that impact First Nation communities (i.e health, education, governance) (Danard 2010). The question then becomes one of if meaningful inclusion is indeed occurring.

Despite the increasing interest, there is hesitance among Indigenous peoples to share their knowledges with non-Indigenous people. There are many reasons for the hesitance, including previous lack of ethics and risky research practices (Mosby 2013), and lack of meaningful inclusion (Lavery 2006). For an example, the Government of Canada's changes to

National Energy Board, *Fisheries Act*, and the *Navigation Protection Act* includes claims to incorporate and protect the knowledge of Indigenous peoples (Government of Canada 2017). However, the bill that passed, *Bill C-69*, states traditional knowledge can be disclosed if "the disclosure is necessary for the purposes of procedural fairness and natural justice or for use in legal proceedings", further stating that it is the Minister, Agency that decides if they "impose conditions with respect to the disclosure" (2019). To complicate matters further, Indigenous Elders have stated that their input is not heard until environmental damage has already occurred (Lavery 2006). With a lack of trust from previous experiences, Indigenous peoples are now outlining protocols to be associated with the use or application of giikendaaswin (Danard 2010, Chief et al. 2015).

Part II – (In)Justice

Indigenous Environmental (In)Justice

The environmental justice movement has taken on many forms since it started, however Canadian-based academics maintain that effective understandings of environmental (in)justice (EJ) stem from a specific history and geography (Gosine & Teelucksingh 2008). Consequently, this paper will focus specifically on Indigenous environmental justice (IEJ) followed by a look into climate justice. Kyle Whyte defines environmental justice as "the problem that people of color, indigenous peoples, women and people with disabilities, among others, are more likely than privileged white populations to live in toxic environments that are bad for human health and community cohesion" (2017a, 1). When referring specifically to IEJ, the concept does not yet have an agreeable or widely-accepted definition, despite the research of many Indigenous authors[6]. Instead of an agreeable definition, the literature tends to describe a specific understanding that is best described by Indigenous scholars like Dr. Deborah McGregor who provides insight on the Indigenous approach to EJ when she describes that "relationships based on environmental justice are not limited to relations between people but consist of those

[6] See ongoing work of the York-based Indigenous Environmental Justice Project. http://iejproject.info.yorku.ca/our-team/

among all beings of Creation" (2009, 27). With an understanding that justice goes beyond humans and applies to plants, animals, spirits and medicines, IEJ does deserve an Indigenous-informed framework, separate from the mainstream EJ framework in both Canada and the United States.

To stay in line with an Indigenous-informed approach to EJ and maintaining the importance of EJ being location and history based, the focus will be on Anishinaabe understandings of EJ. According to Anishinaabe tradition or law, "the ancestors of current beings and those yet to come (at least as far ahead as seven generations from now) also have entitlement to environmental justice" (McGregor 2009, 30). For the Anishinaabek people, environmental decisions that need to be made must consider 7 generations of all beings. The understanding of looking 7 generations into the future is further highlighted in declarations like the Water Declaration of the Anishinabek, Mushegowuk, and Onkwehonwe (2008) and the Tribal and First Nations Great Lakes Water Accord (2004). More Indigenous law and deeper understanding can come from the perspective described in The Mishomis Book, where one story explains, "whether they be mountains, glaciers, waterfalls, the deepest swamps, or the wildest places, should never be changed, diverted or disturbed." (Benton-Banai 1988, 45). Although a very simple and brief introduction to this understanding, there is a clear indication of how Indigenous peoples can experience in(justice) differently.

In the context of IEJ, leading Indigenous scholars tend to identify the relationship between injustice and colonialism. It is important to note that colonialism is a historic practice that continues to be acted upon and evolves (McGregor 2018b, 227). Coupling ecological challenges with political obstructions generated by a colonial society, Kyle Whyte argues that tribal, or Indigenous governments may be better prepared to respond to climate change at the local scale, as climate change is occurring so rapidly that federal agencies may not fulfill their responsibility to consult Indigenous communities (2013, 18). With the ongoing challenges of colonialism in many aspects of our society and the lack of proper consultation, Indigenous voices in establishing a EJ framework becomes increasingly important.

In Canada, Indigenous peoples experience many in(justices) in all aspects of life. For example: the recent release of the National Inquiry into Missing and Murdered Indigenous

Women and Girls Final Report which highlights the social crisis and genocide that affects Indigenous women and girls and 2SLGBTQQIA people every day (2019), the Truth and Reconciliation Commission showcasing the many horrors of the Residential school system (2015), and the Royal Commission on Aboriginal Peoples that was the first of its kind created to address many issues Indigenous peoples face (1996). Despite these initiatives with plenty of recommendations, communities are still experiencing these and other injustices, especially related to environment.

In the Anishinaabe territory, there is additional concerns over ongoing pollution and destruction occurring which is affecting the communities in various ways. The outspoken group of Elders, the“ TEK Elders”, have raised concerns about the aerial use of glyphosate-based herbicide. They have claimed, along with local trappers in the area, that there is a connection between declining in animal numbers and the continued use of this herbicide on the forests (Read 2019). There was no consultation, despite the government's duty to consult being established through the Haida and Taku River decisions in 2004, and the Mikisew Cree Decision in 2005 (Government of Canada 2011, 1). Although the areas being sprayed include locations all over Ontario and other parts of Canada, this topic is of particular concern for GRFN residents, as their community lies in the Robinson-Huron Treaty area that is being sprayed.

Climate (In)Justice & Climate Change

Climate (in)justice is a relatively new field that arose out of a combination of activist, social justice, environmental justice and academic traditions (Meikle et al. 2016, 490). The Mary Robinson Foundation – Climate Justice, a foundation focused on securing global justice for people that are vulnerable to climate change, has offered the definition that climate justice “links human rights and development to achieve a human-centred approach, safeguarding the rights of the most vulnerable and sharing the burdens and benefits of climate change and its resolution equitably and fairly” (2019). Although a helpful start, Kyle Powys Whyte provides further insight into the Indigenous perspective on climate injustice,

> “climate injustice against Indigenous peoples refers to the vulnerability caused by ongoing, cyclical colonialism both because institutions facilitate carbon-intensive

> economic activities that produce adverse impacts while at the same time interfering with Indigenous people's capacity to adapt to the adverse impacts" (2017b, 94).

It is not only Whyte that links climate change to colonialism. Nicholas J. Reo and Angela K. Parker particularly describe the removal of Indigenous peoples from their lands and the establishment of extractive systems as factors in rapid ecological degradation (2013, 679). It is the understanding utilized in this research that the systems that created climate change and perpetuate discrimination is causing further struggle for Indigenous peoples to adapt to climate change.

More recently in Canada, an assessment reports was released in the spring of 2019 titled Canada's Changing Climate Report. With this release, it can be stated with confidence that the effects of climate change are being experienced now and may get worse with time. The report claims there will be numerous affects in Canada, including temperature changes, changes to rainfall and snowfall, intensified weather extremes, changes in snow and ice, freshwater availability alterations, ocean changes and sea level changes (Government of Canada 2019). At the international level, both the United Nations through the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services and the Intergovernmental Panel on Climate Change (IPCC) offered similar results to Canada's report, with agreement on the fact that a significant portion of our current climate change concerns are human-caused (Government of Canada 2019, IPCC 2018, IPBES 2019). Comparable to the National and International reports, climate scientists, experts and academics have predicted that "changing temperature and precipitation regimes will increase the probability and severity of extreme events including heatwaves, storms, floods, drought, and wildfire" (Ford et al. 2010, 670). There is a growing population that is causing greater demands that has resulted in high greenhouse gas emissions from industry that will deplete marine resources, increase atmospheric pollution, negatively impact forest and biodiversity (Hardisty 2009). Alternative approaches to addressing climate change must be explored.

There is a consensus between the International reports and Indigenous climate experts, that there is a wide range of adaptation options that include utilizing local and Indigenous knowledges, in order to assist in reducing the risks to natural and managed ecosystems (IPCC

2018, IPBES 2019, Whyte 2016). While there is great work being done by Indigenous researchers south of the border in the United States, the research regarding climate change in Canada still maintains a primary focus on the far North with the Inuit people, or heavily focused on western science. The research in the north has been helpful with essential conclusions for future climate change research, including changing temperatures are likely to affect wildlife availability and distribution that are important in Indigenous subsistence hunting (Ford et al. 2010). From these examples, one can argue that western science is dominating the climate change discourse and that for serious change to happen, the narrative needs to change.

For the Anishinaabe, there is a slowly emerging field of climate research occurring in their territories. There have been initiatives led by Indigenous political agencies, like the Anishinabek Nation[7] through their Regional Round Tables on Climate Change, Winter 2017. However, the focus was on Ontario's approaches to adaptation (i.e Ontario's climate change action plan, and Ontario's gas cap and trade program). Participants raised many concerns with the Ministry of Environment and Climate Change's (MOECC) initiatives, including trust issues with government and worries over MOECC's prioritizing money over conservation (17). The need for Indigenous led and informed initiatives is being exemplified in this report, further supporting the need for this research. Similarly, the Chiefs of Ontario have conducted climate change research at the provincial level with a focus on Elders and Youth. Participants identified the need for more opportunities for Youth and Elders to share knowledge and experiences regarding climate change (2017, 41).

Food (In)Justice

Of the many ways that Indigenous people, and the Anishinaabek specifically for this context, experience injustices, there are numerous pathways to relate injustice to food (including medicines). Potawatomi scholar, Kyle Powys Whyte, defines food injustice in the academic sense as the occurrence when "at least one human group systematically dominates one or more other human groups through their connections to and interactions with one

[7] The Anishinabek Nation is the political advocate for 40 member First Nations across Ontario. (https://www.anishinabek.ca/who-we-are-and-what-we-do/)

another in local and global food systems" (2018, 345). He further explains that from an Indigenous perspective, food injustice is viewed as a violation of their collective self-determination over their food systems (2018, 346). The injustice becomes evident when considering a hunter-gatherer diet of the Robinson-Huron Treaty area, which have historically included (if it was a good season for) hunting or trapping wild meats such as beaver, muskrat, fish, moose and more (A3[8]). The diet was well-balanced, using a variety of fungi, plant and animal species for food, medicine, ceremonies, and community and economic health (Lynn et al. 2003, 546). Dawn Morrison contributes, "Indigenous food systems include all land, soil, water, air, plants and animals, as well as Indigenous Knowledge, wisdom and values. (2011, 98). With this interconnected relationship in mind, one can observe the disconnect between Indigenous and western food and food systems.

There are many contributing factors when discussing the change in diet for Indigenous peoples. With the addition of freezers, new processing and preservation techniques, and improved transport, many types of cuisines have been changed (Mintz 2006, 6). To further complicate matters, the impacts of colonization and unresolved treaty processes have reached Indigenous food systems resulting "in the loss of widespread access to traditional territories and relationships supporting hunting, gathering, fishing, cultivation and trading of Indigenous foods" (Desmarais & Wittman 2014, 1165). With restrictions on accessing traditional foods and territories, the Indigenous food systems were completely disrupted and resulted in high food prices in remote communities, along with a decline in the use of traditional foods by the youth (Desmarais & Wittman 2014, 1165). Despite all of the barriers, many communities are still working toward a strong, diversified traditional diet and food-related traditions (Lynn et al. 2013, 39).

The literature continuously points to the deep connection that Indigenous peoples have with their food, and in turn their territories and how climate change is affecting those relationships (Lynn et al. 2013, 547-8, Whyte 2013, 520). Combining climate change effects like changes in species populations and habitat quality with the idea that Indigenous peoples have relationships with food that is intimately linked with cultural, physical, emotion, psychological,

[8] See Chapter 3: Research Approach and Methods for description of coding framework.

and spiritual health (Lynn et al. 2013, 547), one can speculate that there is another ongoing threat to Indigenous food systems. Kyle Powys Whyte explains further, “Changes in landscape may engender less opportunities for Elders to teach youth in practical situations.” (2013, 520). There are many examples of how Indigenous peoples connect to their foods, such as berries serving as key cultural indicators of ecosystem services (Lynn et al. 2013, 548), salmon providing spiritual, physical and cultural well-being (Lynn et al. 2013, 550), wild rice representing cultural health for the Great Lakes Anishinaabe, and sturgeon as an indicator species for environmental monitoring, with a clan identity and used in Anishinaabe ceremonies (Whyte 2017c, 5). In the Anishinaabe worldview, some of our food can also be viewed as gifts, relatives and teachers, as exemplified through our clan system (Benton-Banai 1988, 74-8). This interconnected approach to issues draws together the important fact, that Indigenous peoples are facing a serious threat regarding climate change, and action is needed.

Part III – Indigenous Food Sovereignty

It is suggested in both the literature, and directly on their website, the concept of food sovereignty was developed by La Via Campesina and was brought to the public at the World Food Summit in 1996 (La Via Campesina 2003). With a primary focus on agricultural and food policies, Lucy Jarosz describes the start of the food sovereignty as an alternative to the dominant globalization of food and agriculture (2014). Described by Charlotte Coté, Nuu-chah-nulth scholar, as “rights-based” (2016, 57), the concept itself arose from the food security movement becoming “increasingly entangled with mainstream neoliberal notions of developmentalism and economic growth as expressed in World Bank and FAO documents” (Jarosz 2014, 170). To be clear, food security can be defined as “availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices” (Clapp 2014, 207), and more simply, “access of all people at all times to enough food for an active, healthy life” (Clapp 2014, 207). With an upcoming alternative focused on rights, Coté explains that the food sovereignty movement “quickly became central to self-determination and decolonial mobilization embodied by Indigenous peoples throughout the world” (2016, 57). Although both discourses

have clear advantages, the inclusion of self-determination in the food sovereignty movement aligns with Anishinaabe efforts for self-determination, but through food and medicines. With an continuously evolving framework, Indigenous worldview has been incorporated in the literature.

When approaching the concept with an Indigenous world view, Charlotte Coté argues that "Indigenizing" the food sovereignty is needed, and "means moving it beyond the rights based discourse to emphasize cultural responsibilities and relationships that Indigenous peoples have with their environment" (2016, 2). Coté further defines Indigenous food sovereignty as "positioned within a restorative framework that places responsibility and action on individuals and communities to repair and strengthen relationships to ancestral homelands weakened by colonialism, globalization, and neoliberal policies" (2016, 12). Leading Secwepemc scholar Dawn Morrison has worked with Indigenous Elders, traditional harvesters and community members to develop four guiding principles for achieving food sovereignty: *Sacred* or *Divine Sovereignty* describes how food is a gift from the Creator and that we as Indigenous peoples need to nurture healthy relationships to the lands, waters, plants and animals; *Participation* is based on the daily practice of nurturing those healthy relationships at the individual, family, community and regional levels; *Self-Determination* refers to the "ability to respond to our own needs for healthy, culturally-adapted Indigenous foods" (100); and *Legislation and Policy* attempt to reconcile food and cultural values with laws, policies and mainstream economic activities (Morrison 2011).

Interconnectivity

Although separate topics in the literature, giikendaaswin, Indigenous ideas of justice relating to environment, climate and foods, and Indigenous food sovereignty remain interconnected in Anishinaabe worldview. With a primary focus on healthy relationships to Mother Earth and all the beings associated, this interconnected approach is crucial for identifying new innovations, knowledge and opportunities for adaptation (Williams & Hardison 2013, 24). Believing that all beings are equal and therefore deserve equal rights can enhance society's understanding of justice while further supporting Indigenous communities in

establishing or enhancing their ability to adapt to climate change and work towards food sovereignty in a culturally-appropriate manner. This understanding is important to grasp for future chapters.

Chapter 3: Research Approach and Methods

Part I – Research Framework: Mino-bimaadiziwin[9]

As an Anishinaabe kwe, it is very important that the research I conduct reflects the values, teachings, and opinions I have gathered over my (short) lifetime. Consequently, the research process was required to be approached from a "decolonizing" perspective. Leading Maori scholar Linda Tuhiwai Smith in *Decolonizing Methodologies* explains that approaching research through a decolonizing framework "is about centring our concerns and world views and then coming to know and understand theory and research from our own perspectives and for our own purposes" (41, 1999) and does not include the rejection of theory, research, or Western knowledge. In a similar approach, Anishinaabe author Wendy Makoons Genuisz, explains the concept of *Biskaabiiyaang*, meaning "to return to ourselves, to decolonize ourselves" (2009, 105). Genuisz further explains,

> "Biskaabiiyaang methodologies require that researchers begin their research by analyzing the teachings and philosophies within themselves, separating those of the colonizer from those of inaadiziwin[10]. When "returning to ourselves," we must centre ourselves in the dibaajimowin[11] and aadizookaan[12] that we receive from our elders and from that stance we can decolonize ourselves and our knowledge." (2009, 120).

Achieving an objective of this means goes beyond the scope of the academic confines, and into the Anishinaabe worldview. Furthermore, Brent Debassige, an Anishinaabe scholar, explains his understanding that biskaabiyaang research includes the journey of coming to know Anishinaabe mino-bimaadziwin" (2010, 19). In order to determine how I could utilize teachings of Anishinaabe mino-bimaadziwin as a research methodology, the entire process began by

[9] The English interpretation of this Anishinaabe word is "the good life" (Debassige, 2010; McGregor 2018).
[10] The English interpretation of this Anishinaabe word is "Anishinaabe way of being, behaviour, psychology" (Genuisz, 2009, Glossary)
[11] The English interpretation of this Anishinaabe word is "Teaching, ordinary story, personal story, history story" (Genuisz, 2009, Glossary)
[12] The English interpretation of this Anishinaabe word is "the spirit of character in a traditional or sacred story or a legend" (Genuisz, 2009, Glossary)

consulting with local giikendaaswin holders and Elders in my community of GRFN. As I've outlined in previous chapters, and as I was reminded again – I had to live it.

With the process of returning to myself and continuing my journey of coming to know mino-bimaadziwin, the methodology of this research began to be centered around ceremony and participating in as many activities that my academic schedule would allow for. As a result, I began by spending time out in the trapping territory with a local trapper, Mukunuk. In Indigenous research, Indigenous authors outline the importance of reciprocity (Debassige 2013, Kovach, 2009.) when working with Indigenous communities. For this reason, I included as much of the harvesting process in my learning journey – i.e setting & checking traps, skinning, tanning of hide, and eating. It is my understanding from the literature, but also from my experiences on the trapline, that this process is a methodology itself, similar to how the Plains Cree relate to the sacred act of hunting – involving preparation, method, protocol, ceremony, respect for the animals, and sharing the gift received (Kovach 2009, 65). It was during this experience, and with speaking with Mukunuk, that I could truly understand how I could apply mino-bimaadziwin and biskaabiiyang as research methodologies.

This participatory approach, summarized in Table 1 at the end of the chapter, sought to engage youth with traditional harvesting practises while the research was conducted. The workshop was broken down into three main components, 1. Introduction and Initial Discussion, 2. Participatory Analysis, and 3. Reflection and Knowledge Mobilization. The process combined Indigenous research methods, such as storytelling, oral traditions (Kovach 2009), and conversation based interviews (Danard Wilson & Restoule 2010, Kovach 2009). At the one-day workshop, the morning began with Component 1 where they were introduced to climate change discussions by knowledge keepers and Elders, allowing for me to gain an understanding of where participants' understanding of climate change is. Component 2 consisted of harvesting demonstrations by local trappers with the discussion centered around climate change impacts in GRFN. Most of the content of this research was generated in this discussion. Component 3 concluded the workshop and allowed the identification of how to move forward. One-on-one interviews followed.

Part II – The Process

Partnership and Collaboration

The main research approach and objectives emerged from a collaboration with the GRFN Aboriginal Skills and Employment Training Strategy (ASETS) and Chief and Council. It began with contacting the current Chief of GRFN, Paul Syrette, for feedback and ultimately, approval to conduct research highlighting Youth voices in the climate action framework. Upon approval from the Chief, the next step consisted of contacting the local high schools to send out information and permission slips, as the students would be missing a day of school to attend the workshop. With the assistance provided by Boissoneau Bus Lines[13] with transportation, the project gained multiple important collaborators that contributed to the success of the research.

Recruitment

The project maintained a priority on Indigenous youth of GRFN, but also required the attendance of community Elders and knowledge holders which is why the recruitment process began with relationship building at the start of my degree. It began with ceremony – attending and participating – hosted by local knowledge keepers. Due to my continuous participation in both ceremony and traditional activities (i.e trapping, tanning hides, etc.), the relationships I was building became much stronger, to the point where the knowledge keepers and Elders were willing to support my endeavors. After full approval by GRFN's Chief Paul Syrette, recruitment began through contacting high schools and word of mouth through Youth I already knew[14]. The focus was on all GRFN youth, 16 to 25. Participants, upon approval of their parents, were able to miss one full day of school, providing us with a full day to hear what the students wanted. We also offered 10 $50.00 VISA cards as compensation for their time and sharing knowledge for those students that would attend the full day, donated by ASETS.

Ethical Considerations

[13] Local bus line, owned by a community member, that drives elementary and secondary students to the schools in the nearby city of Sault Ste. Marie.

[14] See Appendix for Recruitment & Permission Slip for Youth Participants.

Knowledge keepers and Elders stayed the entire day, offering any kind of support that the Youth may need due to recent traumatic events in the community. With having knowledge keepers and Elders at the entire event, throughout the day the Youth had the opportunity to speak privately with the Elders, medicine people, and knowledge keepers. Plenty of excellent food was donated by Mary Pine, offering hearty foods, with the inclusion of locally harvested meat.

Using participatory methods that were conversation based, it provided the Youth with a level of comfort that could not be achieved when having a one-on-one interview with a recorder in front of them. This method was utilized because in a previous workshop with the Youth, they responded well to discussion among themselves in small groups, and providing private written responses. Many did not want to be identified, and did not respond well to a full group discussion during that workshop. From this experience, I wanted to create an environment where they felt comfortable to share on their own terms.

The Participants

The participants consisted of mostly GRFN band members. The event was hosted at the community centre, resulting in people walking in that weren't specifically recruited for but still provided input and shared important stories and perspectives. Attendance included eight Youth and nine non-Youth, with a total of sixteen GRFN band members and one local Sault Ste. Marie resident.

Most of the Youth participants identified their interest in the harvesting portion of the event, with a few admitting that wanting to miss a day of high school was their main reason for attending. The youth were not told in advance about the donated gifts (from GRFN's ASETS program) for each youth participant that stayed the entire day, or about the locally trapped and harvested food we would have for lunch and saw these as bonuses upon their arrival.

Part III – Workshop Outline

The workshop was hosted on March 7, 2019 at the GRFN community centre. The outline consists of a summary of events and the questions used to generate discussion between participants.

Component 1 → The workshop began with introductions by all attendees (i.e facilitator, Chief & Council members, students, knowledge keepers, medicine people, and Elders). After a brief welcoming by Chief Paul Syrette, the conversation began with Elders and knowledge keepers, allowing them to share any knowledge, stories or concerns relating to climate change, foods/medicines, and the environment. This allowed the context to be set, in a way that they saw fit while also following Anishinaabe protocol that Elders go first. Since the Elders, knowledge keepers and medicine people were asked to speak through the passing of tobacco, they were aware of the questions and topics I had in mind and provided a great starting point for discussion after the break.

After the health break, the students were shown a video created by myself responding to their questions from the previous workshop I assisted in facilitating. The video highlighted Chief and Council's responsibilities, but also the history of how they came to be through the Indian Act. The Chief was in attendance, along with some council members who then spoke about their roles – providing the Youth with a deeper understanding of the imposed colonial laws in our community. This was important for me to include, because in the methodology I decided to follow, reciprocity is of great importance. I intended to share some of the knowledge I have received with the Youth, before asking for their knowledge. This also led to a portion of time being dedicated to speaking about University and College by both myself and Aaron Tyler Jones. In the previous workshop, many of the Youth were interested in what life is like at the post-secondary level as many of them would be graduating and attending school in the fall. Continuing with reciprocity being a large theme in my methodology, the inclusion of post-secondary discussion took a priority over splitting the time for asking my questions. The day changed to include most of the activities and climate change discussion in the afternoon, as both of these discussions took up more time than expected.

Component 2 → After lunch, we posed questions to gain a better understanding of the Youth's knowledge of climate change, and local foods/medicines/plants. The opening questions

were similar to: *What is the depth of your understanding of climate change, and what information do you want to know/how can you be supported to better your understanding of climate change? How well do you know your traditional foods/medicines/plants? (i.e Can you identify any? Do you know where they are located in our territory? Do you hunt/fish/trap? Etc).* Some youth responded very quickly, while others did not respond until the animal harvesting demonstration began. It was at this time when discussion was occurring that I included more prompt questions such as: *Is climate change affecting our traditional foods & medicines? How does this relate to our overall health? Is the ability to follow our way of life being impacted by the noted changes in wildlife, plant life, waters?* Building off the discussion the trapper started, the conversation flowed into the Youth sharing their own stories and knowledge relating to traditional foods and the environment. There were many responses coming forward as the demonstration continued, with Youth specifically sharing stories when it was their chance to assist in harvesting.

Component 3 → In the last phase of the event, participants were guided to the following questions: *What did you, or didn't you learn today? Has this helped you better understand topics of climate change, foods/medicines, and the Anishinaabe way of life? How can we share our information and ideas with other communities, in a way that others can utilize? What is your vision for Garden River? How do you see us adapting or moving forward with climate change, while maintaining our way of life?* With the following discussion being so in depth, and their inclusion increased, they all had many ideas for how to spread the word of what was discussed and completed at the workshop.

Part III – Analysis

Following the workshops, I began to compile the responses into one large table in order to identify common themes. In order to maintain comfort of students, they were able to decide to put their name on their written response, which most chose not to. They were also encouraged to share stories, but preferred to not be identified. Instead, they preferred a summary of responses to be input into a short digital story that they could share on social media.

Upon completion of the three interviews[15] with four non-Youth, I engaged in in-depth content analysis of the data collected (recorded conversations & interviews). In order to maintain confidentiality, of responses and stories shared, the responses will be coded via youth (Y1= youth 1, Y2= youth 2, and so on) or adult to include Elders, knowledge keeper, medicine people, trappers and other attendees (A1 = adult 1, A2 = adult 2, and so on). The interviews focused on the non-Youth, because the Youth participants had provided effective responses during the discussion portions of the workshop. The audio recordings and written recordings were transcribed, then hand coded with the intent to identify similar themes or concepts, following rules created to distinguish concepts. With the intersection of climate change effects and achieving food sovereignty being the main focus, the emerging themes were identified as 1. Water, 2. Land, 3. Plants, Animals, Medicines, and 4. Moving Forward. I explored the relationships between these concepts, allowing for constant review. I included my own derived understanding through reflection to assist in the analysis. The participants were made aware of this conventional academic paper summarizing the process and major highlights, however the Youth requested a short digital story that highlights the workshop and key findings in a community-friendly manner.

Reflection

Here, I plan to include some of the revealed reflections from the discussion with an Elder/knowledge keeper that attended the event, which I believe embodies Anishinaabe methods of research. The ongoing learning is a large part of Anishinaabe worldview, and therefore, I feel, must be addressed.

Participation – With eight Youth and nine non-Youth, participation was quite high. However, the Youth that attended were all of high school age. It would have been ideal to also include Youth above 18, however most non-high school Youth are not available during the day due to post-secondary education, job requirements, or lack of provided childcare. Some post-secondary Youth attend school in other cities, also posing a challenge for engagement with those Youth.

[15] See Appendix for Interview Questions

Timing – The event could have generated more responses from the Youth, if the event day was switched to have the harvesting demonstration occurred in the morning. This portion of the event worked as an excellent ice-breaker for the Youth, generating excellent discussion but it was so close to the end of the day that there was little chance to allow the discussion to continue. In addition, some portions took longer than expected which led to a later start for the harvesting demonstration. I am, in this case, a researcher, however, I am also Anishinaabe. I did not cut anyone short when speaking and allowed the time to go over because the teachings being shared were relevant and important to the event, and for the Youth to hear.

Location – I had originally wanted to be able to bring the Youth onto the land to have some of these discussions and let them set some rabbit snares, however logistically, it could not be completed. There were concerns of transportation with the unknown number of students, parental approval to go into the bush and more. Instead, we settled for the community centre.

Ceremony – It would have been great to include a water ceremony, as I would anticipate challenges in attendance for a sunrise ceremony. The youth want to learn more about our culture, which ceremony is an integral part of.

Table 1 – Summary of Methods

Approach	Data collection	Participants
Knowledge sharing paradigm: Storytelling	Component 1: Discussions guided to posed questions. Flipcharts & notetaker.	All attendees
Observation and oral tradition	Component 2: Discussions guided to posed questions. Flipcharts & notetaker used to record groups.	All attendees
Indigenous participatory research utilizing on the land activities Learning by doing	Elders sharing knowledge with youth, eg. Trapping, harvesting foods via storytelling, oral traditions.	Elders & Youth
Conversation Method	Component 3: Flipcharts & notetaker to record groups.	All attendees

Observation & Experiential Learning	Reflections written after the workshop & interviews	Researcher
Semi directed interviews	March-April 2019	Elders/Knowledge Keepers/Medicine People/Community Members (4)
Analysis	Transcripts created & analyzed via content analysis, color coded by theme etc.	Researcher
Knowledge mobilization	Digital story During the workshop, the group was asked how they would like to represent this event	Targeted audience is other community members, neighboring communities, and whomever else the group identifies as a target audience.

Chapter 4: Findings – Community Well-being

Part I – Youth are the Future

Both the youth and the Elders and knowledge keepers identified the desire to better the community of GRFN as a whole, for all members and future members. The knowledge sharing workshop was intergenerational with Youth and Elders, knowledge keepers, and community members in attendance. The interconnectivity of Anishinaabe worldview was demonstrated by all participants, with their responses pushing the research beyond climate change and food sovereignty. It is likely best, then, to attempt to understand the emerging patterns as related and interacting with each other.

Of the 9 non-Youth participants, many got up to share their stories and teachings with the youth participants. This allowed us to open in a good way, and to respond to some of the requests for Anishinaabe teachings from Elders. The introduction to climate change and food sovereignty was given through these teachings, avoiding confusion in the Youth from using western concepts and terms. Because the health of the community is central to success in both fields, one person described “you are our future” (A2), and another pointed to our youngest attendee (my nephew, age 8 at the time) and exclaimed “THIS is our future” (A3). After a recent suicide and numerous attempts in the community, we wanted to highlight how important the Youth are to our community.

Part II – A Brief History of GRFN

During the presentation of the video “Chief and Council”, all participants were highly engaged and followed with a deeper discussion. GRFN’s Chief and some Council members shared their experiences as community leaders, with the Chief specifically mentioning that the Youth input is key for future programming initiatives and funding opportunities. One Youth spoke up and described that they were unaware that the Anishinaabe had established their own laws, governance structure, education system, health care, alliances and vast territory prior to European contact (Y4). However, a few mentioned they were aware of our treaty right to hunt, fish, and trap, as most of the Youth participants established that they exercise this

treaty right. From the mentioned responses and the rest of the discussion that followed the video, it was concluded that despite us using a western form of governance through Chief and Council, we can and should still utilize and learn Anishinaabe forms of governance.

Part III – Youth Participation

It was exciting to have such a high interest in the harvesting demonstration, which was when most of the Youth opened up to the knowledge keepers, medicine people, Elders, trappers and myself. It was during this time where the discussion was brought to a deeper level, with the Youth identifying that none have had the opportunity to try skinning an animal or identifying the medicines of those animals. However, some Youth were hesitant to get their hands dirty and try skinning the beaver. Some Youth (Y5, Y6) showed particular interest in the parts where the medicine people would share knowledge of the medicine in the beaver.

Part IV – A Colonized Education System

There was an unexpected theme that emerged during many of the discussions, the participants were critical of the western education system. Beginning with the disapproval of the lack of inclusion of Indigenous history and traditions identified by the Youth in high school, conversations continuously featured ways in which participants felt there could be improvements upon the education system. One participant was a teacher in a local high school and brought up an important discussion regarding the perceptions the education systems have on such activities as harvesting, and the associated challenges to bring these activities into the schools (A8). We were able here, to specifically isolate how western society as a whole has impacted how our traditional foods and medicines are viewed. The implications of western society have reached so many aspects of our culture, that these are important for Youth to understand and be aware of.

Part V – Climatic Changes by Theme

In order to provide organization, this next section will organize research content via themes generated through group discussions and the one-on-one interviews. The themes were

identified because of their contribution to working towards achieving Indigenous food sovereignty and their experiences with climate change. Water was identified as particularly important during Component 1 discussions, where Elders and knowledge keepers introduced climate change, and in the one-on-one interviews with the non-Youth. Component 2 had a primary focus on the following themes, Land and Animals/Plants/Medicines and their interconnectivity. During the interviews, the non-Youth participants focused heavily on the noted changes throughout their lifetime and tended to respond to climate change questions by referring to Water, Land, or Animals/Plants/Medicines (our relatives). The last theme, Moving Forward, is heavily based on the Youth input, however the responses were similar to the non-Youth. The input for Moving Forward provided the foundation of working towards climate justice and food sovereignty in GRFN.

1. *Water*

In the morning during the first discussion, one non-Youth expressed the importance of the 4 sacred elements – earth, wind, water, fire, sharing that "this is what helps us survive" (A1). Youth responses maintained many similarities when relating to water – drinking, fishing, boating/canoeing/kayaking/ and swimming. Many of the non-Youth participants described picking medicines (in swamps), ceremony, women, and other aspects that focused on spirituality. In personal interviews, the topic of climate change always lead to a discussion regarding water. A4 discussed women's role in caring for the water, and how important it is to recognize that water has a spirit. The spirituality component was important to many of the non-Youth participants, meanwhile there was apprehension when discussing the health of the water in GRFN. Non-Youth participants both in the interviews and at the workshop frequently described similar scenarios where they remember being able to directly drink water from the lakes and rivers (A1, A2, A3, A7) adding that it is no longer safe to do so now. There has been ongoing use of glyphosate-based herbicides being sprayed aerially, but has been identified as "major pollutants of rivers and surface waters" (Gasnier et al., 2009, 184).

One participant, A3, interpreted the lower water levels in the Garden River as possibly being attributed to the warmer temperatures causing a reduction in the amount of snow that remains through the winter season. Equally important to the current spring run-off is the

historical spring run-off, described as “almost reaching over the Garden River bridge” (A3). Another key point brought up by the warmer temperatures, is increased evaporation that Canada’s Changing Climate report claims will contribute to reduced summer freshwater availability. A3, in the interview, claims this is already happening in GRFN, specifically referring to a time 8-9 years ago where the water levels were extremely low. The impacts of these changes in water levels is felt by the land, animals, plants and medicines in many ways, described further in the discussion.

2. *Land*

Youth again focused on activities, like hunting, sledding (snowmobile), walks/hikes, fishing, and camping when discussing land. Non-Youth mentioned the same activities, advancing the conversation again to deeper relationships and connections. One participant explained, “the bush is our pharmacy, it has everything we need” (A1), when trying to communicate the importance of land while A3 contributed that our land is what also sustains our foods and medicines. Participants reiterated the interconnectedness of the natural world in these discussions, mentioning that the health of the land directly impacts our community’s health.

The previously mentioned issue of aerial herbicide needs to be brought up again in this category due to the impacts of forestry practices in GRFN’s territory. This topic was discussed in interviews and at the event, with one participant referring to our forests as “plantations” (A4). To specify, our forests in GRFN have been cut approximately 25 years ago (A3) and re-planted in evenly distributed rows with red pine. Although a species natural to the landscape, the uniform planting does not match the natural environment that grows in GRFN’s forests.

3. *Animals/Plants/Medicines*

The group consisted of hunters, fishers, some trappers, berry-pickers, and those who pick medicines. However when discussing animals, many Anishinaabe will relate using the clan system. In this approach, animals are viewed as our relatives and are to be treated with the same respect as our relatives (A3). This category generated the most discussion among group conversations, and individual conversations.

Participant A3 in an interview indicated changes in animal distribution in 50 years, acknowledging less muskrat, beaver, and fish in the water, but also mentioning larger wildlife experiencing a decline in food availability from the changes in forestation. They also mentioned the plantations offer easier hunting of larger game as there is less bush cover for animals to hide. Temperature changes have impacted our hibernating animals, such as bears, as one participant noted bears are hibernating later and coming out earlier (A3).

When discussing plants and medicines, there was a consensus among participants that there has been major impacts in GRFN. Participants A1, A2, and A3 all noted changes in plant health, distribution, and availability, specifically describing that these plants are used in traditional healing practices. Berries for example, particularly important to the Anishinaabe diet and traditions are getting smaller and less abundant.

4. *Moving Forward*

Although the non-Youth participants provided more input regarding changes to Mother Earth, the Youth provided many ideas of how GRFN can move forward in a healthy way that supports the goals of our Youth. Of the many recommendations, on the land activities became an emerging theme. It is exciting for the community of GRFN to hear that many of the Youth want to continue into post-secondary education, however they want this education alongside learning from Anishinaabe teachings and activities. Some of these activities and teachings include hunting, fishing and trapping skills, learning the Anishinaabe language, learning about the seasons from an Anishinaabe worldview, and further incorporation of the Anishinaabe cultural opportunities in their schools. Further supporting the desire to learn Anishinaabe Bimaadziwin, the Youth offered methods they think would work best in our community like outdoor education or camps including as many outdoor activities as possible, seasonal programs or retreats for Youth, an Ojibway school in our community to learn our teachings from Elders and knowledge keepers, and motivation workshops to keep the Youth inspired in continuing their education. The Youth also added that in order for there to be successful initiatives, the community needs to come together and support each other so we can all learn together, and teach each other as a community. It is clear the Youth have a vision and methods for making that vision happen for GRFN.

In support of the Youth, the non-Youth participants offered a bit of a different narrative. They want Youth activities with treaties and maps, in order to learn our territory and history of our territory alongside the outdoor activities. Sharing that we acquire wisdom and knowledge through our experiences, the non-Youth participants wanted to remind the Youth that making mistakes is a part of life. They want to inspire the Youth to learn from their mistakes, and keep respecting themselves and others. They, too, have called for more workshops for the Youth, where there is an abundance of Elders in attendance, with the grandmothers and grandfathers involved in the process. A community-based approach has been identified by the input from the Youth and non-Youth participants, however some participants reminded us that balance is essential in order for success.

Chapter 5: Discussion – Establishing Relationships

Part I – Moving Toward Food Sovereignty & Climate Justice

Indigenous people are facing serious challenges when experiencing the effects climate change (Lynn et al. 2013, 545, Whyte 2013, 518). The Anishinaabe, in particular, identify special relationships to water (Chiefs in Ontario 2008, Craft 2014, McGregor 2013, Chiblow 2019), lands Big-Canoe & Richmond 2014, 128), and all beings of Creation (McGregor 2009, 28 as cited in Whyte 2013, 524). Although plenty of research has been conducted on climate change, community health, and food sovereignty, it tends to only be Indigenous researchers that weave the three together. This research, using a similar approach, aimed to apply an Indigenous food sovereignty framework to climate change adaptation, in order to better overall community health. Following suggestions from local Elders and knowledge keepers, the research unfolded into an event focused on utilizing youth input for design, implementation, and results. Identifying climatic changes to water, land, animals, plants, and medicine, the results demonstrate a clear relationship between the effects of climate change on environmental health and the health of the community.

The four emerging themes from the research are to be viewed as interconnected and interacting with each other, see *Figure 1* for visual representation. The water affects the lands which affects the animals, plants and medicines, ultimately affecting how our community moves toward Bimaadziwin, the good life. However, their interconnectedness goes much deeper, for example disruptions in land can also directly impact Bimaadziwin, or the water can affect the animals, plants and medicine. The cycle continues as our people care for, and build relationships with the

Figure 1

waters. This cycle is disrupted with anthropogenic climate change and continued pollution, where humans are the dominant influencer (Government of Canada 2019, 5).

There can be many applications of this cycle, however in this case, it will be used to represent community food sovereignty. To quickly revisit, Indigenous food sovereignty is described as positioned in a restorative framework, placing responsibility and action on individuals and communities to repair and strengthen relationships to Mother Earth (Coté 2016, 12). When analyzing the results of the research and comparing to the associated frameworks of Indigenous food sovereignty, one can begin to envision the connections with climate change.

To start, consider the desire for the youth of GRFN to learn about their Anishinaabe cultural practices and language, while being supported by healthy community connections. There is a growing concern that this will become increasingly challenging over time with the impacts of climate change. The concerns arise out of the reduction in species abundance in GRFN. One must also consider with the rising temperatures, the possible further disruption with the animals moving north while the confinements of GRFN's territory remains the same. The Youth want on-the-land activities and outdoor education, specifically how to fish, hunt, trap and harvest medicines. With less plant, fish and wildlife species around to learn these traditions, there are less opportunities for Youth to learn and build meaningful relationships. This loss of opportunity to harvest traditional foods in communities is resulting in a denial of the community's rights to have access to a steady supply of culturally relevant foods (Lynn et al. 2013, 547-8). In this case, it is also important to consider the Youth's desire to learn their clan system, the Anishinaabe method of governance. These kinds of injustices, taking many forms, are further challenging the Youth's ability to learn Anishinaabe traditions, and the entire community's ability to build and maintain healthy relationships with Mother Earth.

Prioritizing self-determined climate initiatives for both GRFN and the broader Anishinaabe Nation is crucial for the creation of a distinct Indigenous climate justice framework for Turtle Island that is focused on Indigenous perspectives and realities. Contrary to the IPCC 2018 report and Canada's Changing Climate Report that are heavily rooted in western science, Indigenous approaches to climate change require interconnectivity of culture. Further supporting the self-determined future of the Youth of GRFN and the Youth of the Anishinabek

Nation, relying on being grounded in our Anishinaabe identity through reconnecting with Mother Earth via land-based activities and cultural camps can strengthen our ability to adapt to future changes as individuals, and as a Nation (Anishinabek Nation 2017, 37). Bringing forward the lived experiences of the Anishinaabe people, input from Elders and knowledge keepers tend to highlight the importance of government funding supporting the community-based initiatives in response to climate change, supporting our self-determined climate futures. It is important, then to highlight that the underpinnings of a successful Indigenous climate justice framework would therefore need to be rooted in Indigenous culture, laws, protocols, cultures, traditions, languages and ceremonies.

Applying the guiding principles of achieving food sovereignty to climate change can further support the generation of an effective Indigenous climate justice framework.
Let us consider the four guiding principles to achieve food sovereignty: sacred or divine sovereignty, participation, self-determination, and legislation and policy (Morrison 2011). The sacred or divine sovereignty principle includes the need for healthy relationships to the lands, waters, plants and animals. Similar to the principle of participation which is based on the daily practice of nurturing the relationships (Morrison 2011), sacred/divine sovereignty is threatened for Youth and community members with effects of climate change on the waters, plants, medicines, and wildlife. Prior to the research conducted, the community of GRFN did have the capacity to respond to their own needs for healthy Indigenous foods, however this self-determination was left undocumented. It is the intent of the research to not only assist the Youth in establishing healthy relationships with Mother Earth, but to use the last guiding principle, legislation and policy as direction to report these results to Chief and Council for them to determine how they can attempt to reconcile food and cultural values with laws, policies and mainstream economic activities while also contributing to the broader Indigenous climate justice framework.

It is possible, though, that the changes in species distribution and species abundance could be more related to the forestry management practises occurring in the area. It is challenging, however, to rely on the current research with the release of The Monsanto Papers,

or The Monsanto Secret Documents[16] raising concerns over the legitimacy and possible fabrication regarding the levels of safety of glyphosate, the herbicide used in this case. Despite this, there remains the possibility of current forestry management practices exacerbating climate change. When analyzing the current climate change effects in GRFN, the remaining waters, medicines, plants, and animals may become even more scarce due to lack of food or a damaged environment from the aerial spraying.

Nevertheless, there are changes happening in GRFN that are affecting the plants, medicines, animals, lands and waters and therefore a growing necessity for the Anishinaabe Youth to build and maintain a good life, or mino-bimaadziwin. Whether the impacts are caused by climate change, the aerial spraying, or a combination of the two, it is with hope that the establishment of an Indigenous climate justice can inform policy and legislation in Canada and Ontario leading to the support of self-determined climate initiatives for Indigenous peoples.

Part II – For All Anishinaabe Peoples

With the research occurring much earlier than the completion of the paper, preliminary findings have been shared with the public in order. Although this research is specific to GRFN, the ideas and strategies can be used as stepping points for other Indigenous Youth to take on such projects in their communities, or for future research possibilities that want to incorporate Youth input. As such, this work has been presented to Youth at the Assembly of First Nations National First Nations Youth Summit on Environment and Climate Action in Wendake, Quebec. Preliminary findings have also been presented at the Roberts Graduate Conference: Canada on the Edge, Peoples, Places and Perspectives, hosted at York University. As a result, the IEJ project has developed a podcast series, *Anishinabek Rationality*[17], highlighting the panel I participated in. It is with hope that these, and further knowledge mobilization can assist other Anishinaabe communities in establishing their own climate change strategy, or fostering relationships with Youth.

[16] See https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/monsanto-secret-documents/
[17] See http://iejproject.info.yorku.ca/podcast/

Chapter 6: Conclusion – Maintaining Relationships

In previous chapters, I recount the findings of a participatory-based workshop informed by Indigenous methodologies that engaged sixteen GRFN community members consisting of mostly Youth alongside Elders, trappers, medicine people, knowledge keepers and community members in an community knowledge sharing workshop, supported by three subsequent interviews with four non-Youth participants. Seeking to foster intergenerational knowledge transfer and relationship building, recruitment maintained a focus on GRFN Youth 16-24 and Elders, knowledge keepers, and medicine people. The introduction describes how I seek to include Anishinaabe knowledge into a climate adaptation strategy using an Indigenous food sovereignty framework with four main objectives. Although reached, each objective will require more exploration and effort, as a one day event cannot cover the entirety of Anishinaabe teachings and culture, that the Youth want to learn.

Under intentions led by my Anishinaabe worldview and understanding, my first intention was to centre Youth voices in the climate action movement in order to inspire meaningful change in GRFN. Focusing on the importance of connection, I identify the ways in which climate change may be affecting the overall health of the community. Future research may pick up on strategies to foster healthy and meaningful connections to Mother Earth and with each other, as put forward by the Youth. With the intention of contributing to the broader environmental justice framework, the work focused on the effects of climate change on Indigenous communities. Demonstrating the valuable input that Youth can have in these complex issues, I also highlighted the desire they have in learning Anishinaabe traditions and culture and the importance of a healthy environment to ensure the continuance of learning. Acknowledging that the generation of a climate justice framework, and the creation of a broader EJ framework, will not solve all climate or environmental issues that Indigenous communities are facing, it is my hope that the implications can assist in better health for the plants, animals, medicines, waters and lands. With that in mind, the creation of a healthy learning environment for the Youth achieved through participation-based methods informed by

Indigenous methodologies has hopefully advanced the identified objectives along with identified priorities of the community.

Contrary to the western scientific analysis that is dominating the climate change discussion, this research focuses on the self-identified community futures advancing Indigenous solutions to climate change that prioritize healthy relationships with Mother Earth. It is my hope that this work can inform future research, but more importantly, inspire the Youth in my community to take action on the injustices in our community of Garden River with the support of Chief, council, and the rest of the community, while maintaining and building upon their relationships with Mother Earth, our community, and our Nation.

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Appendix

Recruitment & Permission Form Sent to High Schools for Youth Participants

Garden River Climate Change Workshop
March 7, 2019
Garden River Community Centre
9:00am-3:00pm

To Whom It May Concern:

My child _____(First, Last)_____ would like to attend the climate change workshop being hosted in Garden River on March 7, 2019.

Signed: _____(Signature of Parent/Guardian)_____

Emergency Contact Name & Number: _____

_____

Date: _____

*Reminder to students – the bus will pick you up between 8:30am and 9:00am AT YOUR SCHOOL. Parents/guardians may drop children off at community centre.

Interview Questions

The interviews are meant to be discussion based, so the following questions were used as starting points:

1. Can you describe the work that you do and how it informs your knowledge regarding climate change?
2. What kind of environmental changes have you seen in Garden River, and how is this affecting our territory?
    a. Are any of these effects changing how you interact with our territory?
3. How do you think Garden River should adapt/mitigate climate change?
    a. What kind of programs will support mitigation/adaptation?