“YOU KNOW THE SAYING, THE FUTURE’S SO BRIGHT YOU HAVE TO WEAR SHADES?”

DESCRIBING COMMUNITY PERSPECTIVES ON WELLBEING, ENVIRONMENTS AND SUSTAINABLE FUTURES WITH THREE REMOTE, OFF-GRID NUNATUKAVUT COMMUNITIES

by

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Abstract

This research aims to support three NunatuKavut Inuit communities – Black Tickle, Norman Bay and St. Lewis (Fox Harbour) – as they identify and pursue sustainable futures.

This study builds upon an existing NunatuKavut Community Council Community (NCC) Governance and Sustainability Initiative and related doctoral research by Amy Hudson, who is the Research, Education and Culture Manager at NunatuKavut Community Council. Building from priorities and needs identified by those communities, it draws from decolonial and community-based participatory research methods to help create research that is equitable and collaborative. It uses qualitative methods (focus groups and interviews) to gather and assess community members' perspectives about wellbeing, land, diesel, renewable energy and sustainable futures. Results are presented in both academic and non-academic (i.e. community report) formats within this thesis.

Participants described sustainability in their communities as wholistic and wellbeing is one significant piece of that puzzle. Well-being is connected to the land, the community and the sustainable future of NunatuKavut. Diesel and renewable energy may act as pathways to sustainable futures, but those pathways must be embedded within Inuit communities and ways of being.

The findings from this research show that NunatuKavut Inuit have their own conceptions of sustainability, which underline the importance of Inuit decision-making; deep, reciprocal relations with the land; and community and culture in planning for the future. The communities believe in their own sustainable futures and are clear that plans for the future must respect their autonomy, and support resurgence and empowerment of NunatuKavut Inuit.

List of Abbreviations Used

NCC NunatuKavut Community Council

CGSI *Community Governance and Sustainability Initiative*

CIHR Canadian Institutes for Health Research

A SHARED Future Achieving Strength, Health, and Autonomy, through Renewable Energy Development for the Future

Glossary

This section provides a brief description of terms used throughout this thesis, listed alphabetically.

Indigenous: the term used to recognize and refer to the people who have existed on colonized lands since time immemorial and continue to exist despite ongoing colonization. In this thesis, the names that reflect how communities, nations and governments refer to themselves are used whenever possible. The term 'Indigenous' is used to refer more generally to peoples who consider themselves to be the First Peoples of a particular territory.

NunatuKavut Community Council (NCC): the elected government of the NunatuKavut Inuit

NunatuKavut Inuit: "NunatuKavut means 'Our Ancient Land'. It is the territory of the Inuit of NunatuKavut who reside primarily in southern and central Labrador. Our people lived in Labrador long before Europeans set foot on North American soil. As it was in times of old, and still today, we are deeply connected to the land, sea and ice that make up NunatuKavut, our home" (NCC, 2013)

Sustainability: refers to sustaining life, livelihoods and the future in NunatuKavut communities; sustainability is supported by complicated webs of resources, culture, and relations.

Traditional territory: the natural world in relation to which Indigenous communities exist and have existed since time immemorial, in this case called NunatuKavut. May also be described as the *land-sea-air-ice*

Wellbeing: a broad term used to mean wholistic health; generally, this thesis uses the term 'wellbeing' over the term 'health' to capture the wholistic, fluid and diverse conceptions of what it means to live well.

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Chapter 1: Introduction

The thesis you are about to read is the story of my master's research. Written in my own words and from my perspective, this thesis is understood and written through my eyes, informed by my background, experiences and understandings of the world. This thesis describes the research, how it fits into the bigger picture of sustainability research in NunatuKavut, and how I aim to do this research authentically, in ways that are meaningful to the communities with whom I am working.

Positioning Myself and this Work

Before this thesis research I had never eaten a bakeapple, and that is important because it means I am an outsider in this research, a white settler participating in sustainability research in NunatuKavut, trying to support decolonizing sustainability efforts in whatever way I can.

I grew up in Chatham, Ontario, a rural farming town in southern Ontario. Tucked between great lakes, the land is flat (it used to be marshland until it was drained by Europeans to make rich farmland). Winters are mild, and summers are hot and humid with corn, soybeans, tobacco, and wheat growing thick and fast. Signs for church suppers, yard sales and fresh produce line the straight country roads, as you drive between the small farming communities scattered across the land. For me, this place is home: beautiful, pastoral and quaint; but I grew up not knowing much about Indigenous peoples, nor my complicity in continuing colonization on their lands.

After high school, I could not wait to experience life outside of Chatham and moved to Vancouver to attend University of British Columbia (UBC), to obtain a Bachelor of Science with a Minor in First Nations and Indigenous Studies. At UBC, I fell into an Indigenous Studies minor almost by accident, but once there, my eyes were opened to the real, violent, and continued colonization of Indigenous peoples in what is now known as North America. Once I began to understand what colonization meant, and the role I play in continuing to live and work on this land, I could no longer be a bystander – I had to begin to address colonization in my own way. Leaving UBC I knew I had to fight against colonization and its continued, violent oppression and elimination of Indigenous ways of being, but did not really know where to start. As a white settler, I

recognized the importance of being an ally in the truest sense of the word: as a partner, focused on building a trustworthy, equitable relationship with a community who chose to work with me (Castleden, Morgan, & Lamb, 2012; Irlbacher-Fox, 2014). To move forward, I sought to do master's work that supports the decolonization, empowerment and resurgence of Indigenous peoples on their own terms.

I came to Dalhousie University under the supervision of Dr. Karen Beazley and together we began to look for projects that needed extra hands, where my skills and experience would be an asset to an Indigenous community or communities. Karen and I approached Dr. Debbie Martin to see if I could be useful to her team. Debbie (Dalhousie University) and Amy Hudson (NCC Research, Education and Culture Manager) are co-leads on *Towards Energy Security in NunatuKavut* and were looking for a student to be involved in their project on energy security and community sustainability, as part of a 5-year CIHR-funded initiative called 'A SHARED Future'. Debbie agreed to supervise me, with the caveat that I take the time to do it 'right', including spending time in communities. It was a great fit, intellectually, ethically, and interpersonally, and this was the beginning of a strong partnership. Amy, Debbie and NCC got the application of my skills and experiences to an important project, while I got to do work that is fulfilling, both for my master's program and personally.

Collaboration with and mentorship from Indigenous scholars make it possible, and ethical, for me to do this work. I am doing this work because I believe colonization is a continuous, self-reinforcing structure of oppression upon Indigenous peoples. The lands upon which I live, work and learn do not belong to me, and I do this work to address the continued colonization upon the lands that I call home. I am driven to do something to address colonization, to face the continued oppression of Indigenous and colonized populations, and to act, guided by my Indigenous mentors and friends, against the colonial structure. I cannot sit idly by, knowing but doing nothing about colonization.

This thesis is a requirement for completion of my Master of Environmental Studies at Dalhousie University. Throughout this first experience doing primary research, over the past two years I have been learning, everyday, about research, decolonization and how I fit in. I am trying to do my best, to work in collaboration with communities, and to be an ally in a good way. I aim to do work that supports decolonization,

empowerment and resurgence of the communities with whom I am working, (NCC, Black Tickle, Norman Bay and St. Lewis (Fox Harbour)), and, on their own terms. I do not own the knowledge contained within this thesis. It belongs to the NunatuKavut Inuit community members who shared with me. I see myself as a liaison between communities and the academy, describing my understandings of stories shared with me throughout the research, in-academic and non-academic writing, and in ways that benefit the communities I am working with. This position is a challenging one. I do not own the knowledge and yet am trying to interpret and share the findings of this thesis research in ways that support the collaborating communities. All I can do is my best, and I recognize that this work is limited by my own perspectives and ways of being. I hope that this work supports the conversations about sustainability these communities are already having, and it will hopefully be useful as they plan for their sustainable, decolonial futures. I have been asked to carry out this thesis research as a partner, in collaboration with Amy, Debbie, the NCC, and the three pilot communities.

Researching through Bakeapples

This thesis shares many stories about bakeapples. While I was visiting each community to collect data, it was bakeapple season, and community members enthusiastically shared their bakeapples with me. Over bakeapple cheesecakes, we created shared experiences that helped me begin to relate to NunatuKavut ways of being. Throughout this study, I use bakeapples as a concrete illustration because I want to honour those shared experiences, to remember the special moments when community members shared their precious bakeapples with me, and to demonstrate that I was listening.

For those that do not know, bakeapples are bright, orange-pink, segmented berries that grow thick across NunatuKavut, the traditional territory of the NunatuKavut Inuit in southern Labrador. It seems like bakeapples grow everywhere in and around communities in NunatuKavut, on boggy land that community members call ‘the mash’ (Anderson, Ford, & Way, 2018; Karst & Turner, 2011). In other parts of the world, they are also known as cloudberries, but NunatuKavut Inuit are quick to remind you that they are not called cloudberries in NunatuKavut (Anderson et al., 2018). Bakeapples have a strong, sweet-sour flavour, with a hint of the earthy bog they grew from; they are absolutely

delicious: made into jam and sauce, spread on cheesecake and toast, baked into tarts and topped with cream, or simply eaten by the spoonful, maybe with a sprinkle of sugar.

An integral part of NunatuKavut sustainability, bakeapples are a healthy food source and they are not subject to the complicated, often high cost – low availability commercial food systems in NunatuKavut. They are an opportunity for physical activity and social-cultural engagement, as families pick bakeapples together, hiking out to prized berry grounds, sharing knowledge, stories and laughter. Often, bakeapples are shared between families and generations according to Inuit food sharing practices (Anderson et al., 2018; Karst & Turner, 2011; Martin, 2011). They are an economic opportunity, as bakeapples can be sold outside the community. Despite sustainability challenges in their communities, NunatuKavut Inuit continue to harvest bakeapples, practicing their culture and passing traditions and values on to younger generations.

Throughout this thesis, bakeapples are a common theme. Bakeapples helped me to relate with and to better understand NunatuKavut and the Inuit who live there. They are used to describe my own experiences as a settler graduate student researcher engaging with these communities through community-based participatory research (CBPR). Bakeapples are used as an analogy to illustrate NunatuKavut sustainability; both bakeapples and sustainability rely on the wellbeing of the land-sea-air-ice. Bakeapples and sustainability alike are threatened by local and global economic, environmental and social forces. The most important part of this analogy is that both bakeapples and sustainability are cherished, flowing from millennia of deep, reciprocal relations between Inuit and the natural world. I also use bakeapples as a central unifying theme because bakeapples are important to NunatuKavut Inuit, and while I was in NunatuKavut, people generously shared their bakeapples with me. I want to show that I was listening and learning, and so I use some of what they gave to me: a love of bakeapples.

Research Statement

The research questions and goals have been co-defined with NunatuKavut mentors and community members.

The primary research question for this thesis is:

With the urgent need for sustainability, and interest in pursuing renewable energy alternatives, how do (if at all) NunatuKavut community members reconcile long-standing social and cultural values regarding human health and the health of the land-water-air with the need for economic opportunities?

To answer this research question, the objectives of this thesis are:

1) To identify NunatuKavut community members' values and perspectives related to wellbeing, the land, diesel, renewable energy and sustainable futures;
2) To understand how energy development, for example diesel and renewable energy options, can support sustainable futures in NunatuKavut; and,
3) To better understand how NunatuKavut Inuit want to go about making decisions with respect to their sustainable futures.

This research arose from three distinct, but inter-related projects that are being undertaken by NCC. The first project is called the NCC *Community Governance and Sustainability Initiative* (CGSI) and the doctoral work informing the CGSI, entitled *Reclaiming Inuit Governance: Self-Determining our future in NunatuKavut* is led by Amy Hudson (forthcoming-b), which aims to create space for community sustainability planning that is led by the values, goals and interests of communities (A. Hudson, 2019, personal communication). NunatuKavut, the traditional territory of the NunatuKavut Inuit, stretches across south-central Labrador from the Lake Melville area, down the South Coast (Clarke & Mitchell, 2010; NCC, 2013). The land is called "NunatuKavut, which means 'Our Ancient Land', as NunatuKavut Inuit have lived on their traditional territory since time immemorial (Clarke & Mitchell, 2010; NCC, 2013). The land, sea, air, and ice are bountiful and have sustained Inuit communities for millennia – it continues to provide a sustainable way of life for NunatuKavut Inuit today (Clarke & Mitchell, 2010; Martin, 2011). This continuity is evidenced by the continued existence and autonomy of NunatuKavut Inuit communities (Martin, 2011). Despite the strengths of their culture, tradition, governance and territory, these communities face sustainability concerns brought about by powerful colonial, political, social and economic forces (Hudson, forthcoming-b, forthcoming-a). From this initial sustainability work, there emerged the need to identify and address issues related to energy security. This led to the second and third projects, described in the following paragraphs.

The second project is called *Towards Energy Security in NunatuKavut* and is co-led by Debbie Martin (Dalhousie University) and Amy Hudson (NCC Research, Education and Culture Manager). It aims to understand NunatuKavut Inuit perceptions of and goals for community sustainability, with a view towards supporting community-led pathways to sustainable futures (Hudson, forthcoming-b). *Towards Energy Security in NunatuKavut* pays special attention to issues arising at the intersection of energy insecurity, human wellbeing and the wellbeing of environments: how to go about diesel transitions and renewable energy development in NunatuKavut; and, how communities want to build capacity related to energy, wellbeing and sustainable futures. It is a direct result of off-grid communities identifying high electricity costs, changes in price, and risks of losing diesel generation plants altogether as major sustainability concerns (Mercer, Parker, Martin, & Hudson, 2018). *Towards Energy Security in NunatuKavut* , is funded by 'A SHARED Future' (Achieving Strength Health and Autonomy through Renewable Energy Development for the Future), which is a 5-year Canadian Institutes of Health Research (CIHR) Team Grant through the Environment and Health Signature Initiative, that began in 2018. *Towards Energy Security in NunatuKavut* is one of several A SHARED Future sub-projects across the country, which are all focused on healing and reconciliation in Indigenous communities by reducing diesel dependency. This thesis research has been funded by this research project, and I also contributed to the project as a Research Assistant.

A third research project was led by doctoral candidate, Nick Mercer. Mercer's PhD research was funded by an Engage Grant from the Social Sciences and Humanities Research Council called "Renewable energy in community sustainability initiatives: NunatuKavut Labrador" and aligned very closely with our existing A SHARED Future project, *Towards Energy Security in NunatuKavut*. His work was defined by community visioning related to sustainability and energy security, and it focused on collecting and analysing data on community acceptance of diesel, renewable energy and energy efficiency technologies in NunatuKavut. Data collection for both Nick's thesis and my own were carried out simultaneously. This was intentional; our objectives overlapped, and we wanted to avoid overburdening communities. Nick has become an integral part of *Towards Energy Security in NunatuKavut* and has continued his data collection through

Spring 2019 into six additional communities, supporting additional community engagement.

The Research Team

This work is a collaborative labour of love for NunatuKavut members and academic partners like me, supported by NCC and A SHARED Future. Many individuals have been integral in defining and supporting this thesis. The following is a brief description of the research team and the structure of the project, to further situate this thesis within the context in which it was created and carried out.

My supervisory committee consists of Dr. Debbie Martin, Amy Hudson and Dr. Karen Beazley. Debbie is Inuk and a NunatuKavut member, with years of experience working with NCC in health research, and an Associate Professor in Health Promotion at Dalhousie University. Amy is Inuk, a NunatuKavut member from Black Tickle, the Research, Education and Culture Manager at NCC, and PhD candidate leading Inuit governance and self-determination in NunatuKavut, as well as lead on NCC's *Community Governance and Sustainability Initiative.* Karen is a non-Indigenous ally and a Professor in the School for Resource and Environmental Studies at Dalhousie University.

The communities of Black Tickle, Norman Bay and St. Lewis (Fox Harbour) are integral to the research. Community members participated openly and enthusiastically throughout this study. They shared their opinions, values, needs and visions for the future of their communities. Three local research collaborators, Siobhan Slade, Abigail Poole and Stacey Keefe, were hired through a separate grant from the Conservation Corps of Newfoundland and Labrador and they provided opportunities for engagement with communities that really helped us to get to know the people who live there, and to feel more deeply the fabric of life in NunatuKavut. The relationships established with the local collaborators also opened the door for more honest feedback and engagement in the analyses, whereby the collaborators felt comfortable telling us when we have it right, and when we have it wrong. Frank feedback and continuous guidance is integral for me as an outsider and a white, settler scholar to create work that is accurate and meaningful for the communities I work with.

NunatuKavut

This thesis research is first and foremost grounded in community, specifically the NunatuKavut communities of Black Tickle, Norman Bay and St. Lewis (Fox Harbour). The needs and values identified by these communities, as well as the ongoing consent, support and guidance of participants and community collaborators, define this thesis. This thesis is only one output of the research, others include a non-academic report (included in Chapter 3) and a co-learning workshop held in January 2019 where results were shared, discussed, and adjusted with community members from Black Tickle, Norman Bay, St. Lewis (Fox Harbour). Additional research sharing activities are being negotiated with NCC and the partner communities.

NunatuKavut is the traditional territory of the NunatuKavut Inuit, within which the three collaborating communities in this study exist. In the following sections, I describe NunatuKavut and the three partner communities, along with a brief description of the sustainability successes and challenges they face. Whenever possible, I have cited NunatuKavut Inuit scholars and writers and sources that research 'with', rather than 'on', NunatuKavut Inuit (Koster, Baccar, & Lemelin, 2012). This is by no means a complete or categorical description of NunatuKavut Inuit and their territory. Instead it is a small piece of a big project, sharing stories of NunatuKavut sustainability in ways that supports sustainable futures. Further, I am a settler scholar, and the NunatuKavut Inuit perspectives shared in this work are understood and further shared through my privileges and experiences.

Locating NunatuKavut

NunatuKavut stretches across south-central Labrador, with most of the communities tucked in remote or isolated locations along the coast. The Trans-Labrador Highway slices across the land, connecting to some NunatuKavut communities, leaving others isolated. The road runs across ancient mountains, carved away by glaciers and erosion, through bog and boreal forest, across salmon rivers and past stunning views of Atlantic inlets. On a good day, the drive from Goose Bay to the Quebec border takes 6 hours but can take twice that or be impassable altogether in snowy, rainy or muddy conditions. This route provides an important, but tenuous, connection between the South

Coast communities, Goose Bay, and the rest of Canada; it brings less costly groceries, mail and other essentials to some of the communities along the coast in NunatuKavut.

Inuit Culture and Lifeways – Land as a Way of Life

Governed by their Inuit values, NunatuKavut Inuit who live in these communities belong to this land. NunatuKavut Inuit lifeways are inseparable from their land (Martin, 2011). What resources are taken from the land to survive, such as berries, firewood and fish, are balanced by what is given back to the land: love, support and stewardship from NunatuKavut Inuit ensure the close, reciprocal relationship between Inuit and their territory continues. As Debbie Martin, a NunatuKavut Inuit scholar, reminds us, however, this relationship is hard won:

> "This intimate relationship, however, was not borne out of romantic notions of living in harmony with the earth; rather, it was borne out of a serious and constant struggle for subsistence that was perpetuated by a "wilful ignorance" of Labrador by colonial authorities." (2011, p. 385)

Today, large-scale resource extraction and economic developments that at best ignore local knowledge and concerns and at worst perpetuate colonial violence through the destruction of territories and separation of communities from their land continue to appear in NunatuKavut (Ley, 2015; Martin, 2011). A contemporary example of this would be Muskrat Falls, a major hydroelectric project, built with little to no consultation with and consent from the people on whose land it stands.

The Inuit of southern Labrador submitted a statement of intent (comprehensive land claim) to the federal government in 1991. Since that time, the NCC has submitted supplemental research to support their land claim submission in 1996 and 2010. To date, the NCC has not received a formal reply to their CLC submission. However, the current federal government has opted to move away from the comprehensive land claim process and have begun to engage Indigenous groups in a new process called Recognition of Rights and Self Determination (RIRSD). The RIRSD process is intended to renew relations between Indigenous peoples and the federal government, ensuring rights and responsibilities are maintained, and treaties are upheld (Government of Canada, 2018). On July 12, 2018, the NCC formally announced that they had been accepted into this new RIRSD process with Canada and in September of 2019 NCC and Canada formalized a

Memorandum of Understanding (MOU) that will guide RIRSD negotiations. This MOU is a positive outcome after generations of struggle by NunatuKavut Inuit to be recognized as rights holders on their lands. By engaging in this process, NunatuKavut Inuit continue to assert their autonomy and self-determination on their lands (NCC, 2018).

Sustainability Challenges Faced by NunatuKavut Inuit Communities

Many NunatuKavut Inuit continue to live in small, off-grid communities along the coast, according to traditional and contemporary Inuit values, beliefs and ways of knowing (Clarke & Mitchell, 2010). NCC represents Inuit in south, central and western Labrador; this research works with the communities of Black Tickle, Norman Bay and St. Lewis (Fox Harbour) on the southeast coast. In many ways, these communities are very similar: they have small, close-knit, predominantly Inuit populations; they rely on traditional, resource-based economies, particularly fishing; and are off-grid, powered by diesel plants owned and operated by the provincial energy utility, Newfoundland and Labrador Hydro (Mercer et al., 2018). All three of the communities face transportation challenges; while St. Lewis (Fox Harbour) has road access to the Trans-Labrador Highway via an access road, Black Tickle and Norman Bay do not, and transportation options are limited to helicopter, plane, boat, or skidoo. While the communities in this thesis work are resilient and persistent in the face of challenges, these communities also face a number of growing sustainability concerns.

Black Tickle, Norman Bay and St. Lewis (Fox Harbour) became part of the CGSI as they face urgent sustainability crises, including increasing energy insecurity, food insecurity, water insecurity and economic insecurity (Hudson, forthcoming-a). The degree of urgency across all three communities vary and all three communities bring with them a wealth of knowledge and expertise about survival and adaptation (A. Hudson, 2019, personal communication). In these communities however, reduced government support is leading to reductions of and skyrocketing costs for essential services such as healthcare, water and sewer, and electricity (Hanrahan, Jr, Minnes, & Campus, 2016; Martin et al., 2018; Mercer et al., 2018). The sustainability challenges in these communities are complex and interconnected.

Energy insecurity is a concern in NunatuKavut. Two of the communities lack access to gas and fuel, sometimes having to travel hundreds of kilometres by boat or

skidoo for a drum of gas, or have it brought in by helicopter from a nearby community (Mercer et al., 2018). Limited gas and fuel make transportation more challenging, especially as government transportation support dwindles as a result of decreasing populations and shifting socio-political priorities, increasing isolation in these communities (Martin et al., 2012; Mercer et al., 2018). Additionally, many homes face heat insecurity, with poor insulation, inadequate access to heat sources such as firewood or furnace oil, and high cost of electricity (Mercer et al., 2018). Finally, Mercer et al. also describe how NunatuKavut communities are powered by diesel generators run by Newfoundland and Labrador Hydro, and are therefore dependent on the company for the continued operation of the diesel plants. Lack of energy autonomy and uncertainty about the future of diesel in these communities means increased stress about community sustainability overall (Mercer et al., 2018).

Food insecurity is also a sustainability concern, as environmental degradation, decreasing populations, and colonization threaten traditional food practices, while economic, social, political and transportation insecurity threaten commercial food brought in by road, plane and boat. Seasonal variations in country food availability, as well as in transportation costs and abilities, mean food insecurity ebbs and flows, with the most isolated communities experiencing the worst food insecurity. Commercially-available foods are often processed, packaged and costly, making it harder for community members to make healthy food choices and sometimes commercial food is unavailable altogether due to seasonal transportation barriers (Martin, 2011). Socioeconomic status, employment and supportive familial and community relations have a big impact on food security. NunatuKavut Inuit fish, hunt, harvest and gather a variety of nutritious foods seasonally, and many households preserve foods for use throughout less bountiful months. Food is foundational to culture; reliance on country foods allows for physical activity, ceremony, and intergenerational and community connectedness, but these things become harder as populations shrink and age (Martin, 2011).

Some NunatuKavut communities have limited water and sewer services and are unable to build new houses or businesses as a result of water and sewer capacity, the community of Black Tickle lacks water and sewer infrastructure altogether (Mercer &

Hanrahan, 2017). This is a direct result of mismatched, multijurisdictional responsibility, and is directly tied to other sustainability issues (Mercer & Hanrahan, 2017)

The economy in NunatuKavut is closely tied to resource-based activities, and was dramatically affected by the collapse of the cod fishery in the early 1990's. Some fishing jobs remain, but they are limited and located in larger communities within NunatuKavut. Many community members are forced to travel outside of their communities and territories to work, at places like Muskrat Falls, in bigger centres like Halifax and St. John's, and elsewhere across Canada. Resource extractive activities such as mining are major economic opportunities that could provide jobs and support for services in isolated communities, but that could also have negative impacts on the land-water-air-ice and Inuit lifeways.

Though incomplete, this brief introduction to major sustainability concerns within NunatuKavut provides a basis for beginning to understand how complex and complicated sustainability is for NunatuKavut Inuit in their home communities. Sustainability is a culture, a tradition and a way of life. The results of this study will show that sustainability is wholistic; made up of many interconnected sustainability strengths, opportunities and challenges. As an outsider, looking to address sustainability as a whole seems daunting, if not impossible, as there are many distinct, pressing concerns, mired in multi-jurisdictional red tape. However, this study demonstrates that communities are able to identify their own challenges and opportunities and are empowered to pursue their own sustainable futures. Community-driven solutions to an individual challenge, such as inaccessible energy, can act as stepping-stones to community sustainability as a whole.

NunatuKavut Community Council Community Governance and Sustainability Initiative & Sustainability Successes

In response to pressing sustainability concerns across their territory, NCC started the *Community Governance and Sustainability Initiative* (CGSI) in the three remote communities: Black Tickle, Norman Bay and St. Lewis (Fox Harbour) (NCC, 2018). This initiative uses a strength-based approach to identify opportunities and challenges in these communities, aiming to build capacity in communities to drive long-term solutions to sustainability crises (NCC, 2018). Throughout the CGSI, there have been many sustainability successes in NunatuKavut. Examples include:

- A feasibility report of water and sewer infrastructure in Black Tickle
- Advancements towards construction of a combined community/fire hall in St. Lewis (Fox Harbour)
- A resurgence of crafting as a social and intergenerational support network, and a pathway to practicing Inuit governance, reinforcing tradition and culture and;
- Increased capacity for community-driven initiatives to support sustainable futures, including increased youth-engagement and research interest; and,
- Opportunities for community energy autonomy, through renewable energy development and increased home energy efficiency.

These successes demonstrate that NunatuKavut sustainability is real and effective. It demonstrates that these communities have the capacity to be sustainable, have been sustainable for millennia, and can continue to be sustainable into the future.

Researching Sustainability in NunatuKavut

Key aims of the CGSI are to identify and build on community perspectives about sustainability and the future, as well as to build capacity and expand community engagement. Prior to my engagement on the project, community members and NCC identified sustainability concerns, strengths and opportunities; while diverse concerns were presented, energy autonomy and heat insecurity were consistent priorities across all three sustainability pilot communities (Black Tickle, Norman Bay and St. Lewis (Fox Harbour)). Working from those priorities, NCC and the collaborating communities began to identify research goals and collaborations to further explore these community concerns. Diesel and renewable energy were chosen as an area of discussion for community sustainability.

I became a part of the ongoing NunatuKavut sustainability research in 2017, when I joined *Towards Energy Security in NunatuKavut* as a master's student. I was asked to carry out the first phase of *Towards Energy Security in NunatuKavut* as my thesis research, building from existing CGSI discussions around sustainability, energy and wellbeing, and applying my own academic skills and abilities to the challenges and opportunities presented through the CGSI. As that first phase, this thesis research intends to record and translate NunatuKavut conceptions of sustainability into the academy in

ways that support community resurgence, empowerment and decolonization, and as understood from my experiences with NunatuKavut Inuit.

How Does this all Fit Together?

This thesis is structured in an intentional but somewhat unconventional manner. This introduction makes up Chapter 1, introducing the research question, providing context and rationale for the project, and describing the research team.

Chapter 2 describes the theoretical and methodological pathway of my master's thesis. This research is first and foremost grounded in community and I start by describing the community foundations and continued involvement throughout this thesis research. Second, this thesis draws from decolonial theory. I describe how it helped me to attempt this research in a good way, aiming to support the wellbeing and sustainability of the NunatuKavut Inuit communities and creating research outputs that are meaningful and valuable for communities. Lastly, I describe how I draw upon the principles of community-based participatory research (CBPR) as a methodological toolbox to carry out this research in a more equitable way. The bakeapple theme appears in this chapter as I discuss my own experiences with bakeapples and how they helped me understand both the results and my role in this research.

Chapter 3 contains a 'community report', which describes the research process, the results, and preliminary analysis. This report is designed to be inclusive of community readers, especially participants. It includes no formal citations and uses language that is accessible for diverse readers. Because of these inclusive language goals, the research question and other aspects of the project have been reworded. Throughout this thesis, I used bakeapples to frame the data. The community report takes it one step further and is designed with bakeapples in mind right down to the colour scheme. As I described above, while I was doing fieldwork in Summer 2018, I came to understand bakeapples as a resounding feature of NunatuKavut culture, traditional territory, and sustainability. Bakeapples came up consistently across all the data, with participants describing the importance of picking, eating, sharing and selling bakeapples. Moreover, bakeapples came up in conversation outside of data collection too, as community members were excited to share their bakeapple baked goods, recipes and tips. This report

is designed to return results to communities, and so uses bakeapples as a metaphor to talk about sustainability. I use bakeapples because I want to show that I was listening and learning, as community members were sharing their bakeapples with me. Finally, as described above, bakeapples are used as a metaphor, to provide a concrete illustration of the more abstract concept of sustainability.

The community report is an opportunity for community members to see the results and analysis, to give feedback and guidance prior to publishing. This report makes it possible for participants to not only be involved during data collection but throughout the research process. It is also intended to be a tool for community members and NCC that builds from continuing work within the *Community Governance and Sustainability Initiative*. In writing the results for communities, this report aims to break down colonial academic norms that keep knowledge contained within institutions. This community report was returned to communities as early as possible, with opportunities for feedback and discussion prior to academic publication. This report falls in line with the principles of co-learning and knowledge sharing identified within CBPR, by recognizing NunatuKavut ownership of the traditional and community knowledge contained in this thesis work. Colonization seeks to eliminate Indigenous peoples by erasing their voices, their needs and their histories (Wolfe, 2006). This report refuses the elimination of Indigenous knowledge by ensuring communities continue to access and have determination over their own ways of knowing.

Chapter 4 is written as an academic report that also presents the results, but in a conventional academic format including a scholarly description of background, literature review, methods, analysis, and conclusion. Additional literature is found in Chapter 4. This report is intended to support the '*Community Governance and Sustainability Initiative'* in a different way; although it will be shared with interested community members, the audience is intended to be academic audiences. It intends to make space for NunatuKavut Inuit voices within the colonial academy on their request, and on their own terms.

The bakeapple comes up again in the academic report. This report forms the basis of one or more academic articles to be refined for publication. The aim of this report is to represent NunatuKavut voices and ways of knowing within the academy in a way that is

useful as they define their own futures. In its own way, this report also aims to support decolonization, as it refuses the elimination of Indigenous voices by privileging them in this research (Wolfe, 2006). This report not only shares stories of NunatuKavut Inuit, clearly named and identified, but also aims to convey results that are useful to communities as they plan and negotiate sustainable futures.

Chapter 5 is a synthesis discussion, describing how this research fits into the greater CGSI, parts of the research partnership that are not included in the thesis, and limitations and next steps of this thesis research.

Chapter 6 provides a brief conclusion, including a summary and some closing words about my experiences throughout this thesis research.

Recognizing Academic and Community Needs

I want to recognize that this thesis is required to follow formal academic stylings to fulfill the requirements of my master's degree. This may throw into question whether this formal thesis remains founded in the decolonial priorities of the community, or if instead, community needs and decolonization are being used as a justification for the academic needs. I acknowledge that the literature on community-based participatory research describes it as an ongoing partnership, where the needs of the community are held equitably against the needs of the researchers (Castleden et al., 2012). In the negotiation of the research agreement, academic writing was included and defined in a way that recognizes the needs of the community and the researchers alike. We aimed to negotiate for equity rather than equality, to balance out the existing power structures that favour white, settler and colonial knowledge and people (Castleden et al., 2012). As a white, settler scholar I aimed to acknowledge my own privilege and to discuss it frequently with my collaborators and mentors. The benefit I get is huge, including (but not limited to) a master's in environmental studies, political and social benefit from calling myself a community-engaged researcher, opportunities for financial support for future research in an era of reconciliation-focused government funding. We worked to balance those benefits with benefits for the communities: scholastic writing that supports culture and rights; resources to plan for more sustainable futures; some increased capacity and engagement opportunities in research, renewable energy and sustainable futures. In the end, I cannot say if these benefits are equitable, but in recognition of the autonomy of

the communities I work with, I let my NunatuKavut Inuit collaborators decide if and how they want to collaborate with me.

Further, this research is funded from within the colonial academy, and the team uses academic resources and tools, with full knowledge of their colonial foundations, to do this work. This thesis, and *Towards Energy Security in NunatuKavut* attempts to break down the colonial system from within, but the research team is unsure if that can even be done. However, NunatuKavut Inuit and NCC see Inuit research as a way to self-determine, as described in the longstanding work led by NCC and several NunatuKavut Inuit scholars on research ethics and governance (Brunger & Bull, 2011; Brunger & Russell, 2015; Brunger, Schiff, Morton-Ninomiya, & Bull, 2016; J. Bull & Hudson, 2018). NCC's work on research ethics defines what ethical research is in NunatuKavut, describes how to engage in ethical research partnerships and what it means to refuse those that do not support NCC (and their member communities') own aims; this field of work sees research as a statement of autonomy (Brunger & Bull, 2011; Brunger & Russell, 2015; Brunger et al., 2016; J. Bull & Hudson, 2018). In response, I do my best to do work that is equitable, honest, authentic, embedded within our relationships, and supportive of NCC and its members on their own terms.

In this thesis, two pieces – the community report and the academic report – sit between an introduction that positions the communities, the researchers and the methods used, and a discussion that describes the synergies and conclusions that I have drawn within and around this research project. By necessity, there is repetition; the results are described in both the community report, and the academic report. The whole is a representation of the partnership that made this research possible, the best of the community and academia coming together to build NunatuKavut's sustainability work.

Summary of the Introduction

This introductory chapter opens with positioning of the author, and a description of the research team and questions explored. Then, it situated the research in NunatuKavut, the CGSI and sustainability challenges that precipitated this work. This section closes with an outline and brief description of the following chapters. The next section entitled Methodological Foundations, outlines the three primary frameworks that

structure this research: community, decolonial theory, and community-based participatory research (CBPR).

Chapter 2: Methodological Foundations

The following chapter describes the theoretical, ethical and emotional foundations of this research. This thesis has roots in both community and academia, and the following section describes how those dual foundations support the qualitative methods, analysis and dissemination of this research in ways that are meaningful, relevant and support NunatuKavut communities. This section is largely theoretical and reflexive. I describe the concepts, relationships and reflection that defined this thesis research, and inform the qualitative data methods used. A more conventional "Methods" section is found in the Academic Report (Chapter 4), where the specific research design, data collection, analysis and dissemination methods used in this study are described in detail.

First and foremost, this research is part of a collaboration with NunatuKavut Inuit, and brings together the values and goals of the community collaborators with my own skills and abilities as a white, settler scholar. The communities who collaborated with me, my friends, and mentors were essential in all stages of this research, from the first idea to dissemination. In this section I describe how this research is embedded with NCC's CGSI, and how I engaged with NCC and community collaborators to do research that communities identified as a priority.

NunatuKavut Inuit communities are resurgent, autonomous and self-determining, and live according to Inuit values and culture on NunatuKavut, their traditional territory since time immemorial. This thesis research aims to support NunatuKavut Inuit on their own terms. As a settler scholar, I turn to theories of decolonization written by Indigenous scholars, in an aim to create research that supports the decolonial goals of the NunatuKavut Inuit collaborators. In this section, I describe how decolonial theory helps me to understand colonization and decolonization, I engage briefly with some critiques of decolonial theory, before describing how I draw from decolonial theory in practice throughout my master's research.

Finally, I turn to community-based participatory research or CBPR as a set of tools that helps me bring together the academic and community ways of knowing and learning. These tools are intended to help build bridges between diverse ways of being, by establishing equitable and ethical research relationships (Castleden et al., 2012). In the final part of this chapter, I provide a description of CBPR, and an analysis of its strengths

and weaknesses. To close this section, I reflect on my role as a researcher with bakeapples, using them to provide a description of my own experiences with CBPR, how they informed my experiences as a researcher and how they shaped the analysis.

It is important to note that I am just beginning to understand the theories and ways of knowing that act as foundations to this thesis. As a master's student, I have a limited grasp on the academic knowledge informing this thesis research, and in writing this thesis see many pathways for future learning. As a non-Inuit I have a limited grasp on the NunatuKavut community, local and cultural knowledge informing this work. Community members shared some stories and knowledge with me to help shape and guide this work, but I am not Inuit and the Inuit ways of knowing and being that support this thesis research are not mine to master. I recognize my limitations and look forward to continuing to learn and grow in my academic journey.

Grounded in Community

This thesis research takes place in NunatuKavut Inuit communities, and NunatuKavut Inuit collaborators supported this research with ethical, intellectual and emotional guidance. To me, being grounded in community means putting the needs and goals of the collaborating communities first, and to allow the culture and values of the NunatuKavut Inuit collaborators to define and guide this research. Inuit have lived in NunatuKavut since time immemorial, resulting in the development of ways of life and knowing in relation to the land (Clarke & Mitchell, 2010; Martin, 2011; Semali & Kinchelo, 2011). Indigenous knowledge is borne of millennia studying, experiencing, living within the natural world, embedded within community and traditional ways of life (Semali & Kinchelo, 2011; Simpson, 2014). Indigenous knowledge isn't just a "romantic notion", it is a real, lived knowledge that allows for sustainable communities and ways of life among NunatuKavut Inuit (Martin, 2011, p. 385).

This thesis research is grounded in community in several multifaceted ways that embed local knowledge, expertise and support throughout the research. Given the leadership role of the NCC in sustainability research, this study is embedded in the *Community Governance and Sustainability Initiative* (CGSI) and is just a tiny part of ongoing sustainability research in NunatuKavut. The research question and goals were

identified by communities through the CGSI. The three pilot communities: Black Tickle, Norman Bay and St. Lewis (Fox Harbour) identified community sustainability concerns including those related to energy security and autonomy. The CGSI identified diesel and renewable energy as concrete examples to discuss sustainable futures. This thesis research works with and for those communities, building from community priorities and goals. Throughout the project, I worked on other parts of NCC's sustainability initiatives as requested, engaging in other initiatives outside of this thesis research. I attended community meetings where my role was to listen and learn about community members' perspectives. I organized meetings and events, and I wrote successful grant applications. These tasks were not strictly a part of this thesis research, but supporting my collaborators in other, concurrent sustainability work was an important part of our research relationship.

Further this study is supervised by Debbie Martin and Amy Hudson, both NunatuKavut Inuk scholars, who have mentored and guided this me in this work. I first met Debbie in the fall of 2017 when I was looking for a supervisor with a project that critically engaged with and supported decolonization. At that same time, she was looking for a graduate student to be a part of *Towards Energy Security in NunatuKavut.* It was a great fit interpersonally and intellectually (and most importantly, our senses of humour match!) but before inviting me to join the project, Debbie had an important question:

"To do this work, you need to spend time in NunatuKavut. You cannot do this work without ever spending time getting to know NunatuKavut Inuit and the land-sea-air-ice. Are you up for that?"

I sure was, and before long I had agreed to be a part of *Towards Energy Security in NunatuKavut*. Debbie and Amy provided integral community critique and guidance of research design and theories used to define the research, making this work appropriate and meaningful for their communities. Through Debbie and Amy, the qualitative methodology was informed by community: flexible and conversational research instruments were used and paired with community engagement and relationship building so that participants would feel comfortable and empowered to share about sustainable futures of their communities. Throughout analysis, the results and conclusions have been continuously brought back to Debbie and Amy and the communities for feedback and

discussion, through formal reports and presentations and informal conversations with community members who wished to participate. Dissemination of the research findings follows two pathways: those required by the academic institution, and those required by community, including a community report, a plan for community presentations, this thesis, a paper for publication, and various conference presentations. While this thesis is written by a settler, its contents have been read, discussed and approved for defence by members of NunatuKavut Community Council, and our community collaborators.

Finally, I spent eight weeks in NunatuKavut during primary data collection in Summer 2018 and continue to visit and work closely with community collaborators. Spending time in communities was an honour and an opportunity to learn context and background for this study, but moreover, it was an obligation. I could not do this work without spending time in communities, making personal connections with community members, building trust and acceptance with community members to do this research together. I made friends, who share their homes and opinions with me, who are willing to provide honest feedback and guidance, and who remind me that this work is for them and their beautiful children. Those relationships, more than anything else, hold me to research that is ethical, equitable, and meaningful for the communities with whom I work. I hope that the voices of the many NunatuKavut Inuit participants, mentors and friends who contributed to this research shine through.

This thesis comes from community as a physical location, along the rugged coast of NunatuKavut, but also as a non-physical location, as my efforts are guided by the intellectual, philosophical, emotional, ethical and cultural values of NunatuKavut Inuit collaborators and mentors. This research is legitimate only because of the community. The research questions and goals came from communities through the CGSI, and NunatuKavut Inuit scholars and community members Debbie and Amy supervised this thesis research and guided the project design and implementation. Their mentorship, and the other relationships built with community collaborators throughout this project are integral to this research.

Drawing from Decolonial Theory

In this thesis, decolonial theory acts as a guide to help me, as a settler scholar, work with NunatuKavut communities in a way that is ethical, meaningful, and supports community members' goals of decolonization, resurgence and empowerment. Throughout this thesis research, I have drawn from principles of decolonial theory to guide me from project design, to analysis, to final dissemination.

I first encountered decolonial theory in my undergraduate degree, as I studied a minor in First Nations and Indigenous Studies. Throughout that minor, I began to understand the real, ongoing and oppressive structure of colonization that continues to impact Indigenous peoples. As a white, settler scholar, I look to the words of others to help me define both colonization and decolonization. In engaging with decolonial theory I have come to understand colonization to be a real and violent structure that continues to oppress Indigenous peoples throughout their traditional territories, across what is now known as Canada (Wolfe, 2006; Yang & Tuck, 2012). I understand that colonization aims to eliminate Indigenous peoples, through assimilation, and/or violence; if a colonial structure can succeed in eliminating Indigenous peoples (either physically and/or culturally) it allows for expansion and ultimate dominion of the colonial state (Wolfe, 2006). I understand colonialism asserts a power dynamic: the colonizer, privileged and stereotyped as good, strong and benevolent; and, the colonized, oppressed, and stereotyped as conniving, lazy and good-for-nothing (Memmi, 1991). These definitions help me to recognize and understand how colonization is enacted, and thus, better able to understand the specifics of how colonization has impacted NunatuKavut Inuit.

What I am beginning to learn is that in NunatuKavut, colonization manifests itself in many ways, some of which are very overt and definitive, and others which are less visible and more subtle, but often no less damaging. For example, I am learning that colonization has manifested itself through the destruction and appropriation of traditional territory clearly apparent in the large-scale resource extractive activities, military bases and colonial settlement that directly impact the lives and customs of the Inuit who live there (Ley, 2015; Martin et al., 2012). Forceful implementation of a Western economic system and exclusion from decisions about funding allocations and policy-making,

alongside destruction of lands and waters, has impacted foodways, health and healthcare, and culture (Ley, 2015; Martin, 2009; Martin et al., 2018, 2012).

NunatuKavut Inuit are decolonizing, refusing colonial oppression and fighting for their own resurgence and decolonial futures. The CGSI is an example of how NunatuKavut Inuit are working to decolonize their lands, waters and communities, building resurgence through strengths-based approaches, through connection with culture and land, and through their own communities (Hudson, forthcoming-a).

In understanding decolonization, I again turn to theory, to the words of Indigenous scholars and allies, to educate myself. As I learn about decolonial theory, it is helping me to understand the process of decolonization, as a clear and active struggle to break down that colonial structure (Coulthard, 2014b; Yang & Tuck, 2012). I understand that Indigenous peoples continue to "exist, resist and persist" against colonization, asserting sovereignty over their people and territories (Alfred & Corntassel, 2005; Coulthard, 2014a; Kauanui, 2016, p. 1; Wolfe, 2006). Decolonization is not just a buzzword: *"*Its goal is to question, interrogate, and challenge the foundations of institutionalized power and privilege, and the accompanying rationale for dominance in social relations" (Dei & Asgharzadeh, 2001, p. 300; Yang & Tuck, 2012). Decolonial theory instructs that decolonization is founded in real change, not an apology, empty reconciliation, feigned consultation or token of friendship (Coulthard, 2014b; Yang & Tuck, 2012). It means the return of traditional territories to Indigenous communities, the repatriation of lands and waters to their rightful stewards (Yang & Tuck, 2012). It means transparent, authentic nation-to-nation negotiations and agreements between the Canadian State and Indigenous peoples (Coulthard, 2014a). It means a right to self-determination and autonomy, to live according to traditional and contemporary lifeways, and is a fight, a way of life, and essential to the continued existence of Indigenous peoples (Coulthard, 2014a; Yang & Tuck, 2012).

Drawing from the principles of decolonial theory to inform this research, it is important that I understand common critiques of Western, academic decolonial theory. Modern, academic decolonial theory has roots in the middle of the 20th century, as a series of countries broke free from British rule but continued to deal with colonial norms and stereotypes, and it continues to adapt as concepts of colonization and decolonization

shift (Memmi, 1991; Shahjahan, 2005). Separate from the diverse, fundamental conceptions of decolonization held by Indigenous peoples, Western academic theories of decolonization are often criticized for being too narrow, too normative, too in-line with settler colonial narratives, and not pushing hard enough against the colonial structure (Coulthard, 2014a; Kauanui, 2016; Lorde, 2003; Simpson, 2014). The most blunt critique that can be applied to decolonial theory is best captured in feminist, lesbian, Black theorist Audra Lorde's words: "the master's tools will never dismantle the master's house" (Lorde, 2003, p. 25). Put more plainly, this critique could read: within an omnipotent colonial system, how can we hope to create decolonial thought, and decolonial action (Mahuika, 2008)? This critique of academic decolonial theory is fair. So far in this section, I have asserted that colonization is a dominant structure of oppression that seeks to eliminate Indigenous peoples through violence, assimilation and destruction of culture and identity (Kauanui, 2016; Wolfe, 2006).

However, colonization is not at an end point; it is a continuous structure of oppression, not a single, finite event; colonization has not been completed (Kauanui, 2016). Indigenous peoples continue to exist and assert their culture, land, and autonomy in active resistance to colonization (Coulthard, 2014a; Yang & Tuck, 2012). Second, Indigenous peoples get to choose for themselves what tools work best to break down the colonial system. Indigenous peoples are modern, drawing from tradition and culture, but living in the world today, and have the authority to use every tool at their disposal to struggle against the colonial machine. Indigenous knowledge and theory can be both decolonial and not; the decolonial intent and effect is defined by the communities who create and maintain the knowledge and theory (Mahuika, 2008). Decolonial theory is deeply intersectional, drawing from Marxist, feminist, postcolonial and deconstructionist schools of thought; and scholars continue to seek new opportunities for intersection and shared knowledge (Dei & Asgharzadeh, 2001).

Some decolonial writing is embedded within Western academic norms, in white-male dominated fields like political science, and relies on complex theoretical reasoning; this writing is useful because it provides a strong, powerful and equal response to dominant colonial political theory (Coulthard, 2014a). On the flip side, there is decolonial writing centred on love, family and empowerment, written by Indigenous scholars for

their own friends, family and communities (Coulthard, 2014a; Nason, 2013; Simpson, 2011). The branch of decolonial literature focused on love and empowerment often bleeds into resurgence literature; you can't have one without the other (Simpson, 2014). This literature focuses on resurgence as a collective mobilization of culture, a political statement, and celebration of self, identity, culture, tradition, and governance (Simpson, 2014). Resurgence, to rebuild society, life and community, must grow up from Indigenous foundations, led by Indigenous peoples, and guided by their communities (Simpson, 2014).

Framing Research by Applying the Principles of Decolonial Theory

Decolonizing methodologies aim to address and breakdown the colonial structure of oppression as it exists specifically within academic research while championing resurgence and decolonization within Indigenous communities (Hudson & Cunsolo, 2018; Tuhiwai Smith, 1999; Wolfe, 2006). Decolonizing research is deeply interwoven with traditional ecological knowledge (TEK), Indigenous knowledge (IK), land and resource management, etc. (Simpson, 2004; Tuhiwai Smith, 1999). Decolonial research isn't just academic, it is research within communities and within the 'real world'; it is activism, capacity-building, community engagement and relationship-building (Lewis, 2012). To be decolonial means it cannot only exist within the ivory tower of academia (Lewis, 2012). Decolonial research supports resurgence and empowerment of communities, if and when they ask for it, on their own terms and based on their goals, values and needs. My aim is to draw from the principles that inform decolonial theory and decolonizing methodologies, recognizing that not only am I still learning how to do so, but that there lies a fundamental tension as to whether I (as a settler scholar) am positioned to apply a decolonial lens to my research. For now, I believe that my role is to support communities in their efforts to decolonize and to draw from the principles of decolonial theory to support my work. For me, I have attempted to do this by striving to do research that is deeply embedded in community, guided by relationships and emotion, and supporting the autonomy of the communities I work with throughout the research process.

Learning about decolonial theory has helped me to identify how to apply a decolonial lens as I worked to design, analyze and disseminate this research (J. Bull &

Hudson, 2018; Hudson & Cunsolo, 2018; Tuhiwai Smith, 1999). It helped me to build relationships in a good way, and to do good research with the communities who choose to work with me (J. Bull & Hudson, 2018; Hudson & Cunsolo, 2018; Koster et al., 2012; Tuhiwai Smith, 1999). Decolonial theory demonstrates that the words I choose and the way the research is framed matters in this colonial world, where the deck is stacked against Indigenous peoples (J. Bull & Hudson, 2018; Hudson & Cunsolo, 2018; Tuhiwai Smith, 1999). I do not claim to fully understand colonization and decolonization; instead I look to this theory for guidance, as an ethical-intellectual foundation for this work.

As a non-Indigenous scholar aiming to do work that supports decolonization and resurgence, I let myself be guided by community and community collaborators. Whenever possible, community members were involved in official guidance roles: both my co-supervisors Debbie Martin and Amy Hudson, as well as thesis external examiner are NunatuKavut Inuk scholars, and authorship of the community report was shared with community collaborators Siobhan Slade, Abigail Poole and Stacey Keefe. I turned to community members as experts and knowledge holders on their lands. The guidance of community and community collaborators helped me to understand how to do this research respectfully, how to handle and analyze data appropriately, and how to disseminate this research in a good way.

Throughout the research I aimed to build authentic relationships, and to honour and prioritize those relationships. I continue to maintain those relationships today. I aimed to allow emotion, especially love and hope, both my own and that of communities to shape and govern this research. I aimed to approach this research humbly by recognizing my strengths and limitations as a white settler researcher. I tried to do this research in a way that honours the land-sea-air-ice, and the traditional knowledge that flows from that land, both of which are integral to NunatuKavut Inuit ways of being.

Community-based Participatory Research

Finally, I have also drawn from principles of community-based participatory research or CBPR to help me build research that is ethical and equitable. I started my master's without connections to NunatuKavut. CBPR was suggested by peers and mentors, has been used by previous scholars in my department, and was a good place to

start understanding how to build this research project in collaboration with NunatuKavut. This suite of tools has been identified by several scholars in the field as a research format that works for Indigenous communities, as it ensures the research project is centred on community needs, highlighting inclusion and co-learning throughout the entire research project and beyond (Castleden et al., 2012; Drawson, Toombs, & Mushquash, 2017). For me, as a first-time researcher, as a graduate student and as a settler, CBPR allows me an entry point to begin decolonizing research in collaboration with Indigenous communities. This is an opportunity to learn, to do my best as a researcher, and to figure out how to be better next time; I want to do research in a good way.

In the following paragraphs I describe my understandings of CBPR, drawing from prominent scholars in the field. I offer my own lived experiences and reflections on CBPR as it relates to this study. It is important to note that this thesis research is my first active engagement with CBPR, the first opportunity I have had to engage with the challenges and opportunities CBPR poses, and I am excited to keep learning about ways to do research in a good way, through CBPR and other Indigenous and decolonial methods.

What is CBPR?

CBPR aims to build research that is grounded in community and can be entwined with Indigenous, decolonial and other research approaches (Castleden, Garvin, & Huu-ay-aht First Nation, 2008; Castleden et al., 2012; Drawson et al., 2017; First Nations Information Governance Centre, 2014). It aims to reveal and neutralize the power imbalance between academic researchers and their institutions, and Indigenous communities (Castleden et al., 2012). CBPR is imperfect; it is only as successful in addressing the colonial-academic power imbalance as the individuals who work on the project (Castleden et al., 2012). CBPR supports research that is ethical, equitable, collaborative, and done in a good way (Ball & Janyst, 2008; Castleden, Sylvestre, Martin, & McNally, 2015; Drawson et al., 2017).

Principles of CBPR

CBPR is not theory in itself, but a loose set of principles that structure a research project; the shape and importance of each of these principles shifts within and between each project (Castleden et al., 2008, 2012; Drawson et al., 2017). The first of these

principles is clear: community comes first (Castleden et al., 2012, 2015; Drawson et al., 2017). The research ideally starts from community, grounded in local customs and values (Castleden et al., 2012). Second, the research is a collaborative partnership, using all of the partners' diverse strengths; all traditional and community knowledge, perspectives and stories belong to participants and their communities, while ownership and responsibility of the research outputs (this thesis, the community report, academic presentations, etc.) are shared and negotiated between all collaborators (Castleden et al., 2008, 2015; Drawson et al., 2017). These partnerships often aim to put community first, inviting the academic partners in when and however it makes sense to the community (Drawson et al., 2017). Third, throughout the research, all partners are involved in co-learning and sharing of knowledge (Castleden et al., 2012; Drawson et al., 2017). In CBPR partners benefit equitably, but not necessarily equally (Castleden et al., 2012). Finally, in CBPR, there are no parachute researchers; a parachute researcher is one who drops into a community, collects data, leaves, and the community never hears from them again (Castleden et al., 2012). CBPR is characterized by continuous community consent throughout the research process, a continuous negotiation between partners as equals (Kirkness & Barnhardt, 1991).

Critiques of CBPR

Western academic research has long been used as a tool for evil in colonized communities, used to shape the knowledge about Indigenous peoples to maintain and support their colonial elimination (Castleden et al., 2012; Hudson & Cunsolo, 2018; Simpson, 2014; Tuhiwai Smith, 1999; Wolfe, 2006).

Further, defining CBPR as a complete, inelastic research method is impossible. A flexible and dynamic set of research tools that are informed by community, CBPR is always changing, with each community, each project, and each research team member (Castleden et al., 2012). While it is a useful set of tools, there are some important critiques of CBPR: for one, the onus of good work in CBPR is on the people – the research partnership that defines the project – and if they are not up to the task, the CBPR foundation falls apart (Castleden et al., 2012).

Finally, the CBPR literature puts the onus for equity on the researcher. A quote from Castleden (2008) describes the power imbalance in academia. This quote also underlines the responsibility of the CBPR researcher to address that imbalance:

> "Two further fundamental tensions concerning power are also worth noting here. First, there is an inherently unequal relationship between researchers and research participants. Second, although CBPR is collaborative, it has been developed as a Western research process largely undertaken with non-Western populations" (Castleden et al., 2008, p. 1395)

This is understandable, as the academic system and the researchers embedded within it hold all the power in a colonial reality. However, unilaterally putting the onus of equitable research on the academic researcher saps Indigenous autonomy. Indigenous peoples have the right, responsibility and autonomy to create and define their own research, working with partners if and when they choose. This is described best by Bull & Hudson, both NunatuKavut Inuit scholars (2018, p. 1): "An inherent part of self-determination relates to decision-making in research. That is, Southern Inuit are to decide the research that occurs with them or on their lands and the research is to be guided, informed and prioritised by Southern Inuit.". Colonization may have impacted or eliminated governance systems within Indigenous communities, but Indigenous peoples maintain autonomy over their lands, and the research that happens on them.

To truly address the colonial foundations of CBPR and academia as a whole, researchers should look first to communities. In perceiving communities as equitable research partners, researchers should look to the governance and culture already informing research (academic and otherwise) happening in communities. According to CBPR's own principles, community members, governance organizations and local scholars know what research needs to happen – we need to trust that they know how to make it happen in a good way. In NunatuKavut, NCC and several NunatuKavut Inuit scholars are writing powerful assertions of research governance (Brunger & Bull, 2011; Brunger & Russell, 2015; Brunger et al., 2016; J. Bull & Hudson, 2018; J. R. Bull, 2010). These scholars are defining community- and culturally- appropriate research ethics processes, working with community members and leaders to identify concerns about research, and pathways to better research partnerships, focused on ethical research,

consent, authenticity and community (Brunger & Bull, 2011; Brunger et al., 2016; J. Bull & Hudson, 2018; J. R. Bull, 2010). Bull (2011) proposes the creation of a "Community Research Review Committee", to review potential projects from a community perspective rather than an institutional perspective (p. 127). Brunger and Russell (2015) describe the need for collective consent and for researchers to recognize the power and risk involved in research with NunatuKavut Inuit. Reflecting on a decade of NunatuKavut research governance, Bull and Hudson (2018) identify strengths, including the reclamation of control of research, the negotiation of research agreements and establishment of ethical review processes as NCC and NunatuKavut Inuit scholars continue to advance their research governance processes.

While academic literatures on CBPR, decolonial theory and ethical research are valuable, it is the words of these scholars (and in some cases, their personal guidance) that underpins this research. Research with and for NunatuKavut Inuit should be defined and guided by NunatuKavut Inuit. It is our responsibility as CBPR researchers not to define ethical research, but to follow the rules and regulations outlined by our partner communities, to follow their lead and to act in a good way throughout the research partnership. We should find ways of building research into and alongside Indigenous, traditional and culturally-created governance structures, rather than pre-empting them with codified structures of agreement and consent (J. Bull & Hudson, 2018; Tauri, 2017). Looking to theories of Indigenous law, state law and treaty, there are ways to both address and break down colonial power inequities while maintaining and building up existing Indigenous autonomy (J. Bull & Hudson, 2018; Henderson, 1982; Napoleon, 2007). It may be tied to capacity-building work; in some cases, communities do not have capacity to review and decide on all proposals, to address unethical or unapproved work, or to review ethics submissions. Researchers in CBPR partnerships should be open to supporting that kind of capacity building with their partners.

As I am writing and disseminating this thesis research, I am looking forward to continuing to engage with ethical and meaningful research practices, and to building better research in the future. One important critique of this work is that it relies too heavily on non-Indigenous scholars. The academic concepts I have worked with, including decolonial theory and CBPR are just a tiny piece of the scholarship available on

doing research in a good way. Moving forward, I am looking forward to continuing to engage with other scholarship to help me to research in a good way, particularly literature on Indigenous methodologies, including *Research as Ceremony* (Wilson 2008) and *Indigenous Methodologies* (Kovach 2009). These texts, and many more, can push me to do research that is more equitable, more ethical and more meaningful to the communities with whom I work. I have been invited to continue in this research partnership with the CGSI through a PhD, and I look forward to drawing from these Indigenous and decolonizing methodologies to do better work: work that is more meaningful, more supportive, and more ethical.

Applying CBPR: Reflections on my Own Experience

In this section I describe my own experiences and how this thesis research draws from principles of CBPR in an effort to be more ethical and to better support the resurgence and decolonization of the collaborating communities. Defined and directed by NunatuKavut Inuit and borne of the *Community Governance and Sustainability Initiative* (CGSI), this thesis research is one tiny part of the ongoing sustainability work in Black Tickle, Norman Bay and St. Lewis (Fox Harbour). The research questions and objectives are community priorities and the research methods were approved by communities and designed to adapt to community needs and feedback.

In Summer 2018, I spent two weeks in Black Tickle, three weeks in St. Lewis (Fox Harbour), and one week in Norman Bay scheduling and holding focus groups and interviews, while also building relationships, supporting concurrent research projects (Nick Mercer's PhD Research), and participating in community events whenever possible. I returned to NunatuKavut for a month in Spring 2019, to visit old friends, support Nick Mercer's continuing community energy planning research and youth engagement initiative, and finish writing this thesis. During this time, I got to chat with mentors and collaborators about the results, the analytical process, the dissemination, working through particularly tangled or confusing parts in person. Participating in this research was an honour and a privilege. In this section I describe my experiences with CBPR in more detail, particularly the challenges faced in ethics processes and doing this research as a graduate student.

Ethics[1] Approvals & Relational Ethics

Ethics, and ethical approvals within CBPR are complicated. At first, I thought it was just me who felt this way, but as I have continued to read and talk about research ethics, it became clear that there is a foundational tension between Indigenous community ethics and academic research ethics (Ball & Janyst, 2008; Brunger, 2013; J. Bull & Hudson, 2018; Canadian Institute of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2014; Castleden et al., 2012; Corbin & Morse, 2003). Institutional ethics relies on paperwork, fine details and policy guidelines that prescribe ethical conduct for researchers; in communities, relational ethics are key, as the researcher must build trust, demonstrate authenticity, and establish community relationships (Ball & Janyst, 2008; Canadian Institute of Health Research et al., 2014; Corbin & Morse, 2003). For example, consent means different things to different people; paper forms and formal consent processes are standard in university ethics processes, while in community ethics processes, trust, personal ethics and relationships are key to obtaining actual consent (Brunger & Bull, 2011; Brunger & Russell, 2015; Corbin & Morse, 2003; Tauri, 2017).

Academic consent is complicated; it brings to the fore the long-standing, colonial power dynamic between researchers and researched, intellectual property, economic and social benefit, fairness, equality. We write lengthy legal documents that perform consent in a purely colonial way, which are focused on protecting all parties from legal ramifications, should the partnership go awry. Those forms are often meaningless to community members. What is meaningful is who the researcher is: their identity, their ethics and values, their integrity and how they are embedded within the community (who they know and who knows them).

Convoluted consent protocols complicate the CBPR process even more, especially for graduate students, who have limited time, budget and power within the Western academic system. For this thesis, ethics applications, alongside a research

[1] This research received ethical approval from NunatuKavut Community Council Research Advisory Committee, Dalhousie Social Sciences and Humanities Research Ethics Office (2018-4491), and the University of Waterloo Office of Research Ethics (23233).

agreement, were submitted to relevant community and academic boards: the Dalhousie University Social Science and Humanities Research Ethics Board, the NunatuKavut Community Council Research Advisory Council, and the University of Waterloo Office of Research Ethics. These applications were submitted for all of *Towards Energy Security in NunatuKavut,* with Debbie Martin listed as the principal investigator, to allow for smoother ethics approvals for all stages of the project. In collaboration with my mentors, I wrote the formal application and drafted a research agreement, based off principles and discussions decided on by the research team. Having a hands-on role in the ethics process was useful, because it meant I knew the details about how consent and ethics would work in the field. At the same time, it was trial by fire, and I am still not certain I did it correctly, or if there was a better way.

The consent forms were especially challenging. Due to foreseeable logistical issues, we decided when applying for ethics approval, that the focus group consent form did not allow participants to have their name alongside their quotes, they could only be listed as having participated in the study. The interview and focus group guides were identical, making the line between the two fuzzy; it didn't matter to participants what their method of participation was called, as long as they understood what their participation entailed, including how their data would be used and how their information would be protected. The interview consent forms were almost exactly the same but allowed participants to use their name alongside quotes. In some cases, when participants expressed a desire to have their name listed alongside their quotes and logistics allowed (a small group where it would be easy to distinguish individual voices, all agreeing to be audio-recorded), the individual interview form was used. This allowed me to use participants names alongside their quotes, to honour and recognize the knowledge, experience and presence of participants, while still obtaining consent. For analysis, the more formal, pre-scheduled, advertised and public focus groups, with 2-8 participants remain categorized as "focus groups". Both individual interviews and group interviews (up to 3 people), were more casual, spontaneous, and often took place with community members I had built relationships within their own homes, and throughout analysis are categorized as "interviews"). Data was only ever used as it was authorized by a

participant on the consent form they read and agreed to. An amendment to all relevant ethics authorities describing this change was completed.

Often, there is a tension between the ethics required by the institution, and those required by the community. Founded in colonial traditions and Western knowledge, often academic ethics maintain research 'on' rather than research 'with' Indigenous peoples; community ethics require equitable and community-centred approaches (J. Bull & Hudson, 2018). Increasingly, these issues are being discussed in academic literature, but more work is needed to address challenges in institutional ethics, and the deep, colonial biases in which the academy is founded (Brunger & Bull, 2011; Brunger & Russell, 2015; J. Bull & Hudson, 2018).

Navigating CBPR as a Graduate Student

CBPR is an intense emotional-psychological experience. In my case, I was forced to balance the competing needs and values of the academy, including degree requirements, and complex processes for disbursement of research funds, with the community needs and values, including the ethical, emotional and personal relations that define this research.

Relationship building is central to CBPR, but it is not easy. It is slow, and in the early days you spend a lot of time waiting. At the start, I was very anxious about my role in this, as a settler scholar working within a colonial academic system, trying to be an ally. What does it mean to be an ally? Even as I write this, I am not sure I know what an ally is; I aim to be humble, authentic and to check my privilege, working to balance my power with that of the communities I work with. I had honest conversations with my committee and peers about this, and the most profound conversation was with Amy Hudson, a mentor and co-lead on the project from NCC. Even as she warmly welcomed me to the research team, she also told me that I don't have ownership of the knowledge and perspectives contained in this work; the sustainability research that is part of the CGSI belongs to NCC and the collaborating communities, and I'm only here because they asked me to help to work on a small piece. In much gentler words, she told me to leave my 'white saviour complex' at the door, but to bring my skills and expertise to the table, openly and authentically. This clarified my role – I am only able to work with NunatuKavut Inuit because I am invited, I am doing only a tiny piece of this research,

and my responsibility is only to be here, with integrity and effort, to do the work I've been asked to do. That is what being an ally means to me.

I was very lucky to be able to approach fieldwork, and the entire CBPR process as a team. I am mentored and supervised by NCC members who invited me to work on the project and support my continued engagement with the collaborating communities. I was in the field alongside Nick Mercer as he was undertaking community-based work on energy planning at the same time. Working as a team had many benefits: we reduced community research fatigue by visiting communities as one unit; we shared accommodation, food and transportation costs; we shared ideas and provided critique throughout the field season; and perhaps most importantly, we shared emotional and psychological support throughout the field season. Data collection in CBPR is fun and incredibly rewarding, but it is also exhausting. Having a peer in the field to talk about it not only helped to crystallize the research and results but also provided emotional support, opportunities to decompress, and ability to share experiences with someone who understands. Being a graduate student can be isolating and draining, especially in the field for an extended period away from home; having a peer in the field made a world of difference.

Sometimes there were challenges to doing the research together. At times, our two distinct projects were conflated by researchers and community members alike, or one project became more dominant than the other. For example, at times, the research partnership was purely focused on renewable energy possibilities and assessing community acceptance of renewables; when that happened, the goals related to wholistic sustainability, wellbeing and the land were pushed to the side. I had to work hard to bring those questions and ideas back to the forefront, reminding community members, Nick and myself to think more broadly, about the intersections of energy, wellbeing, land and sustainability.

Further, there are tensions in our results and conclusions; while it is frustrating not to have a seamless, simple picture of NunatuKavut communities, these tensions show the diversity of opinions and perspectives that are present in all communities. Data collection and analysis is always subjective and biased, community members have diverse opinions, and researchers are limited to those who choose to participate. Working together was

sometimes challenging, as we balanced the academic needs of two research projects, but revealed tensions and synergies within our research, as well as the real complexities in perceptions and goals for sustainability within NunatuKavut Inuit communities. Ultimately, it demanded us to both to reflect carefully on our own data, and how we can work towards better research in the future, with more collaborations and more tensions – to show the real-world complexity of issues in every community.

Applying the Methods through Bakeapple Cheesecake

On paper, and after the fact, methods and methodological frameworks can be laid out clearly, one by one, described, and critiqued in detail according to the literature supporting them. In real life, research is not that simple. Research is complex, confusing, and subjective; it becomes even more complicated when real people are involved as participants. When I think about how I applied my methods, I think about bakeapples.

Bakeapples were an opportunity to learn and engage with NunatuKavut communities. When I was in NunatuKavut, community members often shared their precious bakeapples with me; bakeapple season was just starting, so the ones they shared were the last, saved bags they had in the freezer. Nevertheless, it seemed like every day I was eating bakeapple cheesecake, bakeapples smeared on buttered toast, or a creamy-crunchy-sweet bakeapple tart. As they shared their bakeapples with me, they shared stories: where they picked the bakeapples, who they picked them with, why they pick bakeapples, or who taught them when bakeapples are ripe or how to make jam.

I loved those moments, because I could relate to those stories. I grew up in a part of the country where fresh produce is readily available in summer. I keep track of when each fruit is about to come ripe and keep a stack of recipes to use up bountiful summer produce before it goes bad. I like to can and freeze produce, saving for the long, dark winter. I have my own stories: tasting the first wild blueberries with my Papa, glistening jars of Nana's canned peaches in the root cellar, hot afternoons spent with my mum picking strawberries, stopping at a fruit stand to buy cheap seconds (slightly misshapen fruit no one else wants) to make into jam or baked goods.

Through bakeapples, I could connect. We could share stories of picking fresh produce, swapping recipes and tips for jams and pies, and share openly pieces of ourselves that we cherish.

Not only were bakeapples an opportunity to share knowledge, lessons and stories about the land and community, but they were an opportunity to make friends, to have long conversations about anything and everything over a cup of tea. As people shared their bakeapples with me, I felt welcomed into their communities; bakeapples acted as a foundation for some of the relationship building that makes CBPR possible.

Bakeapples helped to ground the research in community. Throughout analysis and writing, I was based mostly in Halifax, NS and in Chatham, ON, staying in touch with collaborators over phone, email and video chat, visiting whenever possible. Community collaborators and mentors continued to provide guidance and support throughout analysis and dissemination. Honestly, it was hard working on the project from far away. I put a quick sketch of a bakeapple on the front of my notebook. Everyday, when I sat down to write, I remembered all the stories I was told over a slice of bakeapple cheesecake, of the land and of communities. I remembered the friends who shared their bakeapples with me, and why this research matters to them. I remembered the smell of the mash (bog) and the sweet-sour-earthy taste of a fresh bakeapple. I still have a jar of bakeapple jam stashed away, just in case I need a more visceral reminder – a taste – of the land, communities and culture that define this research.

Summary of Methodological Frameworks

In this section I discussed the methodological frameworks that inform this thesis research: community, decolonial theory, and CBPR. All three inform the qualitative methods (focus groups and interviews) used in data collection and analysis. This research is defined and driven by community, flowing from the CGSI and guided by NunatuKavut Inuit mentors and collaborators. I was guided by community collaborators and mentors, building relationships, which allow me to do meaningful community-driven research. Decolonial theory pushes me to address my role as a settler scholar, to understand the impacts of colonization and decolonization on this research, and to foreground the community collaborators as experts. Drawing from the principles of CBPR, me and my collaborators created an interdisciplinary partnership, designed to reduce the burden on community, that aimed to fulfill the goals identified by communities. At the core, this

research aims to support NunatuKavut communities as they define their sustainable futures; all methods and frameworks used in this study are intended to support that.

The following chapters, Chapter 3 (Community Report) and 4 (Academic Report) are both self-contained research reports, presenting the research for community and academic audiences respectively.

Chapter 3: Community Report

This report was prepared to return the results to participants and the NCC. This report is a primary avenue for returning the results to participants and their communities, and an important piece of the ongoing research.

I would like to note that this report remains in draft form until the participants, community leaders and NCC have reviewed and approved its final publication. It was designed to be engaging and inclusive for community members; as such, the formatting of the original report does not match the formatting required by FGS. Within this thesis, some aspects of this report, particularly the margins, have been adjusted in this thesis to match the FGS requirements

I, Emily Beacock (author of this thesis), am the primary researcher on this report, performing project design, data collection and analysis. Beacock wrote this report and is the primary author listed. Throughout the project, guidance, supervision and editorial contributions were made by Debbie Martin (co-supervisor) Amy Hudson (co-supervisor) and Karen Beazley (committee member). Community-specific guidance and feedback was contributed by community research collaborators, Siobhan Slade, Abigail Poole, and Stacey Keefe.

PRELIMINARY REPORT

October 11, 2019

Community perspectives on diesel, renewable energy and wellbeing in NunatuKavut

Prepared for NunatuKavut Community Council and A SHARED Future

Authors: Emily Beacock with Amy Hudson, Siobhan Slade, Abigail Poole, Stacey Keefe, Karen Beazley, and Debbie Martin

Preliminary Report

COMMUNITY PERSPECTIVES ON DIESEL, RENEWABLE ENERGY AND WELLBEING IN NUNATUKAVUT

CONTENTS

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First and foremost, we would like to thank Black Tickle, Norman Bay and St. Lewis (Fox Harbour) for welcoming me into their communities, sharing their stories and guiding me in doing this work.

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DEAR NUNATUKAVUT COMMUNITY MEMBERS,

I'll never forget the first bakeapple cheesecake you shared with me.

I'd been on the coast for a day. A new friend found out that I'd never had bakeapples before and made a beautiful cheesecake for supper the next evening. I can still taste the sweet-tangy bakeapples spooned across the creamy cheesecake. Taking a bite, I didn't expect the nutty seeds, but they balance so perfectly with an otherwise soft, smooth dish. I had two, then three slices, and was sent home with the rest of the cheesecake wrapped up for later. It didn't last long.

Being a white settler from Southwestern Ontario, I'd never heard of bakeapples before, let alone tasted them.[2] Last summer, throughout July and August 2018, in addition to several cheesecakes, I gobbled up bakeapple tarts, bakeapple sauce on ice cream, bakeapple jam, fresh bakeapples on toast or in a little bowl sprinkled with sugar, and the sweetest bakeapple of all: the first one I picked myself. I didn't realize how soft and fragile it was going to be. When I reached down to pick it, I squished it, and had to lick a mess of orange juice off my fingers. It was still delicious. Everywhere I went, people enthusiastically shared bakeapples with me, often opening the last bag they had in the freezer. At the same time, they shared stories and lessons about bakeapples.

"We call 'em bakeapples, it's cloudberries is it? Nobody calls 'em cloudberries here, they're bakeapples here!" (Joe Keefe, Black Tickle)

I spent eight short weeks in Labrador eating bakeapples, making friends and doing research in Black Tickle, Norman Bay and St. Lewis (Fox Harbour). These communities were identified through the NCC Community Governance and Sustainability Initiative (CGSI), to discuss community perspectives on diesel, renewable energy and wellbeing for several reasons. All three communities are off-grid, powered by diesel plants, and face some of the most serious and pressing sustainability concerns in NunatuKavut. These communities are amongst some of the most remote in NunatuKavut and have a rich culture and a wealth of knowledge that goes back for generations.

Black Tickle is located on the Island of Ponds, has a population of around 105, and is the northernmost community in this report. Transportation to Black Tickle can be challenging and expensive – it is accessible by snowmobile when the surrounding water is frozen, boat in the ice-free months, airplane or helicopter year-round, but there is no road access. Once the home of a very vibrant fish plant, this industry was shut down in the last decade. The population varies with the seasons, as people leave to work as fishers or in fish plants in the summer and travel widely in the winter to hunt, trap, fish and collect firewood and

[2] A note for anyone reading this who isn't from NunatuKavut and hasn't had a bakeapple (you poor thing!): Bakeapples are segmented berries, kind of like a raspberry, except bigger, bright orange, and with a large, hard seed in the centre of each segment. They are magically tart and sweet at the same time.

fuel, and to visit family and friends. A tundra island, Black Tickle is ruggedly beautiful, with crisp skylines and views of the sea unhampered by trees.

"Well, that's why I wouldn't move away. Because I don't think I would be, well I wouldn't be able to move to anywhere where I couldn't open my curtains, look out, see water." (Participant, Black Tickle)

Plus, as anyone from Black Tickle will tell you, they have the best bakeapples anywhere in the world.

St. Lewis, known by many locals as Fox Harbour, is the southern-most and only road-connected community participating in this research. St. Lewis (Fox Harbour) is about a six-hour drive from Goose Bay via road although timing depends on weather and road conditions. With a population around 180, St. Lewis (Fox Harbour) is the largest of the three communities.

"It's not only the water. The water is an amazing background, especially coming out around here. But we're really blessed here because we've got forest on one side and the ocean on the other side, so we get to avail of all those resources." (Participant, St. Lewis/Fox Harbour)

Norman Bay is the smallest community in this research, with a summer population around 13 and a winter population around 19. Tucked into a bay and sheltered from the Atlantic Ocean, Norman Bay is peaceful – often the only sound is the diesel plant humming across the harbour. Norman Bay has no store, no mail delivery, no clinic and no ferry; in the summer the community is accessible by helicopter and private boat, in winter by snowmobile.

"[It's a] beautiful place, nice and quiet." (Diane Ward, Norman Bay)

This research is related to two other NCC research projects, both of which involved existing and ongoing conversations about sustainability in NunatuKavut. The first is NCC's Community Governance and Sustainability Initiative (CGSI), led by Amy Hudson (NCC Research, Education, and Culture Manager). The second project is called **Towards Energy Security in NunatuKavut**, co-led by Amy Hudson (NCC) and Debbie Martin (Dalhousie University). Debbie and Amy co-defined the research goals and questions for that project to align with the CGSI. As a result, **Towards Energy Security in NunatuKavut** focuses on community needs and goals identified through the CGSI, aims to use community-and-culturally-appropriate strategies for research, and prioritizes community engagement and capacity-building as identified through the CGSI.

I was invited to join **Towards Energy Security in NunatuKavut** as part of my master's degree. It is funded through A SHARED Future, a 5-year grant from the Canadian Institute for Health Research (CIHR) that is funding 8 projects on diesel, renewable energy and Indigenous reconciliation. The goal of this research is to understand how NunatuKavut communities balance the wellbeing of humans, communities and the natural environment with the need for economic development.

Towards Energy Security in NunatuKavut uses diesel and renewable energy as examples of development that can potentially build towards sustainable futures. Diesel and renewable energy are good examples to use for a couple of reasons. Diesel provides reliable electricity and good jobs and allows for NunatuKavut Inuit to continue to flourish on their traditional territories. However, NunatuKavut communities also face high electricity costs, fear the loss of their diesel plants, and lack energy ownership. Renewable energy could be a pathway to sustainability. I acknowledge that diesel and renewable energy aren't the most important or the only sustainability issues in NunatuKavut. Participants made it clear that the needs and opportunities within NunatuKavut communities are diverse and complex. But having conversations about diesel and renewable energy made it easier for us to break down and talk about the complicated issues of community sustainability in NunatuKavut.

I tried to use research methods that work for NunatuKavut communities and decided to hold interviews and group discussions. The questions had five themes: land, health, diesel, renewable energy, and sustainable futures. The goal was to have conversations – to chat with NunatuKavut community members about their perspectives, values, and goals for the future. In the end, I spoke with 17 people, and it is those voices that you will see in this report, and which shapes my understanding of sustainable futures in NunatuKavut.

The analysis process is a cycle, with repeated individual analysis, followed by a review by you, and then more writing by me. I listened to the recordings, copied them down, and re-read the notes – I tried to capture your words as I heard them. At a meeting in Goose Bay in January 2019 I began to discuss preliminary themes with some community members. Then I sifted through transcripts and 'coded' them, marking important quotations and themes that appeared throughout the data. Then I summarized the data into the five themes described below. These themes are the ideas that really stood out, coming up again and again across all of the interviews and focus groups. presentations and reports like this, to returned them to you. Using your feedback as a guide, I will return to the transcripts and codes, and will revise this report for you and NCC. In addition, the results will be published in journal articles, conference presentations and a thesis for my university.

This report sums up the most important ideas from the stories and perspectives that you shared with me. I hope that nothing in this report is a surprise; it is my best attempt to record your ideas, priorities and goals for sustainable futures in your community, and I hope that it resonates with you and your community. This report, once I have changed it to reflect any feedback you give me, is intended to be used by you, your community, and NCC to plan for the future of your communities.

Throughout the research, you enthusiastically shared the story of your community, and each of the interviews and focus groups was valuable and special. Across all of the interviews, similar themes emerged: a deep love for your community and the land, a complex web of urgent sustainability concerns, and a passion for planning for the future. There is something else that everyone talked about: bakeapples.

"Berries… bakeapples, around here, there be more spoiled [rotten] than what people pick." (Participant, Black Tickle)

You described bakeapples as a culturally important, delicious and healthy food. They grow freely in and around your communities, filling the *mash* (bog) in August every year. When they're ripe, you eat as many as you can, and those you can't you make into jam or freeze. You use them up slowly all winter, breaking them out for special occasions or when you need a taste of summer. And once they're gone, you wait eagerly for them to ripen again next summer.

"And as I said earlier, I mean, you're walking on them, 24/7. Only off the road; the only way you're not walking on them, is on the road. You go off the road, you're walking on 'em." (Participant, Black Tickle)

You explained that bakeapples are not only a food, they can be an economic resource. They can be picked and sold in bigger centers or to processing plants that make them into jam and syrup. Picking bakeapples is hard work, and the farther away you sell them, the more money you can earn. In Black Tickle, hours spent picking bakeapples can be counted towards Employment Insurance. The business of bakeapples is tricky, though. If your community is too remote to sell them fresh, you must have enough freezer space to store them while you wait to ship them out. Not to mention some years there are more bakeapples than you can pick and other years there are none.

"And I think people would be able to pick more, too, if they had, uh, like, the place here to store…" (Participant, Black Tickle)

People described what it's like to pick bakeapples, spending hot, sunny afternoons crouched on the mash (bog). From my time spent in your communities, I learned that picking bakeapples is hard work, and the dedicated bakeapple pickers are revered within their communities. Parents take their children, and grandparents take their grandchildren. Friends go together to catch-up on their conversations and relations, and some people might even return home in the summer just to go bakeapple picking. Picking bakeapples isn't just a physical act, it's also a social event, an opportunity for intergenerational connection and a spiritual retreat.

"But I think that if the family, like, your parents, didn't carry it down from their parents, it just kind of gets lost. And, like, if the youth don't get it from their parents or their elders, they don't just think, 'okay I'm gonna go berry picking'. And maybe some do… I think it's more of a tradition." (Abigail Poole, St. Lewis/Fox Harbour)

Bakeapples are also a celebration of tradition and culture. They've been harvested by NunatuKavut Inuit since time immemorial. Through bakeapples, you live your culture, you practice traditional ecological knowledge and your intimate, balanced relationship with the land. People described to me how you know when the bakeapple season is going to be good. You need hot days and a few rain showers. If it rains too much, the berries rot. If it doesn't rain enough, they dry out. Some years, there's just nothing. Bakeapples embody

the relationship you have with the land: to take what you need, but never take too much. To respect the land-air-water-sea, and to make sure it will be there for future generations.

Bakeapples are integral to NunatuKavut Inuit ways of being. I often heard myself saying "I'm not from here," but you already knew. Not only because I had a last name no one knew, or I didn't know how to walk across a bog without getting a wet foot, but because I'd never had a bakeapple before.

Emily: "I was up there this morning and I had my first bakeapple that I picked myself,"

Warrick: "Yes bhy! Your first one!"

(Warrick Chubbs, St. Lewis/Fox Harbour)

You are proud of your culture, your territory, your communities and you are excited to share them with me. So, you invited me in for a cup of tea, a slice of fresh bread with bakeapple jam and told me the stories of your land. In the next couple of pages, I've summed up all that you told me. I have pulled out important themes that emerged from our conversations and made some conclusions and recommendations about sustainability and future planning in your communities based on what I heard – and I welcome your input on these recommendations. I use the bakeapple as a metaphor for sustainability, because it is simultaneously fragile and tough, and is an integral part of life in NunatuKavut.

Thank you for your participation and support.

Sincerely,

Emily Beacock

Master of Environmental Studies Student

Dalhousie University

Lead Researcher

This report is for you, and I hope it help us build toward your sustainable futures. I would love to hear your feedback. In trying to record what you've said and condense it into a few pages, I may have missed some important things. Please let me know if you have any thoughts, ideas or corrections you think will make this study better for you.

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RESEARCH QUESTION:

How do NunatuKavut communities balance the need for economic development, with their health, the health of their families and communities, and the health of the environment?

RESULTS:

The answer?

It's all about sustaining your communities. The results show that NunatuKavut Inuit aren't just balancing health of humans and environments with the need for development – they're balancing a complex web of sustainability. Participants described how their communities are sustained by a complicated network of resources, and their sustainable futures are defined by community, family, love, traditional governance, culture and the land-sea-air-ice. The balancing act includes health of communities, health of the land and a healthy economy – but it is so much more than that.

But this is a short answer to a complex problem. The following section describes six themes that came up often and most strongly throughout the data to describe the complex sustainability of NunatuKavut Inuit communities: 1) Sustainability is wholistic, 2) Health is place, community and culture: just as complex as sustainability, 3) Getting off diesel is a scary idea, 4) Renewable energy (and other development) is a pathway to sustainability, 5) Decision-making must be sustainable too, 6) Communities believe in their sustainable futures.

Theme 1: Sustainability is wholistic

"So, you kinda can't take away one to solve another problem, right" (Participant, Black Tickle)

Participants said that, first and foremost, their communities are seeking sustainability, founded in deep connection to land and culture, and filtered through community. NunatuKavut Inuit have been sustainable forever, living a deep relationship with the land where Inuit values and culture make communities sustainable. However, Black Tickle, Norman Bay and St. Lewis (Fox Harbour) are facing some real sustainability challenges. In NunatuKavut, sustainability isn't a single problem, it is a complicated web of challenges including food, energy, transportation, economic, and cultural security. To be sustainable, all these pieces need to come together to support NunatuKavut communities.

Bakeapples came up again and again during the summer, and they make a great metaphor to talk about sustainability (see Figure 1).

Participants made it clear that bakeapples are precious, and central to NunatuKavut Inuit culture. They are a celebration of NunatuKavut Inuit ways of being. They are an important

food source in NunatuKavut communities. They directly impact NunatuKavut Inuit health as a healthy food resource, but also as an important cultural symbol, supporting traditional harvesting practices, intergenerational knowledge sharing, community engagement, culture, and sense of place.

Bakeapples are made up of many small, connected pieces. Each segment is juicy and delicious but wouldn't exist without the whole. Bakeapples and sustainability are fragile. If one, two or more pieces disappear, the whole thing will fall apart. Sustainability is the same.

Harvesting bakeapples is hard work; it means taking time to go out on the land, to build knowledge about how and when to pick bakeapples, and to build relationships within communities, passing bakeapples and their stories between generations. Sustainability is hard work, too; it means struggling to protect and maintain the things communities need and love, and ensuring a future for families, communities and the land.

And, bakeapples are worth fighting for. Just like sustainability.

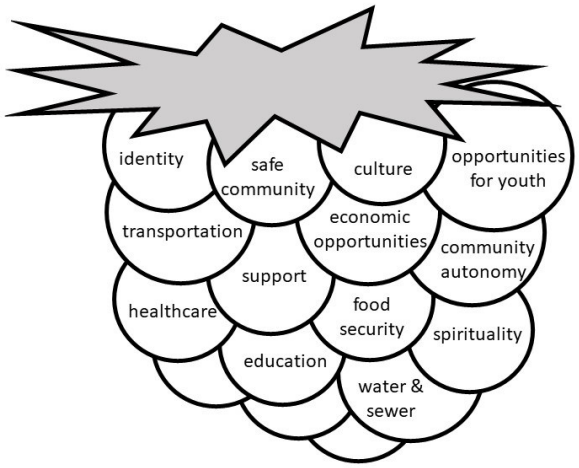

Figure 1: This bakeapple shows how many pieces grow together to create sustainable futures (and this isn't all of the pieces). Each piece is important. All of the segments rely on one another to make the bakeapple whole and complete.

Throughout the research, participants described what sustainability looks like to them, and how they imagine an ideal future in NunatuKavut. Here are some examples.

Many participants described sustainability as being able to stay in the community, with their families into the future. They don't want to have to worry about leaving to find work or other opportunities, and they want those who have left to come back home.

"… this community should have the same bright future as St. John's has. We shouldn't have to worry about the school closing their doors, or the nurse walking out, or the Hydro walking away, or anything else walking away. We shouldn't have to worry about that. My grandparents shouldn't have to worry about that, my aunts and uncles, my mom and my dad, or me and my child. Nobody should have to worry, if they have to walk away from their livelihood. Nobody. And I want us to wake up and not have that burden on us. Because a lot of people are so worried about 'when are they gonna kick us out?'. There's so many people worried about that. And it'd be nice for them to not have to worry about that." (Jennifer Keefe, Black Tickle)

"… [T]here is more kids. Like, my youngest came home with her child, and hopefully she'll stay, which means there's going to be another extra kid in school, and like, she's not the only one, like there has been several more that came home with their, you know, their little ones. So, there is going to be a bigger population in the school, which means that our school won't, uh, be in danger of having to relocate. (Minnie Slade, St. Lewis/Fox Harbour)

"I want a job, in the community. I want my son to be raised here." (Participant, St. Lewis/Fox Harbour)

Participants described how high cost and transportation issues impact their food systems and said that their sustainable futures include affordable access to healthy food and essentials.

"Well…Nobody talks about food, but food is very challenging here sometimes. I mean there's times that, you know, that, you can't buy things here, right?" (Participant, Black Tickle)

With limited to no water and sewer infrastructure in each of these communities, participants highlighted the importance of clean drinking water and sewage infrastructure for every household in their community.

"What I want it to look like in ten years: I want a fully functioning water and sewer system." (Participant, Black Tickle)

With governments threatening to reduce ferry service and cut healthcare in their communities, community members are concerned for the future of their communities. In their sustainable futures, they don't have to worry. Participants describe continued government support, including transportation, essential services and infrastructure as an important piece of sustainability.

"Nobody wants to put the time in. Like, if the government just stopped taking from us, and help us, they would be able to see that we can sustain ourselves. We can. We can easily sustain ourselves." (Jennifer Keefe, Black Tickle)

In the face of dwindling government support, participants also see community autonomy, self-governance and empowerment as integral to their sustainability. They want to make the best decisions for their communities, to know about the risks and benefits of development and to plan for the future accordingly.

"We should know [about development on our land]. We have the right, this is our land, this is where we live, this is where our children play. This is where we get our food. We have the right to know." (Jennifer Keefe, Black Tickle)

Participants often reflected on their own childhoods and want their children to grow up in the same safe, healthy environment. They described the importance of being outside, free to explore, play and learn. Participants described how sustainability means no more cuts to education, and that their children should have the same high-quality education and diverse opportunities as other children.

"People raise kids and that here, so they have so much freedom. Kids can climb around the hills, and there's always someone's got an eye on them kids, make sure they're not gonna go too far." (Participant, Black Tickle)

"But just because we only have a handful of students doesn't mean that they should be deprived of a good education." (Participant, Black Tickle)

Participants described many different important parts of sustainability. In the end, it all boils down to one thing: flourishing NunatuKavut Inuit culture and community into the future.

"I mean we got everything here: we can live off the land, friends, family; it's just the most awesomest place in the world!" (Ovadius Morris, Norman Bay)

Theme 2: Health is place, community and culture: just as complex as sustainability

Health is just as complex as sustainability. NunatuKavut Inuit have lived in relation to the land, the sea, the air, and the ice, since time immemorial. Communities, health and survival can't be separated from the land-sea-air-ice.

Bakeapples can't be separated from the land either (see figure 2). They are part of a web of resources; with rain and sunshine they grow, insects pollinate them, and birds eat them. They grow out on the bog, and there are certain places along the South Coast where bakeapples grow thicker, juicier and better than everywhere else. Bakeapples need just the right conditions to grow, a sweet spot of sunshine, rain, heat and cool. It's hard to describe exactly all the ways bakeapples need their environment to survive. Just like it's hard for participants to describe how their wellbeing is influenced by their environment.

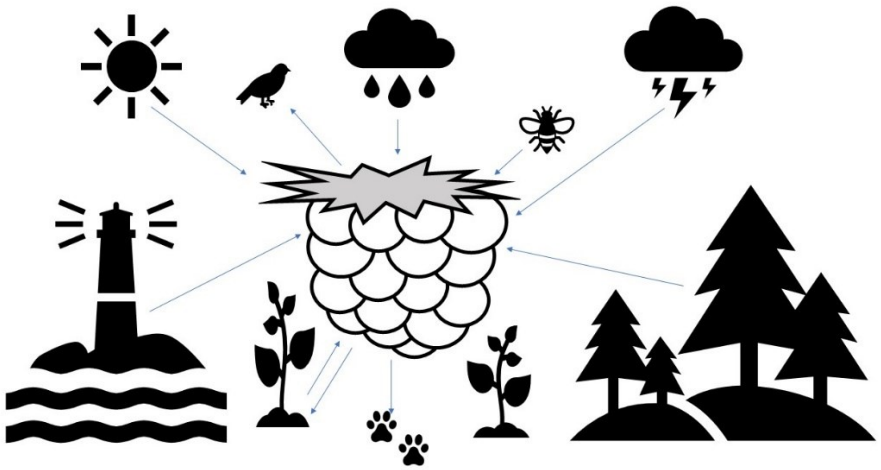

Figure 2: Bakeapples live within an ecosystem - each part of that ecosystem is important for bakeapples to survive.

Emily: "How do you think your health is influenced by your relationship with the land?"

Ovadius: "Oh, I think it plays a big part, and if you haven't got your health, you haven't got much!"

(Ovadius Morris, Norman Bay)

Health of humans and health of the environment is inseparable. Land is central to every aspect of life in NunatuKavut. NunatuKavut Inuit ways of being are based on a close, deep, shared relationship with the land. If the environment is healthy, so are the people, and vice-versa.

"Well, as a community, and as a cultural person, the land and the air and the water and everything around here has always provided us with a way of life, a way of living, a way of keeping our families fed." (Wendy Strugnell, St. Lewis/Fox Harbour)

"And makes you feel better, no matter what kind of a day you're having, if it's a good day, a bad day, if you wants to cry, there's something special about being able to go out in the middle of nowhere and scream, and no one can hear ya, when you needs to do it." (Participant, St. Lewis/Fox Harbour)

In interviews and focus groups some variation of the question 'how does the land influence your health?' always came up. Participants often didn't have a direct answer. It was hard to ask the question in a way that participants could provide a direct answer; and eventually it became clear that the question didn't make sense. In Western science the idea of 'wholistic health' is new. Researchers and doctors are only just beginning to understand how health is interconnected with the environment and community. In NunatuKavut, that's been known forever. It's just how things are. Participants described

how they want to continue living in relation to the land and want to protect it all, in a way that allows them to continue living the way they always have.

"This is where I grew up. This is where I was born, this is where I was raised. I've never lived anywhere else." (Joe Keefe, Black Tickle)

Participants told me about how they couldn't imagine living anywhere else, that the land is beautiful, and peaceful and perfect. They described how they fish, hunt and harvest to feed their families. They described how being on the land, smelling the sea and the mash, feeling the sunlight and doing activities Inuit have done for generations strengthens identity, feelings of belonging and a sense of safety. They also described their deep relationship with the land, and the importance of respecting the land.

"It's just, and it's not just simply the smell of the ocean air coming into the harbour, it's just, it's in me, that I know, what my family did there, and this was their home, and it makes me realize my place." (Abigail Poole, St. Lewis/Fox Harbour)

In addition to all the ways the land supports human health, participants also recognized how things like contamination and environmental destruction can impact NunatuKavut Inuit health in a bad way. There are external factors over which NunatuKavut Inuit have very little control. Climate change, economic and political uncertainty, changing populations, all impact bakeapples, and wellbeing.

"If we don't protect it, in, in the years coming, there'll be nothing left for the next generation. And, from what I can see, we're doing a great job on destroying our land. And we're destroying, we're gonna destroy our waters." (Warrick Chubbs, St. Lewis/Fox Harbour)

Theme 3: Getting off diesel is a scary idea

Changing one piece of the sustainability puzzle is scary, because the wrong change, or too much change can make the whole thing fall apart.

Take the bakeapple again. Bakeapples need sunlight to survive. If there isn't enough sunlight, each segment of the berry doesn't grow, the berry is ruined and the whole plant could die. If there is too much sunlight, the segments dry out, the berry is ruined and the whole plant could die. Changing just one factor can have a huge impact on the whole plant. Just the right balance of sunlight is needed.

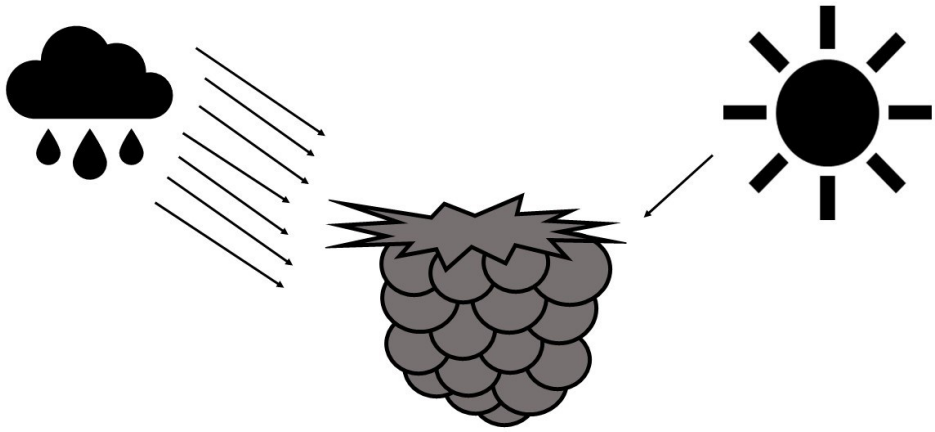

Figure 3: Too much rain and not enough sun is bad for bakeapples. Making any changes can be scary as they throw off the balance of the system!

Just the right balance is needed for sustainable NunatuKavut communities as well, and diesel is an important piece of the sustainability puzzle. If, for example, the diesel plant suddenly closed, the community would lose power and several jobs. But losing the diesel plant would affect the community in many more ways – it would mean the clinic closing, the loss of other essential services like the ferry, groceries and food, and make it harder to practice NunatuKavut Inuit culture and values. One change, like losing the diesel plant, impacts every aspect of sustainability, and could mean the end of the community. That means that talking about getting rid of the diesel plant is scary – because losing just one piece could mean the community is no longer sustainable.

"Like, why? And to me I don't see like why the government would want anybody to move from your home." (Ovadius Morris, Norman Bay)

"Energy has to be produced, and the only way we could do that is by burning hydrocarbons." (Joe Keefe, Black Tickle)

Participants described how diesel plants not only provide safe, reliable and consistent electricity, but also bring several high-quality jobs in each community. Diesel is also used regularly for transportation and recreation within NunatuKavut; without diesel, it would be much harder to engage in many cultural and recreational activities such as berry picking. Participants described having much more pressing sustainability concerns than getting off diesel.

However, participants have complex opinions about diesel; generally, participants highlighted the important role diesel plays in their communities, while recognizing the downsides including spills, fumes and high costs. In the end, participants want the best,

healthiest, safest, most reliable, cost-effective and environmentally friendly option for their community. Participants also talked about wanting control of their diesel plant – and not relying on the government to maintain (or take away) the diesel plant.

In some cases, the diesel plant is the last bit of government support that is keeping communities afloat – without it, the community would struggle to survive. Talking about getting off diesel is scary, because the diesel plant is a key part of sustainability within NunatuKavut Inuit communities today. With diesel generation playing such an important role in communities, any talk of getting off diesel has to be embedded in a conversation about sustainability, to ensure the transition supports all aspects of the community, to ensure NunatuKavut Inuit can continue to live according to their values and culture – such as picking bakeapples!

Theme 4: Renewable energy (and other development) as a pathway to sustainability

Change can be a good thing, if done in a good way.

For bakeapples, some years there is a change in the weather, just the sweet spot of sun and rain, that brings a bumper crop of fruit.

For sustainable communities, change can be good too – just the right amount, done in a good way – can help the community to flourish. That might mean renewable energy – something cheaper, more environmentally friendly, more reliable, and developed according to the community's values and needs. But it might also mean keeping the diesel plant, finding ways to make diesel generation cleaner, cheaper and better for the community. The pathway to sustainability could be anything. It's up to the communities to decide.

NunatuKavut communities have existed sustainably for millennia – NunatuKavut Inuit already know how to exist in relation to the environment, to be sustained physically, mentally, spiritually and socially. Inuit values and culture ensure sustainable communities. Therefore, development within NunatuKavut communities must support sustainability.

"It means its giving people in the community work. I would like to see windmills, windmills, windmills…" (Participant, Black Tickle)

"Right? Yeah. There's no houses there, there's no like, no one does anything anywhere near it. So, it's close to the community, cause it's like on the back of the community, but its not physically in the community, it's not in the way of anybody. And you could really get fierce winds over there, you know? And I truly do think that windmill would work here." (Participant, Black Tickle)

There are upsides to renewable energy. It could be cheaper, better for the environment, and integrated with diesel to ensure continued reliability. But participants said they want to know all the answers before starting a conversation about renewable energy and other

development. While many environmental, economic and other concerns arose, often community members were concerned about their cultural practices, such as berry picking, fishing and spending time out on the land.

Questions Community Members Would Ask Before Development

Autonomy: *Would it provide the community with more autonomy? Who would be responsible for the development? Who owns it? Who benefits from this development? How are communities consenting to the development?*

Reliability: *Would it be reliable? How would the high winds, low temperatures and other local environmental factors influence the development?*

Maintenance: *Who would maintain it? What happens if it breaks down? How would it interact with existing community infrastructure? What new infrastructure would be needed? How long will it last? Will there be a backup in case of failure?*

Jobs: *Would anyone lose their job? Could they be retrained? Would they want to be retrained? How many jobs would there be? How would you be trained for those jobs? Would they be jobs held in communities?*

Financials: *What do the finances look like? Is it economically feasible? Who is paying for it? Who owns it? Will it mean more money in the community?*

Land: *Would it interfere with fishing? What about berry picking?*

Location: *Where would it go? Would it be in the way of the community? Would it be too far or too close? Would it be noisy?*

Environment: *What would be the impact on the environment? Would it impact fishing, berry picking, hunting, or other valuable resources and cultural values?*

Health: How would it influence the health and wellbeing of the community? Are there any risks?

Culture & Future Generations: *How will it impact NunatuKavut Inuit culture? What will be the benefits and downfalls for future generations?*

Theme 5: Decision-making must be sustainable too

Communities want autonomy in their futures, and that means sustainable decision making, embedded in Inuit governance structures and community goals.

"We should know [about development on our land]. We have the right, this is our land, this is where we live, this is where our children play. This is where we get our food. We have the right to know." (Jennifer Keefe, Black Tickle)

The bakeapple metaphor works again – bakeapples exist within a cultural and environmental landscape that allows them to flourish. The bog ecosystem in which

bakeapples grow is home to many organisms that rely on each other for food and shelter. Bakeapples are just one piece of the food web.

NunatuKavut communities are no different; they exist in relation to the land. This relationship is founded in Inuit ways of knowing that have existed since time immemorial, as long as NunatuKavut Inuit have lived in NunatuKavut. Equity, respect, trust and consent are integral to this relationship. Without following the rules of existence, whether community governance structures or the eat-or-be-eaten bog food web, the whole thing will collapse.

What does it mean to 'do it in a good way'? Discussions about renewable energy (and other development) should be done in a way that supports community empowerment, autonomy and self-determination. Communities are the ones making the decisions, energy transitions and economic development are on the community's terms, and communities should be supported with the resources they need to make the right decisions.

Participants told us that they want all the information for NunatuKavut communities to make good, educated decisions. Repeatedly, participants underlined the need for transparent information and resources to help them understand complex issues within their communities. This includes support from NCC to ensure the right questions are asked before development begins.

"I think that NCC should play a bigger role in decision making of all of their towns, of all of their communities, mainly because they have the understanding to do so," (Wendy Strugnell, St. Lewis/Fox Harbour)

Communities know what they need to address sustainability, and just need support to get there; there is deep love for community and for land and a passion to stay in homes.

Decision making should be community-focused and follow NunatuKavut Inuit governance models. Participants described discussion, community-consensus, making sure to hear everyone's opinion and capture the views of marginalized groups such as youth.

"Let everybody come in and make their own decisions if they want, as a whole community." (Ovadius Morris, Norman Bay)

"Yeah, common sense, yeah, that's right. And that's why we need, uh, I guess, groups of people from different walks of life, from the common man to the top dog, to sit down and say, 'okay, this is the way', yeah?" (Participant, St. Lewis/Fox Harbour)

"We should educate on every aspect. So that people are informed, and educated on it, so that the community as a whole can make an educated decision." (Participant, St. Lewis/Fox Harbour)

Community-generated Ideas to Guide Decision-making

-The first step is education; communities want to have all the information on the table, to understand the potential benefits and impacts of any change to their community.
-Community meetings and meals are an effective way of bringing together the whole community to discuss important issues.
-Give everyone a chance to have their voice heard; respect their decision if they choose not to be involved.
-Decisions should be made as a community, through discussion.
-Work to include all groups within the community, including youth, seniors, people who are immobile, etc.
-Support from NCC (the education & knowledge there should come together with community knowledge to build the best future; help make decisions on big things, like mining)
-Follow through from partner organizations – show the effect of community involvement in development, demonstrate commitment and start what you finish
-Build trust and relationships with partner organizations

Theme 6: Communities believe in their sustainable futures

NunatuKavut communities are excited about the future; participants described how they're planning for what's next, and they can't wait to see what the future brings.

"You know the saying, the future's so bright you have the wear shades?" (Minnie Slade, St. Lewis/Fox Harbour)

I can't think of a bakeapple metaphor for this theme. Do bakeapples believe in their futures? Bakeapples are resilient, growing year after year on in NunatuKavut. NunatuKavut Inuit, too, remain on their traditional territory, building towards strong, resilient and resurgent futures. Communities are strong, continuing to uphold Inuit knowledge, values and culture, especially when it comes to the lived relationship with the land-sea-air-ice, and the health of humans, communities and the natural world. The future of bakeapples is dependent on a safe, consistent environment in which they can grow; that future is entwined with the people who protect and sustain that land. It is clear that NunatuKavut Inuit believe in taking care of the land-sea-air-ice and are looking to be sustainable into the future – as proud, self-determining people. This is what sustainability looks like in NunatuKavut.

"So, I just want us to have the best bright future here. And I want him, I really want him, to have the same childhood as I did. I can't stress that enough, like, I loved it here." (Jennifer Keefe, Black Tickle)

FINAL WORDS:

This research question asked:

How do NunatuKavut communities balance the need for economic development, with their health, the health of their families and communities, and the health of the environment?

The communities said:

NunatuKavut Inuit have lived sustainably for millennia, as they live in relation to the land and community. Their values and culture are sustainable, and that sustainability is wholistic. The health of humans, environments and economies are part of a complex web that sustains NunatuKavut communities. Each piece of the sustainability puzzle is important and if one piece disappears, the whole thing falls apart. They described the wellbeing of humans, environments and economies as equally important to the future, as long as each is embedded within their relationship with the land.

Participants described both the need for autonomy (to make their own decisions, govern themselves and to be empowered), but also the need for government supports. Participants needs, the needs of their family, community and traditional territory are prioritized by survival. They do what they need to do today to stay in their homes and in their communities. For many participants, things like food, water and sewer, primary healthcare, and jobs are the highest priority. It's the bigger picture things, like environmental health, health of communities, cultural health, that sometimes they just don't have the capacity, the resources and the support to deal with right now.

That's why autonomy is important. It will give NunatuKavut Inuit the ability to survive today, by ensuring their families and communities have the resources to survive. But it will also give them the ability to plan for the big picture, to build their own sustainable futures. NunatuKavut communities use traditional Inuit governance models. All the decisions made for and with the community are filtered through NunatuKavut Inuit culture, tradition and values. This includes community-based decision-making processes, based in love, friendship and cooperation, sharing ideas, discussions and meals.

Finally, participants believe in their own future, and the future of their communities. NunatuKavut Inuit have lived sustainably since time immemorial and will continue to live a sustainable future. They are fighting for sustainability, to continue to live in their homes and communities. They are excited to provide future generations with the best life they can, including strong NunatuKavut Inuit culture and believe that those futures are possible, if only they are autonomous and empowered to make their own informed decisions.

So what?

NunatuKavut Inuit aren't alone in these conclusions. Indigenous peoples around the world are turning to their own definitions of wholistic wellbeing and sustainability, and traditional governance models. More and more, Indigenous scholars and communities are

writing about their own wellbeing, their relation to land, and the interconnectedness between health, the environment and sustainability.

We think this means that our results are on the right track. Our findings are similar to those of other sustainability research projects happening in NunatuKavut communities. Our results align with other research outside of NunatuKavut on Indigenous wellbeing, sustainability and self-determination. We also reviewed these findings with community members, who offered critique and guidance.

But we know these results aren't perfect. Throughout this research project, we couldn't talk to everyone. In total, we talked to 17 people. We talked to men and women, old and young, but we only talked to people who chose to participate. We know there are probably many perspectives that we didn't hear.

We hope this report acts as a jumping off point for continued conversations about wellbeing, land, development and community sustainability. We intend for this report to contribute in a small way to the CGSI and other sustainability work happening in NunatuKavut communities. We hope that this report shows some of the most important goals for sustainable futures, and to give community members another resource when planning their next steps.

Finally, we're excited to keep participating in the sustainability initiatives in collaboration with Black Tickle, Norman Bay, St. Lewis (Fox Harbour) and NCC. As we return these results to communities, we will continue to discuss our role and how we can further support their empowerment, resurgence and sustainable futures.

WANT TO LEARN MORE OR GET INVOLVED WITH SUSTAINABILITY WORK IN YOUR COMMUNITY?

For more information on the CGSI, or to see what's going on in your community, visit the NCC Research, Education and Culture page at http://www.nunatukavut.ca/home/345

While you're there, check out the **Why I Love My Community** booklets (created through the CGSI), highlighting strengths and successes, created by community members from Black Tickle, Norman Bay and St. Lewis (Fox Harbour).

What does the sustainable future look like for your community? If you're interested in getting involved in NCC's **Community Governance and Sustainability Initiative**, get in touch with:

Amy Hudson
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Tel: 709-896-2644
Fax: 709-896-0594
amyh@nunatukavut.ca

WHAT'S NEXT WITH THIS DATA?

1. Continuing community and NCC review & feedback – we want to hear from you!
2. We are going to write and present this data in addition to this report – including a master's thesis, academic publications and conference presentations. We are also working with Amy and NCC to plan community gatherings and education events to bring these results back to the participating communities directly. Whatever gets produced would be shared back to community.

QUESTIONS, COMMENTS, CONCERNS ABOUT THIS REPORT

Thanks for reading this report! If you have any feedback, concerns or ideas, please get in touch.

Chapter 4: Academic Report

This following report includes information to be submitted for publication; it will be reformatted into one or two multi-authored journal articles. Emily Beacock (the author of this thesis) was the primary researcher, performing project design, data collection and analysis described in this report. Beacock wrote this report and will be listed as the primary author. Throughout the project, Debbie Martin (co-supervisor), Amy Hudson (co-supervisor) and Karen Beazley (committee member) provided guidance, supervision and editorial contributions and will be listed as authors. This report is written in first-person plural in preparation for multi-authored publication. several possible journals have been identified; a single target journal has not been finalized. Formatting and length will need to be edited to accommodate the journal's requirements.

Abstract

Objectives: To understand how NunatuKavut communities balance the wellbeing of humans and the environment with the need for economic opportunities in their communities.

Study Design: Drawing from decolonial theory, this project is a collaboration between NunatuKavut Community Council (NCC), three partner communities, Black Tickle, Norman Bay and St. Lewis (Fox Harbour) and an academic team from Dalhousie University, that aims to identify community perspectives related to human and environmental wellbeing, development and sustainability, using diesel and renewable energy as concrete examples.

Methods: Semi-structured, qualitative individual (n=7) and group interviews (n=3) and focus groups (n=3), with a total of 17 participants were conducted in three off-grid NunatuKavut communities: Black Tickle, Norman Bay, and St. Lewis (Fox Harbour). Open-ended questions were asked to stimulate discussion on five thematic areas: land, health, diesel, renewable energy and sustainable futures.

Results: NunatuKavut Inuit sustainability is wholistic; it is a complex equation of resources, needs and opportunities, where the wellbeing of humans and environments is just as important as economic development. Planning for those sustainable futures should be embedded in those communities' deep, reciprocal relationship with the land-water-air, and informed by Inuit decision-making practices.

Conclusions: NunatuKavut communities aim to create strong, self-determined and sustainable futures informed by their own definitions of sustainability. This paper works with and for NunatuKavut communities to support resurgent futures and builds on the work of NunatuKavut Inuit scholars and collaborators to bolster what is known about NunatuKavut Inuit within academia.
Keywords: NunatuKavut Inuit, sustainability, wholistic wellbeing, decolonization, qualitative research

Introduction

Inuit have lived since time immemorial on the lands, waters and ice that they call home in NunatuKavut, their traditional territory which stretches across south-central Labrador. Many NunatuKavut Inuit continue to live in small communities along the South east Coast, according to traditional and contemporary Inuit values, continuing to live according to their deep, reciprocal relationship with the land. A strong, culturally-rooted sense of place, and a deep, reciprocal relationship with the land-sea-ice-air are central to NunatuKavut Inuit ways of knowing and being (Martin, 2011).

For millennia, NunatuKavut Inuit have been living sustainably on their lands, practicing seasonal transhumance, following seasonal patterns of movement between fishing, gathering, hunting, shelter and cultural grounds (Clarke & Mitchell, 2010; Martin, 2011). Aiming to homogenize Inuit culturally and economically, colonial governments and religious groups pressured NunatuKavut communities to settle into permanent, year-round communities in the 1960s (Martin, 2011; Mercer & Hanrahan, 2017). Today, outmigration for work, education and as a result of reduced government support is impacting population numbers in NunatuKavut. Despite these challenges, Inuit continue to practice seasonal transhumance as they move around their territory to be close to resources, economic opportunity or family throughout the year (Martin, 2011; Mercer & Hanrahan, 2017). As they have always done, Inuit have been adapting and identifying innovative ways to continue to live upon their lands and provide for their families. They are autonomous and resilient as they continue to live according to their own culture and ways of being.

The deep, reciprocal relationship with the land is essential to NunatuKavut Inuit lifeways. However, Inuit autonomy is threatened by colonization. Inuit rights and

responsibilities to NunatuKavut are often jeopardized by colonial desires for land and resources. This pattern of colonial appropriation, as evidenced throughout Canada and elsewhere globally, is often focused on extracting valuable resources to benefit the settler majority, leaving Indigenous lands ravaged and Indigenous communities struggling to maintain their way of life (Bennett, 2013; Ley, 2015; Simpson, 2014). For NunatuKavut Inuit specifically, this has resulted resettlement programs (a program of forced relocation of whole communities popular with the Newfoundland and Labrador government), loss of land to large-scale developers, and the resulting outmigration of Inuit to larger centres for education and employment.

NunatuKavut Community Council (NCC), the elected governing organization of NunatuKavut Inuit, exists to "ensure the land, ice and water rights and titles of its peoples are recognised and respected" (J. Bull & Hudson, 2018, p. 1; NCC, 2013). In the face of ongoing colonization, appropriation of lands, resettlement and outmigration the NCC have been leading a *Community Governance and Sustainability Initiative* (CGSI), led by Amy Hudson (NCC Research Education and Culture Manager; Memorial University PhD Candidate) (Hudson, forthcoming-a; NCC, 2018; Wolfe, 2006). The CGSI engages a decolonial, strengths-based approach to create space for community sustainability planning that is led by the values, goals and interests of communities (Amy Hudson, 2019, personal communication). The CGSI supports communities in pursuing sustainable community planning through research and capacity-building, revitalization and resurgence, on their own terms.

In this way, the CGSI identified sustainability goals and interests in those three communities and worked with communities to pursue interests. In collaboration with communities, goals and pathways forward were identified based on community strengths and values (Hudson, forthcoming-a). Recognizing the importance of wellbeing to Inuit lifeways and sustainable futures, the CGSI also identified the need for research around the interconnections between community sustainability and wellbeing. In turn, energy security and autonomy arose as especially pressing sustainability issues due to political and economic uncertainty in the region (Mercer et al., 2018). While energy transition from diesel to renewable energy is just one possibility for development in NunatuKavut, in this thesis research, they provide a concrete example through which to frame the

opportunities, challenges and concerns NunatuKavut Inuit have about diverse development possibilities on their territory. CGSI visioning exercises, in addition to a larger research initiative, A SHARED Future[3], led to a multi-phase research project entitled *Towards Energy Security in NunatuKavut*, which aims to understand NunatuKavut Inuit perspectives on sustainability, diesel and renewable energy transitions, and wellbeing within their communities. This paper represents the first phase of *Towards Energy Security in NunatuKavut*.

It is important to outline the terminology used to represent the 'traditional territory' of NunatuKavut Inuit in this academic report. Participants described the land, the sea, the air, the freshwater rivers and ponds, the 'mash' (bog), the ice, and other aspects of the natural world with which they have deep, reciprocal relationships. Generally, we use 'traditional territory' as a catch-all term to describe the totality of these things; other times we use 'land' or 'water' or 'land-sea-air-ice'. Throughout data collection, the term 'land' was used; no one corrected or challenged it, but we recognized the inadequacy of this word. These terms reduce to a single word the gravity and diversity of the natural world that supports NunatuKavut Inuit lifeways; however, we have settled on a few representative terms.

Background on Sustainability & Wellbeing

Sustainability is one of the foundational concepts of this paper. However, it is a nebulous concept, widely used in academia with the assumption that it is universally understood, but with many different understandings that make it impossible to precisely define. In the following section, we first summarize academic definitions of sustainability, common critiques of 'sustainability science', community sustainability, and Indigenous conceptions of sustainability. Sustainability is deeply entwined with wellbeing of humans, communities and the environment; the second part of this section describes Indigenous conceptions of wellbeing as they apply to sustainability, and as they

[3] Achieving Strength, Health, and Autonomy, through Renewable Energy Development for the Future (A SHARED Future) is a 5-year CIHR team grant, with a focus on healing and reconciliation through reducing diesel dependency. The project is co-led by Heather Castleden (Queens University) and Diana Lewis (Western University). *Towards Energy Security in NunatuKavut* is one of several concurrent projects across Canada.

strengthen this work. Finally, we assert the importance of decolonial theory in the design, implementation and dissemination of this research.

Throughout, we use the bakeapple as a concrete representation of sustainability. Bakeapples are ubiquitous in NunatuKavut; they grow every summer on the mash (bog) in and around communities (Anderson et al., 2018; Karst & Turner, 2011). Bakeapples are a keystone of sustainability in NunatuKavut. They support food, economic, social, cultural and wellbeing systems in NunatuKavut communities, and are a cultural icon (Anderson et al., 2018; Karst & Turner, 2011). Community members were excited to share their bakeapples, and the stories and knowledge about bakeapples in their communities. Bakeapples helped us to build t relationships and include NunatuKavut specific knowledge and background alongside our findings. They illustrate NunatuKavut sustainability, and the true complexity of wholistic sustainability. Framing this piece with bakeapples seeks to support NunatuKavut Inuit efforts towards decolonization, in direct response to continued colonization, elimination, and destruction of lands; by using Inuit words, stories and cultural emblems, we affirm NunatuKavut Inuit presence, and belonging within academia.

Intersecting Sustainability, Community, and Indigenous Ways of Being

Brought to the fore by the 1987 *Report of the World Commission on Environment and Development: Our Common Future,* the term 'sustainable development' was used to describe economic development that also supported social and environmental sustainability (Brundtland Commission, 1987). Sustainability became increasingly popular in the decades following the Brundtland Report, without a precise, widely accepted definition; as a result, it has become a buzzword, used frequently but without common understanding, strength or conviction (Dahl, 2011; Lew, Ng, Ni, & Wu, 2015; White, 2013). Over the years, the definition of sustainability has changed to align with the needs and goals of whoever is using the term and has been used to inform corporate policies, government planning and more (Green, 2001; Lew et al., 2015; Sneddon, Howarth, & Norgaard, 2005; Storey, 2010). New models and conceptions of sustainability have arisen that add factors such as culture and history, and that focus on the interconnections and relationships between factors (Alexander et al., 2003; Valentin & Spangenberg, 2000).

Community sustainability is described most broadly as the ability of communities to survive and flourish (Lew et al., 2015; Magis, 2010). Community sustainability takes into account economic, social and natural environments in which communities exist, and recognizes that communities cannot always control those environments (Magis, 2010). This branch of sustainability literature is even more ambiguous than sustainability as a whole; it is relatively new and still being defined through research and community usage of the term (Storey, 2010). Community sustainability is closely entwined with community resilience; community sustainability focuses on the conservation of community, while community resilience focuses on the ability of communities to adapt to changes (Lew et al., 2015; Magis, 2010).

Sustainability is considered to be inherently interdisciplinary. However, as it often fails to engage with social and cultural aspects of communities, it rarely addresses Indigenous ways of knowing about sustainability (Johnson et al., 2016). Sustainability is not a new concept within Indigenous ways of knowing and communities have worked to exist sustainably since time immemorial (Trosper, 2002). Indigenous peoples maintain intimate knowledge and deep relationships with their territories and communities, actively stewarding their lands and waters, leading to sustainable communities (Johnson et al., 2016; Martin, 2011; Whyte, Ii, Jay, & Johnson, 2016). Sustainability, as a general concept and practice, should work to include Indigenous knowledge and protocols as relevant, meaningful and central to community sustainability (Eichelberger, 2014; Johnson et al., 2016; Whyte et al., 2016). Further, sustainability scholarship should address the powerful colonial forces that structure inequality and vulnerability in Indigenous communities (Eichelberger, 2014). State pressures to eliminate Indigenous peoples through assimilation, civilization and violent destruction has resulted in threats and harms to Indigenous sustainability, through the forced breakdown of Indigenous ways of knowing and governance (Eichelberger, 2014; Wolfe, 2006).

For NunatuKavut Inuit, sustainability means communities flourish, with secure economies, food and water systems, healthcare and education services, populations, local infrastructure, social and cultural systems, and more (Hudson, forthcoming-a, forthcoming-b; NCC, 2018). NunatuKavut Inuit are not seeking textbook sustainability as it is defined by the colonial academy; they are seeking to be sustainable according to

Inuit culture and ways of knowing, embedded within their way of life and continued care for their traditional territory, and in ways that support a resurgent and decolonized future (Hudson, forthcoming-a, forthcoming-b).

Decolonization means autonomy of Indigenous lands, bodies, identities, knowledges and emotions and that Indigenous peoples are able to maintain the relationships they have with their traditional territories (Christie, 2014; Martin, 2011; Nason, 2013; Simpson, 2014). NunatuKavut Inuit are seeking autonomy and self-determination of their lands and lifeways; after centuries of colonization, empowerment and resurgence are key to sustainable futures in NunatuKavut (Clarke & Mitchell, 2010; Hudson, forthcoming-a; Ley, 2015; Mercer et al., 2018; L. B. Simpson, 2014; Wolfe, 2006). NunatuKavut Inuit are seeking sustainable futures that are embedded within their deep reciprocal relations with the land-sea-air-ice and focusing on empowered, resurgent futures.

Tying Indigenous Wellbeing into Sustainability

In NunatuKavut, sustainability is deeply embedded with wellbeing, land and culture[4]. This is especially apparent in NunatuKavut, where Inuit rely on deep, reciprocal relations with the natural world, drawing their way of life from their traditional territory (Martin, 2011). In exploring the intersections of sustainability, land, and wellbeing, this paper draws from scholarship on Indigenous wellbeing, as it sees the importance of interconnections of wellbeing, humans, communities and environments (Greenwood, de Leeuw, & Lindsay, 2018; Marmot, Friel, Bell, Houweling, & Taylor, 2008; Russell et al., 2013). While Western health scholarship is just beginning to accept the wholism of wellbeing, Indigenous peoples have been attentive to the wholistic nature of wellbeing since time immemorial (Brant Castellano, 2018; Martin et al., 2018; Prosper, McMillan, Davis, & Moffitt, 2011). Indigenous wellbeing scholarship asserts the importance of continued relationships with land, community, and culture; highlighting the importance of access and lived knowledge of the land-air-water-ice, (Martin, 2011; Obed, 2017).

[4] Generally, this research uses the term wellbeing to underline the complex, wholistic and fluid nature of human health, as well as to include Indigenous, decolonial conceptions of wellbeing. Health is generally used for Western conceptions of human wellbeing (ex// physical health, mental health, healthcare, etc.). The term ‘health’ is used in the research materials, as it is the most concrete and commonly used term.

In NunatuKavut, as in Indigenous communities globally, cultures and traditions are often centred around the land, through food harvesting and other cultural activities (Expert Panel on the State of Knowledge of Food Security in Northern Canada & Council of Canadian Academies, 2014; Martin, 2009; Tobias & Richmond, 2014). Accessing country foods, and thereby stewarding their traditional territories, is a cultural activity that supports resurgence and empowerment of Indigenous communities, and encourages relationship building within families and communities, across generations and between knowledge holders (Expert Panel on the State of Knowledge of Food Security in Northern Canada & Council of Canadian Academies, 2014; Martin, 2011). In NunatuKavut, that may mean picking bakeapples, fishing for salmon or cod, or putting out shrimp or whelk pots; all of these activities require physical engagement with the land, but also sharing of work and knowledge within communities.

The literature on Indigenous wellbeing underscores the intimate relation between land and wellbeing, describing many of the diverse links between Indigenous cultures and their territories. For example, language flows from the land, and the land provides opportunities to reconnect with language and culture (Brown, McPherson, Peterson, Newman, & Cranmer, 2012; Tobias & Richmond, 2014; Wildcat, McDonald, Irlbacher-Fox, & Coulthard, 2014). Craft, art and performance often engage with natural products, such as caribou hide, sinew and fish bones, and in or near natural spaces. Not only is the importance of land to Indigenous wellbeing overwhelmingly evident, but it is complex and nuanced; land is important as a source of food, but is also foundational to identity, language, sense of place, sense of belonging, culture and governance (Martin et al., 2012; Richmond & Ross, 2009; Tobias & Richmond, 2014; Wildcat et al., 2014). Unsurprisingly, separation of Indigenous peoples from their traditional territories, including barriers to autonomy, physical, spiritual, emotional and intellectual engagement with the land, due to colonization has significant impacts on Indigenous wellbeing (Czyzewski, 2015; Richmond & Ross, 2009).

Wellbeing is positively associated with strong social and cultural supports; socioeconomic status; hygiene; water quality; affordable, nutritious and culturally appropriate food; and adequately heated and powered homes (Greenwood et al., 2018; Martin et al., 2012; Richmond & Ross, 2009). Wellbeing is negatively associated with

isolation, social exclusion, racism, discrimination and colonization (Czyzewski, 2015; Reading & Wien, 2009a). Further, individuals in NunatuKavut communities facing sustainability crises are constantly worried about the future of their family, their home and their way of life, and are concerned about the impact a changing environment may have on their lifeways. These kinds of stresses can also impact wellbeing (Reading & Wien, 2009b).

This literature on Indigenous wellbeing makes it clear that wellbeing is integral to life. In turn, wellbeing is central to sustainability. Land is essential to Indigenous life, and sustainability focuses on protecting and upholding those ways of life. The land-sea-air-ice from which NunatuKavut Inuit draw lifeways, is not simply a food resource or an economic opportunity but is woven into the fabric of NunatuKavut being. The relationship with the land is deep and reciprocal, flowing from millennia of shared experience and stewardship, give and take from the land that allows both to flourish (Martin, 2011). NunatuKavut Inuit are not only seeking sustainable futures, but also healthy futures.

Drawing from Decolonial Theory

Decolonial theory critically engages with the structures that create and perpetuate colonization and endeavours to address and break down violent colonial oppression. It is useful to draw from the principles of decolonial theory to study sustainability in NunatuKavut. NunatuKavut communities are resurgent, and empowered, and are seeking autonomy and self-determination of their lands and peoples. Decolonial theory guides the research in ways that support the goals of the NunatuKavut community collaborators in pursuing their own sustainable futures.

Decolonial theory reaffirms the interconnection of sustainability and community with land, culture and tradition (Simpson, 2014; Yang & Tuck, 2012). It also provides a valuable critique of sustainability science, that requires a breakdown of traditional understandings of sustainability, community and knowledge.

Throughout this report, we apply decolonial thinking by using the bakeapple as a concrete representation of sustainability. Bakeapples are ubiquitous in NunatuKavut, growing every summer on the mash (bog) in and around communities (Anderson et al., 2018; Karst & Turner, 2011). Bakeapples are a keystone of sustainability in

NunatuKavut. They support food, economic, social, cultural and wellbeing systems in NunatuKavut communities, and are a cultural icon (Anderson et al., 2018; Karst & Turner, 2011). Community members were excited to share their bakeapples, and the stories and knowledge about bakeapples in their communities. Bakeapples provided context and background, helped us to build relationships and strengthen our findings. They are used here to illustrate NunatuKavut sustainability, and the true complexity of wholistic sustainability. Framing this piece with bakeapples also makes space for Inuit narratives within academia, in direct response to continued colonization and destruction of lands; by using Inuit words, stories and cultural emblems, we aim to affirm NunatuKavut Inuit presence, and belonging within academia.

Methods

Methodological Foundations

This project is grounded in community goals and values, NCC's CGSI and NunatuKavut Inuit research governance are the foundations of this work (J. Bull & Hudson, 2018; Hudson, forthcoming-a, forthcoming-b). Second, this research is framed by applying the principles of decolonial theory. NunatuKavut Inuit are seeking resurgent, empowered futures and the language of decolonial theory helps the research team to translate the sustainable futures described by NunatuKavut Inuit participants into the academy. Finally, this research draws from community-based participatory research (CBPR) for tools to help the academic researchers to do research that is equitable and ethical, in an aim to address longstanding colonial oppression within the academy.

Role of the Researchers

Towards Energy Security in NunatuKavut is co-led by Dr. Debbie Martin (Dalhousie University) and Amy Hudson (NCC Research, Education and Culture Manager), both NunatuKavut members. The primary researcher (Beacock) was invited by Martin and Hudson, to undertake research as part of *Towards Energy Security in NunatuKavut* as a part of her Master of Environmental Studies at Dalhousie University. Ms. Beacock's positioning as a settler and an outsider in NunatuKavut undoubtedly influenced data collection, results and conclusions drawn from this study. She was mentored throughout the process by Martin and Hudson and worked with community research collaborators Siobhan Slade (St. Lewis/Fox Harbour), Abigail Poole (St.

Lewis/Fox Harbour) and Stacey Keefe (Black Tickle) to ensure the research aligned with community goals and values. Ms. Beacock collected her data in tandem with Nick Mercer (PhD Candidate, University of Waterloo), as he collected data for his PhD project. Dr. Karen Beazley (Dalhousie University) provided guidance and editorial contributions.

Collaborating Communities

This study took place in Black Tickle, Norman Bay and St. Lewis (Fox Harbour), all of which are located on the south-east coast of NunatuKavut. These three communities were chosen by NCC to be a part of this research: (i) they are identified in NCC's *Community Governance and Sustainability Initiative* as having the most pressing sustainability issues across the territory; (ii) they are among the smallest, most remote, off-grid communities within NunatuKavut; and, (iii) in the face of urgent sustainability crises, these communities continue to assert their right to continue living in their homes, according to their traditional and contemporary ways of being.

Black Tickle is the northernmost of the three communities, formerly a major global fishing station which closed in 2012 and has a population of approximately 105 people. Located on a rugged, treeless tundra island, community members are quick to tell you they have the best bakeapples in the world. Black Tickle is accessible year-round by airplane, in the summer by a public ferry, as well as by speedboat, and in the winter by snowmobile. It has an airport, an all-grade school, a health clinic, two convenience stores, a post office, and no water or sewer infrastructure (Mercer & Hanrahan, 2017). The water treatment plant is located outside of the community, and community members haul barrels of water from there for drinking, cooking, hygiene and other purposes (Mercer & Hanrahan, 2017).

St. Lewis, known by many locals as Fox Harbour, is the largest of the three communities, with a population of approximately 180 people. St. Lewis (Fox Harbour) is connected to Goose Bay and the Quebec north shore by road, through a combination of paved and gravel roads that make up the Trans-Labrador Highway. St. Lewis (Fox Harbour) has an airport, an all-grade school, a health clinic, three convenience stores, a post office, and water and sewer infrastructure throughout most of the community (Martin, 2011; Martin et al., 2012). While their fish plant closed in 2012, the fishing

industry remains a major economic driver, although increasingly residents are employed by major resource development projects within Labrador (e.g., Muskrat Falls, Voisey's Bay) (Martin, 2011). A majority of houses in the community are connected to water and sewer infrastructure, but some are not. High paying jobs outside of the community often allow residents to continue to support their families at home. Despite road connectivity, St. Lewis (Fox Harbour) faces sustainability challenges as the population ages, and youth move away for employment and other opportunities.

Norman Bay, the smallest community, has a summer population of 13 and a winter population of 19 people. Serene and beautiful, it has an all-grade school, no community-wide water and sewer infrastructure and is serviced throughout the summer by a publicly subsidized helicopter (Martin et al., 2012). There is no store, no post office, no medical clinic, no ferry, and no airport in Norman Bay; community members travel to Charlottetown by helicopter or boat in the summer and snowmobile in the winter to reach essential services (Martin et al., 2012). For several weeks in the spring and fall, Norman Bay is isolated and accessible only by emergency rescue helicopter.

In Black Tickle, Norman Bay and St. Lewis (Fox Harbour), community members are welcoming and delighted to share their beautiful, resilient communities. All three are breathtaking, with whales and polar bears frequently passing by, and community members quick to point out the nearest berry patch, the best view or how to avoid a bear. The depth of traditional ecological knowledge and the strong reciprocal relationship between community members and the land-sea-air-ice is clear, and their ongoing stewardship and care for their territory defines their way of life. Despite decreasing populations, community members continue to actively pursue sustainability for their communities and for all of NunatuKavut.

All of NunatuKavut's coastal communities are off-grid, powered by diesel plants operated by Newfoundland and Labrador Hydro. The impacts of diesel in NunatuKavut communities are diverse and complicated. Diesel plants provide reliable electricity and high-quality jobs within communities, and communities are comfortable with diesel because it is what they have been using successfully for decades (Mercer et al., 2018). However, diesel-generated electricity rates are astronomically high, and communities lack ownership and decision-making power over their energy systems (Mercer et al.,

2018). This lack of autonomy is especially clear as major resource extractive developments take place on NunatuKavut, often in direct conflict with Inuit autonomy and rights.

Research Ethics

This research received ethics approval from NunatuKavut Community Council Research Advisory Committee, as well as the research ethics boards at the institutions of all affiliated researchers (Nick Mercer, University of Waterloo Office of Research Ethics). This research follows the principles of the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (Canadian Institute of Health Research et al., 2014).

Oral informed consent was sought by reviewing the provisions with the potential participant, and considered obtained when the researcher recorded the participant's oral consent (i) to participate in the study, (ii) to be recognized as a participant, (iii) to have their quotes used, and (iv) to have their name associated with those quotes. Only those who agreed to be recognized as contributors, as well as those who agreed to have their name listed alongside their quotes, are identified by name; those who agreed to have their quotes used without attributing their names, and those who participated in focus groups, are identified as 'Participant' throughout the academic report. Participants were provided the opportunity to remove themselves and/or their data from the study for up to one month after their interview or focus group.

Institutional ethics approvals are not the only important parts of ethical research in Indigenous communities. This research is embedded within NunatuKavut Inuit goals and values and is a direct result of their own plans for sustainable futures. This is captured in the research agreement signed by Amy Hudson and Debbie Martin, to structure the relationships and negotiations that define *Towards Energy Security in NunatuKavut*. This research agreement clearly outlines the purpose; scope; methods; community engagement and participation; how information will be collected, stored and protected; informed consent processes; and dissemination. The research agreement also describes how changes, benefits and risks will be negotiated and balanced between academic and community partners. This agreement draws from Indigenous research methodologies, helping the entire research team to do research that is ethical and meaningful, as defined

by the NunatuKavut communities who participated in the study (J. Bull & Hudson, 2018; Hudson, forthcoming-a; Tuhiwai Smith, 1999; Wilson, 2008).

Research Instruments

The primary data collection tools used in this study were focus groups and interviews; both were chosen because they are flexible, dynamic and culturally-appropriate (Berg, 2004; Rabiee, 2005). They allowed the researchers to sit down and have a conversation, over a cup of tea, in a way that is more relaxed and informal than a formal, structured interview. The intent was to let community members tell us the things that matter most within their communities.

The interviews and focus groups used semi-structured discussion guides (see Appendix 1) focused around community perspectives and understandings on five themes: land, health, diesel, renewable energy, and sustainable futures. Each theme had several guiding questions, intended to stimulate discussion with participants; however, discussion was not limited to those questions, and participants were invited to discuss whatever they thought was important within the broad themes related to health, land-sea-air-ice, development and community sustainability. Land-sea-air-ice was used to describe the natural environment. Participants were not limited to discussions of diesel and renewable energy, however, these topics provided participants with a starting point to discuss sustainability within their communities. The research instruments used the word ‘health’, rather than ‘wellbeing’; however, participants were invited to think broadly about their health, including wellbeing and feelings of being healthy or unhealthy.

All focus groups and some of the interviews were audio-recorded, with the researcher taking additional notes for all focus groups and interviews. Findings based on the data from all interviews and focus groups are included in this paper.

This study was designed using academic principles of community-based participatory and decolonial theory; equally important in defining this research are NunatuKavut communities (Drawson et al., 2017; Tuhiwai Smith, 1999; Wilson, 2008). This study was supervised and mentored by Martin and Hudson, both NunatuKavut Inuit, guided by priorities identified by community members through the CGSI, and the results reviewed and discussed with community collaborators. The concerns, values, feedback and guidance of communities throughout this research project have been essential.

Participant Recruitment & Data Collection

Adult (18 years or older) community members from Black Tickle, Norman Bay and St. Lewis (Fox Harbour) were invited to participate in a focus group or an interview. The focus groups were designed as semi-formal group discussions (2 to 8 participants), advertised and held in public locations. The interviews were designed to be casual and spontaneous and were often held with people we had developed relationships with. Individual and group interviews (up to 3 participants) were also held. Both methods used the same semi-structured question guide.

Focus groups and interviews were advertised in several ways: snowball sampling spread by word of mouth, social media, and posters, and targeted recruitment of participants identified by research team members and community collaborators. One focus group was held in each study community, with three participants in Black Tickle, two participants in St. Lewis (Fox Harbour) and two participants in Norman Bay. Four individual interviews and one group interview (two participants) were held in Black Tickle. Three individual interviews and two group interviews (two and three participants respectively) were held in St. Lewis (Fox Harbour). In total, there were 17 participants across the three study communities.

Data were collected in Summer 2018. Beacock spent two weeks in Black Tickle, three weeks in St. Lewis (Fox Harbour), and one week in Norman Bay.

Data Analysis, Dissemination & Continuing Conversations

Emily Beacock, the lead researcher undertook all aspects of analysis. Audio recordings and notes taken during data collection were transcribed and analyzed through emergent, thematic coding. In-text analysis software, Atlas.Ti was used to assist coding Data analysis occurred in three stages: 1) concurrent analysis –themes and concepts were tracked as they arose throughout data collection; 2) preliminary review –summaries of emergent themes and concepts based on concurrent analysis were prepared and returned to participants, allowing for community feedback and guidance through community meetings in subsequent stages of analysis and dissemination; and, 3) thematic coding – important themes were drawn out from transcripts and notes.

Community collaborators provided guidance, insight and clarification throughout the data analysis and writing phases. Emergent themes were orally presented to

community members and NCC representatives for review at the mid-point (January 2019) of the analysis process. Community feedback from this event was used to inform the final stages of analysis, and dissemination in the community report and throughout the thesis. A complete summary of results was presented to participants, community leaders and NCC, who were invited to provide feedback prior to publication (Summer 2019). The discussion and review of the results summary helped to guide the final stages of thesis writing. It also allowed us to 'double check' the results and analysis with participants and community collaborators prior to final thesis submission. This final stage of feedback is ongoing, as we reformat this academic manuscript for publication and continue community engagement and dissemination of these results.

Results

The following results section highlights four themes that arose from the interview and focus group data. Filtered through the three-stage analysis process, three main themes came from the data. First, sustainability is wholistic, which means that healthy land, people, and economies means a healthy future. Second, that autonomy is integral to sustainable futures in NunatuKavut. Third, that NunatuKavut Inuit are moving towards their own sustainable futures.

Sustainability is Wholistic: Healthy Land, Healthy People, Healthy Economies and Healthy Futures

Over millennia living on their traditional territory, NunatuKavut Inuit have developed their own conceptions of sustainability. Those conceptions of sustainability are wholistic, a complex equation of resources, opportunities and threats, embedded within deep, reciprocal relationships with land and community, existing within Inuit governance structures. According to NunatuKavut conceptions of sustainability, the wellbeing of economies, including economic development, must be balanced with the wellbeing of humans and the environment for Inuit communities to flourish into the future.

In this study, participants described those conceptions of sustainability by telling us what sustainable futures look like to them: diverse, high-quality jobs; healthy, accessible food; better education and healthcare; water and sewer infrastructure; government support and infrastructure, including community halls, transportation and energy;

community autonomy, self-governance and empowerment; community spirit; safe spaces and opportunities for youth; supports for seniors; a growing population; and, flourishing NunatuKavut Inuit culture. This is a partial list; it is unlikely to have captured every aspect of sustainability; instead, it provides a baseline of what sustainable futures could look like in NunatuKavut. In the end, development is a part of NunatuKavut sustainability, but as equal to the health of humans and the environment; development can only be carried out through conceptions of wholistic sustainability and in relation to the land-sea-air-ice.

Participants also identified clear connections between the wellbeing of the natural environment and the wellbeing of humans, including physical health, mental health, sense of safety, connection, belonging, and culture.

> "Well, as a community, and as a cultural person, the land and the air and the water and everything around here has always provided us with a way of life, a way of living, a way of keeping our families fed." (Wendy Strugnell, St. Lewis/Fox Harbour)

They also described how NunatuKavut Inuit culture and lifeways are tied to place and community. Cultural and recreational activities take place out on the land, with boil-ups, camping, skidooing and boating commonly described. Harvesting of country foods, including berries, fish, and moose, require intimate knowledge of land and waterways, and relationships with family, friends and community.

> "I think that if the family, your parents, didn't carry it down from their parents, it just kind of gets lost. And, if the youth don't get it from their parents or their elders, they don't just think, 'Okay, I'm gonna go berry picking'. And maybe some do… I think it's more of a tradition." (Abigail Poole, St. Lewis/Fox Harbour)

Parents want their children to grow up with the same sense of freedom, close relationship to the land-air-water-ice, and in a healthy, safe community. Connection to the land-sea-air-ice results in more intergenerational knowledge sharing and relationship building. Participants described never wanting to leave their homes, and that having to move away from the sea, the hills and the bogs that surround their communities would be detrimental to their wellbeing. Some described how the land impacts their wellbeing, the

positive impacts of their intimate relationship with the land, as well as how moving away would leave them feeling lost, sad or depressed. These results make clear not only the complex web of resources, opportunities and strengths that make NunatuKavut Inuit communities sustainable, but also the fundamental link between the wellbeing of humans, their communities and the environment.

Autonomy is Integral to Sustainable Futures

These results show that sustainability is complex, and no single solution is possible for the myriad challenges NunatuKavut communities face. In this study, we picked just one challenge, energy security, to start the conversation. We used diesel and renewable energy as concrete ideas to talk about economic development, future planning and community perspectives on sustainability. Generally, participants see diesel as an important part of their community. Diesel plants not only provide safe, reliable and consistent electricity, but also bring several high-quality jobs to communities that do not have an abundance of employment. However, participants also recognize the downsides, including spills, fumes and high costs. In the end, participants want the best, healthiest, safest, most reliable, cost-effective and environmentally friendly option to power their communities.

Participants described how they want control of their diesel plant, because it allows them control of their futures. In the case of Black Tickle and Norman Bay, the diesel plant is one of the last sources of government support that is keeping communities afloat. If they control the energy infrastructure in their communities, they do not have to rely on the government to maintain (or take away) their access to energy, and thereby, their right to stay in their communities.

> "I'd rather get away from the diesel; I'd rather for us to have something that just does it on its own, … because in my eyes, the government right now can come in and be, like, we're taking Hydro; and, it's like, if we had our own little wind thing, or our own little solar thing, well you can't take that from us!" (Jennifer Keefe, Black Tickle)

With diesel generation currently playing such a nuanced role in each community, any discussion about getting off diesel has to foreground community autonomy, be embedded within a broader conversation, and ensure the transition supports all aspects of

the community, to ensure NunatuKavut Inuit can continue to live according to their values and culture. Renewable energy could be a pathway to future sustainability; it could be cheaper, more environmentally friendly, and integrated with diesel to ensure continued reliability and improved energy autonomy. For renewable energy developments to be sustainable within NunatuKavut, they must support NunatuKavut communities first and foremost. Participants were clear that any conversations about energy transitions, renewable or otherwise, have to come from communities, and support community empowerment, autonomy and self-determination.

Across all three communities, participants made clear their desire and right to autonomy and self-determination as NunatuKavut Inuit. In response to questions about economic development and future planning one respondent said:

> "We should know [about development on our land]. We have the right, this is our land, this is where we live, this is where our children play. This is where we get our food. We have the right to know." (Jennifer Keefe, Black Tickle)

They want to know what development would look like, how it would impact the land-sea-air-ice and how it would benefit the community. With regards to energy development, they want to know whether any potential development would be reliable; how it would be maintained; whether it would provide high quality jobs; how it would impact the environment; where it would be located; how it would impact their use of the land; the financial details; how it would impact the community economy; and how it would impact their lives, and the lives of future generations. Since the onset of colonization, NunatuKavut Inuit rights to self-government have been infringed upon by the colonial state. Participants made clear that they want to make informed decisions for the future of their communities and their territory; they are seeking to strengthen their own autonomy through the governance of energy systems, land-water-air-ice and flourishing NunatuKavut Inuit communities into the future.

Looking Towards Sustainable Futures in NunatuKavut

> "You know the saying, the future's so bright you have to wear shades?" (Minnie Slade, St. Lewis/Fox Harbour)

These results show that NunatuKavut Inuit believe in their own sustainable futures. To get there, they insist that planning for NunatuKavut futures must entail community- and culturally- appropriate pathways to sustainability.

> "Let everybody come in and make their own decisions if they want, as a whole community." (Ovadius Morris, Norman Bay)

They see their right to make decisions about their own sustainable futures as an important part of their rights and responsibilities as Inuit, and they know exactly how they want to go about planning for the future.

> "… this community should have the same bright future as St. John's [Newfoundland] has. We shouldn't have to worry about the school closing their doors, or the nurse walking out, or the Hydro walking away, or anything else walking away. We shouldn't have to worry about that. My grandparents shouldn't have to worry about that, my aunts and uncles, my mom and my dad, or me and my child. Nobody should have to worry, if they have to walk away from their livelihood. Nobody. And I want us to wake up and not have that burden on us. Because a lot of people are so worried about 'when are they gonna kick us out?'. There are so many people worried about that. And it'd be nice for them to not have to worry about that." (Jennifer Keefe, Black Tickle)

Community members want to be informed. They want all the information about sustainability concerns and potential developments. They are seeking open, transparent and trustworthy resources on potential development and its impacts the land-sea-air-ice and their way of life, to help them navigate complex issues within their communities.

> "We should educate on every aspect. So that people are informed, and educated on it, so that the community as a whole can make an educated decision." (Participant, St. Lewis/Fox Harbour)

Participants said that decision-making should be community focused; they want to see more education and discussion in their communities, with consensus whenever possible, making sure to hear everyone's opinion and capture views of marginalized groups within their communities, such as those of youth and elders. The goal of community

autonomy and self-determination in planning for wellbeing, development and sustainable futures was clear.

Community members described diverse but interconnected sustainability challenges in Black Tickle, Norman Bay and St. Lewis (Fox Harbour), and recognize the challenges in addressing diverse sustainability needs. This was described to us by a participant:

> "So, you kinda can't take away one to solve another problem, right." (Participant, Black Tickle)

Participants were clear that initiatives to solve each of those diverse sustainability challenges should consider the sustainability of the whole community, recognizing all community strengths and opportunities. These results underline the need for community- and culturally- centered sustainability stepping-stones, where communities define sustainability initiatives and possibilities for the future, and drive paths towards their own sustainability.

Discussion

Balancing Humans, Nature and Development

NunatuKavut Inuit communities rely on their own conceptions of sustainability, to navigate the balance between the wellbeing of humans and the environment with the need for development. These NunatuKavut conceptions of sustainability are complex and nuanced, focused on the interconnected web of strengths, challenges and opportunities, informed by culture, tradition and values, and deeply embedded within a reciprocal relationship with the land. Through these conceptions of sustainability, NunatuKavut Inuit are planning for their own resurgent, empowered and decolonial futures.

Getting off diesel and transitioning to renewable energy is one possibility; conversations about development (renewables, diesel, or other economic opportunities) must be framed in ways that support sustainable futures, and support community autonomy in the face of continued colonial elimination and appropriation of the land-air-water-ice. Communities are the ones making the plans to bring about their own sustainable futures, and with support from NCC aim to make the healthiest, best decisions for themselves and their territory. However, making the best decisions for their

communities remains difficult when they are not given the opportunity to have full autonomy over their lands and waters.

Indigenous ways of being are informed by their relationship to land; separation from the governance of their lands impacts the ability of communities to know and care for their territories (Simpson, 2014; Wildcat et al., 2014). Sustainability is a pathway to decolonization, by reconnecting with lands, communities and regeneration traditional governance practices, Indigenous communities can live sustainably and resurgently (Corntassel, 2012). Repeatedly, NunatuKavut community members underlined the need for transparent information and resources on issues such as environmental assessment and resource development, to help them navigate complex challenges within their communities. Having the information to make effective decisions founded in culture and values is vital to sustainability (Corntassel, 2012). Communities know what they need to address sustainability, including community- and culturally- appropriate planning and decision making, transparent educational resources to make the best decision for the community as a whole, and support from all representative governments, to make those decisions for sustainable futures in a good way.

The deep, reciprocal relationship with their territory, means NunatuKavut Inuit have a right and responsibility to the land-sea-air-ice. Their sustainable futures mean the continued stewardship of NunatuKavut. NunatuKavut Inuit sustainability means balancing the wellbeing of humans and the environment in navigating development, to ensure the future of NunatuKavut Inuit and their territory alike. In continuing to live sustainably, according to their relations with land and community, NunatuKavut Inuit are pursuing decolonization and resurgence.

A Study in Bakeapples: Understanding NunatuKavut Sustainability

NunatuKavut sustainability is about survival of Inuit lives and lifeways, and flourishing Inuit realities in the future. Wellbeing, of land and humans, plays an elemental role in NunatuKavut sustainability. The results show NunatuKavut Inuit see diverse paths to sustainability in their communities: diesel, renewable energy or infinite other opportunities, but that these paths must include NunatuKavut Inuit voices in all aspects of decision-making to move forward into a decolonial future. We demonstrate the

importance of Inuit culture and values in NunatuKavut perspectives of what sustainability means for them, in determining the best pathway for them towards sustainable futures.

Participants did not always use the word 'sustainability'. They talked about the future, the things they want for their children and their children's children, the opportunities they are fighting for and the threats they are protecting against. Participants talked about the future of their communities as reality, making it clear that they are working hard for that future, and for what is best for the whole community. The word 'sustainability' is used here because it means to sustain, for NunatuKavut Inuit to continue sustaining themselves as they have for millennia, and to more forward into the future in Inuit ways. It is the word chosen by NCC through the NunatuKavut *Community Governance and Sustainability Initiative* to capture all of the concerns that, communities brought to the table. We continue to use the term sustainability here to align with the Sustainability Initiative, and to contribute to the body of work NCC is building to support their member communities.

Participants told stories about fishing, camping, boating and harvesting plants, but one feature of these stories arose again and again: bakeapples. Bakeapples are a keystone element of NunatuKavut Inuit ways of being and provide an exceptional metaphor for NunatuKavut sustainability. Bakeapples, like sustainability, are complex, made up of many small, interconnected parts, and embedded within land and Inuit culture. To support Inuit voices and resurgence, we use bakeapples, described to us as an important aspect of NunatuKavut culture, as a metaphor for sustainability: complex, interconnected and integral to life in NunatuKavut.

A large, vibrant, orange-pink, segmented, berry (like a blackberry), bakeapples grow on the mash (bog). Picking bakeapples is hard, because they grow out in the hot sun, on a bog that sinks into murky water with every step. They ripen in August, dependent on just the right weather in spring and summer. NunatuKavut Inuit have been picking bakeapples forever. Inuit increasingly rely on commercial foods that are low quality, expensive and/or unavailable altogether; bakeapples are a nutritious, tasty and culturally-appropriate food source (Martin, 2011; Martin et al., 2012).

Like sustainability, bakeapple picking rarely happens alone. Instead couples, families and friends pick together, and bakeapple picking is often an opportunity for

intergenerational knowledge sharing, as stories about bakeapples are passed down through generations. Bakeapples are often shared, brought to Elders and those who can't get out on the land, or sold in larger centres for a high price (Martin, 2009; Mercer & Hanrahan, 2017). Bakeapples create opportunities for social and cultural engagement that are pathways to maintaining NunatuKavut Inuit culture, a key part of sustainability.

Bakeapples support sustainability as they are a food source, an economic driver, a generator of cultural and community engagement and are overall an important piece of NunatuKavut Inuit culture. In turn, they demonstrate some pressing sustainability challenges. Many families in NunatuKavut face significant barriers in their day-to-day survival: electricity is expensive; many homes are extremely heat insecure; many homes do not have water and sewer; food insecurity is high; and, there are few jobs that pay enough to support families (Ley, 2015; Martin, 2011; Martin et al., 2012; Mercer & Hanrahan, 2017; Mercer et al., 2018). In some NunatuKavut communities, gas and fuel are in short supply or unavailable altogether; without fuel to go out on the land or out in the boats, bakeapple harvesting can be very challenging (Mercer et al., 2018). Subsidy cuts to the ferry, helicopter and flights, as well as unreliable service, means getting in and out of communities is hard (Mercer et al., 2018). Community members may not have time or resources to go berry picking, when they are focused on paying the bills and heating their homes (Mercer et al., 2018). In fact, people have moved away from their communities to avoid having to deal with sustainability issues (Ley, 2015). Once they leave their homes, they are separated entirely from bakeapples and the many valuable cultural aspects of berry picking. As these sustainability tensions grow - for example, if ferry or airplane transportation is cut completely, the diesel plant closes, or food security increases - the whole community could be in jeopardy. Clearly, such a situation is not sustainable.

As we talk about bakeapples, it underlines that traditional territory, the land-sea-air-ice, is central to NunatuKavut sustainability and that NunatuKavut Inuit are essential to the continued existence of their territory. Sustainability for NunatuKavut Inuit also means they can continue living in relation to the land, ensure continued stewardship of the land-sea-air-ice. NunatuKavut communities face many, diverse sustainability

concerns, but they are all underwritten by a deep desire to keep picking bakeapples, to stay connected to land and continue to live good lives.

Bakeapples have existed on NunatuKavut since time immemorial, just like NunatuKavut Inuit. NunatuKavut Inuit believe in their own sustainable futures and are fighting for them according to Inuit values and culture. After centuries of colonial destruction and appropriation of Inuit culture, with Inuit lifeways falling secondary to colonial resource extraction and settlement, NunatuKavut Inuit see renewable energy and other community- and culturally- centred development as pathways to support sustainable futures, economically, politically and culturally. They highlighted the importance of community autonomy and self-determination, the need for consensus-based and culturally- relevant decision-making to decolonize, resurge and empower themselves and future generations of Inuit in NunatuKavut. They plan to hold community suppers, to engage with youth, elders and marginalized populations within their communities, to hold education events, and make sure everyone's voice is heard. Participants identified the supports they need to achieve sustainable futures: transparent, educated and community-driven research; economic, social and political support; and autonomy to make the healthiest, best decisions for everyone in their communities. In identifying their needs, and actively pursuing solutions, NunatuKavut Inuit are making their own sustainable futures a reality.

The NunatuKavut communities who collaborated on this work conceptualize their own sustainability, without an academic definition: they have lived sustainably, on their traditional territory since time immemorial, meaning NunatuKavut sustainability is well engrained (Hudson, forthcoming-a; Martin, 2011). NunatuKavut Inuit assert the existence and importance of sustainability in Inuit communities in NunatuKavut, and in the global climate as it impacts the land-sea-air-ice (Dahl, 2011; Nalau & Fisher, 2017; Trosper, 2002; White, 2013). This paper, as part of the CGSI, works to support these communities in making space for NunatuKavut ways of being and knowing within academia. In the following paragraphs, we describe how these results are situated within the academic literature.

This research contributes to the growing body of literature led by NCC and NunatuKavut Inuit scholars, that supports their communities to pursue sustainable, ethical

and powerfully Inuit futures and influence a NunatuKavut Inuit knowledge base within the academy (Brunger & Bull, 2011; Brunger & Russell, 2015; Brunger et al., 2016; J. Bull & Hudson, 2018; Clarke & Mitchell, 2010; Hanrahan, Sarkar, & Hudson, 2016; Martin, 2009, 2011; Martin et al., 2012; Mercer & Hanrahan, 2017; Mercer et al., 2018). While NunatuKavut communities have been defining and living according to sustainable lifeways since time immemorial, this study works with and for NunatuKavut communities to support their own definitions of sustainability within the colonial academy.

Indigenous Wellbeing Literature

This paper describes how NunatuKavut conceptions of sustainability are inseparable from conceptions of wellbeing: the results describe how sustainability is being connected to land and ways of being. Healthy humans, environments and economies (including development) are all required for sustainable futures in NunatuKavut. Literature on Indigenous wellbeing supports the connection between sustainability and human and environment wellbeing (Greenwood et al., 2018; Simpson, 2014; Tobias & Richmond, 2014; Wildcat et al., 2014). Indigenous wellbeing literature also makes clear the impacts of colonization on wellbeing, echoing the findings of this paper about the need for resurgent, decolonial and empowered futures in NunatuKavut (Czyzewski, 2015; Reading, 2018). This link between Indigenous wellbeing and sustainability literatures is explored only briefly in this paper; with a focus on wholism and diverse ways of knowing, Indigenous wellbeing literature could be very valuable to understandings of Indigenous sustainabilities.

Sustainability Literature

NunatuKavut conceptions of sustainability also align with the sustainability literature in a general sense – both NunatuKavut sustainability, and other versions of sustainability in the literature want to 'sustain' (Brundtland Commission, 1987; Lew et al., 2015). However, the term 'sustainability' is used broadly, with many diverse meanings, affiliations and political uses (Bolis, Morioka, & Sznelwar, 2014; Dahl, 2011; Hák, Janoušková, & Moldan, 2016; Holden, Linnerud, & Banister, 2014; Lew et al., 2015; Marinova & Raven, 2006; Valentin & Spangenberg, 2000; White, 2013). This diversity is both a blessing and a curse. It makes it hard to apply theories and abstract

concepts of sustainability on the small scale, in specific local and community contexts (Dahl, 2011; Hák et al., 2016; Valentin & Spangenberg, 2000; White, 2013). On the other hand, complex and diverse definitions means there is space within sustainability thinking for alternate world views and decolonial theories (Hove, 2004; Marinova & Raven, 2006; Nalau & Fisher, 2017; Sneddon et al., 2005). NunatuKavut conceptions of sustainability are supported by other Indigenous sustainabilities asserted in academic literature (Johnson et al., 2016; Marinova & Raven, 2006; Nalau & Fisher, 2017; Whyte et al., 2016). These sustainabilities are diverse and wholistic, often highlighting the reciprocal relationship Indigenous communities have with their traditional territories and the importance of traditional knowledge and lifeways (Johnson et al., 2016; Nalau & Fisher, 2017; Whyte et al., 2016).

This paper, in describing NunatuKavut conceptions of sustainability and its implications in communities, implore the Western sustainability discourse to further embrace diverse worldviews, especially Indigenous and community definitions of sustainability (Hove, 2004; Marinova & Raven, 2006; Nalau & Fisher, 2017; Sneddon et al., 2005; Storey, 2010; Trosper, 2002). Many academic discussions of sustainability break it down into discrete categories and concrete frameworks (Bolis et al., 2014; Dahl, 2011; Hák et al., 2016; Valentin & Spangenberg, 2000). This is understandable. Reducing sustainability to a simplified conceptual framework or discrete categories allows for a clear pathway to sustainability, a series of steps that can be taken to attain a sustainable future. However, in breaking down and categorizing the path to sustainable futures, the real complexity of sustainability, as described by NunatuKavut Inuit, is lost (Nalau & Fisher, 2017; Sneddon et al., 2005). Western and academic notions of sustainability hold power; bringing diverse ways of knowing and conceptions of sustainable futures into academic discussions of sustainability that serve to deconstruct that power and its implications for marginalized populations (Chilisa & Ntseane, 2010; Johnson et al., 2016; Martin, 2012; Sneddon et al., 2005; Whyte et al., 2016).

NunatuKavut Inuit have their own conceptions of sustainability in NunatuKavut, and describe how stepping stones to sustainability, such as initiatives targeting individual sustainability challenges, should be embedded community and their wholistic understandings of sustainability. NunatuKavut conceptions of sustainability not only

recognize the complexities faced in pursuing sustainable futures but celebrate them by building from strengths that flow from the intersection of culture, community, wellbeing and the natural world. Sometimes sustainability is addressed in small pieces, due to logistics, budget and feasibility; however, in NunatuKavut the big, complex, interconnected and diverse conceptions of sustainability provide a foundation from which those small actions work together to effect substantial positive change in communities.

Limitations & Lessons for the Future

Like many community-based participatory projects, this study was limited by time and resources. All the data collection took place in a two-month period, in Summer 2018. In consequence, many of the stories and perspectives shared by participants were set in the summer: stories of fishing, camping, boating and berry picking. In fact, the bakeapple theme, which came through so clearly in the collected data, may only have been so clear because it was bakeapple season. Bakeapples were a concrete example that could be seen, touched and tasted by the researchers, so it provided common ground upon which participants could base their contributions. In winter, when bakeapples were only found in the freezer, the stories and perspectives people shared about their territory and way of life, may have instead been centred on ice, snow and resources of the winter. In the future, we would look to collect data throughout all seasons and over a longer time span, to account for changes in environment, weather and season and their impacts on the data collected. We also look to funders and universities to do their part to ensure adequate time and resources to do authentic, meaningful community-driven research.

This research was also de-limited in scope. The research questions outlined at the start of the study were informed by sustainability concerns raised by communities and NCC around energy autonomy and heat insecurity. This thesis research aimed to understand how communities balance wellbeing, the land, and sustainability development by looking at their perspectives around diesel, renewable energy and sustainability.

Once we were in communities, we found that diesel and renewable energy were not the concerns at the forefront of most peoples' minds. Diesel was seen as reliable, safe and stable, while renewables had many possible challenges and risks; communities are interested in pursuing sustainability as a whole, and they are not interested in pursuing diesel or renewable energy or any other development without careful thought and

attention. Participants made clear that any changes they make to community must be embedded within and support NunatuKavut Inuit ways of being and be a pathway to a more sustainable future.

So, should we have framed the research around something other than diesel and renewable energy? Maybe. There are many sustainability challenges and strengths in Black Tickle, Norman Bay and St. Lewis (Fox Harbour) we could have used to frame the research. At the start of project design and data collection, we did not really know what questions to ask to allow community members to talk about the issues that are important to them. We purposely designed research tools that were flexible and accommodating of whatever community members wanted to discuss. We decided to go ahead – to ask the imperfect questions, and to let community members correct us throughout the data collection and analysis. Continuous feedback and engagement with community is so important. For example, this work included community members as collaborators from the very start and used a multi-stage analytical process that returned the results to the community for guidance and critique. This helped us to create research that is relevant, meaningful and approved by communities.

No part of this research was or is static; it continues to grow and evolve as sustainability work in NunatuKavut continues. Research questions and goals that shift throughout the project are a sign of community-driven research that is responsive. Throughout the project, this research continued to adapt to community needs and perspectives, and that is reflected in these results, and will be reflected in future sustainability work in NunatuKavut.

In the end, using diesel and renewable energy to frame the research allowed us to have conversations about several small pieces of sustainability in NunatuKavut: energy autonomy; home heat, food, water and healthcare insecurities, etc. We worked in collaboration with other research teams and community projects to support real advances in sustainability in Black Tickle, Norman Bay and St. Lewis (Fox Harbour). In the future, we may take more time to develop project details, such as interview questions and procedural details, bringing together the best of both academic and community ways of research before the study begins. We will let NCC and the collaborating communities guide us. If communities present urgent research needs and accept flexible questions that

can adapt to community priorities as they arise in the data collection, we might follow a similar path again.

Where to Go Next?

This study demonstrates opportunities for more diverse conceptions of sustainability within the academy. Communities have their own distinct definitions and applications of sustainability, filtered through their culture, land and ways of being. As described in this study, looking to Indigenous community-based conceptions of sustainability support resurgence, empowerment pathways to sustainable futures. A stronger focus on Indigenous community-based sustainability would provide opportunities for communities around the globe facing similar challenges to see themselves represented in academia, and to work together to find solutions. This literature should be decolonial in its focus. What is Indigenous sustainability? Likely, the definitions will vary between nations and communities. We can listen to diverse voices and support many definitions of sustainability in the academic sphere as part of advancing a decolonial agenda. We can use those diverse definitions to tackle global sustainability crises, no longer limited to Western definitions of sustainability and associated solutions.

One unique aspect of these results of this study is that participants simultaneously described the need for autonomy in planning sustainable futures, and support from governments to continue to live in their communities. We do not see this as a tension in our results or a limitation of our work, but instead an illustration of real life in NunatuKavut. All humans need to have a roof over our heads, to feed our families, access to healthcare and other essential services. Those needs are immediate, and we all take what we can get. At the same time, we pursue better futures for ourselves and our communities. All humans imagine futures where the resources and services upon which we rely are safer, healthier, and more community appropriate. The NunatuKavut Inuit communities represented in this work are no different. They want to be safe, healthy and happy today and into the future, and that means services to support them now and fighting for autonomy and self-determination to support themselves tomorrow.

Conclusion

Wholistic conceptions of sustainability will shape the future of NunatuKavut. Community members navigate the balance between wellbeing of humans and the environment using those wholistic conceptions of sustainability, filtered through community, culture and a deep, reciprocal relationship with the land. In this way, they are planning for futures that include both the health of humans and environments with economic development to sustain their lands and communities. In this way, they are planning empowered, resurgent and resilient futures; they intend to continue to live strong, self-determined Inuit lifeways on their territory.

They look to all representative governments to honour their way of life, and to provide essential services to continue to live on, and steward NunatuKavut. NCC continues to stand up for the protection and autonomy of NunatuKavut Inuit.

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Chapter 5: Synthesis Discussion

In this chapter, I tie this thesis together, describing the importance of both the community report and the academic report and situating them within the greater sustainability work happening in NunatuKavut. I go on to briefly discuss limitations of the study and what I would do differently next time. Finally, I close this section with a brief description of next steps for me, this research, and sustainability work in NunatuKavut.

Situating this Research

As described above, this work is a small part of NCC's *Community Governance and Sustainability Initiative*. The goals and questions explored in this thesis were co-defined by Amy Hudson (NCC Research, Education and Culture) and Debbie Martin (NunatuKavummiuk professor, Dalhousie University) as part of that work. This is one of several academic projects being carried out simultaneously that support the sustainability work in NunatuKavut; others projects explore: NunatuKavut identity and governance (Amy Hudson, Julie Bull); community energy, autonomy and sustainability planning (Nick Mercer); mental health, wellbeing and healthcare (Jennifer Shea, Julie Bull); sustainable fisheries (NCC Natural Resources Department); and, research ethics (Julie Bull, Amy Hudson).

Also, this thesis sits within *Towards Energy Security in NunatuKavut*, a multi-year project involving several researchers. As the first stage of this bigger project, this thesis helps to scope and focus future stages. One primary focus coming out of this thesis, and the rest of the CGSI, is the need for more education and resources for communities to plan for their own sustainable futures. With community members seeing renewable energy as one pathway to sustainability, an education event focused on energy, sustainability and wellbeing is being planned by academic and community collaborators. We hope to hold these events in Fall 2019, to share these research results in person with collaborating communities and participants, as well as to co-create resources and build synergies between sustainability work happening across NunatuKavut. This thesis has also provided the groundwork for my own PhD research, which will begin in September

2019. In partnership with NCC, my current NunatuKavut mentors (Debbie Martin and Amy Hudson), my future PhD supervisors (Diana Lewis and Chantelle Richmond at Western University) and I are planning a project that builds from this work to further explore NunatuKavut conceptions and determinants of wellbeing.

This thesis, including the academic and community reports, are intended to support NunatuKavut, alongside the rest of the sustainability work, in defining sustainable, decolonial and empowered futures. As they navigate the Recognition of Indigenous Rights and Self-Determination process, NCC can use this research to assert specific sustainability needs and pathways that are community- and culturally appropriate, and support NunatuKavut Inuit autonomy. Community members can turn to these documents in planning for their specific healthcare, land management and governance futures. Further, this thesis aims to make space for NunatuKavut Inuit voices within the academy, translating perspectives about energy, sustainability and the future in collaboration with communities, so they are accurately and meaningfully represented within academia.

Community engagement and capacity-building, when directed and defined by communities, can be an integral part of community-driven research partnerships (Brunger & Wall, 2016). In the CGSI, capacity-building and community engagement is community-specific, flows from community needs and values, and is managed by CGSI co-lead and my co-supervisor, Amy Hudson. Capacity-building work related to this project includes youth hired as research assistants through the CCNL Green Team program and NATURE (NunatuKavut Action Team on Using Renewable Energy) Youth Council, were integral to this research, providing continued guidance and support throughout the data collection, analysis and dissemination processes.

What Isn't Here?

It is hard to represent all of a community-based research project within the pages of a thesis, academic report or community report. So much of the work for this thesis is in the background, indirectly essential to the methods, results and analysis.

The first of these is relationship building; while it is described in the CBPR literature, the true gravity of relationship building does not hit you until you are on the

ground. It is continuous and rewarding, and key to putting the research into context. Relationships allow researchers to do ethical research, based in trust, and shared experience. Finally, it makes the research process less draining – the research is not an esoteric rambling, but a result that matters to communities.

The second piece is the capacity-building; not just a buzzword or fluff piece, capacity-building can mean real change in collaborating communities. Capacity-building, only beneficial when directed and defined by community, can be an important part of community-driven research (Brunger & Wall, 2016). I participated in capacity-building that employed my skills and abilities to support communities in pursuing their sustainable futures outside of the academic work described in this thesis. For me, capacity-building meant applying for grants; supporting friends and cheerleading while they applied for jobs and opportunities; brainstorming and planning new projects in collaboration with communities; budgeting and administrative work to plan meetings and events; and mentoring youth. My participation in these capacity-building activities was only as I was invited and useful, contingent on the approval and guidance of my committee (especially NunatuKavut Inuk scholars Debbie Martin and Amy Hudson), and governed by the same principles of equity and partnership that governs the rest of this work.

Sometimes, it would have been easier to focus only on the academic work, letting all the non-academic engagement fall by the wayside to focus only on data collection, transcription, analysis and writing. But that would have been unethical. I was asked to be a part of a collaboration focused on sustainability in NunatuKavut, not just for my own benefit but more importantly, for the benefit of the community. As a team member, I am expected not just to work on my own thesis research, but also the non-academic and capacity-building work that community members asked me to participate in. My involvement in these capacity-building activities, and all non-academic work I did related to this project were an honour and a privilege.

Limitations & Next Steps

As a part of my masters degree, this thesis is my first foray into community-based research, and while writing this thesis I realized how much I have learned, and how much I need to learn to move forward in collaborative, community-driven research in

NunatuKavut. I am likely the most significant limitation to this research; as a white, settler scholar; a first-time researcher; a non-NunatuKavut Inuit person; largely located in Nova Scotia and Ontario – I created the most significant barriers to this research.

Thankfully, community-based research does not just end when the degree or the funding does. I am excited to be planning for the future of this research, and my involvement with NCC, Black Tickle, Norman Bay, and St. Lewis (Fox Harbour). First, I will keep talking about this research. With my friends, collaborators, and mentors, and with the world. In this research, I get to tell the good stories, the plans for the future, and the ways NunatuKavut communities are succeeding in building their own sustainable futures. I will continue to share this research in whatever ways they want me to – in academic conferences, publications, reports, and community engagement events. Second, just because the project is over, does not mean the relationships end. I have made some of my best friends through this research, and I am so excited to continue to visit and cherish those friends and their families outside of the context of research. Finally, I have been invited to continue working with NCC for my PhD, looking more closely at sustainable wellbeing.

The research goals and questions have not yet been defined, and will, slowly, over the coming years, emerge. I have started to put together a better research agreement to structure our research partnership. I am thinking about better ways to navigate the convergence of academy and community, where I feel (as a white, settler researcher) I am sometimes caught between power, deadlines, expectations, ethics and relationships. I want to create a better informed consent process, improve how I collect data, and return results to community. Guidance and feedback from NunatuKavut Inuit committee members and mentors (Debbie Martin, Amy Hudson, Julie Bull) have directed me to engage more with Indigenous methodologies and with Indigenous scholars who write on ethical research and research partnerships.

As a white, settle scholar, I feel that Indigenous methodologies and ways of being are inaccessible to me; there are several reasons for this. First, I recognize the long history of white, colonial scholars stealing knowledge and using it to exploit the people from whom they stole it. I have an ethical duty to take care that I do not repeat the colonial actions of those before me. Second, I lack the ways of knowing and being that

inform Indigenous methodologies and ways of being; as a settler scholar, can I ever understand an Indigenous methodology? Third, and finally, I lack the engagement with land and community, the deep reciprocal relations with the territory and the close kinship with community members that inform Indigenous ways of being and make Indigenous methodologies possible.

So far in my academic career, I have shied away from Indigenous methodologies and from understanding Indigenous ways of knowing for these reasons. However, under the guidance of the Indigenous women who will supervise and mentor my PhD I look forward to engaging more with Indigenous methodologies and Indigenous scholars who write on ethics, traditional knowledge and ways of being. I have no illusion that I will ever master Indigenous methodologies and ways of knowing, but to draw from them, allowing them to help me understand the communities and collaborators I am working with. As I move into the next phase of my research path, I cannot wait to do work that better supports the sustainable, empowered and decolonial futures of my NunatuKavut Inuit collaborators.

Summary of the Synthesis Discussion

This section describes how this research is situated in within the much bigger CGSI, as a tiny piece of the puzzle alongside parallel research projects and community initiatives focused on capacity-building and engagement. This section focuses on the synergies between this thesis, and all the other sustainability work happening simultaneously. Unfortunately, the entire CGSI cannot be described in this thesis, although, in reality, this thesis is just a tiny piece of the sustainability work and is most relevant and meaningful when embedded within the CGSI.

Chapter 6: Conclusion

In closing, I reflect back on the research question and goals outlined at the start of this thesis, and how my findings address them. I end this thesis with some final reflections on this collaboration with Black Tickle, Norman Bay, St. Lewis (Fox Harbour) and the CGSI.

Research Summary

The primary research question for this thesis is:

With the urgent need for an infusion of sustainability development, and interest in pursuing renewable energy alternatives, how do (if at all) NunatuKavut community members reconcile long-standing social and cultural values regarding human health and the health of the land-water-air with the need for economic opportunities?

This research aims to support NCC's *Community Governance and Sustainability Initiative,* by building a better understanding of community perspectives on diesel, renewable energy, land, wellbeing and sustainable futures. NCC identified Black Tickle, Norman Bay and St. Lewis (Fox Harbour) as the communities best suited for this research, because they are the most remote, facing the most sustainability concerns, and fighting hard for their sustainable futures. Using a decolonial community-based participatory research methodology, we had semi-structured conversations with community members in interviews and focus groups.

When asked to describe their values and perspectives on wellbeing, the land-sea-air-ice, development, diesel, renewable energy and community sustainability, community members described a wholistic sustainability. They described how wholistic sustainability is made up of many resources, strengths, opportunities, and threats within their communities. They described the essential roles the wellbeing of humans, the land, and their communities play in creating sustainable futures.

They described that development, perhaps through renewable energy, could be a pathway to sustainability, but only if it supports community autonomy and empowerment, provides new resources to the community, and supports wholistic sustainability.

Finally, they highlighted the importance of Inuit governance in sustainability planning, describing the importance of community-decision making, consensus, and inclusion of marginalized populations, culture, and tradition in planning for their futures.

Last Words

I love talking and writing about this research because I get to tell a success story. I get to talk about three resilient, empowered communities, that are planning for their own sustainable futures. I get to talk about the strengths, opportunities and dreams community members see for their children and their communities. I get to talk about the dreams they have for their children, and their children's children. I get to talk about how these communities are achieving their own sustainable futures.

I spent a month in NunatuKavut writing this thesis. In the quiet rented apartment, surrounded by trees and ocean and ice, I got to write about the success stories, the opportunities and hopes that community members have for the future. Friends popped over for a cup of tea and chat or dragged me outside into the sunshine for a long skidoo ride. They dropped off plates of food for supper, smoked fish, homemade Easter treats, and even a bakeapple cheesecake. We talked about how I should write about their communities, the words I should use, and how to frame their stories. They helped me work through challenging bits of analysis, pointing out places and things around us that would help me to understand. Without those friends, this research would not have been possible.

My ability to do this work, my authority to speak and write about NunatuKavut sustainability has been shared with me by those friends and mentors. NunatuKavut community members who participated in in research, and those who continue to guide it trust me to write about their communities. Despite everything I read about research relationships, ethics and community-driven research, I did not really understand that until I was building relationships myself. I cannot wait to keep working in collaboration with these communities and with the CGSI.

The honour, privilege and gratitude are mine.

Nakummek

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Appendices

Appendix 1: Research Instruments (Focus Group & Interview Guides)

FOCUS GROUP GUIDE

Project title: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

Focus Group Length: approx. 1.5-2 hours

Welcome:
-1/2 hour before focus group is set to begin: set up is complete, participants begin to arrive, consent is obtained from those who have not yet completed it; field any questions participants may have

Welcome! Thank you everyone for coming today, we are really looking forward to hearing what you have to say about the transition from diesel to renewable energy within your communities. This research project is a collaboration between several groups, including myself and my supervisor Debbie Martin, Nick Mercer from the University of Waterloo, and Amy Hudson from the NCC Research, Education and Culture department. We are supporting the NCC Sustainability Pilot Communities project by exploring the best ways to build sustainability in your communities – and we are particularly interested in understanding your perspectives, concerns, questions and ideas about renewable energy and economic development and about the health of people in your communities. All of the information we collect in this focus group will be shared with you in the form of a summary report that you will be invited to comment on and provide feedback.

Before we begin, I just want to remind you that we are audio-recording this session, and the recorder is in the centre of the room. My assistant *(point them out)* and I will be taking some notes as well. You may withdraw your participation and consent to use your information at any time, however information contributed before you withdraw will still be used. Because this is a group activity, and because all the data will be returned to the community, we can't guarantee confidentiality or privacy of anything you share today. If, at the end of this session, you have more to share or would like to schedule a follow-up interview, please let me know! I can be available either in-person, or on the phone.

Thank-you again for being here, let's get started!"

-participants were invited to bring something (photo, object, etc.) to share with the group that represents them, their land and their community; these items/photos will be noted in observation notes, but not copied or recorded;
-moderator will go around the circle, inviting participants describe their items; this will serve as a lead in/warm-up and to help the moderator understand unique cultural context of these communities

-moderator and assistant will take notes throughout the session, particularly to record non-oral communication such as gestures, as well as to record details on show and tell items.

Thematic Questions Guide:

-what follows is a semi-structured interview guide; the five major themes will be covered, however specific questions may vary due to the flexible, variable nature of focus group discussions; sample questions have been included

Theme 1: Conceptions of Land:

1) I read the "I Love My Community" guides put out by NCC and loved them. So I want to start this by asking all of you: What do you love about living here?
2) How do you use the land, water, air?
    a. Probe: Do you fish, hunt, or harvest your own food?
    b. Probe: Can you describe harvesting activities in this community?
3) Are there any parts of the land here that you really think need protecting, or you want to protect for the future?
    a. Probe: How can we all protect the health of the land, water and air?

Theme 2: Conceptions of Health and Well-being

4) Do you think the health of the land, water and air affects your health and well-being? How so, or why not?
    a. Is the land/water/air important for your wellbeing?

Theme 3: Diesel (and the Transition from Diesel):

5) One of the reasons I'm here is to talk about the transition from diesel. Should your community transition off diesel? What might be some alternatives?
6) What are your concerns for how diesel affects the land and water?
7) What are the concerns you have if the community were to stop or reduce its use of diesel?
8) Have you considered how diesel might affect your health and that of your family and community?

Theme 4: Thoughts and Perspectives on Renewables:

9) What comes to mind when I say renewable energy?
10) We would like to know whether renewable energy is possible in your community. What things do you think we should consider as we explore this possibility?
11) All sources of energy use have an impact on the environment. What concerns would you have if the community were to start using different sources of energy?
    a. Probe: Do you have any thoughts or concerns about solar, wind, or tidal energy in your community?
    b. Probe: Do you have any thoughts or concerns about bioheat, high efficiency stoves and improving home energy efficiency?
12) Might it affect fishing, hunting or harvesting of traditional foods? In what ways?
13) How might it affect your well-being (in positive ways? In negative ways?)

14) How should your community go about making decisions about the transition from diesel and renewable energies?

Theme 5: Sustainability Futures in your Community

15) What are the most pressing sustainability roadblocks for your community?
    a. Probe: How do you think community members should be involved in decisions about energy use in their communities?
16) What goals/plans/futures do you imagine for your community?
17) In your words, why does sustainability matter for this community?

Closing:

"That concludes all the questions I have for the discussion. Does anyone have any final questions or things to add?

I really appreciate you coming out this evening, and the fantastic discussion we've had. We will transcribe this session, and provide each of you with copies to edit and provide comments. Again, if you think of something to add, and would like to schedule a follow-up interview either in person, or on the phone, please get in touch. Any final questions/comments/concerns? Thanks folks – have a great night!"

INDIVIDUAL INTERVIEW GUIDE

Project title: Community-appropriate renewable energy in NunatuKavut A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

Interview Length: 30 – 90 minutes

-The following is a semi-structured interview guide. Due to the flexible and variable nature of interviews, particularly follow-up interviews, the direction of conversation may vary. I have grouped questions according to themes I hope to explore with interviewees and have provided sample questions for each theme.

Introduction & Consent:

-"Thank you so much for meeting with me today. I am really looking forward to chatting with you. I am working on this research project with Debbie Martin from Dalhousie University, Nick Mercer, who you may have seen around town this week, and Amy Hudson, the NCC Research coordinator. We are hoping to better understand what you think about diesel, renewable energy, and sustainability development within your community, as well as how they impact you, your health, your community and the land around you. Before we go any further, we have to go through an oral consent process. I will read the form aloud to you, you can ask any questions you might have, and then I will ask you a series of consent questions. You don't have to sign anything. *(go through consent process)* That's great – now we can begin our interview."

-interviewer take notes throughout the session whether or not it is audio-recorded. If it is not audio recorded, these notes will record important points and quotes in the discussion. If it is audio recorded, these notes will be used to record non-oral communication such as body language and gestures, as well as to record details on show and tell items.

Follow-Up Interview Questions:

1) What did you want to follow-up on today?
2) How do you think the focus group went?
3) Is there anything else you want us to know?

Theme 1: Conceptions of Land:

1) I read the "I Love My Community" guides put out by NCC and loved them. So I want to start this by asking all of you: What do you love about living here?
2) How do you interact with the land?
    a. Probe: Do you fish, hunt, or harvest your own food?
    b. Probe: Can you describe harvesting activities in this community?
3) Are there any parts of the land here that you really think need protecting, or you want to protect for the future?

a. Probe: How can we all protect the health of the land, water and air?

Theme 2: Conceptions of Health and Well-being

4) Do you think the health of the land, water and air affects your health and well-being? How so, or why not?
    a. Is the land/water/air important for your wellbeing?

Theme 3: Diesel (and the Transition from Diesel):

5) One of the reasons I'm here is to talk about the transition from diesel. Should your community transition off diesel? What might be some alternatives?
6) What are your concerns for how diesel affects the land and water?
7) What are the concerns you have if the community were to stop or reduce its use of diesel?
8) Have you considered how diesel might affect your health and that of your family and community?

Theme 4: Thoughts and Perspectives on Renewables:

9) What comes to mind when I say renewable energy?
10) We would like to know whether renewable energy is possible in your community. What things do you think we should consider as we explore this possibility?
11) All sources of energy use have an impact on the environment. What concerns would you have if the community were to start using different sources of energy?
    a. Probe: Do you have any thoughts or concerns about solar, wind, or tidal energy in your community?
    b. Probe: Do you have any thoughts or concerns about bioheat, high efficiency stoves and improving home energy efficiency?
12) Might it affect fishing, hunting or harvesting of traditional foods? In what ways?
13) How might it affect your well-being (in positive ways? In negative ways?)
14) How should your community go about making decisions about the transition from diesel and renewable energies?

Theme 5: Sustainability Futures in your Community

15) What are the most pressing sustainability roadblocks for your community?
    a. Probe: How do you think community members should be involved in decisions about energy use in their communities?
16) What goals/plans/futures do you imagine for your community?
17) In your words, why does sustainability matter for this community?

Closing:

" Thank you so much for chatting with me today. I really appreciated the opportunity to learn so much about your community and your land! I will transcribe this interview, and get it back to you within 1 month. You can then add any comments and make any edits you would like and return it to me. If you think of anything else, please

get in touch. I will be in town for a couple more days, and then can be reached by email at Emily.beacock@dal.ca or phone at (XXX-XXXX)

Appendix 2: Participant Forms: Consent, Contact and Research Agreement

DALHOUSIE UNIVERSITY

CONSENT FORM
[Focus Groups]

Project title: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

Lead researcher: Debbie Martin, Dalhousie University, (902) 494-7717, dhmartin@dal.ca

Other Researchers
Emily Beacock, Dalhousie University, emily.beacock@dal.ca
Nick Mercer, University of Waterloo
Amy Hudson, NCC Manager of Research, Education and Culture
Ashlee Cunsolo – Memorial University of Newfoundland
Paul Parker – University of Waterloo

Funding provided by: A SHARED Future (5-Year CIHR Environment and Health Team Grant)

Introduction
We invite you to take part in a research study being conducted by Debbie Martin from the Faculty of Health at Dalhousie University. Choosing whether or not to take part in this research is entirely your choice. There will be no impact on you if you decide not to participate in the research. The information below tells you about what is involved in the research, what you will be asked to do and about any benefits, risks, inconveniences or discomforts that you might experience.
You should discuss any questions you have about this study with Debbie Martin or Emily Beacock. Please ask as many questions as you like. If you have questions later, please contact the research team at the contact information listed above.
Please keep a copy of this consent form for your files.

Purpose and Outline of the Research Study
This is the first phase of a multi-phase study, seeking to understand the perspectives of three NunatuKavut communities on renewable energy planning, and how they might shape a vision for renewable energy planning in NunatuKavut communities.
You are invited to participate in a focus group discussion. During the focus group, participants will be asked to share their perspectives on diesel, renewable energy and sustainability development, what role community members can and should play in renewable energy development, as well as how energy needs within the community might impact the health of people and the land, water and air.

Who Will Be Conducting the Research
The lead researcher on this project is Debbie Martin, from the School of Health and Human Promotion at Dalhousie University. The focus group will be conducted by graduate students Emily Beacock, who is doing her Master of Environmental Studies at Dalhousie University and Nick Mercer, who is doing his PhD in renewable energy and community sustainability at the University of Waterloo. Other members of the research team include Amy Hudson (NCC), Paul Parker (University of Waterloo), Ashlee Cunsolo (Memorial University).

Who Can Take Part in the Research Study
You may participate in this study if you are an adult (over 18 years old), speak English, and live in Norman Bay, St. Lewis or Black Tickle.

What You Will Be Asked to Do
This focus group will be recorded, so you must be okay with being recorded in order to take part. The research team will also take notes throughout the process. You will be asked a series of questions relating to renewable energy, and the health of your community. The questions are meant to guide conversation, but feel free to discuss anything you think is important. The focus group will last approximately 1.5-2 hours. If you are uncomfortable with any question you may decline to respond. You may skip questions and return to them later.
You may leave the focus group at any time, but your information collected up to the point that you leave will still be part of our dataset as it will be impossible to remove from the focus group recording.
You will be provided a summary report of the study and invited to provide comments and feedback within one month of receiving the report. If you decide not to provide any feedback, we will assume you are happy with the contents of the report.
Direct quotes may be used in publications and dissemination; however your name will not be attached to your direct quote.
You will be asked to review and accept the contributor agreement. This gives you the option to have your name acknowledged as having contributed to the research any time the research findings are presented or reported.

Possible Benefits, Risks and Discomforts
Benefits: You will not receive any direct benefits from participating in this study. Participating in this study may impact energy and sustainability planning in your community. You may benefit by having your voice heard as your community and NCC as a whole moves forward in renewable energy planning and community sustainability initiatives.
Risks: This study is unlikely to cause harm. While there are no direct risks to you, there is a risk of discomfort, distress, or fatigue during data collection. You will be offered frequent breaks, and if you do feel uncomfortable or upset you are able to withdraw from the study at any time.
If the researchers identify high levels of stress, discomfort or agitation in the discussion they may skip questions, attempt to shift the discussion, or if necessary, end the focus group.

Compensation / Reimbursement:
You will not be compensated/reimbursed for your participation in this study.

How your information will be protected:

All of the information that we collect today will be kept confidential, will be stored securely, and will not be shared outside of the research team listed on this document. However, because you are taking part in a group discussion, others are aware of your participation. We ask that you keep everything discussed today confidential, but we cannot guarantee confidentiality or privacy. De-identified, summarized data from this study will be returned to NCC upon completion of the study, and all data storage and use is governed by our research agreement with NCC.

Data retention:
A research agreement has been signed with NunatuKavut Community Council (NCC) that provides information about how the data we collect will be used, stored and owned; all data collected in this study is still owned by you, your community and NCC. Only researchers Emily Beacock and Debbie Martin, and NCC Research Coordinator Amy Hudson will have access to raw, identifiable data. Other members of the research team, NCC and your community will have access to de-identified, summarized data, such as thematic analysis documents and summaries of results. We hope this arrangement ensures you are able to speak openly and confidently with our research team. Should additional access to identifiable data be required by you, members of your community or the NCC, it will be subject to approval by NCC and Dalhousie Research Ethics boards.
We will describe and share our findings in a summary report, a master's thesis, presentations, public media, journal articles, etc.
All of the data we collect will be stored in a locked file cabinet. Electronic information will be stored on a password-protected computer; there will also be a password-protected backup.

If You Decide to Stop Participating
You are free to leave the focus group at any time, however, we cannot remove what you have said up to the point that you leave because it is already part of the focus group discussion.

How to Obtain Results
We will provide you with a summary report that you are able to comment on and provide feedback. This report will be sent to the contact information you have provided. Full results will be given to the NCC for their wider distribution, and you may access them there, if you wish.

Questions
If you have any questions or concerns, please contact Debbie Martin ((902) 494-7717, dhmartin@dal.ca) [or Emily Beacock (emily.beacock@dal.ca)]. If you are calling long distance, please call collect. We will also tell you if any new information comes up that

could affect your decision to participate.

If you have any ethical concerns about your participation in this research, you may also contact Research Ethics, Dalhousie University at (902) 494-1462, or email: ethics@dal.ca (and reference REB file # 20XX-XXXX)."

VERBAL CONSENT FORM
[Focus Groups]

Project title: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

We have read through the consent form, and all aspects of this study have been explained. You have had the opportunity to ask questions and discuss any concerns you have. You hereby consent to take part in this study. Participation is voluntary, and you may withdraw consent at any time.

Do you agree to take part in this audio-recorded focus group: ____yes _____no

Do you agree to have quotes from the interview used for future research publications or presentations? (your name will not be attached to your direct quotes, but the name of your community will be) _____yes _____no

Do you wish to be acknowledged as having contributed to the research? (This means that your name will be listed any time the research is reported or published) _____yes _____no

Do you wish to receive a copy of the summary report? ____Yes ____No **(If yes, please collect email and mailing address. If no, contact information is not needed).**

[Invite participant to review and agree to Contribution Agreement]

_____
Participants Name

_____
Researcher's Signature
_____
Date

DALHOUSIE UNIVERSITY

CONSENT FORM
[Individual Interview]

Project title: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

Lead researcher: Debbie Martin, Dalhousie University, (902) 494-7717, dhmartin@dal.ca

Other researchers
Emily Beacock, Dalhousie University, emily.beacock@dal.ca
Nick Mercer, University of Waterloo
Amy Hudson, NCC Manager of Research, Education and Culture
Ashlee Cunsolo – Memorial University of Newfoundland
Paul Parker – University of Waterloo

Funding provided by: A SHARED Future (5-Year CIHR Environment and Health Team Grant)

Introduction
We invite you to take part in a research study being conducted by Debbie Martin from the Faculty of Health at Dalhousie University. Choosing whether or not to take part in this research is entirely your choice. There will be no impact on you if you decide not to participate in the research. The information below tells you about what is involved in the research, what you will be asked to do and about any benefits, risks, inconveniences or discomforts that you might experience.
You should discuss any questions you have about this study with Debbie Martin or Emily Beacock. Please ask as many questions as you like. If you have questions later, please contact the research team at the contact information listed above.
Please keep a copy of this consent form for your files.

Purpose and Outline of the Research Study
This is the first phase of a multi-phase study, seeking to understand the perspectives of three NunatuKavut communities on renewable energy planning, and how they might shape a vision for renewable energy planning in NunatuKavut communities.
Participants in this study will be asked to participate in an individual interview. During the interview, participants will be asked to share their perspectives on diesel, renewable energy and sustainable development, what role community members can and should play in renewable energy development, as well as how energy needs within the community might impact the health of people and the land, water and air.

Who Will Be Conducting the Research
The lead researcher on this project is Debbie Martin, from the Faculty of Health at

Dalhousie University. The interviews will be conducted by graduate student Emily Beacock, who is doing her Master of Environmental Studies at Dalhousie University. Other members of the research team include Amy Hudson (NCC), Paul Parker (University of Waterloo), Ashlee Cunsolo (Memorial University).

Who Can Take Part in the Research Study
You may participate in this study if you are an adult (over 18 years old), speak English, and live in Norman Bay, St. Lewis or Black Tickle.

What You Will Be Asked to Do
Before the interview begins, you will be asked if you are okay with being audio-recorded for the duration of the interview. If not, researcher will take notes of your discussion. You will be asked a series of questions relating to renewable energy, and the health of your community. The questions are meant to guide conversation, but feel free to discuss anything you think is important. The interview will last between 30 to 90 minutes. If you are uncomfortable with any question you may decline to respond. You may skip questions and return to them later in the interview.
You may end the interview at any time, and can decide that you no longer wish to have your interview used in this study, up until one month after this interview. If you decide that you do not wish to take part in the study, the recording and any notes taken will be destroyed.
You will be provided a summary report of the study and invited to provide comments and feedback within one month of receiving the report. If you decide not to provide any feedback, we will assume you are happy with the contents of the report.
Direct quotes may be used in publications and dissemination; and you will have the option of having your name attached to direct quotes that you've said. You will also be asked to review and accept the contributor agreement. This means that any time the research is presented or reported, your name will be acknowledged as having contributed to the research. Having your name acknowledged as a contributor and having your name attached to your quotes is entirely up to you and will not affect your ability to take part in the study.

Possible Benefits, Risks and Discomforts
Benefits: You will not receive any direct benefits from participating in this study. Participating in this study may impact energy and sustainability planning in your community. You may benefit by having your voice heard as your community and NCC as a whole moves forward in renewable energy planning and community sustainability initiatives.
Risks: This study is unlikely to cause harm. While there are no direct risks to you, there is a risk of discomfort, distress, or fatigue during data collection. You will be offered frequent breaks, and if you do feel uncomfortable or upset you are able to withdraw from the study at any time.
If the researchers identify high levels of stress, discomfort or agitation in the discussion they may skip questions, attempt to shift the discussion, or if necessary, end the focus group.

Compensation / Reimbursement:
You will not be compensated/reimbursed for your participation in this study.

How your information will be protected:
All of the information that we collect today will be kept confidential, will be stored securely, and will not be shared outside of the research team listed on this document. However, because you are taking part in a group discussion, others are aware of your participation. We ask that you keep everything discussed today confidential, but we cannot guarantee confidentiality or privacy. De-identified, summarized data from this study will be returned to NCC upon completion of the study, and all data storage and use is governed by our research agreement with NCC.

Data retention:
A research agreement has been signed with NunatuKavut Community Council (NCC) that provides information about how the data we collect will be used, stored and owned; all data collected in this study is still owned by you, your community and NCC. Only researchers Emily Beacock and Debbie Martin, and NCC Research Coordinator Amy Hudson will have access to raw, identifiable data. Other members of the research team, NCC and your community will have access to de-identified, summarized data, such as thematic analysis documents and summaries of results. We hope this arrangement ensures you are able to speak openly with our research team. Should additional access to identifiable data be required by you, members of your community or the NCC, it will be subject to approval by NCC and Dalhousie Research Ethics boards.

If You Decide to Stop Participating
You are free to leave the study at any time. If you decide to stop participating at any point in the study, you can also decide whether you want any of the information that you have contributed up to that point to be removed or if you will allow us to use that information. You are able to remove yourself from the study up until one month after this interview has taken place. After that time, it will become impossible for us to remove it because it will already be analyzed and incorporated into the larger data set.

How to Obtain Results
We will provide you with a summary report of the results that you may comment on and provide feedback. This report will be sent to the contact information you have provided. Full results will be given to the NCC and the community, and you may access them there, if you wish.

Questions
If you have any questions or concerns, please contact Debbie Martin (902) 494-7717, dhmartin@dal.ca) [or Emily Beacock (emily.beacock@dal.ca)]. If you are calling long distance, please call collect. We will also tell you if any new information comes up that could affect your decision to participate.
If you have any ethical concerns about your participation in this research, you may also contact Research Ethics, Dalhousie University at (902) 494-1462, or email: ethics@dal.ca (and reference REB file # 20XX-XXXX).

VERBAL CONSENT FORM
[Individual Interviews]

Project title: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

After reviewing the information about the study, the following will be read to participants:

We have read through the consent form, and all aspects of this study have been explained. You have had the opportunity to ask questions and discuss any concerns you have. You hereby consent to take part in this study. Participation is voluntary, and you may withdraw consent at any time.

Do you agree to take part in the interview: ____yes _____no

Do you agree to be audio recorded during the interview: _____yes _____no
(If not, the researcher will take notes of the interview)

Do you agree to have quotes from the interview used for future research publications or presentations? _____yes _____no

Do you wish to receive a copy of the summary report? ____Yes ____No **(If yes, please collect email and mailing address. If no, contact information is not needed).**

[Invite participant to review and agree to contribution agreement]

_____
Participant's Name

_____
Researcher's Signature
_____
Date

PARTICIPANT CONTACT INFORMATION

Participant Name: _____

Mailing Address:_____

_____

Home Address (if different):_____

_____

Phone Number: _____

Email:_____

PARTICIPANT CONTRIBUTION AGREEMENT

Project title: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut

A copy of this agreement will be given to all participants. The following will be read to the participant, and their assent or dissent will be noted.

I, _____, hereby acknowledge that I have participated in the research study entitled: A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future – Getting Off Diesel in NunatuKavut.

1. As a participant in this research project, I wish to have my name acknowledged in any future dissemination of the research findings.

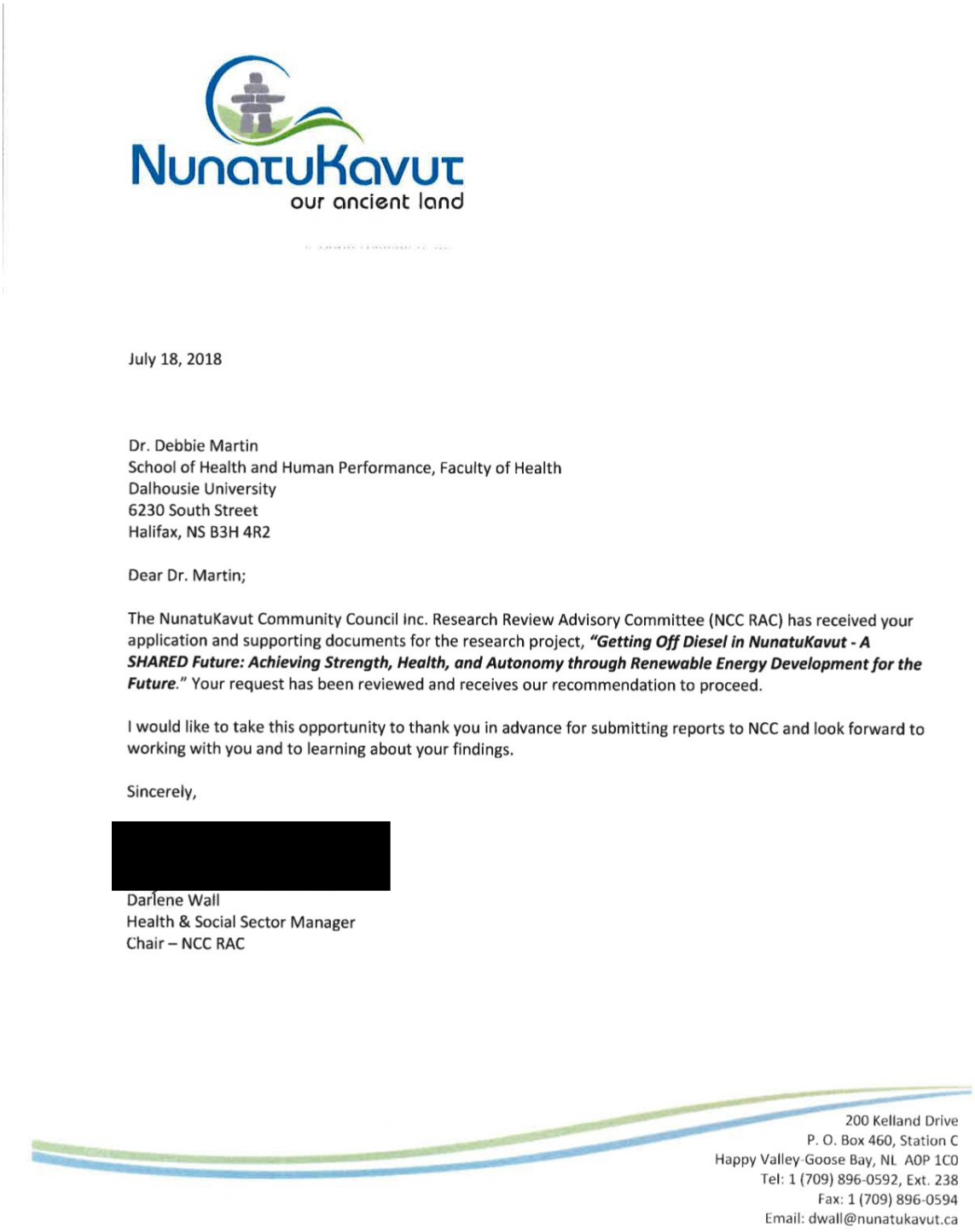
2. In any future publications and presentations of this research (including Master's and PhD theses), my name will appear in the 'Acknowledgements' of those documents.

3. [For Individual Interview participants ONLY]. I wish to have my name attached to my direct quotes] ___yes _____no

_____
Participants Name

_____
Researcher's Signature
_____
Date

Appendix 3: Documentation of Ethics Approvals



NunatuKavut
our ancient land

July 18, 2018

Dr. Debbie Martin
School of Health and Human Performance, Faculty of Health
Dalhousie University
6230 South Street
Halifax, NS B3H 4R2

Dear Dr. Martin;

The NunatuKavut Community Council Inc. Research Review Advisory Committee (NCC RAC) has received your application and supporting documents for the research project, ***"Getting Off Diesel in NunatuKavut - A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future***." Your request has been reviewed and receives our recommendation to proceed.

I would like to take this opportunity to thank you in advance for submitting reports to NCC and look forward to working with you and to learning about your findings.

Sincerely,

[redacted]

Darlene Wall
Health & Social Sector Manager
Chair – NCC RAC

200 Kelland Drive
P. O. Box 460, Station C
Happy Valley-Goose Bay, NL A0P 1C0
Tel: 1 (709) 896-0592, Ext. 238
Fax: 1 (709) 896-0594
Email: dwall@nunatukavut.ca

Emily Beacock

From: Debbie Martin
Sent: July 13, 2018 4:06 PM
To: Emily Beacock
Subject: FW: REB # 2018-4491 Letter of Approval

[redacted]

Debbie

From: "do-not-reply-DAL@researchservicesoffice.com" <do-not-reply-DAL@researchservicesoffice.com>
Date: Friday, July 13, 2018 at 3:58 PM
To: Debbie Martin [redacted]
Cc: [redacted]
Subject: REB # 2018-4491 Letter of Approval

****This was sent from a no-reply address. To respond to this message, please reply directly to Research Ethics at ethics@dal.ca.*

Social Sciences & Humanities Research Ethics Board
Letter of Approval

July 13, 2018

Debbie Martin
Health\School of Health and Human Performance

Dear Debbie,

REB #: 2018-4491
Project Title: Getting Off Diesel in NunatuKavut - A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future

Effective Date: July 13, 2018
Expiry Date: July 13, 2019

The Social Sciences & Humanities Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on *Ethical Conduct for Research Involving Humans.* This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

1

Sincerely,

Dr. Karen Beazley, Chair

[redacted]

Post REB Approval: On-going Responsibilities of Researchers

After receiving ethical approval for the conduct of research involving humans, there are several ongoing responsibilities that researchers must meet to remain in compliance with University and Tri-Council policies.

1. Additional Research Ethics approval
Prior to conducting any research, researchers must ensure that all required research ethics approvals are secured (in addition to this one). This includes, but is not limited to, securing appropriate research ethics approvals from: other institutions with whom the PI is affiliated; the research institutions of research team members; the institution at which participants may be recruited or from which data may be collected; organizations or groups (e.g. school boards, Aboriginal communities, correctional services, long-term care facilities, service agencies and community groups) and from any other responsible review body or bodies at the research site

2. Reporting adverse events
Any significant adverse events experienced by research participants must be reported **in writing** to Research Ethics **within 24 hours** of their occurrence. Examples of what might be considered "significant" include: an emotional breakdown of a participant during an interview, a negative physical reaction by a participant (e.g. fainting, nausea, unexpected pain, allergic reaction), report by a participant of some sort of negative repercussion from their participation (e.g. reaction of spouse or employer) or complaint by a participant with respect to their participation. The above list is indicative but not all-inclusive. The written report must include details of the adverse event and actions taken by the researcher in response to the incident.

3. Seeking approval for protocol / consent form changes
Prior to implementing any changes to your research plan, whether to the protocol or consent form, researchers must submit a description of the proposed changes to the Research Ethics Board for review and approval. This is done by completing an Amendment Request (available on the website). Please note that no reviews are conducted in August.

4. Submitting annual reports
Ethics approvals are valid for up to 12 months. Prior to the end of the project's approval deadline, the researcher must complete an Annual Report (available on the website) and return it to Research Ethics for review and approval before the approval end date in order to prevent a lapse of ethics approval for the research. Researchers should note that no research involving humans may be conducted in the absence of a valid ethical approval and that allowing REB approval to lapse is a violation of University policy, inconsistent with the TCPS (article 6.14) and may result in suspension of research and research funding, as required by the funding agency.

5. Submitting final reports
When the researcher is confident that no further data collection or participant contact will be required, a Final Report (available on the website) must be submitted to Research Ethics. After review and approval of the Final Report, the Research Ethics file will be closed.

Emily Beacock

From: ORE Ethics Application System <OHRAC@uwaterloo.ca>
Sent: July 26, 2018 11:01 AM
To: Debbie Martin; amyh@nunatukavut.ca; ashlee.cunsolo@mun.ca; pparker@uwaterloo.ca
Cc: n2mercer@uwaterloo.ca; Emily Beacock
Subject: Ethics Clearance (ORE # 23233)

Dear Researcher:

The recommended revisions/additional information requested in the ethics review of your application for the study:

Title: Getting Off Diesel in NunatuKavut - A SHARED Future: Achieving Strength, Health, and Autonomy through Renewable Energy Development for the Future ORE #: 23233
Principal/Co-Investigator: Debbie Martin (dhmartin@dal.ca)
Principal/Co-Investigator: Amy Hudson (amyh@nunatukavut.ca)
Principal/Co-Investigator: Ashlee Cunsolo (ashlee.cunsolo@mun.ca)
Collaborator: Paul Parker (pparker@uwaterloo.ca) Student Investigator: Nick Mercer (n2mercer@uwaterloo.ca) Student Investigator: Emily Beacock (emily.beacock@dal.ca)

have been reviewed and are considered acceptable. A University of Waterloo Research Ethics Committee is pleased to inform you this study has been given ethics clearance.

A signed copy of the notification of ethics clearance will be sent to the Principal Investigator (or Faculty Supervisor in the case of student research). Ethics approval to start this research is effective as of the date of this email. The above named study is to be conducted in accordance with the submitted application (Form 101/101A) and the most recent approved versions of all supporting materials.

University of Waterloo Research Ethics Committees operate in compliance with the institution's guidelines for research with human participants, the Tri-Council Policy Statement for the Ethical Conduct for Research Involving Humans (TCPS, 2nd edition), Internalization Conference on Harmonization: Good Clinical Practice (ICH-GCP), the Ontario Personal Health Information Protection Act (PHIPA), and the applicable laws and regulations of the province of Ontario. Both Committees are registered with the U.S. Department of Health and Human Services under the Federal Wide Assurance, FWA00021410, and IRB registration number IRB00002419 (Human Research Ethics Committee) and IRB00007409 (Clinical Research Ethics Committee).

****
Renewal: Multi-year research must be renewed at least once every 12 months unless a more frequent review has otherwise been specified by the Research Ethics Committee on the signed notification of ethics clearance. Studies will only be renewed if the renewal report is received and approved before the expiry date (Form 105 - https://uwaterloo.ca/research/office-research-ethics/research-human-participants/renewals). Failure to submit renewal reports by the expiry date will result in the investigators being notified ethics clearance has been suspended and Research Finance being notified the ethics clearance is no longer valid.

Modification: Amendments to this study are to be submitted through a modification request (Form 104 - https://uwaterloo.ca/research/office-research-ethics/research-human-participants/modifications) and may only be implemented once the proposed changes have received ethics clearance.

Adverse event: Events that adversely affect a study participant must be reported as soon as possible, but no later than 24 hours following the event, by contacting the Chief Ethics Officer. Submission of an adverse event form (Form 106 - https://uwaterloo.ca/research/office-research-ethics/research-human-participants/report-problems) is to follow the next business day.

Deviation: Unanticipated deviations from the approved study protocol or approved documentation or procedures are to be reported within 7 days of the occurrence using a protocol deviation form (Form 107 - https://uwaterloo.ca/research/office-research-ethics/research-human-participants/report-problems).

Incidental finding: Anticipated or unanticipated incidental findings are to be reported as soon as possible by contacting the Chief Ethics Officer. Submission of the incidental findings form (Form 108 - https://uwaterloo.ca/research/office-research-ethics/research-human-participants/report-problems) is to follow within 3 days of learning of the finding. Participants may not be contacted regarding incidental findings until after approval has been received from a Research Ethics Committee to contact participants to disclose these findings.

Study closure: Report the end of this study using a study closure report (Form 105 - https://uwaterloo.ca/research/office-research-ethics/research-human-participants/renewals).

You are responsible for obtaining any additional institutional approvals that might be required to complete this study.

****

Best wishes for success with this study.

Karen Pieters, MPH
Manager
Office of Research Ethics
EC5, 3rd floor
519.888.4567 ext. 30495
kpieters@uwaterloo.ca

A new research ethics system will be available on August 13. Visit the Kuali webpage at the link below to find out what you need to do. See https://uwaterloo.ca/research/faculty-0/your-gateway-research/kuali

Sign up for our listserv at http://uwaterloo.us10.list-manage.com/subscribe?u=734de426ca7ee1226a168b091&id=46fdcbfea2

6. Retaining records in a secure manner
Researchers must ensure that both during and after the research project, data is securely retained and/or disposed of in such a manner as to comply with confidentiality provisions specified in the protocol and consent forms. This may involve destruction of the data, or continued arrangements for secure storage. Casual storage of old data is not acceptable.

It is the Principal Investigator's responsibility to keep a copy of the REB approval letters. This can be important to demonstrate that research was undertaken with Board approval, which can be a requirement to publish.

Please note that the University will securely store your REB project file for 5 years after the study closure date at which point the file records may be permanently destroyed.

7. Current contact information and university affiliation
The Principal Investigator must inform the Research Ethics office of any changes to contact information for the PI (and supervisor, if appropriate), especially the electronic mail address, for the duration of the REB approval. The PI must inform Research Ethics if there is a termination or interruption of his or her affiliation with Dalhousie University.

8. Legal Counsel
The Principal Investigator agrees to comply with all legislative and regulatory requirements that apply to the project. The Principal Investigator agrees to notify the University Legal Counsel office in the event that he or she receives a notice of non-compliance, complaint or other proceeding relating to such requirements.

9. Supervision of students
Faculty must ensure that students conducting research under their supervision are aware of their responsibilities as described above, and have adequate support to conduct their research in a safe and ethical manner.