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SANTA CRUZ

ACOUSTIC RELATIONS: PIPELINES, PLANT MEDICINE, AND SUSTAINABILITY IN VANCOUVER, BC

A dissertation submitted in partial satisfaction
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

ANTHROPOLOGY

by

Kristine Lawson

June 2019

The Dissertation of Kristine Lawson is approved:

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Vice Provost and Dean of Graduate Studies

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Table of Contents

Table of Contents iii

List of Maps, Figures, Tables, and Illustrations iv

Abstract vi

Acknowledgements viii

Abbreviations and Names xii

Preface 1

Introduction: The Sounds of Sustainability 8

Listening to History 40

  Timeline of Indigenous Issues 44

  Trans Mountain Pipeline Timeline 51

Part I - Yarrow 61

Part II - Borage 98

Part III - Mullein 144

Acoustic Relations, All My Relations 202

Appendix I - Maps of Pipeline Routes and Sites 211

Appendix II - Acoustics 217

Appendix III - *The Haudenosaunee Thanksgiving Address* 218

References 221

List of Maps, Figures, Tables, and Illustrations

Figure 1. Yarrow sketch 61

Table 1. Spring and fall yarrow leaf cleanse 65

Figure 2. Kwekwecnewtxw Banner hangs in the winter sunlight . . . 77

Figure 3. High pressure pipeline marker 83

Figure 4. "We take care of each other" mural 91

Figure 5. Borage sketch 98

Figure 6. A crop of borage 102

Figure 7. Harvested borage ready for drying 103

Figure 8. A wall of borage plants cures in the basement 104

Table 2. The many uses of borage medicine 105

Figure 9. Purple vetch 114

Figure 10. Trans Mountain Pipeline Stump Pump Station sign . . . 115

Figure 11. Stump Lake access road 116

Figure 12. "Direct Jobs Per $1 Million of Output" 126

Figure 13. "Industrial GHG Emissions and Employment, 2008" . . . 127

Figure 14. "Project Benefits" 128

Figure 15. City of Vancouver: "mecca of green enterprise" . . . 139

Figure 16. Mullein sketch 144

Figure 17. Mullein flowers drying at home 153

Figure 18. Rogue mullein plant 154

Figure 19. Burnaby Mountain tank farm marked perimeter and prohibited area notice 181

Figure 20. Entrance to Kwekwecnewtxw with secured area in background . 182

Figure 21. Trans Mountain property line signpost 183

Figure 22. Prayer flags at Kwekwecnewtxw 188

Map 1. Trans Mountain Pipeline through the Fraser River Watershed . . 211

Map 2. Existing & Proposed New Kinder Morgan Trans Mountain Tar Sands Pipeline Route from Merritt to Kamloops 212

Map 3. Trans Mountain Pipeline associated tanker route through the Salish Sea . 213

Map 4. Proposed Kinder Morgan Trans Mountain Tar Sands Pipeline in Burnaby & Coquitlam 214

Map 5. Kinder Morgan Burnaby Mountain Storage Tank Terminal Injunction Site with 5 m Buffer 215

Map 6. Trans Mountain Pipeline Full Route Map. 216

Abstract

Acoustic Relations: pipelines, plant medicine, and sustainability in Vancouver, British Columbia

Kristine Lawson

The twinning of the Trans Mountain Pipeline between the Alberta tar sands and Vancouver, British Columbia is one of the most politically divisive issues in recent Canadian history. At the epicentre of the debate are questions about sustainability policy, indigenous rights, environmental rights, and political leadership. This ethnographic investigation problematizes the term "sustainability" and approaches to accomplishing it that fail to adequately acknowledge social implications. The work draws parallels between the need for reconciliation with and healing of Land and Peoples. It also implements the teachings of plants and plant medicine to draw out connections between people, their environments, and climate change crisis. Some of the questions raised include: What if sustainability policy focused instead on natural cycles of regeneration, with phases of creation, sustainability, and destruction? In what ways has the City of Vancouver's Greenest City 2020 Action Plan created new sets of exclusion and marginalization and how will the city address this in its next sustainability plan? What are the connections between climate change crises and reconciliation, in a Canadian context, with land-based long-resident people? And, how can the use of ceremony be heard as a form of both political dissent and re-emergent leadership? This investigation combines acoustic methods for deep listening to the environment, the news, and political leaders, as well as the ancient knowledge of plants.

About the Author – Kristine Lawson is a West Coast woman of Turtle Island and has lived up and down the coastline from Santa Cruz in central California to Juneau, Alaska, and many places in between. Her main home is in the city of Vancouver, located on the unceded lands of Musqueam, Squamish, and Tsleil-Waututh Nations. Kristine's grandparents, Jim and Maudie Lawson, did important community building work with their Native American neighbours in Alaska and Washington, which is likely where her spirit for bridge-building comes from. She also learned about plants and storytelling from Maudie and Jim. In addition to her conventional western education, Kristine also spent eight years working in the backcountry "classrooms" as a whitewater raft guide. In the Fraser River Valley, the Rocky and Sierra mountain ranges of BC, Alberta, and California, as well as the Daintree Rainforest of Far North Queensland, Kristine learned about rivers and forests and brings her deep connections to those places into her current work.

Acknowledgements

It has become increasingly common for those with a heart toward decolonization to acknowledge the traditional and unceded territories they occupy, where they live, and where they do their work. Land acknowledgements have become more performance than critical intervention in many instances. They are a necessary step in reconciliation processes and decolonization efforts but certainly not enough in and of themselves. Here I acknowledge the lands where my project is situated and the lands of my scholarly institution, whose resources I have used these past six years.

I acknowledge that the land on which my university, the University of California in Santa Cruz, is located is the traditional and unceded territory of the Uypi Tribe of the Awaswas Nation. Today these lands are represented by the Amah Mutsun Tribal Band who are the descendants of the Awaswas and Mutsun Nations whose ancestors were taken to Mission Santa Cruz and Mission San Juan Bautista during Spanish colonization of the Central Coast. Today, the Amah Mutsun are working hard to fulfill their obligation to the Creator to care for and steward Mother Earth and all living things through relearning efforts and through the Amah Mutsun Land Trust[1]. I also acknowledge the profound beauty and natural spirit of this place, that brought me so much peace and joy during the time I spent there – I feel blessed to have walked through the forests and along the seaside of the Awaswas Nation.

---

[1] Written in collaboration with the tribal chairperson of the Amah Mutsun Tribal Band for use on the UCSC campus.

I also acknowledge the lands where I have carried out and completed my dissertation research, the same lands where I have grown up and where I have now returned home to live, are the unceded ancestral lands of the Musqueam (xʷməθkʷəy̓əm), Squamish (Skxwú7mesh), and Tsleil-Waututh (sə̓lílwətaʔɬ) Peoples, sometimes known under the umbrella of Coast Salish Peoples (of the Salish Sea). These lands were never surrendered, relinquished, or handed over in any way and I recognize and call attention to the sustained efforts of these nations to have their sovereignty remembered and honoured by Canadian settler society. I feel so grateful to have been called home to these lands and I pray my work will be useful in restoring sovereignty and justice to all people here.

Finally, I acknowledge that these acknowledgements alone do not amount to reconciliation or decolonization. Words matter, but words alone will not bring the justice that is needed. Through all the words that follow, it is my hope that they will inspire action and it is my commitment to continue to act in solidarity with all my relations here at home.

In addition to acknowledging the lands, I also acknowledge those who walked beside me, stood around me, and offered their support. To all my teachers, I say thanks.

Thanks especially to some of my earliest teachers, Paige Hansen who introduced me to the art of storytelling, Greg Tener who taught me "relentless pursuit" and of worlds beyond my own, and Paula Clarke and Ted Hamilton who taught me how to take control of my own education. Thanks to my first teachers and mentors in anthropology, Charles Briggs and Steve Feld. To my dissertation committee members – Don Brenneis, thanks for standing with me since before day one; Nancy Chen, thanks for supporting me to be well in all parts of my life; and Lori Snyder for agreeing to come along for the last leg of this wild ride with a spirit-filled power to translate the words of the plants for me.

Thanks to everyone who shared their stories with me for this work, especially Bear Twofeathers, Black Bear Warrior, and Lindsay Cole.

Thanks to my soul sisters, Rebecca, Lizzy, Abbey, Kymberlie, Ursula, Margreth, and Haylee, and my actual sisters, Munch and Sam. Thank you to my mom, my rock. All of you women have been, and continue to be, my lifelines when I've been sinking down into the depths, floating up in the sky, or adrift somewhere in between – thank you for helping keep my feet on the ground and my heart filled with love.

All my relations,
Kristine Lawson
May 28, 2019

This work is dedicated to my dad who has taught me one of the most important lessons so far: how to disagree, fiercely, and still be friends.

Abbreviations and Names

AB	The Canadian province of Alberta
BC	The Canadian province of British Columbia
GC2020AP	The City of Vancouver's "Greenest City 2020 Action Plan"
Green Party	As in the US, the Green Party is an environmentalist political party
NDP	The New Democratic Party is generally closest to a socialist party federally and provincially although in Alberta the recent NDP government, led by Premier Rachel Notley, has been quite economically and socially conservative, not consistent with their counterparts nationally and in other provinces.
NEB	National Energy Board of Canada
Liberal Party	The centrist party federally and provincially. In BC, the provincial Liberal Party, led by Premier Christy Clark, held power until the NDP and Green Party formed a minority government in 2017
TIK	Traditional Indigenous Knowledge
TMX	The Trans Mountain pipeline
TRC	The Truth and Reconciliation Commission of Canada
Turtle Island	Also known as North America. I use Turtle Island throughout the project out of respect for indigenous sovereignty and naming traditions and as a reminder of histories older than "North America."

Preface

Originally, my dissertation project was to be a study of urban farming activism in Istanbul, Turkey. I conducted two summers of preliminary fieldwork in the Yedikule *bostanlar* – 2,000-year-old urban gardens along the edges of the ancient, westernmost city walls. After my second summer in Istanbul, in light of the political tensions that were rising nationwide, as well as in the city centre, it began to feel like an undue risk to plan to spend at least a year hanging around the gardens where the farmers and their families were navigating already complicated social and political terrain. Without a substantial history in that place, I felt my presence would bring more potential problems and risks for the farmers, their families, the other, mostly Turkish, activist involved, and myself than any benefits my bearing witness could possibly hope to contribute. Yet, I had become, and remain, deeply committed to the investigation of sustainability policy and practices and their social implications.

While working in Istanbul, I had begun to hear about the important sustainability work that was happening in Vancouver, British Columbia. That city was one of the "C40" cities (C40 Cities n.d.) and had developed the Greenest City 2020 Action Plan that promised to launch it on a path of sustainability leadership for other cities around the world to follow. That city and its surrounding neighbourhoods just so happened to be my home, the place where I grew up, although I hadn't lived there for the better part of a decade. I'd never really thought of Vancouver as an important place to think about sustainability and climate change – to me it was just home. But after the challenges I had faced in Turkey, being too much of an outsider, I decided to flip my approach and return home to study sustainability in Vancouver.

It became very clear, very quickly, that to ask questions about sustainability and the environment, from a sociocultural perspective, would necessarily include consideration of the era of reconciliation in Vancouver and across Canada. I do not think it is a coincidence that both the city and the nation find themselves in times of acknowledging and being held to account for damaged relations between indigenous and settler peoples and between human culture and the natural environment. Returning home, as a part of this settler culture, with all its complications, surfaced many questions of reflexivity as I began to understand my position as a pivot point between insider-outsider, settler-indigenous, social-political, human-environment. One of my first questions was about the connections between climate change crisis and reconciliation, in a Canadian context with land-based, long-resident people here.

Coming home to Vancouver to take up my fieldwork on sustainability policy, I knew I needed to address the connections between multiple sets of damaged relations. I also knew I wanted to take up the issue of Vancouver's reputation as a leader on sustainability policy since even the most cursory investigation of the Greenest City 2020 Action Plan (GC2020AP) revealed several ways that the goal of sustainability was unintentionally creating new forms of exclusion and marginalization. I quickly identified a place in which all these issues were coming together: a local indigenous medicine garden. This was distinct from an urban farm or community garden – its intention was not so much about the production of certain crops or plants but was instead to bring urban indigenous people to reconnect with the land. I thought it would be a great place to explore reconciliation between people, land, and the policies that supported both. I spent my first year of fieldwork volunteering in the medicine garden and was grateful for all the knowledge shared with me but, in the end, the timeline requirements for my project could not align with the time needed to build trusting relationships in sensitive contexts.

However, one of the most important things I learned from my entire six-year endeavour, and some of the first words spoken to me that would end up shaping my project were instructions: please don’t bring pencil or paper or any other recording device. You must show up with ears to hear and whatever stays with you, after you leave, you may record and share in any way you like, but *you must begin by listening*. Also, don’t ask too many questions.

The connections between an era of reconciliation with indigenous people and times of increasingly severe climate crisis became clearer for me when “indigenous” was described as “land-based” (Turner 2005, 5) and “long-resident” (20). Land stewardship and/or close relations to land – familial relations – and over long periods of time seem to be wrapped up in the very definitions of both “indigenous” and “sustainability.” But, as you will hear, many scholars and writers have importantly pointed out that it is not fair to expect to misappropriate indigenous knowledge to save the world from the havoc of industrialization and market economies – western colonial structures (Klein 2015, Dhillon 2018). Indigenous peoples and culture do not necessarily hold all the answers to healing and wellness for people and the earth – they are not necessarily “special” (King 2012, 265-266) and they too make mistakes (Turner 2005, 14). However, as Turner explains, the mistakes become an important part of the teachings (14).

It was my intention to make this a collaborative and participatory project and I allowed space in my research design for groups and individuals to come on board with their own ideas and approaches. But I grossly underestimated the time and connections – established relationships – that are needed to carry out this kind of work. I also learned of the realities of “participation fatigue” of those doing similar work. I think the instruction about not asking too many questions has to do with this – what is the burden we as researchers (also journalists, artists, documentarians, etc.) place on the local experts, those with the “lived experience” that we so crave to make our work accurate and authentic? I worked at an emergency shelter and service centre in Vancouver's Downtown Eastside neighbourhood, known as one of the most impoverished communities in all of Canada and with some of the highest rates of homelessness and mental health and addictions issues. The number of indigenous people in the Downtown Eastside, experiencing these issues, are disproportionately high (Urban Matters CCC and BC Non-Profit Housing Association 2018, Lupick 2018). While working in the Downtown Eastside, I developed a standard response for those wishing to come in and study our clients or even our frontline workers: sorry, but we don’t facilitate that – please feel free to check out all the excellent work that already exists. Marginalized folks are asked to share their story, re-live their traumas, again and again, for the benefit of researchers and there usually isn’t any real compensation or recognition that comes with this. Yet, policy researchers are often trying to do the right thing when they think to speak to those with lived experience. It is one of the best places to go to understand the unintended consequences of progressive social policy. For example, while it is true that Vancouver has made progress on important carbon reduction goals, it is also true that other crises, including housing affordability and homelessness, mental health and addictions, plus a poisoned drug supply, have destroyed the health and taken the lives of thousands of individuals over the course of my fieldwork.

But what did any of these factors have to do with sustainability? Although I was no longer doing fieldwork in the medicine garden, it continued to serve me in linking together the pieces of the sustainability puzzle. That garden was being used for healing. Community gardens and urban farms, for better or for worse (see Mary Beth Pudup 2008), have become a common component of any city plan for going green. If there were established connections between plants and healing and plants and sustainability, was there also some connection between healing (with plants and through growing) and sustainability? Plus, the indigenous participants in the medicine garden were traveling from the Downtown Eastside, out of the neighbourhood, to work with the plants in the garden. I began to consider sustainability and the Greenest City 2020 Action Plan through the lens of an indigenous healing garden, even though I knew I needed to move on from the garden.

By the spring of 2018, the Trans Mountain Pipeline project was huge news (see Listening to History, page 39). The highly contested pipeline project was not new, but was newly back in the media spotlight as construction picked up. I remembered a rally I had attended in Vancouver in the fall of 2016 and the sound of the drums that had woven throughout the thousands of people and kilometers of action. The message from activists was one of environmental sustainability but the indigenous elders and leaders brought a different message: one of healing the damaged environment and protecting it from further damages. For the next year, I attended rallies and marches with anti-pipeline activists. I spent time in the two camps established at the last pipeline terminal in the city of Burnaby, which neighbours Vancouver to the east. I talked with the indigenous elders and youth who, to my eyes and ears, were the leaders of much of the protest action. During this time, two indigenous herbalist women came alongside me and began to share their knowledge about plant medicine. Working with these two women and learning of the emotional and spiritual approaches to working with plants – literally listening to the voices and spirits of the plants – affect became an important consideration. I wanted to understand how plant medicine affected peoples' mental, emotional, and spiritual conditions but I also wanted to know how people were otherwise feeling about their social and political realities and whether their feelings mattered.

On this listening quest, I began to tune in to news about the pipeline project, often on the radio but also online, in deeper ways. On one level, my ears registered what was being said – arguments made, and stories told – but on another level, I began to hear the underlying sentiments – political divisiveness, fear, anger, even panic and overwhelm. Although this affect-inquiry was a little more difficult to navigate, since I usually couldn't speak directly to those in the news, it led to many interesting and important conversations with those who were participating in the research. The news stories became artifacts of sonic analysis to hear not only what was said about the pipeline but what kinds of affective responses the words and stories elicited.

So, the ethnography began to take shape with all these influences – the pipeline, activism (and my previous writing about social movements), plant medicine, acoustics, and indigenous perspectives. Working with the plants, learning how to listen in even another way, I have come to trust that things, people, and ideas come into our lives for a reason, and not by chance. In honour of that truth, I have joined together all these types of knowledge and ways of understanding the world in ways that I hope will reveal new understandings of some of the very big and very old problems of caring for all of creation.

Introduction: The Sounds of Sustainability

Sustainability

This is a story about sustainability in Vancouver, British Columbia. In some ways this is a very Canadian story but, in many ways, it goes beyond this city, country, and all the other sovereign nations that occupy this place. Sustainability is a vast topic that has become so critical in our age of climate crisis. Sustainability is typically understood as an approach to mitigating the damages of climate change. It has come to mean so many different things, to different people in different places, that sometimes it seems it no longer means anything at all. The word has been used so frequently that it can sound like no more than a buzzword used to market the latest product to “go green.” The story I’m about to tell takes up sustainability in new ways, combining different knowledges, worldviews, and approaches, with the intention of unearthing new understandings of this elusive yet enormous and perhaps critical concept. Although sustainability has everything to do with the natural environment, it is also about economies and political leadership. Through the stories you will hear, I bring together different ways of understanding sustainability policies through talk and other sounds of the environment and the economy, and political relations. I draw out the connections between all three and in doing so, exemplify sustainability policy as a matter of social relations.

So, what does *sustainability* even mean? According to the Cambridge English Dictionary, sustainability is “the quality of being able to continue over a period of time” or “the quality of causing little or no damage to the environment and therefore able to continue for a long time" ("Sustainability" n.d.). I wonder how often policy makers and those working on sustainability-oriented research stop to remember this very baseline definition – is this really the goal that has been set? I set out to challenge the thinking on sustainability and question whether this is even the desired goal or if, perhaps, there is another desire, another goal that feels better-suited and that creates opportunities for differing worldviews to build more inclusive and uplifting policy, together. But first it is important to understand the history of the use of sustainability to address global and local climate-related issues.

According to Google, the use of the word "sustainability" increased by 3,000% between 1987 and 2008, when their analysis ends (Google n.d.). 1987 is an important year because it is the year that the United Nations issued its "Brundtland Report," also known as "Our Common Future." The report offered "an agenda advocating the growth of economies based on policies that do not harm, and can even enhance, the environment" (Brundtland et al. 1987). Although the report emphasized cooperative approaches that "cut across the divides of national sovereignty, of limited strategies for economic gain, and of separated disciplines of science" (12), the central theme was still economic development.

Two decades later, Julian Agyeman, Bob Bullard, and Bob Evans compiled a series of writings that responded to the Brundtland Report and defined the concept of "just sustainabilities" (Agyeman, Bullard, and Evans 2003; Agyeman 2005; Agyeman 2013). In *just* sustainabilities, the authors acknowledge the need for justice within sustainability, that stems from a focus on matters of equity, social needs, and welfare. The plurality of sustainabilit*ies* is an acknowledgement of the impossibility of a timeless, universal solution (Agyeman 2013, 4-5). Specifically, the concept of just sustainabilities focuses equally on four essential conditions:

- improving our quality of life and wellbeing;
- meeting the needs of both present and future generations (intragenerational and intergenerational equity);
- justice and equity in terms of recognition (Schlosberg 1999 in Agyeman 2013), process, procedure, and outcome; and
- living within ecosystem limits (also called 'one planet living') (Agyeman 2005, 92) (Agyeman 2013, 7)

Although Agyeman, Bullard, and Evans developed their discourse around just sustainabilities more than ten years ago, Agyeman's more recent publication (2013) expands on how this concept might be further developed through practice, especially as it pertains to policy and planning. Using the broad themes of food, space and place, and culture, Agyeman notes how these three themes are increasingly widely discussed in popular discourse, even as they are underdeveloped in critical theory pertaining to just sustainabilities. He also notes the significant areas of overlap amongst these themes and the implications they pose for policy-makers, planners, practitioners, and activists. The collective work addresses issues of "equity deficit" (Agyeman, Bullard, and Evans 2003); insists that justice and social needs must be considered in sustainable development; and argues that there are no universal, timeless solutions but that the term sustainability must remain emergent and flexible (Agyeman 2013). Interestingly, the plurality of just sustainabilit*ies* seems to allude to the future work that would identify types of sustainability through its work to explore differing values in sustainability policies and priorities.

In 2012 the UCSC Critical Sustainabilities project assembled a group of scholars who defined different types of sustainability that often seemed to be in competition with one another. This work challenged assumptions about what exactly what was being sustained through the creation of several types of sustainability including:

- vernacular sustainability - privileges the social and cultural environment and is associated with traditional and everyday ways of living and working with nature (e.g. local definitions of sustainability)
- eco-oriented sustainability - privileges the bio-natural environment and is associated with environmental sciences, environmentalist movements, and conservation (e.g. the “classic” definition)
- market-oriented sustainability - privileges the economic environment for capital, and is associated with green industry approaches, technocratic solutions, and often, environmental gentrification
- justice-oriented sustainability - emphasizes the socio-political environment and is associated with movements that seek to redress historically-based environmental inequalities articulated with race and class disparities, as well as create equitable and diverse approaches to sustainability planning
- utopian sustainability - premised upon the collective imagining of an ideal future environment that transcends contemporary conflicts and crises and has historically been associated with intentional communities, countercultural movements, and science fiction (“Sustainabilities” n.d.).

These categories of sustainability offer invaluable frameworks to understand the complexity of sustainability policy. For example, prioritization of market-oriented sustainability will, ironically, often negatively impact eco-oriented approaches and will directly compete with justice-oriented initiatives through the common practice of environmental gentrification or "green washing." In previous work that picked up from Agyeman et al. and the UCSC Critical Sustainabilities project, I explored whether these competing categories of sustainability might be filled with potential for collaboration. Now I argue that a collaborative shift is, in fact, necessary. While it is necessary to understand the ways different priorities for sustainability have been established – and have resulted in the typologies listed here – and their tendency to be in competition with one another, all of this points to another reason why the term "sustainability" might not be as useful as it, perhaps, once seemed. In addition to setting a rather low bar of maintenance, since its use began to grow in the 1980s, sustainability has also become so complex and varied in its meaning that the time and energy put toward clarification of this nuance might be put to better use. Plus, there are important social considerations that are regularly left out of sustainability policy.

As more studies explore the connections between social, economic, and environmental issues, the greater potential for sustainability policy becomes clearer. Driven by my observations that many individuals are left out of sustainability initiatives because they cannot afford to participate (purchasing organic produce or a hybrid vehicle, for example, is expensive) and/or because they are focused on other priorities such as their own health and wellness, led to the question of what would happen if cities and nations developed policy that supported the health of people, the planet, and markets, all together. Canadian journalist and author Andrew MacLeod draws many connections between these in his 2018 book *All Together Healthy: A Canadian Wellness Revolution*. Included in his analysis are the linkages between homelessness, mental health and addictions challenges, indigenous issues, trauma, wealth, class, education, pollution, and the local and national policies that cover all of these. One of his main arguments is that the health of Canadians is not determined exclusively from within the health care system but must also take other social and economic policy factors into consideration. Canadian environmentalist Naomi Klein argues that climate change, ironically, could be just the thing needed to finally start to develop the holistic public policy that is so desperately needed:

> I began to see all kinds of ways that climate change could become a catalyzing force for positive change – how it could be the best argument progressives have ever had to demand the rebuilding and reviving of local economies; to reclaim our democracies from corrosive corporate influence; to block harmful new free trade deals and rewrite old ones; to invest in starving public infrastructure like mass transit and affordable housing; to take back ownership of essential services like energy and water; to remake our sick agricultural system into something much healthier; to open borders to migrants whose displacement is linked to climate impacts; to finally respect Indigenous land rights – all of which would help to end grotesque levels of inequality within our nations and between them (Klein 2015, 7).

In her 2015 book *This Changes Everything: Capitalism vs. the Climate*, Klein explains that a vast reworking of global society is needed to avoid catastrophic planetary failure. She argues that it is not a matter of the mechanics of how this shift occurs but whether people of the world will make the conscious decision to do so. She speaks of how this shift will come as a result of waking up to the global realities of climate change and all it encompasses, resisting the temptation to “look away” from an overwhelming series of problems that will require radical action, and placing those in power who are in agreement that power must shift away from corporations and into communities.

Rethinking Sustainability

The problem with sustainability is that it has been recognized as a very important goal for cities and nations around the world to achieve, yet strategies to do so continue to fall short or roll out too slowly to avoid catastrophic planetary failure. Emissions targets are not met, timeframes are too lengthy, and all the while the planet continues to heat and melt, burn and blow. Environmental crisis-inspired poverty, economic collapse, and social inequality continue to cause more and more devastation. Drug addiction and poor mental health have become commonplace and it's no wonder, considering the scale of the global problems we all face and the overwhelm this can evoke. One key example I explore is the City of Vancouver's Greenest City 2020 Action Plan, set to wrap up next year. It boasts many lofty green goals for reducing the city's emissions and providing pathways to lifestyle changes in the forms of transit, green spaces, and food security. Yet, the plan openly identifies itself as a market-oriented sustainability plan when it states that its first step in the plan is to "secure Vancouver's reputation as an international mecca of green enterprise" (City of Vancouver 2012, 10). In other words, attracting green business is the major strategy in funding other sustainability initiatives contained in the plan. Further, since the plan's rollout in 2012, the city (and many other cities around the globe) has been hit hard by a housing affordability crisis, a drug poisoning crisis, and sustained struggles with poor mental health and extreme poverty. In this context, when so many find themselves in survival mode, engaging with the latest green technologies seems a distant privilege.

One alternative to the limited goals of sustainability is to understand it as a part of a recurring cycle of regeneration. Nikki Silvestri, writing with Amy Hartzler and Hosan Lee, propose an understanding of the rhythms of change as cycles of destroy > create > sustain or resist (destroy) > insist (create) > love (sustain) (Hartzler, Silvestri, and Lee 2017). Through this description, I understand the current social-political-environmental moment, in Vancouver and beyond, as a moment of creative destruction as the new creation emerges. What will be sustained is still being determined. The co-authors explain more about the destruction phase as it transforms into creation:

> Destruction is exhausting, emotionally, physically, and spiritually...Capturing the moments when destruction becomes creation is the salve for our souls that carries us forward. We see what we're building. We experience hope...As we stand against what we know is wrong, we must also insist on what is right...It's easy to become fixated on systems primed for destruction, especially in times of chaos and crisis. Ensuring that we recognize and lift up creation will ensure that we have somewhere to recharge our batteries and regenerate (Hartzler, Silvestri, and Lee 2017).

These reflections come from an observation of more and more resistance in the authors' communities. Elders, aunties, mothers, and daughters are taking to the streets – and Twitter, the authors say – to speak out on the problems they hear. While this resistance is very important, the three explain how it is only one part of a three-stage cycle that must also include a new creation that will be sustained for a time. When framed in this way, the sustainability portion is not necessarily the goal (nor is the creation or the destruction). Instead, there is awareness that each has its own time.

There is a sense that time running out to cool our planet. This sense is the foundation for Naomi Klein's co-authored *Leap Manifesto* and the Leap.org movement that is emerging in urban centers around the world to bring together activists and city policy makers for rapid change. The authors of the manifesto explain: “caring for one another and caring for the planet could be the economy’s fastest growing sectors...We know that the time for this great transition is short...small steps will no longer get us where we need to go. So, we need to leap (“The Leap Manifesto” n.d.).

Henry Red Cloud, a Lakota educator and entrepreneur working in the solar energy sector teaches his students that there are times when things move slowly and we must accept small steps forward, and there are other times “when you need to run like a buffalo” (in Klein 24, 2015). As I will explore below, there a value to slowing down and taking the time to listen to the world. But, let there be no mistake, this is not a slowing down to consider whether climate change is real or whether immediate and large-scale action to shift to clean energy is needed now. A growing number of studies agree that a shift to clean energy would take less time, and require no new technology beyond what already exists. Stanford researcher and engineer Mark Jacobson called it a myth to believe that any more gas, coal, or oil are needed at all – the transformation to clean energy is possible, he says, without having to develop any additional new technology (Rosenthal 2013). And that was six years ago – just imagine what new technologies have been created even since then. What I refer to is time to listen, with compassion – time to tune in to others. This is the kind of slowing down that might speed up progress toward sustainability goals.

The play between speeding up and slowing down is one of the common dynamics of the stories I share. It is the nuance of knowing when to speed up and when to slow down, from varied perspectives, that I dwell on. One of the locations where it feels important to slow down is in taking the time to understand the connections between environmental, economic, political, and social problems. Often, if not always, to pick up a problem in one of these areas, and really meditate on it, is to understand that all the other areas are also involved. As Klein observes, “we have been trained to see our issues in silos; they never belonged there” (Klein 2019). I ask what might happen if one were to listen from within and outside those silos. For example, Klein describes the need for a “rapid” transition to clean energy but one that also allows workers the time they need to retrain in clean energy sector jobs (Ibid.). Listening to the stories about work from the workers, employers, and political leaders in the news builds out understandings of the beliefs and emotions that shape policy decisions around jobs. Along these lines, I bring together several tools, including listening and plant medicine in my own mode of multimedia, multispecies, participatory ethnography. I arrived at this combination of approaches by early-stage listening. As it turned out, *this* was the version of “participatory” that I *could* do – listen to what was said by those who were too busy to commit to joining my work (because they were doing their own) and bring those themes and motifs together. It has all been an experiment.

There are several key components of this big story of sustainability I am about to tell, made up of many smaller stories. Each of these components exists together, with the others, in an interconnected web of relations that can only be understood as parts of a whole. Connectedness is a part of my main argument that it is problematic to separate different issues such as the environment, the economy, and governance when thinking about climate change and sustainability. To consider only the technology of “going green,” for example, is to miss all the complexity of the relationships between people and the land. This is important because the quest to develop effective, marketable technology has not yet taken us, as a global community, to where we need to be. The planet is still heating up at a catastrophic rate resulting in climate refugees as people flee their now inhabitable homelands. Ecosystems continue fail, which is sad in and of itself as, for example, we see populations of some of humanity's favourite species and places – including monarch butterflies, orca whales, arctic icefields, and coral reefs – dwindle and die. This is also a tragedy for people as awareness slowly grows around the implications to humanity. Even in the briefest of examples just given, it is not difficult to understand the implications that massive waves of refugees have on the cities and towns that usher them in (as a willing collective, or not) or the ways current lifestyles, including food options and prices for goods, are threatened by the inabilities of farmers to produce or industry to transport goods to markets. Each of these is an entire body of knowledge unto itself and there are many important investigations that explore food security and food justice, environmental justice, the traumas of climate change, and so many other aspects of climate change-related crises (See: Lowenhaupt Tsing et al. 2017, Chen 2008, Guthman 2011, Pudup 2008, Pudup 2015, Glowa 2016, Gray et al. 2013, Kaldjian 2000, West et al. 2006, Marris 2013, Gordillo 2014, Rose n.d., Muehlmann 2012, and Shiva 2007). The stories I tell here aim to do something different.

The most effective strategies, policies, and approaches to sustainability will be developed by holding up together the social, ecological, economic, and the political and really tuning in to the connections between each. This silo-busting approach applies at the macro-systems level and flows all the way down to the personal level when considering relationships between people, their neighbours, family members, the specific places where they spend time, and the ways they interact with other beings from birds to fish to plants to forests to rivers and oceans.

The Limitations of Science, the Value of Listening

Collectively, we have learned so much. Ours is an age of information, but I believe science has generated so much knowledge that it has become a distraction. As I have spent the last six years thinking about sustainability, justice, and what can be done to make the world and everything in it healthier and stronger, it is evident that there is plenty of information on these issues. What is needed now is an understanding of how to use such information in more just and equitable ways. Making justice and equity a part of deploying critical information is not just a matter of feeling better or being better humans – it's a matter of survival and thriving for everyone. More importantly, everyone stands to gain when the bar is lifted for everyone, especially when it is lifted for those who face the most vulnerability and marginalization. What must be heard more loudly, clearly, and persistently is how everyone will benefit from a healthier, more vital, equitable, and resilient global community.

This project suggests new ways to use all the knowledge that science has accumulated about sustainability. I ask how best apply it to our circumstances of crisis and move forward in transformative ways. I also ask whether science itself has become partisan.

As an activist anthropologist, I have considered how to be in conversation with my adversaries, or whether I even want to be in conversation with them at all. I have marched and picketed and occupied and mic-checked alongside many different types of allies and over the top of many different types of adversaries[2]. I will admit that it has felt good at certain times to point my finger, shout, and accuse. But over time, the reality of the world sinks in – regardless of political beliefs or alliances, we are all on this planet together and actually need to find ways to live with one another, as difficult as that may sound.

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[2] In my first paper on acoustics and using sound to understand social power dynamics, I studied the practice of "mic check" that became popular during the Occupy Movement. In the paper, I identified two main forms of mic checking. The first was used as simple low-tech voice amplification (one speaker-leader issues her message in short phrases that can be easily remembered and repeated by

Over the years I have learned to disagree, more lovingly. One of the most important lessons came from my dad – someone whom I love dearly but also with whom I rarely see eye to eye on political matters. Through my sometimes painful journey of developing this work and struggling to share it with my dad, without fighting, I have learned a lot about how to speak with respectful disagreement. Our process is not perfected but I believe we have both made a lot of progress understanding where the other is coming from and, as a result, we have softened and shifted, even if only a little bit. Best-selling US author, nonprofit founder, and organizational change theorist Margaret J. Wheatley wrote,

> I believe we can change the world if we start listening to one another again...especially with those we call stranger or enemy...And I know with all my heart that the only way the world will change is if many more of us step forward, let go of our judgements, become curious about each other, and take the risk to begin a conversation (2010, 4).

This is my hope for the work: that the words, the sounds they carry, will sink in and take root and perhaps some small, soft but sturdy shoots of understanding and softening

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everyone within earshot in a call-and-response form, thus allowing the message to be conveyed across a large space without the use of voice amplification technology. The second form was what I called "combative" mic checking and was used as a way to shut down speech already in progress by calling out the group's own message (again in the call-and-response form) over the top of the speech already in progress. Visit https://soundcloud.com/kristine-lawson-1/mic-check-sample to listen to a recording of a mic check (made at University of California meeting of regents in San Francisco in 2012). Visit https://www.academia.edu/2403711/Sounding_Protest to read a brief abstract of the mic check paper entitled "Sounding Protest."

will spring up so that even if we can't agree with one another, we can at least move closer together. With this proximity, perhaps some of the anger, fear, and intolerance can melt away (before the ice caps do...) and we can create together communities where one person's – or species' – wealth and prosperity doesn't come at the expense of another's.

Acoustic Relations

The name of this work, *Acoustic Relations*, implies new approaches to sustainability. My scholarly investigation of acoustics traces back to a guest lecture by Steven Feld, who pioneered the study of the anthropology of sound as something distinct from the anthropology of music and ethnomusicology. I was mentored by Feld as I completed my undergraduate degree and launched into my graduate studies. One of the big questions Feld always asks is how do we know what we know, through sound? Acoustic epistemology, or acoustemology was the word, the way he launched this inquiry as he taught how sound is social and how it brings understandings of people, places, and interactions in complex ways. Feld explains that "acoustemology joins acoustics to epistemology to investigate sounding and listening as a knowing-in-action: a knowing-with and knowing through the audible" (in Novak and Sakakeeny 2015, 12). He explains how acoustemology emerged as a way to describe the world, which is "constituted relationally, by the acknowledgement of conjunctions, disjunctions, and entanglements among all co-present and historically accumulated forms" (12).

Feld teaches his students to tune in to histories of listening. In his foundational book, *Sound and Sentiment*, he mapped the histories of voices and affects amongst the Kaluli people of the Bosavi rainforest in Papua New Guinea. Through their old stories and their worldviews that understand how the spirits of their ancestors take up residence in the birds of the jungle around them, Feld describes how, for the Kaluli, there is a world that grows up from the ground and a world that grows down from the sky. The birds occupy both worlds and so, are highly revered by the Kaluli. Through the songs of the birds and the songs that the Kaluli sing to one another, reminding them of important times, places, and people, they all come together regularly to cry and to acknowledge the connections between all these people, times, and places, that they share. In this way, their ceremonial weeping creates a “cosmic geography” that turns cosmology into ecology as all the connections between land, sky, past, present, physical, and spirit are honoured (Feld November 13, 2012 guest lecture). These concepts shaped my early sonic thinking about the connections between people, places, and other beings and the ways sound might reveal new understandings of these connections.

My work combines acoustics with relations. Relations are foundational to the work of social scientists – how people relate to themselves, other people, the natural world, god and the cosmos. Relations shape culture and the worlds people live in. Relations generate emotions and motivate actions. As I share these stories of acoustics and relations, my intention is to make clear that there is always a choice to hear connection or to hear difference. It is important to hear both, of course, but I hope, through this exercise, that ears will become more tuned and conditioned to hear what is shared. Even when there is significant difference, there is always some common ground to be found. This is rich and fertile ground. Each part of this work is about *hearing* relations: relations to systems, relations to people, relations to other beings, relations to the ways these relations make people feel.

Acoustic Relations also evokes the spirit of the salutation “all my relations” that I have learned since returning home to Vancouver. It is an indigenous greeting that is used in many contexts here but, at its core, acknowledges one’s own hereditary lines and indicates the connections we all share with the world and each other. All my relations might include human ancestors, the people of the same place where I am from, and might also include plants, animals, or natural features like mountains or bodies of water that are of local and familial importance. It is important to note that these relations are understood as literal kinship relations. To evoke these as relations connects a person to those things and to others who are also connected to those things. The web grows. “All my relations” is spoken after prayer or ceremony, as a thank you, and as a farewell salutation. When spoken in person, it is accompanied by a gesture of open arms and hands, palms turned up to offer as well as to receive.

Many social scientists have already done the groundbreaking and developmental work of investigating and describing relations between humans and other beings including canine companions (Haraway 2008), traumatized land (Rose 2004), resilient fungi (Tsing 2009), forests (Kohn 2013), and even the “anthropology of life itself” and the entanglements of all kinds of different living beings (Kohn 2007). The “contact zones” where species meet and mingle have proven fertile grounds for exploration of nature-culture relations (Kirksey and Helmreich 2010). These works have helped us to understand the values of relations between species and the roles and responsibilities of the researcher in observing and describing these relationships. These responsibilities include taking seriously the question of how to speak with/for other species and how to speak from/of certain places (Appadurai 1988 in Kirksey and Helmreich 2010). In my work, I build upon this body of knowledge to explore how relations between people, other beings, and systems (markets, governments, industry, etc.) interface with policy, practice, and belief about sustainability. I use the situated sounds, in the places where I've conducted investigations of sustainability, to explore the social and political power dynamics at play between places, beings, and systems. Multi-species investigations are of critical importance in the work to define and implement more effective sustainability policy since they can push for the respect of other non-human species as powerful agents (Ogden, Hall, and Tanita 2013). I argue that this failure to take other species' agency seriously enough is a key missing component of current, unsatisfactory sustainability policy and practices. Turning to the teachings and practices of land-based, long-resident people, near and far, has revealed the importance of honouring such agency, often spoken of as reciprocity.

Relations with Plants

In addition to acoustics and relations, another key part of my approach in rethinking sustainability is to use the inherent knowledge and expertise of some of the very important things sustainability strives to protect: plants. Biologist and Citizen Potawatomi knowledge carrier Robin Wall Kimmerer says that plants are our oldest teachers (2013, 213), but even before I read her work, I had begun fieldwork in a local indigenous medicine garden. I could hear how that medicine garden offered a different approach to healing, health, and wellness for people and land. In the end, there were just too many barriers to me being as involved as I needed to be for my research, so my field site shifted, but this initial experience launched me into relationship with plants and with local teachers of plant medicine. Now, several years later, I know what Kimmerer means when she says plants are our oldest teachers. When it became clear that my main case study would instead be the Trans Mountain Pipeline project, I had become very interested in plant medicine and wondered what could be learned from "applying" plant medicines to the social, political, and economic issues that the pipeline stirred up. The key to applying plant medicine in this way is to understand the ways they address and heal physical, emotional/affective, and spiritual ailments. As I have been learning, it is important to be well in all these three areas for lasting and durable health.

In the stories that follow, I work with medicines from three common plants that are found throughout the Vancouver area and much of the rest of the world: yarrow, borage, and mullein. These are among the first medicines that I learned about while volunteering in an indigenous medicine garden in Vancouver in 2017. Those teachings have stayed with me, as have the plants, popping up frequently in my travels on the ground and in my mind. Although each of the plants was found in the indigenous garden and each had local native medicinal uses, only yarrow is from this area – the other two have migrated, mullein from the Eurasian and borage from the Mediterranean region. These three plants represent cycles of movement and adaptation. As local indigenous herbalist Lori Snyder suggested to me, it is helpful to think of these plants as tools in the toolbox. I bring them to my social analysis to open up the thinking and feeling space for new or renewed understandings of those invasive species: conflict, divisiveness, and entrenchment. When these three plants presented themselves to me as pairings for the content of each part of the dissertation, I did not consider that only one was native and, in fact, was a little surprised to learn that borage and mullein were not native, seeing as local native groups seemed to have so many uses for them. I realize now that the plants are one microcosm of the complex adaptive strategies of indigenous groups in British Columbia. As ethnobotanist Nancy J. Turner explains,

> These people have, since time immemorial for them, adapted their lifestyles to the changing climates and the fluctuations in abundance...If there is one overriding theme extending over time and space for human survival in this vast region, it is change – and adaptation to change. Being keen and vigilant observers, scientists in the broadest sense of the word, indigenous people shave not only used the resources around them but maintained and enhanced them in various ways (2005, 14).

While some traditions have lasted for a very long time, others have changed and been created anew. The ability to adapt to change is probably the biggest single consideration settler policy might learn from Traditional Indigenous Knowledge. In Part I, I introduce yarrow, the sole native plant of the three I employ, as it informs traditionality alongside consideration of another very old tradition: understanding of human-land relations as kin-relations. In Part II, I discuss uses of the introduced borage plant as I analyze the current political and emotional tensions faced regarding market-oriented sustainability policy. In Part III, I take up the paradoxical mullein plant – understood as weed in some places and a plant used in both ceremony and medicine in others – as I examine current political leadership and reflect on possible future cycles of regeneration.

My focus is on how these plants address physiological symptoms as well as emotional and spiritual ills. Taken another way, the earth seems to be sprouting up the very species that would support people to navigate the struggles currently faced. I describe each of the plants, including the physiological and emotional supports that I have learned they offer, as a reminder of the vast capabilities plants have to work with our human bodies, minds, and spirits. I engage with the role of plants as caregivers, which will take on a deeper meaning in Part I, which includes discussion of plants as relations.

It seems there is a rise in popularity of plant medicines and herbology teachings – many neighbourhoods in Vancouver, including my own, have organizations or local businesses that facilitate plant walks, teaching participants how to identify and harvest plants for their own use. There are also places where one can purchase fresh or dried plants to be used to address health concerns. The pharmacy sections of natural food stores, including Whole Foods, now feature many plant medicines as well. I've noticed that dandelion leaves are now available year-round in my local grocery store's produce section. With all these options for acquiring plant medicine, individuals are becoming more familiar with how to use it. What I am experimenting with here is the application of plant medicines to shared collective issues – emotional responses to the traumas and stresses of climate change crisis and sustainability. While the teachers and practitioners I have met and spoken with employ various approaches from traditional to intuitive to more spontaneous and DIY, in my work I play with an ethnographic approach that applies a macro-dose of plant medicine to troubled social relations. Each of the plants I work with in these stories are commonplace – there is nothing exotic about them and they are sturdy, growing easily in untended soils. The powerful medicines that each of these plants offers are, in a way, hiding in plain sight.

Affect and Spirit

In the shift to apply plant medicine at a collective social scale, the way I understand symptoms shifts: physical symptoms might be noticed in the absence or presence of certain things such as the disappearance of streams running down Burnaby Mountain where the last major pipeline terminal and tank farm is located. These physical symptoms are great indicators and entry points for deeper explorations. The emotional symptoms have become a large focus of my work as those aspects that lie beneath the surface of what is said or heard. I launch into this in stories about the economy as I demonstrate how listening to big media stories ultimately reveals the underlying fears that come with the economic challenges faced. The media stories effectively convey the anger, animosity, and even hostility between Canadian provinces, political parties, and disagreeing citizens that have created a very polarized social climate where differences seem irreconcilable as opponents become entrenched in their beliefs. But is this true – are the differences actually so vast that they cannot be overcome or at least broken down and pulled apart?

In addition to anger, underlying affects of difference and misunderstanding run through many of the stories and themes of the project. Inspired by the work of sociologist Deborah Gould (2010; see also: Rasza 2014, Klein 2015, 337-366, and Kimmerer 2013), I understand affect as an absorption of sensory experiences – similar to emotion but unbounded, non-fixed and, as Gould describes, "bursting with potential" (2010, 26). Consideration of affect, especially in political contexts where tensions and passions are high, is important because of all that can be revealed and understood more deeply. It's not enough to simply dismiss political activists as impassioned, irrational, idealistic, or crazed – especially when more and more people are mobilizing every day. Gould argues that better understandings of affect can help reveal the complexities of human political motivations and behaviours and provide a sense of all the emotional work that is performed in social movements. Studying affect can also illuminate sources of social reproduction and social change, for example, a desire to experience reciprocity or belonging might lead to certain political actions or inactions (32). The three key affective experiences I explore are anger, fear, and spirituality. These were the three feelings that came up, repeatedly, with those I spoke to, in the news and other stories I heard, and even within myself on my two-year exploration of sustainability and the TMX project in Vancouver. While I did not set out to study emotions or feelings or certainly spirituality, these were the things that kept presenting themselves, so I listened.

My incorporation of spirituality is not from the direction of formal or organized religion but instead from the beliefs in and descriptions of connections to other-than-human consciousness and spirit. My explorations are predominantly from the First Nations perspectives that were shared with me, but these perspectives are certainly not exclusive to indigenous people, as both research participants and the literature I engage note. Although the spirit connections between people and the land that I explore stem from indigenous worldviews and laws that are shared broadly amongst many First Nations, there are also nuances in understandings and these worldviews also extend beyond indigenous community. My focus in bringing together the teachings, worldviews, and laws of land-based long-resident groups from across Turtle Island was on the bigger themes and motifs that are shared or that came up frequently in the stories that were shared with me. When a belief or practice is particular to a certain nation, I note as much. There are also individuals and groups who may not subscribe to the spiritual beliefs themselves but actively support the rights of those who do. My interest in spirituality or spirit connections is in its potential to build connections between several of the key problem areas of climate crisis and sustainability themselves. These key areas include how people relate to the natural environment and relate to each other, particularly between indigenous and non-indigenous groups, which forms a part of the main rift between pipeline supporters and protesters. These splits I propose are generalizations, to be sure, but increasing understanding of varying perspectives in a spiritual context – understanding the spiritual relations individuals and groups might have with their environments – stands to increase understanding of and collaboration between groups.

The teachings of the plants say there must be wellness in body, mind, *and spirit* for strong and lasting health outcomes. From the beginning, social scientists have explored the role of spirituality in shaping society and culture. Early work described religions as cultural systems that establish norms, develop collective consciousness, and distinguish between the “sacred” and the “profane” (Durkheim [1912] 1995). Durkheim’s work also emphasized that a gulf between religious and scientific thought need not exist since religious thought developed out of society and can be readily observed and recorded – science is the offspring of religion in its shift toward cognitive function and physical phenomena (431). Later work developed “structuralist” ethnographic investigations that established understandings of different cultures, religions, and rituals as equitable types made up of similar but not necessarily equal or even comparable elements (Lévi-Strauss 1963). Eduardo Kohn’s more contemporary ethnographic exploration of the dream culture and human-animal-forest spirit relations amongst the Runa in the Ecuadorian jungle (2013). Informed by these several contributions that are important but represent but a tiny slice of the work on spirituality that social scientists have done, I explore what is to be learned from bringing together disparate but concurrent beliefs and worldviews – spiritual and not – regarding sustainability, what is to be sustained, how the sustainability is to be achieved.

Within the First Nations worldviews that were shared with me, acknowledging the connections to something beyond and bigger than oneself, is not just a nice option for those who feel so inclined. From supporters and allies of groups holding these spiritual beliefs, but who may not come from the same spiritual traditions themselves, the value of these spirit-connections is increasingly being recognized as an important, and possibly necessary, component of planetary wellness and sustainability. Kimmerer uses basket weaving, and the "lesson of the three rows" to explain this concept:

> In weaving well-being for land and people, we need to pay attention to the lessons of the three rows. Ecological well-being and the laws of nature are always the first row. Without them, there is no basket of plenty. Only if that first circle is in place can we weave the second. The second reveals material welfare, the subsistence of human needs. Economy built upon ecology. But with only two rows in place, the basket is still in jeopardy of pulling apart. It's only when the third row comes that the first two can hold together. Here is where ecology, economics, and spirit are woven together. By using materials as if they were a gift, and returning that gift through worthy use, we find balance. I think that third row goes by many names: Respect. Reciprocity. All Our Relations. I think of it as the spirit row. Whatever the name the three rows represent recognition that our lives depend on one another, human needs being only one row in the basket that must hold us

> all. In relationship, the separate splints become a whole basket, sturdy and resilient enough to carry us into the future (2013, 153).

The third row, the spirit row as she calls it, is necessary to hold the others together. Acknowledging the connections, honouring the resources we have and the systems that provide for us in material ways are the only way they all hold together. This important, considering the ability of sustainability science and technology to only move the global community so far without incorporating connective, affective, and spirit-centric policies and supports.

So, this new approach to sustainability that I propose is to bring not only the social aspects but the emotional, the affective, and the spiritual to science and technology. In what follows, I will use acoustics and plant medicine to facilitate new listening practices and new understandings of the persistent problems of sustainability. As I do so, I hope to break down this baseline goal of sustainability and present a case for how it is a part of a three-stage cycle of regeneration, existing between creation and destruction.

I begin from the premise of environmental sustainability and examine two main reasons why sustaining the earth is so important. The two reasons are shaped by different understandings of the natural environment as a commodity and/or as a relation. Although it is not likely that either of these would be disputed as motivation for eco-oriented sustainability, it is important to understand the differences between these two worldviews since they result in very different approaches to sustainability policy. In Part I, I describe the concept of “the Land” and the ways the natural world, and relationships to it, were introduced to me as I arrived back home in Vancouver and began to listen to those involved in pipeline project struggles. Informed most strongly by, but certainly not limited to, local indigenous leaders including those of Tsleil-Waututh Nation, the concept of the Land can also be described as the natural world and includes the waters, the air, geological features, and all living beings of the earth, air, and water. In a way, I build up a prequel to the TMX case study based on pre-existing understandings of the Land. I compare understandings of land as commodity – as an object of value in a market sense – and Land as relation – literally as kin.

These two different kinds of relationships to the natural world, land, or the Land, run alongside understandings of eco-oriented and market-oriented sustainability policy. A prioritization of market-oriented sustainability lends itself to understanding land as commodity whereas emphasis of eco-oriented sustainability aligns more with understanding the Land as a relation. Using historian Thomas King's analysis of the history of settler-colonialism on Turtle Island[3] (North America) (2012), and Robin Wall Kimmerer's framing of Land as a relation and the importance of reciprocity (2013), I tune in to the story of how it's always been about land, whether as something to possess or something to honour. Indeed, in the case of the pipeline, King's observations remain true today: still it is a question of land, who has the authority to make decisions as to the best use of the Land and what the relationship is to that land. The City of Vancouver's Greenest City 2020 Action Plan, along with the Healthy City and Resilient City Strategies, pose a case study for the complications of understanding land as commodity and Land as relation.

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[3] To hear Thomas King tell the story of Sky Woman and the formation of Turtle Island, listen to the recordings of his 2003 talks as a part of the CBC Massey Lectures (https://www.cbc.ca/radio/ideas/the-2003-cbc-massey-lectures-the-truth-about-stories-a-native-narrative-1.2946870).

Recently, the journal *Environment and Society* addressed the issue of indigenous rights within the mainstream environmental justice movement. In the introduction to that issue, Jaskiran Dhillon takes up the increasingly common practice of capturing, harnessing, and adapting Indigenous knowledge systems in the service of global sustainability (2018). Often, these global sustainability strategies are in the context of white settlers and settlements that do not prioritize decolonization. She includes as an example a joint statement issued by then US President Barack Obama and Canadian Prime Minister Justin Trudeau:

> Canada and the US are committed to collaborating with Indigenous and Arctic governments, leaders, and communities to more broadly and respectfully *include* Indigenous science and traditional knowledge into decision making, including environmental assessments, resource management, and advancing our understanding of climate change and how best to manage its effect (PMO 2016, emphasis added in Dhillon 2018, 2).

Yet, Dhillon argues, traditional indigenous knowledge is not a commodity that can be used to save the planet while a lack of attention to the initial traumas of colonialism and land conquer persists. It is an interesting conversation to now discuss the catastrophic end of the world when indigenous people have faced this end for the last 500 years (Todd 2016). To continue to frame mainstream environmental justice within a framework of settler sovereignty and settler futurity (Dhillon 2018, 4) is to not only eliminate the possibility of decolonization but is also to miss the true lessons of traditional indigenous knowledge, which revolve around relations to, instead of capture of or domination over, the land. As a settler anthropologist taking traditional indigenous knowledge seriously in my work, as an ally to the indigenous rights movement, I aim to heed these warnings and break cycles of the status quo by tuning in to the deeper lessons of the people of long-resident land-based people. Although my collaborations with local indigenous communities have not been as involved or robust as I had hoped them to be, this has come along with the realization that these communities are deeply involved already in launching their own studies and actions for sovereignty and justice. I look forward to a long future in this place where my path will continue to unfold beside that of my brothers, sisters, and neighbours working for transformation.

In Part I I introduce yarrow medicine, good for respiratory health and promoting deep breathing. The breath, as I will argue, is a key element that links people and the Land as air is a part of the natural world needing human support to stay fresh and also a necessary part of human life itself. The plants, including yarrow, are also pivotal links in this relationship between people and the Land as they and we conduct our exchanges of carbon and oxygen. Deep breathing can alleviate anxiety and aid in focusing attention in the present moment. The quiet, breath-centric practice of mindfulness in meditation is an ancient practice that has enjoyed resurgences in popularity over the years – I explore the sounds of breathing and the ways in which particular forms of breathwork, with mindfulness and meditation, are being taken up as radical political acts to advocate for healthier people and planet. The air is also the location where sound waves travel and I use acoustic examples including radio waves and the concept of static or "unwanted interference" (Goodman 2016).

Next, I pull apart assumptions about what is to be sustained. In Part II, I tell the story of the Trans Mountain Pipeline (TMX) twinning project that serves as an important case study of sustainability in Vancouver, Western Canada, and the entire nation. Specifically, I consider “the Economy” and market-oriented sustainability factors. I use capitalization intentionally to draw attention to the power granted to the Economy by government and industry. I want this capitalization to look strange and to disorient the reader as it stirs consideration of social and political relationships to the Economy – whether its power has been intentionally bestowed and whether it makes sense to continue to vest such power and authority in something so potentially volatile going forward. Certainly, not everyone will agree that the Economy deserves such an elevated position (see also page 99). The TMX project is an example of market-oriented sustainability where the undisputed priority of those in power is economics. This message has been repeated and amplified continuously, in contrast to the story of opposition, which tends to focus more on eco- and justice-oriented sustainability.

The sounds of this chapter are the big media stories that fill the airwaves with angry words and voices as provinces, governments, and communities argue over whether and how the pipeline project should proceed. This anger travels between provinces (British Columbia and Alberta) and between First Nations[4] and colonial government and brings division as it escalates into hostility and threats. Because of the diversity of voices heard from various First Nations and the Canadian government, it is important to listen to them all within the context of Canada’s quest for reconciliation with indigenous people (see “Listening to

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[4] Within Canada, the current practice is to recognize indigenous people as Inuit (indigenous from the Arctic region), Métis (a French word meaning “of mixed blood”), or First Nations (all other indigenous groups or nations). First Nations is a blanket term and each nation under this has its own name although recognition of this sovereignty is weak in Canada.

History" on page 40 for a brief overview of this journey within the Canadian national history spanning over 150 years and since the outcomes of the United Nations' inquiry into the treatment of indigenous people in Canada were released in 2015). Although Canada officially signed on to the UN's Declaration on the Rights of Indigenous People in 2016, it has been a very selective process of granting and withholding indigenous rights, as can be heard in the case of the pipeline project where initial approval of the project was ultimately overturned by the Federal Court of Appeals in 2018 in part because indigenous communities were not properly consulted. The selectivity around when rights to indigenous communities and nations are granted and when not suggests the continuation of colonial sovereignty over indigenous nations. Political scientist Jeff Corntassel, writing with Chaw-win-is and T'lakwadzi have argued that, in fact, the language of reconciliation may serve to "relegate all committed injustices to the past while attempting to legitimate the status quo" (Corntassel et al. 2009, 145 in Sinclair 2018, 100). The conflict between First Nations who reject the pipeline project and the approving Canadian Government might be heard as denial of indigenous economic sovereignty.

As I tune in to the sounds of anger, a new affective quality emerges: fear. At the bottom of the anger is a fear that job creation opportunities will be lost, industry profits will fall, and the Economy will weaken. I introduce borage medicine for courage to face the fear underlying the angry words and actions and the patience to sit with that and hear what is being said. Even though there are many strategies for alternative energy production, there is much distrust of these knowledges, even though they have been thoroughly studied. Again, there is a fear of what is unknown and seemingly unvetted. I explain how some strategies rely on new and cutting edge technology, but many of the strategies are founded in old knowledge, carried by indigenous leaders, and have proven successful since time immemorial.

In Part III, I reflect on how sustainability is accomplished through leadership and how particular forms of leadership might develop different forms of sustainability policy. This is made up of leadership – including elected officials, community elders, and teachers – and policy. Since I have already taken up policy at the local level in exploration of the City of Vancouver's Greenest City 2020 Action Plan, Healthy City, and Resilient City Strategies, in this chapter I examine national-level contextualizing factors including the observation of the oil industry and, perhaps the green economy as "deep states," the sounds of zero-sum electoral politics, and the language of "consent" vs. "consultation" with regard to indigenous sovereignty in political and economic decision making. Through acoustic sampling of the sounds of ceremony in local political actions, I argue that the use of ceremony and spirit-centric practices is shifting the sound of dissent and holds the form of new or re-emergent leadership. I use mullein flower medicine – with its deep tap root, capable of breaking up compacted soils – as an aide for good ear health to tune in deeper than ever to the sounds of sustainability and regeneration.

I have invited participation from those who have come around me in this work – the teachers, neighbours, elected officials, and experts who have shared their stories or joined me in conversation on these issues. Some have allowed me to record their voices as they share their stories and perspectives. Some have contributed sound recordings or reflections on what they hear. All who have contributed have helped to shape the direction of the project by sharing what is important to them. It has been my mission to practice my own listening at every turn, with open ears and open heart, even when I didn't particularly like the sound of what I heard. It was my intention for this project to be more of a collaborative co-creation and I held much space in a loose research design to welcome in others who might want this to be their project as well. What I learned, after two and a half years of fieldwork, is that people and organizations working on these justice-oriented issues are very busy and to seek collaborators is, often, to ask too much. I ended up crafting my own art of asking for what seemed fair and truly equitable. Often this meant smaller and shorter contributions in the short term or finding ways to incorporate works that had already been shaped for their own purposes into my project. I hope that in the future, as I continue to build community with the people who have supported me in this project and contributed to it in their way, that our co-creations will become bigger and more expansive.

Listening to History

Before I launch into the main discussion of the project, it is necessary to build context around two areas the reader may know much or little about: reconciliation in Canada – the relations between indigenous and non-indigenous Canadians – and the Trans Mountain Pipeline which transports crude oil and diluted bitumen from the tar sands in northern Alberta through the Fraser River watershed. Within these two areas I believe there are lessons to be learned that go beyond one energy project, one place or region, and one group of people. Social and political dynamics between settler and long-resident land-based societies are of interest around the world and, especially as the need for better approaches to natural resource management increases and intensifies, I have found the lessons and learnings, that continue to pour in even as the project wraps up, to be of critical use in these times of conflict and crisis. It is my hope that the reflections I share will be of value to others who seek peace and wellness.

An Introduction to and Timeline of Settler-Colonialism and Reconciliation in Canada

What follows is a small sampling of key dates and events that provide an overview of relations between indigenous and non-indigenous Canadians and governments. This timeline captures a slice of settler-colonial history as a means of building context for the discussions that are to follow. This overview is heavily informed by the recent published findings of the Truth and Reconciliation Commission of Canada (TRC 2015a, 2015b). One might ask why include a historical discussion of indigenous relations in Canada to a project about sustainability policy and my response to that questions is that I believe sustainability policy, practices, and beliefs are important places to consider and enact reconciliation between indigenous and non-indigenous Canadians. As will become clear, the fundamental debates within sustainability controversy throughout Canada and at every level of decision-making can be understood in part as fundamental differences in worldview that often split along indigenous-non-indigenous lines. Certainly, there are exceptions, but I heard the divide frequently enough for it to become a major framework for this research.

In 2008, the TRC launched an inquiry into the current and historic treatment of indigenous people in Canada. It was the power and determination of residential school survivors that ultimately called for the establishment of the TRC (TRC 2015b, 6). In 2015, the TRC published its findings, which included a decision that Canada had committed acts of cultural genocide against indigenous people across the nation through the residential school systems and other laws, practices, and institutions that were designed to assimilate indigenous people into western settler culture:

> For over a century, the central goals of Canada's Aboriginal policy were to eliminate Aboriginal governments; ignore Aboriginal rights; terminate the Treaties; and, through a process of assimilation, cause Aboriginal peoples to cease to exist as distinct legal, social, cultural, religious, and racial entities in Canada. The establishment and operation of residential schools were a central element of this policy, which can best be described as 'cultural genocide.'
>
> ...Cultural genocide is the destruction of those structures and practices that allow the group to continue as a group. States that engage in

> cultural genocide set out to destroy the political and social institutions of the targeted group. Land is seized, and populations are forcibly transferred and their movement is restricted. Languages are banned. Spiritual leaders are persecuted, spiritual practices are forbidden, and objects of spiritual value are confiscated and destroyed. And, most significantly to the issue at hand, families are disrupted to prevent the transmission of cultural values and identity from one generation to the next.
>
> In its dealing with Aboriginal people, Canada did all these things (2015b, 1).

Residential schools served to not only separate families (even siblings taken from the same households were separated into different schools, often) but to push the message that indigenous parents were unfit and cultural practices were to be ashamed of (4).

In addition to its extensive reporting on historical abuses to indigenous people throughout Canadian history, the TRC also issued “94 Calls to Action” to achieve reconciliation between indigenous and non-indigenous Canadians (TRC 2015a). When the Report and Calls were published, the Canadian government announced its commitment to implementing the Calls to Action (Government of Canada “Delivering on Truth and Reconciliation…” n.d.). As the TRC’s report states, “reconciliation is not an Aboriginal problem; it is a Canadian one. Virtually all aspects of Canadian society may need to be reconsidered” (TRC 2015b, vi). The Commission expressed its definition of reconciliation as building relationships of mutual respect between indigenous and non-indigenous Canadians (6). Reconciliation will involve apologies, reparations, and meaningful actions including acknowledgement of the sovereignty of indigenous nations with their own laws and legal traditions (16). It will also involve reconciliation with the earth and all living beings (18).

As the report points out, “Canadians have much to benefit from listening to the voices, experiences, and wisdom of Survivors, Elders, and Traditional Knowledge Keepers” (9). It also notes that perpetrators of the violence committed against indigenous people in Canada are in just as much need of healing as victims (9-10). This healing will come from listening to one another and from the acknowledgement, however difficult it may be, that different truths exist from different perspectives (10, 12). For indigenous people, this healing is likely to come, in part, from a return to ceremony (17). It is important that all Canadians stay focused on this difficult work and resist the temptation to “look away” (Klein 2015, 13) from the violence and trauma that resurfaces through bearing witness to the stories.

Timeline of Indigenous Issues

1760s Settlers begin to arrive from Europe and engage in biological warfare tactics that include intentional spread of smallpox to unprotected indigenous communities (Spaulding 2006).

1831 Canada's first residential school, Mohawk Institute in Brantford, Ontario, begins accepting its first boarding students (Miller 2012).

1876 The Indian Act is enacted in Canada, allowing for the formal establishment of residential schools for indigenous children. The schools were mainly administered by the Roman Catholic, Anglican, United, Methodist, and Presbyterian churches (TRC 2015b, 3). This is a part of the TRC's description of residential schools:

> These residential schools were created for the purpose of separating Aboriginal children from their families, in order to minimize and weaken family ties and cultural linkages, and to indoctrinate children into a new culture—the culture of the legally dominant Euro-Christian Canadian society, led by Canada's first prime minister, Sir John A. Macdonald. The schools were in existence for well over 100 years, and many successive generations of children from the same communities and families endured the experience of them. That experience was hidden for most of Canada's history, until Survivors of the system were finally able to

> find the strength, courage, and support to bring their experiences to light in several thousand court cases that ultimately led to the largest class-action lawsuit in Canada's history.
>
> ...Children were abused, physically and sexually, and they died in the schools in numbers that would not have been tolerated in any school system anywhere in the country, or in the world (v-vi).

1880s Canada begins to replace traditional indigenous leaders (including hereditary chiefs) with band councils whose decisions it can easily overrule. This also leads to the disempowerment of many indigenous women leaders who traditionally held power in matriarchies (TRC 2015b, 1-2).

1883 Sir John A. MacDonald, Canada's first prime minister, tells the House of Commons (the elected portion of Canada's parliament):

> When the school is on the reserve the child lives with its parents, who are savages; he is surrounded by savages, and though he may learn to read and write his habits, and training and mode of thought are Indian. He is simply a savage who can read and write. It has been strongly pressed on myself, as the head of the Department, that Indian children should be withdrawn as much as possible from the parental influence, and the only way to do that would be to put them in central training industrial schools where they will acquire the habits and modes of thought of white men. (TRC 2015b, 2)

1960s	Child welfare policy later known as the “Sixties Scoop” is carried out to place indigenous children in non-indigenous families in Canada and the US. This began as early as 1951 and carried on into the 80s. It is likely more than 20,000 children were removed from their homes during these years. In 2017, Ontario Superior Court judge Edward Belobaba ruled that the Canadian government did not adequately protect the cultural identity of “Sixties Scoop” victims and ordered an $800 million settlement to survivors (Niigaanwewidam and Dainard 2016).
1969	Canadian government ends partnership with churches that are administering residential schools (TRC 2015b, 3).
1996	Gordon Residential School in Punnichy, Saskatchewan, closes (Miller 2012).
2007	The Indian Residential Schools Settlement Agreement is reached between the Government of Canada and residential school survivors. $1.9 billion is set aside for survivors with individuals receiving $10,000 for the first year of schooling and $3,000 for every subsequent year in damages. The Agreement is the largest class action lawsuit in Canadian history. It had approved $1.6 billion in payments as of 2016; it is estimated approximately 150,000 Inuit, Métis, and First Nations children spent time in residential school between 1870s and 1990s (TRC 2015b, 3, Marshall 2013).

2008 The Truth and Reconciliation Commission of Canada is launched

2015 The Truth and Reconciliation Commission releases its final report and issues the 94 Calls to Action, many of which are specifically addressed to federal and provincial governments and church parties. Included in the 94 Calls to Action are:

- Call 22 to "...effect change within the Canadian health-care system to recognize the value of Aboriginal healing practices" (TRC 2015a, 3)
- Call 45 to issue a royal proclamation and covenant of reconciliation that would include a repudiation of "concepts used to justify European sovereignty over Indigenous lands and peoples such as the Doctrine of Discovery and *terra nullius*" (TRC 2015a, 5)
- Call 92, addressed to the corporate sector, to "Commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects" (TRC 2015a, 10)

2016 The national Inquiry into Missing and Murdered Indigenous Women and girls is launched. Over 1,400 testimonies speaking to the historic and continued violence and trauma committed against indigenous women and girls were heard; the inquiry is expected to conclude in Spring 2019 (see http://www.mmiwg-ffada.ca/timeline/ for more info).

2016 Legal and policy agreements are finalized to legitimize an ecosystem-based management system for the Great Bear Rainforest in British Columbia. The agreements will secure 85% of the 6.4 million hectare rainforest. Importantly, the agreement acknowledges the authority of the Kwiakah First Nation as well as two First Nations alliances, Nanwakolas Council and Coastal First Nations – Great Bear Initiative, to steward their ancestral lands. The agreement comes out of unprecedented collaboration in Canada between environmental justice groups (Sierra Club of BC, Greenpeace, and Stand.earth), First Nations, industry, and Canadian government (see http://savethegreatbear.org/ for more info).

2017 Amidst massive cross-country preparations of Canada's 150th anniversary as a nation-state, the City of Vancouver launched its parallel "150+" project to symbolize "that we were commemorating our Indigenous cultural heritage before confederation, acknowledged our journey over the past 150 years, and celebrated what's to come as we embraced, 'Moving forward together'" (City of Vancouver "Strengthening Our Relations: Canada 150+," n.d.). The 150+ celebrations were in collaboration with local Musqueam, Squamish, and Tsleil-Waututh Nations.

2018 The Trans Mountain Pipeline project approval is overturned by the Canadian Federal Court of Appeals in part because it is ruled that First Nations were not properly consulted prior to the approval of the project[5].

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[5] Tsleil-Waututh Nation v. Canada (Attorney General), [2018] FCA 153 (https://decisions.fca-caf.gc.ca/fca-caf/decisions/en/item/343511/index.do)

Overview of the Trans Mountain Pipeline

The Trans Mountain pipeline (TMX) began shipping crude oil from Edmonton, Alberta in 1953 (Canadian Press 2018). Since then, much has been learned about the impacts of the tar sands in Alberta where the oil is extracted from. These impacts are environmental – drastically affecting local ecologies – but they also have social, economic, and political implications. For some time now, there has been a large body of research on these effects and the ways they have devastated local landscapes, created serious health impacts for local residents and workers, and even contributed to harsh boom and bust economic cycles; the ways all these factors disproportionately affect particular, more vulnerable and marginalized people to a greater extent than others has also been thoroughly documented (see Klein 2015, King 2012, Kimmerer 2013, and Embree and Brugge 2018). As you read, all these issues will unfold with more description and analysis of the social and political power dynamics, but this overview serves as a way to frame the TMX project as a case study for thinking about the social aspects of sustainability.

Acoustic Relations is a story about sustainability and sustainability policy as a solution to the problems of climate crises. As the story will reveal, sustainability policy in many parts of the world, but especially here in Canada and in the city of Vancouver, often prioritizes market-oriented initiatives (see "The Sounds of Sustainability" for definitions of different types of sustainability). Because of this prioritization, and the parallel emphasis of the economic benefits of the TMX, sustainability policies, practices, and beliefs in the city and across the country have come to include pipeline projects. Some of the beliefs come from frequent repetition of the story that the TMX is good for the Economy and Canada cannot afford to not complete the project. Another belief that is often repeated is that transition to clean energy can and will happen, but later. Yet another belief, counter to these, is that Canada’s Prime Minister, Justin Trudeau, and those who would support the TMX for these economic reasons, are a part of the next wave of climate science deniers who believe that climate change is happening and has become more severe due to human activity, but deny that there must be a significant and immediate change in human action to avoid catastrophic planetary failure (Naomi Klein 2015 Interview with Amy Goodman).

Even before the Trans Mountain pipeline owners publicly announced the plan to twin the existing pipeline (in 2012), the twinning project has stirred up much controversy. The Vancouver-area Tsleil-Waututh First Nation formed their legal advisory council, “Sacred Trust,” and to date the indigenous communities and nations whose traditional territories lay in the path of the pipeline, are divided over whether the project should go forward. Generally, environmental groups, and more left-leaning political parties and organizations (including the Green Party and the NDP) tend to oppose the twinning of the TMX wile more socially and economically conservative groups and individuals, as well as the business community, tend to support it.

The timeline provides the key dates, events, names, and numbers that will be critical to understand the more complex discussions that will follow. Use the timeline as an entry point to consider the conflict and the complexity of social, political, economic, and environmental factors all twisting together across an expanse of 1,100 kilometers. Think about the ways pipeline discourse also spans a diversity of voices, cultures, and issues. Consider the date in September 2018 when Natural Resources Minister Amarjeet Sohi orders a new environmental impact report that pays particular attention to the effects of the TMX project’s proposed increase of oil tanker traffic on marine ecosystems in relation to the identification of the Tsleil-Waututh Nation as “Water Protectors,” since time immemorial. Although *Acoustic Relations* relies mostly on qualitative data, notice the numerical descriptions represented in this timeline that will filter through the rest of the project: number of oil spills, litres and barrels of crude oil spilled, kilometers of pipeline, the thousands of activists, hundreds of arrests, dozens of protest actions, lawsuits, court hearings, and testimonies, and the eight years of social and political controversy since the announcement of this TMX project.

Trans Mountain Pipeline Timeline

1947	Oil is discovered in Leduc, Alberta.
1953	The Trans Mountain pipeline begins shipping oil from Edmonton, Alberta to Burnaby, British Columbia at a capacity of 150,000 barrels per day. The 1,150 km route contains four pump stations along the way before eventually delivering the oil to ocean tankers in Burnaby (see Maps 1-5 in Appendix I) (Canadian Press 2018).
1966	On April 29th, approximately 6,982 barrels (1,110,138 litres) of crude oil are spilled from the Trans Mountain pipeline in Jasper, Alberta (Trans Mountain “Spill Chart” 2018).

1971	On April 26th, approximately 2,988 barrels (475,092 litres) of crude oil are spilled from the Trans Mountain pipeline in Kingsvale, British Columbia (Trans Mountain “Spill Chart” 2018).
1977	On June 21st, approximately 6,489 barrels (1,031,751 litres) of crude oil are spilled from the Trans Mountain pipeline in Carvel Corner, Alberta (Trans Mountain “Spill Chart” 2018).
1984	On October 20th, approximately 2,264 barrels (359,976 litres) of crude oil are spilled from the Trans Mountain pipeline in Edmonton, Alberta (Trans Mountain “Spill Chart” 2018).
1985	Trans Mountain’s largest oil spill to date - On January 25th, nearly 10,000 barrels (1,590,000 litres) are spilled from the Trans Mountain pipeline in Sherwood Park, Alberta (Trans Mountain “Spill Chart” 2018).
1986	On October 29th, approximately 1,227 barrels (195,093 litres) are spilled from the Trans Mountain pipeline in Sherwood Park, Alberta (Trans Mountain “Spill Chart” 2018).
2005	Kinder Morgan Inc. purchases the Trans Mountain pipeline for $3.1 billion (de Place 2014).

2005	On July 15th, approximately 1,550 barrels (246,450 litres) of crude oil is spilled from the Sumas Mountain storage facility in Abbotsford, BC; the crude flows into nearby Kilgard Creek (Wilderness Committee "Frequently Asked Questions..." n.d., Trans Mountain "Spill Chart" 2018).
2006-2008	160 km of new pipeline is laid as a part of the "Anchor Loop" that travels through Jasper National Park and Mount Robson Provincial Park. The loop adds thirteen new pump stations and increases capacity from 260,000 to 300,000 barrels per day (Canadian Press 2018).
2007	On July 24th, about 1,459 barrels (231,981 litres) of crude oil spill from a section of pipeline in Burnaby, spraying over a residential neighbourhood and flowing into the Burrard Inlet. A construction crew accidentally struck the unmarked pipeline with an excavator during construction (Wilderness Committee "Frequently Asked Questions..." n.d., Trans Mountain "Spill Chart" 2018).
2009	On May 6th, approximately 1,258 barrels (200,022 litres) are spilled from the Trans Mountain pipeline in Burnaby, BC (Trans Mountain "Spill Chart" 2018).
2012	Tsleil-Waututh Nation establishes the Sacred Trust – a legal advisory council and "an initiative of the Tsleil-Waututh Nation mandated to stop the Kinder

Morgan Trans Mountain pipeline and tanker project" (Sacred Trust Initiative n.d.).

2012-2013 Kinder Morgan announces it wants to twin the existing pipeline and files an application with the National Energy Board of Canada (NEB) (Canadian Press 2018).

2014 In November more than 100 people are arrested for blocking the work of drilling and survey crews. Most charges are dropped (Canadian Press 2018).

2015 On January 28th, Alexander First Nation chief Kurt Burnstick testifies in Calgary and says:

> We feel as a people that we are being asked to take a test by completing a puzzle with you, but it is your puzzle we are completing. We are being asked to put our puzzle pieces into your puzzle and they don't fit. We feel that our complex and interconnected social structures, which are largely foreign to modern day society, cannot be truly understood in this form, and we fear that our evidence may become marginalized and overlooked (NEB 2015, 11777).
>
> ...We hope that open minds will trigger your awareness of the limitations and issues in the Crown's consultation policies and

> use of current regulatory processes that are marginalizing our people and erode our rights (11790).

2015 In August the NEB postpones public hearings pertaining to the expansion project after striking from the record economic evidence provided by Steven J. Kelly. Kelly was a Kinder Morgan consultant who was to begin working for the NEB (Canadian Press 2018, Prystupa 2015)

2015 On November 4th Justin Trudeau is sworn in as the 23rd prime minister of Canada (Government of Canada “Justin Trudeau” n.d.).

2016 In January the new federal Liberal government announces projects such as Trans Mountain will now be assessed, in part, based on greenhouse gas emissions and will required to improve *consultation* with First Nations (Canadian Press 2018)[6].

2016 On March 1, Justin Trudeau famously announces in a press conference that “while governments grant permits, communities grant consent” (CBC Radio-Canada 2016)[7].

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[6] Consultation does not equate to the “free, prior, and informed *consent*” that Calls 92, Part i recommends (TRC 2015a, 10, emphasis added).

[7] This is not the first time Trudeau used this phrase – he was quoted as saying the exact same thing about the proposed Ajax mine in Kamloops, BC (Stahn 2013). Both federal and BC provincial governments rejected the open pit and copper mine project proposals because of the potential for adverse environmental effects (Baker 2018).

2016	In May the NEB recommends approval of the pipeline, subject to 157 conditions – it states the pipeline is in the public best interest (Canadian Press 2018).
2017	In May, the Federal Court of Appeal grants the Alberta government intervenor status[8] in a lawsuit filed by First Nations and municipalities opposed to the project (Canadian Press 2018).
2017	In the same month in British Columbia, the New Democratic Party (NDP) and the Green Party form a historical coalition government to remove the Liberal Party from power and together agree to "immediately employ every tool available" to stop the pipeline project (Canadian Press 2018).
2017	The next day, Kinder Morgan Canada debuts on the Toronto Stock Exchange (Canadian Press 2018).
2017	In December Kinder Morgan is granted permission by the NEB to begin pipeline construction work in Burnaby despite the company's failure to obtain permits and permissions from the City of Burnaby. A month later, the

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[8] An "intervenor" is defined in Canadian law as "a person or organization who does not have a direct interest in a particular court or tribunal proceeding, but is granted intervener status on a discretionary basis because their involvement would be helpful to the determination of the issues" (Government of Canada "Ruling on Intervener Status Requests" n.d.).

NEB establishes a process for resolving such permitting issues (Canadian Press 2018).

2018 In January, “Camp Cloud” is established on Burnaby Mountain, along the shoulder of the road corner of Shellmont Street and Underhill Avenue. The camp was occupied for over six months by anti-pipeline activists before it was forcefully dismantled, with some arrests made, in August 2018 (*Burnaby Now* 2018).

2018 In January the BC government moves to restrict increases in shipments of diluted bitumen (also known as “dilbit”)[9] until more spill response studies can be conducted (Canadian Press 2018).

2018 On March 9th, the BC Supreme Court grants an interim injunction to prevent anti-pipeline activities from interrupting construction in Burnaby; a week later (March 15th) the same court grants indefinite injunction against activists and prevents them from coming within five metres of two work sites. A week after that (March 23rd), federal Green Party leader Elizabeth May and NDP Member of Parliament Kennedy Steward (who would go on to become the mayor of Vancouver later that fall) are both arrested at an anti-pipeline protest. On the same day, a Federal Court of Appeal dismisses a BC bid to challenge the NEB ruling allowing Kinder Morgan to bypass municipality bylaws (Canadian Press 2018).

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[9] Although the Trans Mountain pipeline was initially used to transport crude oil, in more recent years, and with plans for expansion, the transport increasingly consisted/consists of diluted bitumen – an oil product that is less refined, more corrosive and much more difficult to clean up in the event of a spill (Wilderness Committee “Frequently Asked Questions...” n.d.).

2018 On March 10th, Kwekwecnewtxw, the Tsleil-Waututh Nation ceremonial Watch House, is erected atop Burnaby Mountain, just beyond the five metre injunction zone boundary (Lambert 2018).

2018 On March 27th, the City of Burnaby announces it is appealing the Federal Court of Appeals ruling (allowing Kinder Morgan to bypass its city bylaws) to the Supreme Court of Canada (but the Supreme Court refuses to reconsider) (Canadian Press 2018).

2018 In April, Kinder Morgan Canada announces it is suspending all "non-essential[10]" spending on pipeline construction and sets a May 31st deadline to reach agreements with stakeholders (Canadian Press 2018).

2018 As of April 2018, Trans Mountain self-reports 82 spills since 1961 (Trans Mountain "Spill Chart" 2018)[11].

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[10] It is never really determined what is meant by "non-essential" since, according to activists I spoke with, pipeline construction on Burnaby Mountain continued during this time.

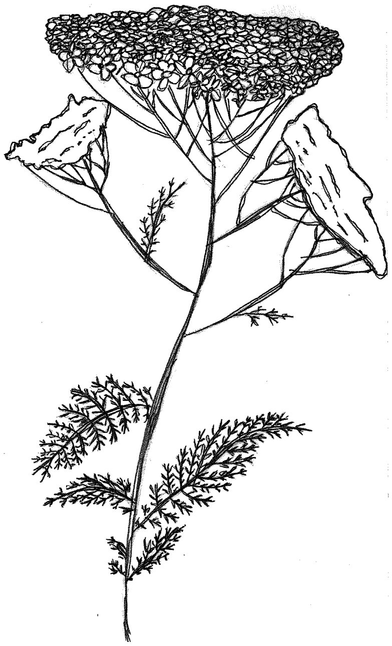
[11] I have included all nine spills of more than 1,000 barrels (approximately 159,000 litres) in this timeline.

2018	On May 29th the federal government announces a bid to purchase the pipeline from Kinder Morgan for $4.5 billion. (There was no public consultation before this decision was made.) In August the company's shareholders approve the sale (Canadian Press 2018). Notably, the vote to sell was nearly unanimous – there was a 99.98% margin and an 88% turnout to vote in-person or by proxy (324,578,862 shares) (Gibson 2018).
2018	On the last day of August, the Federal Court of Appeals overturns the Trudeau government's approval of the pipeline; their unanimous decisions states that the NEB's review process was so flawed that it could not be relied upon for project approval (Canadian Press 2018). The judgement also stated there was an "unreasonable consultation process (with First Nations) that fell well short of the required mark"(Spriggs 2018).
2018	In September the Natural Resources Minister, Amarjeet Sohi, orders the NEB to do a new environmental impact report, paying particular attention to impacts on coastal marine ecologies. The same minister initiates a new round of consultations with 117 First Nations in the areas of the pipeline route (Canadian Press 2018, Barrera 2018).
2018	At about this same time, 42 BC-based Order of Canada award recipients pen a letter to the prime minister beginning "As members of the Order of Canada, whose motto is 'They Desire a Better Country,' we believe it is our

role as citizens to speak out about our government's purchase and building of the Trans Mountain pipeline." The writers, including addictions expert and social justice activist Gabor Maté and legendary environmental activist David Suzuki, express their concern over framing the issue as “climate vs. economy” (Larsen 2018).

Part I - Yarrow

the sounds of ecological wellbeing and the Laws of the Land



It is often assumed that sustainability prioritizes protection of the environment. However, as I will explain in what follows, there are different reasons for *why* the environment is to be sustained, based on very different values of and relationships to the natural world.

When I brought my theoretical understandings of sustainability and the environment to the field, I was met with comment after comment, story after story about "the Land." I had become very well-studied in the concept of environmental sustainability, having worked abroad in Istanbul with urban farming activists – I had even learned the very long and, to my ear, sophisticated-sounding Turkish word for it: *sürdürülebilirlik*. But by the time my field site shifted to Vancouver and I came back home to study sustainability policy here, I knew that the word had become such a buzz that it was starting to lose its meaning. What I did not know, having been away for so long, was the strong role indigenous leadership and language was playing in shaping other ways of understandings things, from within the western systems of ecological science, economics, and politics. So, I began to hear about "the Land" and I became more familiar with all that this entailed – so much more than just vast swaths of ground. the Land is made up of the soil, but it also encompasses all the natural world – the sky, air, winds, waters, rocks, mountains, the cosmos, and all the creatures that live amongst these.

the Land can be perceived of in at least two distinct ways – as commodity and as relation – and depending on which is prioritized, can result in quite different approaches to sustainability policy. I share stories that speak to both these kinds of relationships to build context around some of the current struggles communities face about crafting meaningful and effective sustainability policy. I focus on how these different understandings of the Land create different feelings or affective responses within the body, why this is important, and how this information might be used moving forward.

I have organized the three parts of this project – the Land, the Economy, and Leadership – according to Robin Wall Kimmerer's "lesson of the three rows." In this lesson, Kimmerer relates the process of traditional basket weaving to "weaving wellbeing" – there is a protocol that must be followed if the basket is to hold together:

> In weaving well-being for land and people, we need to pay attention to the lessons of the three rows. Ecological well-being and the laws of nature are always the first row. Without them, there is no basket of plenty. Only if that first circle is in place can we weave the second (2013, 153).

I have thought a lot about the implications of sharing the stories of the local and more distant land-based people of Turtle Island throughout this project. These are not my stories, but what you read has either already been widely and publicly shared or has been shared with me for the purposes of this work, so I now pass it along to you. Anti-colonial scholar and organizer Jaskiran Dhillon points out how much traditional indigenous knowledge (TIK) has to offer approaches to mitigating planetary devastation as well as the necessity for those using the TIK to place it within a settler-colonialism context. She notes the "tidal wave of interest" and the "desire to 'capture and store' the intergenerational wisdom that speaks to the unpredictable path lying ahead" (2018, 1). Her colleague, anthropologist Zoe Todd, asks "What does it mean to have a reciprocal discourse on catastrophic end times and apocalyptic environmental change in a place where, over the last 500 years, Indigenous peoples faced (and face) the end of the worlds with the violent incursion of colonial ideologies and actions?" (Todd 2016). It is not enough to simply appropriate the knowledge as western approaches have often grown accustomed to doing. Instead, the use of this knowledge, as it is generously shared, must come with sustained efforts to decolonize, acknowledge the cultural violence that has been committed, and recognize the inherent sovereignty of the people who carry this knowledge forward and share it with us.

Yarrow

Yarrow is also known as “allheal” or “life medicine” due to its vast range of medicinal properties. The Latin name for yarrow, *Achillea millefolium*, is after the ancient war hero Achilles and the word thousand, for the plant’s foliage, also called “thousand-leaf.” It is said that when Achilles was a baby, his mother dipped him in a vat of yarrow tea to protect him from the harms of war. As a grown and accomplished warrior, he would treat his soldiers’ wounds with yarrow and, when he eventually died – of a wound to his achilles tendon – it was believed that this was the spot where his mother had held him when she dipped him into the yarrow tea. Not too long ago, yarrow pollen was discovered in the 46,000 year old tomb of a Neanderthal man, thus indicating the long history of yarrow’s use as a sacred plant (Gray 2011, 178-83).

Yarrow is a member of the aster/daisy/sunflower family and is a circumpolar plant. A complex species, it spreads easily through its rhizomatic network. Yarrow is used by many Pacific indigenous groups including as sore throat gargle (Tsimshian), poultice (Haida), bronchitis medicine (Nuxalk), childbirth medicine (Ditidaht, Makah), sore throat/cough/cold treatment (Nuu-chah-nulth, Sechelt, Klallam), for headaches (Songish), as a styptic to stop bleeding (Saanich), to cure measles (Squamish), as a blood purifier (Cowichan), a bath for invalids (Swinomish), a general tonic and eyewash (Quinault), a stomach tonic (Squaxin), and diarrhea medicine (Skagit, Snohomish) (Pojar and MacKinnon 2004, 279).

Yarrow is also known as “thousand leaf” for its soft, feathery leaves that extend up the stalk toward the bunches of small white flowers at the top (Gray 2011, 178). As I’ve come to know yarrow, I’ve come to experience it as a dry plant – sometimes almost as if it has already been strung up to be preserved even while still on the stalk.

Table 1. Spring and Fall Yarrow Leaf Cleanse

Offered by indigenous herbalist Lori Snyder

This is a good way to clean out and detoxify your guts before and after the winter, often a time when we eat heavier, starchier foods and activity levels drop. These are also the best times to eat fresh yarrow (or many other medicine plants) – in the spring when the shoots are fresh and new and bring all the nutrients that have newly emerged out from under the layers of winter mulch and in the fall, as the growing season winds down and plants often enjoy a brief second life thanks to the plentiful fall rains.

The cleanse consists, quite simply, of eating a number of yarrow leaves each day, slowly building the number, then decreasing it. Begin by eating five fresh leaves, raw, in the first day then six in the second day, seven in the third day, eight in the fourth day, and so on up to fifteen leaves (eleven days). Then begin decreasing by eating fourteen leaves on the twelfth day, thirteen on the thirteenth day, twelve on the fourteenth day, and so on until you are back down to five leaves. The leaves are to be eaten fresh. I would often just eat them straight out of the earth, but you could also mix them in a salad or a smoothie or something similar.

Yarrow is a winter herb used in winter solstice rituals. It is an herb said to help connect with the sacredness of the season – to reflect on the year that has been and set intentions for the year that is ahead. Yarrow sprinkled around the house or taken as tea can protect from the negative influence of others, strengthen the spirit, and create the future of one's dreams. It provides the courage for positive change, to attract love, and to release negative energy (Gregg 2013, 238).

I chose to begin with yarrow medicine, alongside discussion of the Land, because of the many ways yarrow presents to understand connections between people and the environment. I find it fitting to begin with yarrow as the only one of the three plant medicines I will work with that is native to western North America. To begin with yarrow establishes a centering and a grounding in the history of *this* place, upon which layers will be built, later. I focus on yarrow as an aid for respiratory health, strengthening one's ability to breathe deeply. Air is the central exchange of oxygen and carbon that people and plants make, moment to moment, for survival. Breathing is the essential connection between people and plants. Air and air quality are also of primary concern for emissions reductions and sustainability initiatives. Deep breathing allows one to feel calmer and more relaxed. According to eastern Vedic teachings, the breath is the pathway to the heart. Air is also one of the primary mediums through which sounds travel. I use yarrow, then, to support open airways, open minds, and open hearts to consider the relations between people and the land. I also use it to weave the concept of air, wind, and breath throughout this first part. In what follows, I retell stories of air quality degradation, ecological grief, and words of thanksgiving. All of this helps to convey understandings of land as commodity and Land as Relation.

Wind

Listen to the sound of the wind.[12]

Recording wind is a funny thing. Many times, wind is something the recorder attempts to reduce in the recording. I remember a weekend sound recording workshop I attended in the Sierra Mountains of California – we crafted “dead cats” or fuzzy pouches to fit over the ends of our microphones to muffle the sound of wind outside when what we really wanted to record was the sound of the birds. But what if I just record the wind – what does that sound like? Is it just a racket as it feeds back through the recorder? Does it remind you of having the car window rolled down and sticking your head out or riding down a hill, fast, on a bicycle? Remember what it feels like to hold still in the wind and just experience what it feels like blowing over you – it moves your hair, perhaps your clothes – does it move anything inside you?

Now think of the wind as air in motion. This could be a soft breeze or a gale force. Often, the air goes unnoticed until it is disrupted – until it becomes a forceful wind, or it becomes contaminated in some way. The air, and air quality were some of the first focal points of early sustainability policies – cities and nations began to consider carbon emissions and how these accumulated to form layers of smog, especially in the cities and industrial areas. Here in BC, vehicle emissions testing and standards were introduced in 1992 as a part of the AirCare program and ran until 2014 (Hardie 2006). When more and more smog began settling over communities, people noticed. These days, especially in the heat and dryness of summer, air quality and smog can get so bad it becomes a major health crisis. These crises are rising around the world, even in a city like Vancouver that has, up to now, mostly understood itself as distant to the problem of poor air quality (Killian 2018). In what follows, I share three stories of my experiences of feeling environmental stress through the air, soil, and water. I use these stories to describe how I have come to know the Land around me before I launch into a broader overview of people-land relations.

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[12] Visit https://soundcloud.com/kristine-lawson-1/sets/acoustic-relations-pipelines to listen.

STORY 1

In the summers of 2017 and 2018, summer air quality got so bad throughout BC that multiple and sustained air quality warnings were issued. The air pollution was due to dramatic increases in forest fires – in the summer of 2017, the central BC city of Kamloops was reported to have an Air Quality Health Index rating of 49 – on a scale of 1-10 (Smith 2017). That summer people started wearing face masks while walking outside and talk arose around what kinds of masks were useful and which were not. Already, between 7-8,000 deaths in Canada each year are related to air pollution (MacLeod 2018a, 138, Smith 2017) – with the increase in forest fires and “large smoke events,” that number will likely climb (Smith 2017).

There is a lot of data circulating right now about the impacts of poor air quality on human health, but what stands out to me was how that smoke, settling in for the second summer in a row, landed in my body and left me feeling sad and helpless. Ecological grief is not new, but social scientists are talking about it more as it becomes more widespread with intensifying climate change. I remember riding my bike to work that summer and looking out over the Burrard Inlet. Normally I would see the shores of West Vancouver and the North Shore mountains but with the smoke settled in, it was all a haze. The sun burned a fluorescent reddish pink. For days and days this lasted, and I had to stop riding my bike – my lungs hurt too much by the time I got to work. One day I cried, the sense hopelessness finally seeping out through my eyes with the questions I couldn't answer about when the smoke would lift and how it might be prevented from coming back. And then I cried even more because I realized how many people in my own country and in other parts of the world faced health and environment issues so much bigger than mine. What is to be done with the grief, the sadness, and the overwhelm when it comes? And what about the shame that inevitably creeps in when considering the human origins of these environmental degradations? It helps to begin with a deep breath. Yarrow tea is good too.

STORY 2

One day I was out for a walk in Pacific Spirit Park, near the University of British Columbia campus, with my teacher Bear Twofeathers, and we came across an abundance of yarrow growing the side of the road. I had been doing a yarrow cleanse, to prepare my innards for a winter of root vegetables and decreased physical activity but needed a new source to pick the leaves and this large patch presented itself right where we had parked. It's a busy road, being one of the main routes to the campus. I remember feeling a little reluctant to pick yarrow there since it was right on the shoulder of the road with so many vehicles traveling past – I had read warnings in plant medicine books about gathering near roadsides where the plants are absorbing all the vehicle emissions. I asked my teacher about this and she asked me to remember back to a story I had shared with her, months before, about swimming in the ocean near my home in the Kitsilano neighbourhood...

STORY 3

Flashback one year earlier: I had just moved into my home in mid-April 2017 and as the weather warmed and I grew to know the neighbourhood, it became regular practice for me to walk down to the ocean and dip in. By late spring of that year, I had become quite involved in pipeline matters and was very aware of the environmental impacts the existing line was already having on the local ecosystem. I remember thinking to myself how the water in front of me was contaminated and I wondered if it was a good idea to jump in (even though I had already done so multiple times). I knew there were people around, locals, who refused to go in or let their children go in for fear of unnecessary exposure to toxins. After all, this is a part of the strip of Vancouver beaches that is closed for at least a brief time each summer due to e. coli poisoning and has endured small oil spills in the past. In that moment that I stood on the shore, pondering, I became aware of the ocean and we had a conversation together. I thanked her for her beauty and the opportunity to refresh by floating in her salty waters, but I wondered if it was really the best thing for me. As I considered living this close and not going in the water, a great sadness came over me – how could I live so close to this amazing ocean and not go in it as often as possible? In that moment, I decided I wouldn't resist the water, at least when there were no public health advisories posted, but that I would stay tuned in.

These three experiences opened an ongoing conversation with the waters, the air, the land, and the plants that continues today. This was the conversation my teacher was reminding me of that day in the park. My environment-related health concerns, that are mild in comparison to others in other places, are an entry point into a broader consideration of relations between people and their environments. These relations vary from place to place and group to group, but in my corner of the world the sadness, the grief, and the growing commitment to advocate for healing. I have felt ecological grief in small and more significant ways when I relate to the yarrow by the road, the waters that are an industrial transport route, and when those fires burn and the smoke settles over the city for weeks on end. And even as I experience the sense of helplessness in these instances, I am aware that these are tiny experiences compared to those of other people in other places around the world who are forced to flee, as refugees, or face immediate mortal danger from natural disasters or human conflict.

What does it mean to be in conversation with the ocean or with a plant growing by the side of the road or to feel deep sadness for the polluted air? To come back to my earlier question, what is to be done with all these feelings of sadness, grief, overwhelm, and shame? What happens to these feelings as they are experienced in the body? Are they shut off in a shift toward apathy? Do they create jadedness and cynicism in the face of overwhelm? Or are they perhaps processed and transformed into action? Of course, all of these happen, and more, I'm sure. The activist-art collaboration Ultra-red describes how sound can be useful in processing affects such as these – a process they consider essential in understanding and overcoming tough social problems:

> It is an amazing moment in the class when someone says, “There is nothing I can do,” because the others acknowledge the same thought and feeling. And just when it feels that we are all about to fall off a cliff and give up, I suggest we listen precisely to what everyone is saying. Thus, we slow down. We take our time, we are careful. Sound is an amazing mechanism through which you can actually register levels of experience and make them available for codification and analysis. Someone will inevitably note a contradiction between the claims of helplessness and the knowledge we have developed in the classroom and we start talking about ourselves as actors, perhaps even in despair, but actors nonetheless (2015).

Listen to the sound of the air. When air is still, it is silent, but when it moves, it can be heard. Wind can be heard as a gentle breeze that rustles leaves in a tree or as gale-force bellows that destroy everything in their path. Wind is something out of a human being’s control. Or is it? The origins of wind are connected to high and low pressure zones on the earth which are in turn affected by earth’s temperatures (Richardson n.d.), something we now know human beings affect quite a lot. Wind creates waves (such as the ones sounds travel upon). While people might not pray for wind the way they might pray for rain, there are certainly links to the spirit of the wind in acknowledgements of the “winds of change” or, as in the Four Winds, coming from the four directions, that bring the changing seasons along with messages of strength as they purify the air that we all breathe (Kimmerer 2013, 112). The breath, a small force of wind exerted by an individual, is something absolutely within human control – within the control of every human, in fact. Keeping all this in mind, it is possible to acknowledge the feelings of grief, overwhelm, and powerlessness and their connections to the powerful and the empowered. Seemingly one of the smallest actions – one deep and conscious breath – can create an opportunity to slow down, think and listen more carefully for the contradiction Ultra-red identifies. The feelings of helplessness and the knowledges that are constantly being produced in science and in peoples' own inner-understandings of the world and life do not line up. There is plenty to be done.

One important thing that must be done is to remember to look backward as well as forward. As Todd has asked, critically, what does it mean to have conversations about sustainability, in the face of catastrophic planetary failure, knowing that indigenous peoples have endured this apocalyptic feeling for hundreds of years, since the arrival of settlers (2016)? For long-resident land-based communities and nations, the so-called Anthropocene began hundreds of years ago when Christopher Columbus "discovered" America.

One way non-indigenous people to respectfully approach opportunities to learn about indigenous understandings and worldviews, and move toward mutual understanding, is through the use of protocols. As I have been learning, since the beginning of "New World" explorations, indigenous groups across Turtle Island have been the subjects of scientific study and, over time, many have developed their own protocols for how researchers can engage respectfully and equitably with them, their cultures, and their Lands. During my fieldwork, I attended a presentation on "Responsive Research in an Era of Reconciliation," hosted by the Institute of Public Administration in Canada. In this presentation, I learned specifically of the Vancouver Island-area Nuu-chah-nulth Nation's protocols that have been in use since 1994. The protocol notes how the Nuu-chah-nulth "are aware that researchers are knowledge brokers, people who have the power to construct legitimating arguments for or against ideas, theories, or practices. They are collectors of information and producers of meaning, which can be used for or against Indigenous interests" (Nuu-chah-nulth Tribal Council Research Ethics Committee 2008, 1.1). Further, the protocol

> ...has been developed to assist researchers in ensuring that they meet the appropriate protocols of the Nuu-chah-nulth communities when conducting research in their territories, as well as providing a mechanism of ensuring that research that is conducted within Nuu-chah-nulth communities is done in an ethical and appropriate manner (1.4).

The protocols, which vary from community to community within the nation, place the onus upon the researcher, for research approval, to adhere to nine guiding principles including clearly stated explanation of risks and benefits of the work (with the benefits outweighing the risks), minimal disruptions and no deception in and of the community, that researchers be adequately qualified to do the work, the data disseminated back into the community in a clear way, and that the nation retain at least partial ownership and maintain full access to the research outcomes (Nuu-chah-nulth Tribal Council Research Ethics Committee 2008). There are also ethical principles that must be followed, regarding respect for persons, autonomy, protection, beneficence, and justice (5.1-5.3).

Another protocol I have learned involves the proper way to harvest plant medicines. One of my local teachers explains that it is important to speak to the plants – introductions and transparency are important:

> The plants, the oldest and the wisest, say, what we're going to do is each of us is going to carry a medicine for man and for animals. And if they pick us in a good way, it will work for them and if they don't pick us in a good way, it will make them sick or even kill them. Picking in a good way means to come

> up to the mother plant with tobacco and thank her for the fact that I'm going to be using her children and what I'm going to be using them for. Through my whole process, I tell them – I'm speaking plant. The plants are talking to us all the time – we just don't always hear them. So, I'm talking to these plants and telling them what I'm going to do, and then I'm responsible for doing that (Black Bear Warrior, interview with author August 29, 2017).

Protocols offer a way to engage respectfully with people and the Land. They build a process to incorporate input from everyone involved in a more equitable balance. They also offer a way to move through grief, overwhelm, and shame by activating deep listening – a cycle of questioning, listening to the answers, then acting upon those answers. As I learned more about plant medicines and how to harvest, I was taught protocols as well. Although I found tobacco tricky to locate for offering to plant medicines, or if I found myself unexpectedly in an area where I could harvest, there were other special things I learned to offer in return for the plants I would harvest, including lavender, a piece of hair, or a song. It was through learning about these protocols and the weight given to interactions with Land that I began to realize how Land could be understood as a relation. The protocols conveyed a sense of obligation. The times I would forget the protocol and just take the medicine that I saw, in comparison to the times I remembered it was an exchange that must involve reciprocation, *felt* different.

The Sound of the Last Stream on Burnaby Mountain

I got to know Black Bear Warrior in the spring of 2018 while spending time on Burnaby Mountain. Burnaby Mountain is the terminal station of the pipeline before the oil and bitumen are loaded onto tankers that travel out to sea (see Maps 3, 4, and 5 in Appendix I). Burnaby Mountain is an important place to consider the pipeline project. Its elevation makes it geographically strategic for the terminal station of the pipeline, allowing gravity to support the transport of the oil on the final leg of its journey, but this has also made it a particularly risky place to have the oil accumulate. The fire chief of the City of Burnaby expressed this concern in the media when he shared that the company (then Kinder Morgan) claimed to have an emergency response plan but refused to share it with the City (Embree and Brugge 2018). Over the last four years, at least two assistant fire chiefs in Burnaby have also voiced their disapproval of the project: Deputy Chief Chris Bowcock and Assistant Chief Bryan Kirk (who abruptly retired in 2018 after suspecting he would face heavy consequences for his suggestion he might disobey orders to extinguish the "sacred fire" that Camp Cloud activists were keeping burning [Gawley 2018]) (Hume 2015). Burnaby Mountain is also the place that was chosen as the site for the ceremonial Watch House, Kwekwecnewtxw (pronounced "kwek-wek-oh-tuk")[13]. Kwekwecnewtxw was erected on March 10, 2018 of prefabricated planks from a single cedar tree, as is tradition. The entire structure was constructed off site, then disassembled, transported to its site, and reassembled in one night. It features the images of two wolves, known in Tsleil-Waututh culture as protectors, on either side of the door. “Kwekwecnewtxw” means “a place to watch from” (Lambert 2018).

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[13] Shaena Lambert provides a good contextualized overview of Kwekwecnewtxw, its construction, and what it means to the Tsleil-Waututh Nation in her March 25, 2018 article for *Canada's National Observer*, "The warriors and the Watch House" (https://www.nationalobserver.com/2018/03/25/opinion/warriors-and-watch-house)

Even before the construction of Kwekwecnewtxw, Burnaby Mountain had become the main site for pipeline protest action – it was the destination of multiple marches and rallies and “Camp Cloud” – a long-term occupation of environmentalist activists – had also been established there. Although pipeline protest had been ongoing for many years already, since 2017 there had been a resurgence of activity, likely due to new construction activity starting up on the pipeline. After visiting Burnaby Mountain several times, I was introduced

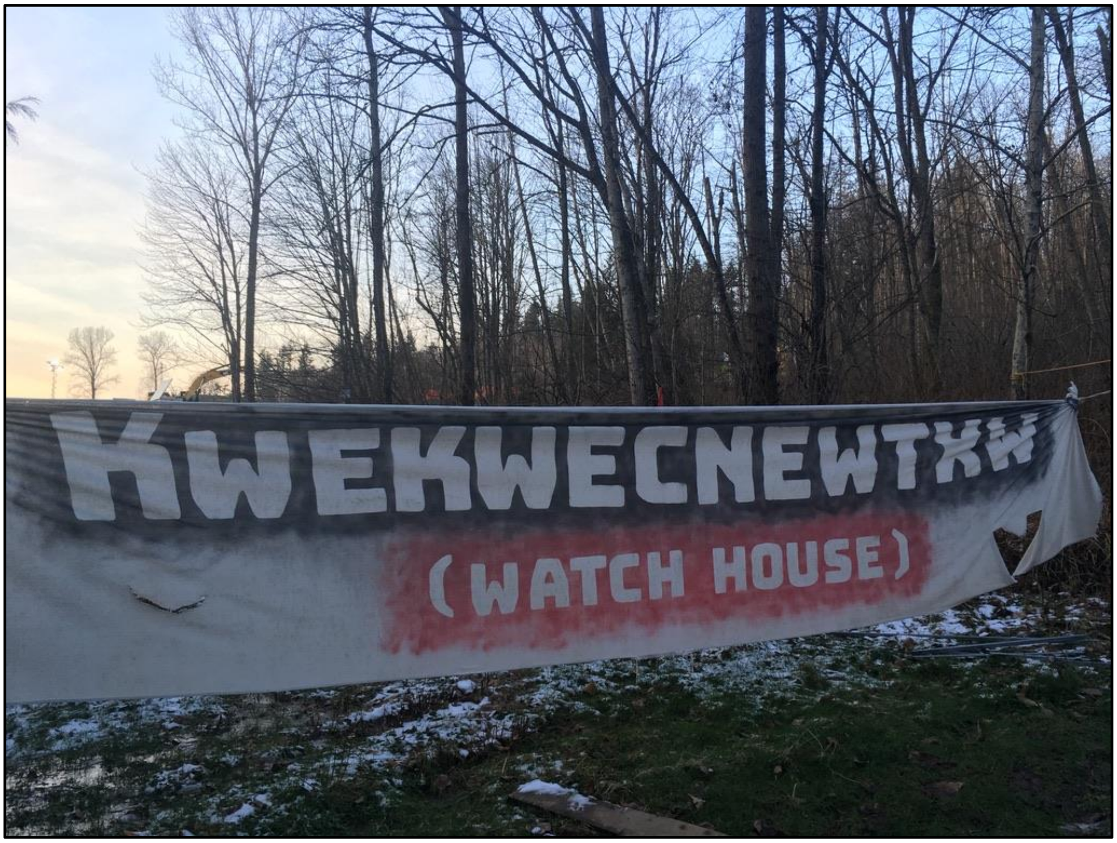

Figure 2. Kwekwecnewtxw Banner hangs in the winter sunlight. The sign is likely strung to alert passersby and visitors to the area. It is often the case that those attending Kwekwecnewtxw are keeping warm or dry or are in prayer or ceremony inside the Watch House and sometimes visitors are shy about knocking on the door. Kwekwecnewtxw is located next to a popular walking path on Burnaby Mountain (photo by author).

to Black Bear Warrior, who is a medicine man and pipe carrier for the Watch House. One day a small group of us were walking the area, observing the day's pipeline activity and checking in with the grounds, as was Black Bear Warrior's daily habit while staying at the Watch House. I asked him if there was a sound that he associated with sustainability on Burnaby Mountain. "Absolutely," he replied – "the creeks" –

> ...you get a sense of the pain that comes out of some of this stuff. It's not just the sound but it's the absence of the sound. I do a lot of perimeter stuff, so as I walk, I'm totally aware of what's going on. Suddenly creeks aren't going – there is a gurgle where there shouldn't be but it's because it's the only one that's got water in it (Interview with the author August 29, 2018).

I use Black Bear Warrior's story about the creeks as an entry point to understanding Land as a relation. He considers it a part of his duty, while staying at Kwekwecnewtxw, to maintain a running status report on all the environmental features in the area – on another occasion he had told me about a particular couple of trees that had been felled, that were eagle nesting trees. It puts a "fire in his belly" (Ibid.), he says, when he learns of a new violation because to him, the value of a particular stream or tree is not quantifiable in dollars.

These stories of Black Bear Warrior's – the cedars, the eagles, the creeks, and Kwekwecnewtxw, the Watch House, convey a sense of stewardship for the land as well as an obligation to literally stand watch. This forms the beginning of what I am calling a Land-as-relation worldview that stands in contrast to the view of land resources as a commodity. Historian Thomas King lays out a comparison of the two worldviews, beginning with a native perspective of Land as a relation:

> Land contains the languages, the stories and the histories of a people. It provides water, air, shelter and food. Land participates in the ceremonies and the songs. And land is home. Not in an abstract way. The Blackfoot in Alberta live in the shadow of Ninastiko or Chief Mountain. The mountain is a special place for the Blackfoot, and friends on the reserve at Standoff have told me more than once that, as long as they can see the mountain, they know they are home...For non-Natives, land is primarily a commodity, something that has value for what you can take from it or what you can get for it (2012, 218).

I explore these two worldviews because of the implications they hold for current social and political struggles around the use of land and natural resources. Understandings of land as a commodity or Land as a relation are the foundations of pro- and anti-pipeline positions and are what motivate much of the debate around climate crisis and what is to be done. I explore both sides not to judge the correct way to understand relations to the Land but as an opportunity to understand the ways these worldviews interact with one another and create or destroy opportunities for collaborative sustainability policy in the future. First, I discuss land as commodity, and you will notice that all the descriptions of land as commodity come from voices that are critical of this perspective. I think this is because those who hold this perspective of land as commodity likely do not spend a lot of time thinking of land as something they are in relationship with.

By describing understandings of “land as commodity,” I mean the practice of capturing natural resources as a marketable product. King describes this understanding of the land in the Alberta tar sands:

> It is, without question, the dirtiest, most environmentally insane energy-extraction project in North America, probably in the world, but the companies that are destroying landscapes and watersheds in Alberta continue merrily along, tearing up the earth because there are billions to be made out of such corporate devastation. The public has been noticeably quiet about the matter, and neither the politicians in Alberta nor the folks in Ottawa have been willing to step in and say, “Enough,” because, in North American society, when it comes to money, there is no such thing as enough (2012, 212).

In my fieldwork, the commodity is the bitumen extracted from the tar sands in Alberta and transported throughout BC to the Pacific Ocean. But there are other parts of the environment that are damaged or destroyed through the extraction of the commodity and become known as the “upstream effects” of the industry, according to the National Energy Board of Canada (NEB) which is responsible for the approval of the pipeline project (Embree and Brugge 2018). A few examples of these elements include the earth that is excavated to sink the pipes that transport the oil, the trees and other earth-coverings that must be removed before the earth can be dug up, and the water that is used to hold the tailings and that will carry the product to market. Embree and Brugge’s film, *Directly Affected: Pipeline under Pressure* quantifies and describes these upstream effects: three barrels of water contaminated for every one barrel of bitumen extracted; 1.2 trillion litres of water made toxic through the creation of tailings ponds used to capture byproduct; vast swaths of boreal forest cut down to clear land for extraction sites; fish with two tails and one eye three times larger than the other. The language used by the NEB and the Canadian government and indeed any person or individual that understands the Land as commodity is typically that of "responsible resource development" (Embree and Brugge 2018). Ethnobotanist Nancy J. Turner, who has worked with many First Nations communities throughout BC, describes the concept of "the Earth's blanket," as translated by James Teit, who worked with Boas in the early twentieth century. In her book of the same name, Turner explains the term originated with the Nlaka'pamux people of the interior region and describes the covering of flowers, plants, and grasses over the earth, also known as its blanket. If too many of these grasses and flowers are picked or are not harvested in a respectful way, "the earth is sorry and weeps" (Turner 2005, 20). This metaphor is used by the land-based people to remember that which is important to the Earth and to remember the links between the Earth's, and humanity's vitality.

To return to the air, it can also be heard as an upstream effect with an ear toward land-as-commodity worldview. The work of sociologist and investigative journalist Andrew MacLeod reveals how poorer people are at higher risk of illness (such as cardiovascular issues as well as increased rates of dementia) related to environmental factors like air pollution. Despite all this, public health interests compete directly with the economic interests of big businesses and industry for government funding. At the same time, corporations remain more interested in treating illnesses than preventing them and/or addressing the conditions that create them in the first place (2018a, 142). MacLeod provides the well-studied and publicized example of the tobacco industry: prevention (of addiction to smoking) is cheaper, but not more profitable, than lung cancer treatment. Further, typical biomedical treatments silo and categorize symptoms, alienating them from possible environmental and socioeconomic connections (143). in other words, it has not been common practice to link health conditions to a person's wealth, the environment in which they live, or their ability to access resources to take good care of themselves.

The story of the stream on Burnaby Mountain suggests other upstream effects of land-as-commodity worldview. Kimmerer tells the story of the construction of upstream dams that created "rivers of no return" for salmon who continue their life cycle by migrating upstream (2013, 246). The commodity mindset drives to extinction species that have flourished for thousands of years and are a major part the cultures of coastal land-based people. One market solution has been to create "industrial fish" in hatcheries, thus attempting to "make the salmon without rivers" (246). On Burnaby Mountain, although it is unlikely the streams Black Bear Warrior was keeping track of were salmon migration routes, more than half of the tank farm terminal is surrounded by conservation area (see Maps 3 and 4).

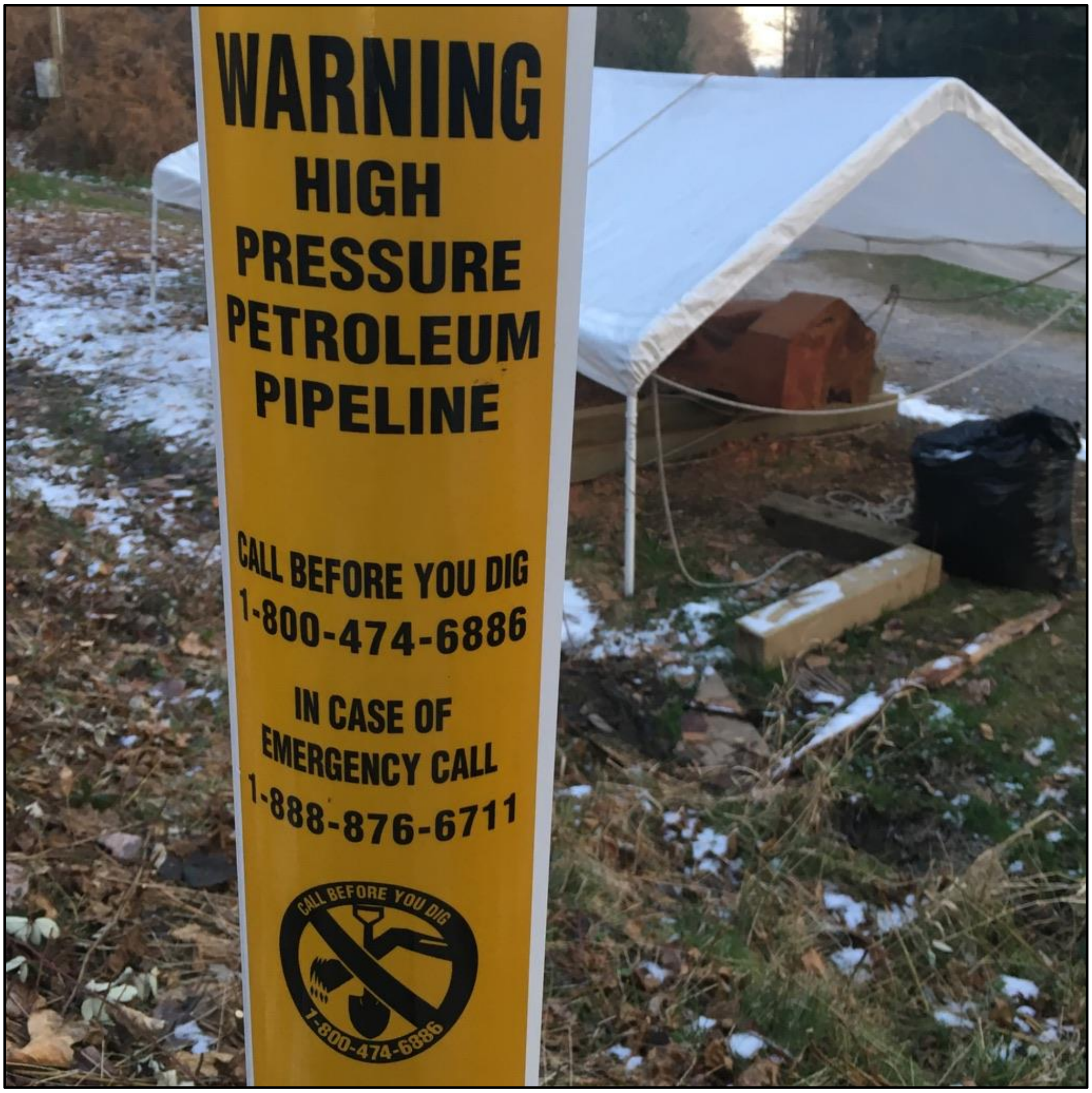
WARNING
HIGH
PRESSURE
PETROLEUM
PIPELINE
CALL BEFORE YOU DIG
1-800-474-6886
IN CASE OF
EMERGENCY CALL
1-888-876-6711
CALL BEFORE YOU DIG
1-800-474-6886

Figure 3. High pressure pipeline marker. This marker is directly next to Kwekwecnewtxw although these markers are found commonly along the pipeline path. In the background the temporary home of a totem pole under construction can be seen. It is not known yet where the pole will be erected but it will likely be nearby (photo by author).

King gives another example of land as commodity when he discusses Shaughnessy Golf and Country Club's 1968 purchase of Musqueam lands in Vancouver. The 162 acres were appraised at a value of $53,450 per year but the country club only paid $29,000 per year for the first ten years and there was a cap on how much the lease could increase per year after that (no Musqueam people were involved in this negotiation – it was all brokered by an agent) (King 2012, 241-244). The lease is set to expire in 2033 (244). At nearly the same time and just a few kilometers away, Canada signed a 99-year lease, on behalf of Musqueam Nation, to a private developer. When the Musqueam Nation tried to have the value raised to market rate after the first 30 years of the lease, they spent five years in court only to have a judge rule that the land was only worth half as much as the adjacent non-native land (244). As King argues, there has always existed a struggle between indigenous and non-indigenous people for land (2012). Tied up in this struggle are beliefs around how the land should be put to best use. In these examples, there is also the question of what native land is worth in comparison to non-native land.

These stories of land understood as commodity begin to amplify the tensions that might exist for those who do not subscribe to the same understanding. The examples King and Kimmerer, Embree and Brugge provide sound a conflict between settler and indigenous values. Writing in 2018, anthropologist Jaskiran Dhillon lays out the intention of a volume of *Environment and Society* dedicated to interrupting the mainstream Environmental Justice Movement's discourse, rooted in settler-colonialism (1). She argues that the environmental justice movement needs to consider more carefully the larger powers at play in climate change and planetary devastation. Dhillon sets out to "showcase how Indigenous struggles to protect and defend the land, water, and air are embedded within Indigenous epistemologies and ontologies that fundamentally challenge settler domination over nature and are inextricably linked to advancing decolonization" (2018, 3). Through Dhillon's work, I hear not only critique of the long-lasting dominant practices of controlling nature (land as commodity) but also the ways in which indigenous stewardship of and relation to the Land challenge the dominant practices and offer alternative pathways. Listening to these examples of land understood as commodity, and the control of nature, a trend emerges in what is at stake for those at a disadvantage in the transactions of land and control. Land-as-commodity beliefs stand to place certain individuals, groups, and other-than-human beings at risk physically, emotionally, and spiritually. Next, I discuss understandings of Land as relation but first I explore possibilities for bridging between these two views that seem to be in such opposition to one another.

Another major dominant structure shaping understandings of the world from a settler-colonial perspective is Western science. The March for Science Movement was initiated in 2017 as an international movement to advocate for the importance of science and demand that scientific evidence be taken seriously by political leaders around the world. It enforces the truth that science is not a partisan issue although there are very real political stakes revealed through science.[14] Robin Wall Kimmerer co-authored a letter of support for The March for Science from indigenous scientists that included a call to remember the traditional ways of Turtle Island and the importance of including these paradigms in future policy:

> Let us remember that long before Western science came to these shores, there were Indigenous scientists here...Western science is a powerful approach, but it is not the only one.
>
> Indigenous science provides a wealth of knowledge and a powerful alternative paradigm by which we understand the natural world and our

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[14] March for Science; March for Science Canada, for example.

> relation to it. Embedded in cultural frameworks of respect, reciprocity, responsibility and reverence for the earth, Indigenous science lies within a worldview where knowledge is coupled to responsibility and human activity is aligned with ecological principles and natural law, rather than against them. We need both ways of knowing if we are to advance knowledge and sustainability (Kimmerer et al. 2017).

This statement suggests possibilities for bridging together Western or settler approaches with indigenous perspectives, which is important, considering the ways the two approaches and worldviews can otherwise be understood as in conflict with one another. The statement emphasizes the work and legacy of Western science, it is important to consider all the different fields that Western science covers, including economics. Discussion of economic considerations will be the focus of Part II but for now I focus on the suggested pathway forward that builds on the strengths of both indigenous and settler approaches. Science fiction writer and philosopher Kim Stanley Robinson reminds us that science originated as medicine – a strategy for a return to wellness (2013 interview with Adam Ford). Is it possible to reimagine science, and all its subfields, as medicine, if not for the physical body then for the health and wellness of minds, spirits, and other non-human beings?

Thinking back to the stories shared so far, how might the air, the streams, and the salmon be brought into this framework? As Kimmerer says, “according to the laws of thermodynamics, everything has to go someplace.” “Where did the relationship of loving respect and mutual caregiving between people and fish go,” she asks (2013, 246). How does being an “upstream effect” land in the body for those whose homelands surround the tar sands in Alberta? Dene elder Celina Harpe, who lives in Fort McKay near the centre of the tar sands says of the air and water pollution, “it’s like a bad dream...I don’t know how to express myself...it’s the worst thing that ever happened to us” (Embree and Brugge 2018). An Athabasca Chippewa man who also lives in the area noted how he sees many young people dying of cancer and alarmingly increasing rates of asthma (Ibid.). It is a heavy topic and, as Embree and Brugge point out, none of us are blameless – if you drive a car, fly on a plane, or use plastic in your life, chances are you benefit from the fossil fuel industry. “We all contribute to the problem,” they say, “but we can’t let that discourage us” (Ibid.). Something similar might be said about non-indigenous Canadians and reconciliation. Melina Laboucan-Massimo of the Lubicon Cree First Nation speaks in the film of the Healing Walk which was organized in the aftermath of the 2016 Fort McMurray fires that wiped out the town and are attributed to the degradation and environmental susceptibility caused by the tar sands. Laboucan-Massimo says the Healing Walk is “part protest and part healing ceremony” and that those who participate “do this not only for ourselves but for the four-legged ones, winged ones, and all the Fish Nations” (Ibid.). Land-as-commodity frameworks have caused a lot of damage to people and the environment, but there are many stories and lessons that share understandings of a different approach (see Lien 2015).

Land as relation

> If there is any hope for the world at all, it does not live in climate-change conference rooms or in cities with tall buildings. It lives low down on the ground, with its arms around the people who go to battle every day to protect their forests, their mountains and their rivers because they know that the forests, the mountains and the rivers protect them.

> The first step towards reimagining a world gone terribly wrong would be to stop the annihilation of those who have a different imagination – an imagination that is outside of capitalism as well as communism. An imagination which has an altogether different understanding of what constitutes happiness and fulfillment. To gain this philosophical space, it is necessary to concede some physical space for the survival of those who may look like the keepers of our past, but who may really be the guides to our future (Arundhati Roy, 2010 in Klein 291).

What does it mean to consider relations to the other-than-human world in an era of reconciliation? What does it mean to respect Land-as-relation worldviews and what are the implications for ongoing development of sustainability policy? These are the underlying questions I ask in the next series of stories and reflections. Part of my discussion of Land as a relation takes the Land as a broad concept and acknowledges all the beings of land, water, and sky, as is central to the First Nations worldviews I learned about during my research. I also take a narrower approach in some of the stories as I discuss, in greater detail, relations to plants, which were the focus of my fieldwork observations in working with plant medicines. My own growing relationships with plants are where the finer details of my ethnographic observations are found. Interestingly, all the teachers that came around me during my fieldwork were very knowledgeable about herbology and plant medicine.

Black Bear Warrior told me one day that he had a sustainability story for me:

> At the very beginning of time, man was killing more animals than they needed. The animals tried to put a stop to it, but they couldn't overcome man. The plants were watching all of this. So, the plants, the oldest and the

> wisest, said, what we’re going to do is each of us is going to carry a medicine for man and for animals. And if they pick us in a good way, it will work for them and if they don’t pick us in a good way, it will kill them. Picking in a good way means to come up to the mother plant with tobacco and thank her for the fact that I’m going to be using her children and what I’m going to be using them for. Through my whole process, I tell them – I’m speaking plant. The plants are talking to us all the time – we just don’t always hear them. So, I’m talking to these plants and telling them what I’m going to do, and then I’m responsible for doing that (Interview with author, August 29, 2018).

Black Bear Warrior’s story provides a sense of what it means to consider Land as a relation. Throughout these next stories, I listen for the sound of human health and wellness echoed in the ways the health and wellness of the Land is heard. Most of the stories are from the perspectives of local land-based, long-resident people and communities, although some of them are from further away. All the teachers who offered their knowledge for me to share in this project shared the opinion that we are not well if the Land is not also well. Following from this belief is the concept of oneness that also came up, again and again, throughout my fieldwork. *Na̱mwa̱yut* was the theme of the “Canada 150+” celebrations in the summer of 2017. The word describes the concept that “we are all one,” in the Kwakwaka'wakw language. July 1, 2017 was considered Canada’s 150th birthday but there was wide public dispute of this acknowledgement of colonial history, at the exclusion of the indigenous history that preceded this time. As a compromise, the “150+” celebrations were added as a parallel event that acknowledged both settler-colonial and indigenous histories, although this was still understood as controversial by many indigenous rights groups and allies. *Na̱mwa̱yut* was used even before the 2017 celebrations, at the Walk for Reconciliation, organized by Reconciliation Canada, a nonprofit group that is "engaging Canadians in dialogue and transformative experiences that revitalize the relationships among Indigenous peoples and all Canadians" (Reconciliation Canada n.d.). One of the first talks I attended after arriving in Vancouver sent me to Umeek's (E. Richard Atleo's) book named after the Nuu-chah-nulth Nation's concept of *hishuk ish tsawalk* or "everything is one" (Umeek 2007).

The main sound object I use for this discussion is a recording[15] I made with two of my local teachers, Bear Twofeathers and Lori Snyder. In the recording, the three of us took turns reciting phrases from the *Haudenosaunee Thanksgiving Address*, which is described by Kimmerer as an invocation of gratitude (2013, 108) (see Appendix III for transcript). In it, each of the land-and nature-based relations are acknowledged and honoured, including our Eldest Brother, The Sun, our Oldest Grandmother, The Moon, our Grandfathers, The Thunder Beings, all our plant and animal brothers and sisters, and our Mother, the Earth. Each verse in the *Address* begins with giving thanks to the element of focus and ends with the phrase "now our minds are one" (107-117). Reading the *Haudenosaunee Thanksgiving Address*, as presented by Robin Kimmerer in her book *Braiding Sweetgrass,* I was so struck by her discussion of what the *Address* is and why it is important – for all of us – that I knew I had to use it, in its entirety, in this project. The *Address* has been leveraged as an educational resource and made into booklets, notecards, and other teaching resources through the "Tracking Project," a nonprofit organization out of Corrales, New Mexico. I discussed using the full *Address* in my project with the founder and director of the Project, John Stokes. Stokes and David Kanawahienton are the translators of this widely-used version, although various other translations exist. I explained to Stokes how I wanted to use recording of the *Address* to consider the significance of the *Address* being invoked far away from its home on Six Nations land (also known as Iroquois and made up of Mohawk, Oneida, Onondaga, Cayuga, Seneca, and Tuscarora and located across upstate New York, Wisconsin, and Ontario). Stokes agreed for me to use the *Address* in this way. I hope he and his team

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[15] Visit https://soundcloud.com/kristine-lawson-1/sets/acoustic-relations-pipelines to listen to the recording.

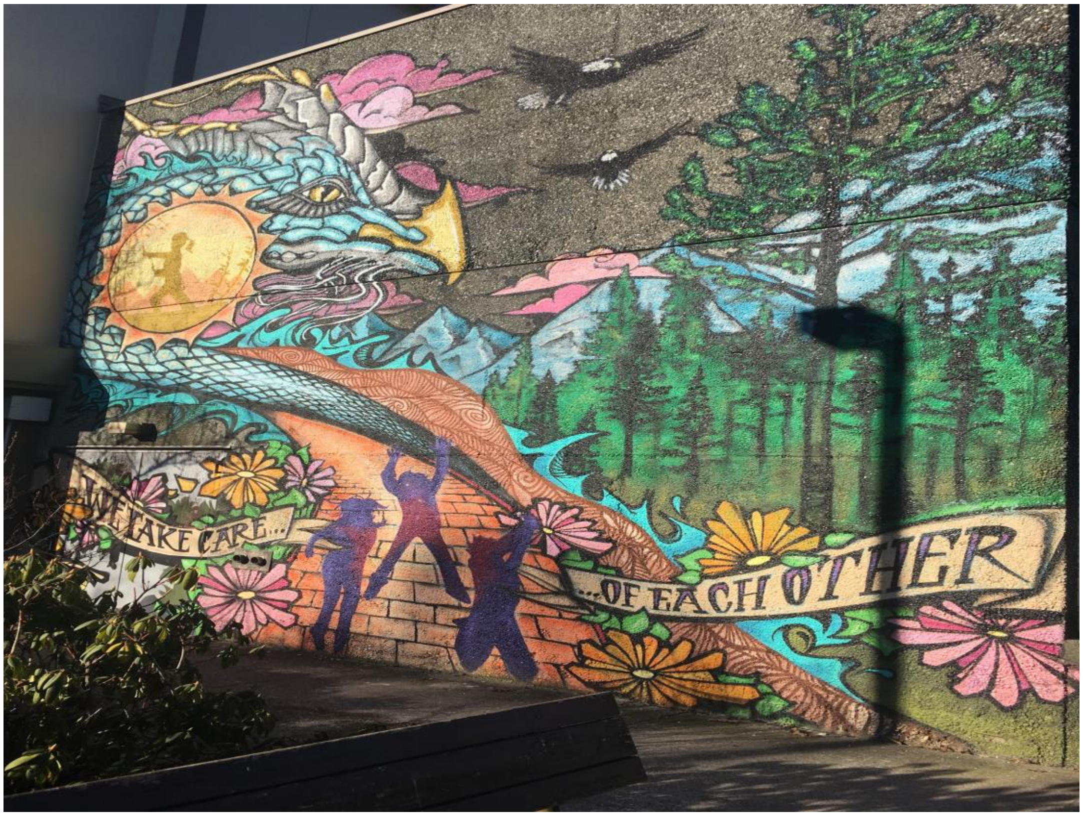

Figure 4. "We take care of each other" mural outside Strathcona School and Strathcona Community Centre (601 Keefer Street, Vancouver) Copyright 2009 by Anne Marie Slater (lead), Scott Chan, and Coleman Webb. The mural depicts a colourful display of human-land relations, including incorporation of Chinese culture, as depicted by the dragon in the upper left and the person doing tai-chi inside the sun; the Chinatown neighbourhood borders Strathcona. Other motifs include interactions between the wild – mountains and forest – and the built environment (bricks, flowers), the guardianship of eagle flying above, and the spirit of the youth (photo by author).

will be pleased with what we have done and that it may serve their work in increasing awareness and education of the values of Haudenosaunee ways.

Kimmerer introduces the *Haudenosaunee Thanksgiving Address* in the context of the Haudenosaunee people's reputation as fierce negotiators and the political prowess they exert (2013, 113). So, the *Address* is used as a business tactic, with a proven success record. Kimmerer notes that "part of its power surely rests in the length of time it takes to send greetings and thanks to so many" (110). The version she includes in her book contains no less than nineteen verses. But this is not a stall tactic – the repetition of the gratitude and coming together ("now our minds are one") and the respect that comes with honouring each different type of environmental being (plus an opportunity at the end for anyone to voice thanks for any being that may have been missed) is a very particular kind of work that carries rebellious and radical undertones:

> You can't listen to *the Thanksgiving Address* without feeling wealthy. And, while expressing gratitude seems innocent enough, it is a revolutionary idea. In a consumer society, contentment is a radical proposition. Recognizing abundance rather than scarcity undermines an economy that thrives by creating unmet desires. Gratitude cultivates an ethic of fullness, *but the economy needs emptiness*. The *Thanksgiving Address* reminds you that you already have everything you need...That's good medicine for land and people alike (Kimmerer 2015, 111, emphasis added).

There are serious political implications in acknowledging the Land as relation. There are also serious responsibilities entailed. As Black Bear Warrior explained above, he believes people are responsible for doing what they say they are going to do to care for the medicine plants. When he hears the birds chirp in their canopy at Kwekwecnewtxw, he hears this as a reminder of his responsibility and a reminder of the dangers of allowing this natural order to be disrupted:

> I wake up anywhere between four and five in the morning – the birds wake me. They welcome the day for me and it's another sound I associate with the Watch House. There are other places I've been where it's the sound of the trees or the water or the shoreline. Here it's the birds – it's really powerful because that's what they're here for. When I hear the absent canopy of birds, I have to be mindful – it puts fire in my belly when they (the pipeline workers) are cutting down trees that the birds live on. This is the birds' path, it's natural law. I am god-sent to defend the natural law – First Nations were god-sent to defend the natural law. The Creator create the rocks – they're our oldest relatives – the water, the grass, and the trees, then he created us and said, 'I'll let you guys stay here but you've got to promise to take care of this.' So, the birds are there to remind me of that" (Interview with the author August 29, 2018).

In one sense, for Black Bear Warrior and those who understand Land as relation, there is a belief in Bird as Brother or Tree as Uncle, but there is also the responsibility to ensure that those relations are protected. Wrapped up in this understanding of the Land is a commitment to action. Black Bear Warrior goes on, "In my spiritual work, the grandfathers talk to me and I have to listen. And I have to do the stuff they're putting in front of me. If I do what I'm told, they keep coming to me, but if I don't do what I'm told, they disappear.

That's a lesson. That's a teaching" (Interview with the author, August 29, 2018). In these words, I hear the spiritual aspects of Black Bear Warrior's relationship with the Land and, while this might be understood as particular to a land-based worldview, there are similarities in this listening work to the political work of the international sound art collective, Ultra-red. Ultra-red uses "militant sound investigations" to understand the most pressing political issues in a community and determine collective pathways forward (2011). Their group explains that "learning to listening is the intentional task of solidarity" and that listening can create dissonance as well as consensus (1). They understand "listening as a relation to an other" (7), meaning listening happens as a part of a collective.

Ultra-red, a collaboration of artist activists that uses aesthetics to reflect what they hear in community organizing to challenge institutional processes and norms, frames the listening practices within a protocol. I return to the concept of protocols as a way of propelling action. If a land-as-commodity mind frame can leave people tied up in feelings of overwhelm or grief that the commodity has been used up or that there is no longer enough, then perhaps a Land-as-relation mind frame can offer a way to relate and rebuild relationship with that commodity but not as a thing to be purchased and used up but as a fellow being. A protocol for listening, on this topic, might ask *what is the sound of sustainability?* The sounds gathered could include the bird canopy or the stream that Black Bear Warrior describes or the sound of the forest fire that scorched the town of Fort McMurray. It could be the sound of bitumen flowing through the pipeline. Next in Ultra-red's protocol, the sounds are played, one by one, and after each one the listeners are asked, *what did you hear?* Of course, the answers will vary. One answer might be "birds," or "Brother Bird," or "a reminder of my responsibility." These differences, Ultra-red says, are issues to be investigated (2011, 32). The final stage of the listening process, Ultra-red says, is action – action is an ethical response to what was heard (2015 n.p.).

Using listening as a way of understanding different relations to the Land can help in the development of sustainability policy that serves more diverse members of the community and will therefore have better outcomes. In their 2013 article for *BioScience*, ethnobotanist Nancy J. Turner and her collaborators discuss five different metaphors used to understand human-environment relationships. The authors point out that, not surprisingly, the most commonly used are economic production metaphors or those that indicate the economic worth of ecosystem services to humans (Turner et al. 2013, 536, 539). However, despite this widespread use, predominant use of the economic production metaphor is problematic because it suggests humans have a right to "despoil nature" and deemphasizes the intrinsic value of nature itself (536-537). The authors describe three other metaphors that offer different views and values:

- "stewardship" metaphor: humans' moral concerns drive protection of environment
- "web of life" metaphor: humans as one part of a multi-directional, multi-influencing ecosystem
- "ecocultural community" metaphor: humans are responsible for managing ecosystems based on physical, spiritual, and social connections (539, Figure 2).

The authors conclude that metaphor sharing is the most strategic way to promote collaboration between scientific and traditional knowledge groups and the most likely way to ensure robust participation and successful outcomes (537, 542-44). Again, just as market-oriented and eco-oriented sustainabilities are often posed in opposition to one another, it is possible, with careful listening, for seemingly divergent approaches to move closer together.

It is also important to remember that Land-as-relation views or the stewardship, web of life, or ecocultural community metaphors are not exclusive to indigenous communities. As King humorously requests and reminds:

> Let's agree that Indians are not special. We're not...mystical. I'm fine with that. Yes, a great many Native people have a long-standing relationship with the natural world. But that relationship is equally available to non-Natives, should they choose to embrace it. The fact of Native existence is that we live modern lives informed by traditional values and contemporary realities and that we wish to live those lives on our terms" (2012, 265-266).

And, as my teacher Lori Snyder frequently reminds me, we are all indigenous to somewhere.

The theoretical understandings of sustainability invariably come down to classifications and evaluations of aspects of the environment. Much of this is quantifiable – how much carbon, how much exhaust, how much extinction, how many years until the next level of devastation is reached. Specialists can quantify the extent of the damage, predict the rate of new damages yet to come, and, importantly, recommend courses of action to shift all this. Those numbers are necessary to understand the scope and urgency of the issues faced. And these economic quantification approaches, as Turner et al. suggest, are the most commonly used in communicating resource management issues. But these numbers and theories cannot account for understandings of the eco-natural world that understand the Land as a relation and humanity as a part of an interconnected web of life with physical, social, and spiritual connections. Policies and approaches that do not or cannot take these other ways of relating to the Land into serious consideration are doomed to fail as they fail to provide ways of meaningful engagement for all.

It is also important to understand the context in which those stories are told and the trajectory they are placed upon. What does the story say about how we, as a global collective, arrived in this place, the full description of the current issues and what is at stake, and where we might go from here? In Part II, I explore media stories of sustainability news more deeply but for now I lay the groundwork for situating the big-picture story of sustainability. The differing views I have expressed here, land as commodity and Land as relation, parallel different forms of sustainability laid out in the introduction: market-oriented sustainability matches the concept of land-as-commodity beliefs and eco-oriented and/or justice-oriented (thinking of environmental rights) sustainabilities follow with Land-as-relation worldviews. But, there need not be a competition between these two. It is possible to think of these collaboratively, one built upon the other. Thinking of it in this way could be like sipping a cup of yarrow tea – it allows space for a calmer, deeper breath.

Part II - Borage

the sounds of the pipeline, material welfare, and the Economy

In Part II, I take up matters of the Economy as they pertain to TMX and in relation to the environment. I use capitalization of the Economy in this way to provide a constant reminder of the importance and prioritization that is continuously bestowed upon the Economy. I might even argue that the Economy has been given human-like status in the ways it is cared for, worried over, and supported. Many communities do not feel that they receive this same attention and care from their governments or from the Economy, as evidenced in widespread housing affordability and homelessness crises, increasing poverty rates, and burgeoning mental health and addictions crises, widely seen as coping mechanisms for the other two crises (see also page 36). You will hear an anti-pipeline rally and march in the heart of Vancouver and a mid-route pipeline access station, located in the Nicola River Valley in rural British Columbia. I link these two recordings by discussing the importance of when to hit the RECORD button on the microphone. As Ultra-red asks, is it just the political demand that is worth recording or is there something important to hear before this moment (2008)? Traveling between urban and rural along the pipeline route, the sounds vary in content, volume, and reach. As I moved along with these sounds, literally along the pipeline route, I became curious about the relational dynamics between the Economy and the Land, urban and rural, quiet and loud. The third sound of Part II is the sound of sustainability in the news. There has been much analysis of the economic considerations of TMX and the research that is shared in the news is itself politicized and partisan. Depending on who has conducted the research, where the funding for the work has come from, and what the political affiliations or incentives are, the outcomes seem to shift, often drastically. Instead of attempting to determine who is telling the “truth,” I explore the affective underpinnings of the economic “facts” and decisions made by individuals, communities, nations, and leaders of nations. I listen for the sounds of worry, doubt, and fear and the ways these are used to motivate beliefs, decisions, and actions pertaining to TMX. I hear big media stories that cover major TMX considerations, particularly the generation of new jobs, as rooted in worry, concern, and fear of economic uncertainty. Again, my focus is not so much on which stories are true (the jobs numbers vary significantly, depending on who you ask) but on the ways the stories are told and heard and what possibilities these storytelling practices enable for discussion and/or further political entrenchment.

I introduce the borage plant, used, for courage to face fear and calm the nervous system, as a tool for both pro- and anti-pipeline advocates to resist "looking away" (Klein 2015) from the big social, economic, and political problems and to sit and listen together instead. Late sixteenth and early seventeenth century herbalist John Gerard is credited with the translation of the old Latin verse ""*Ego Borago, Gaudia semper ago*" as "I, Borage, bring always courage," although recently "*gaudia*" has been identified as meaning something more like "delight" than "courage" (Zong n.d., Dobelis, Inge N. et. al, ed. 1986, 117). Perhaps it follows that courage, an alleviation of fear, opens one up for greater experiences of delight. I explore how an application of borage medicine might ease tensions and create space to hear the anger, and then fear, that lies under all the accusations. Can borage medicine bolster the ability to sit with these fears, listen to those who sound so different and so wrong and remember the connections?

In Part II I pull apart the question of what is to be sustained, and why, and focus on two most common answers that have been firmly established as in opposition to one another: the Economy and/or the Land. In this way, Part II continues the analysis of land-as-commodity and Land-as-relation beliefs as they play out in sustainability policy-making decisions. The lesson of the three rows, taught by Robin Wall Kimmerer helps build one framework for how economy and environment might be reconciled together:

> In weaving well-being for land and people, we need to pay attention to the lessons of the three rows. Ecological well-being and the laws of nature are always the first row. Without them, there is no basket of plenty. Only if that first circle is in place can we weave the second. The second reveals material welfare, the subsistence of human needs. Economy built upon ecology (2013, 153).

In what follows, I explain how the pipeline is an excellent place to listen for sounds of sustainability since the project forces consideration of what, really, is to be sustained through its completion. Although it is usually assumed sustainability policy aims to strengthen and protect the environment, the self-described environmentalist leader of Canada, Prime Minister Justin Trudeau, decided to purchase the TMX project in a move that is widely understood to prioritize economics before the environment. As already discussed, there are multiple types of sustainability that emphasize different priorities including markets and justice, intentionally or not. There often also tends to be a ranking of priorities, as in the case of the TMX pipeline – leaders in support of the project do claim to value the environment, but not above the Economy.

Borage

Borage is a settler on Turtle Island from the Mediterranean. It is another of the first medicines that I learned about in the indigenous medicine garden – during my time there, borage was intentionally sown, its flowers harvested, and its seeds collected for replanting.

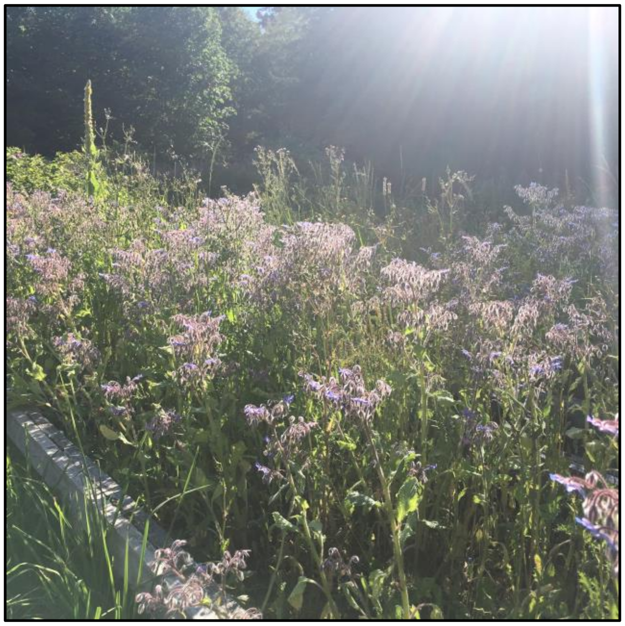

Figure 6. A crop of borage (photo by author).

Although it is not native to Turtle Island, borage is now commonly grown as a companion plant in Pacific west coast gardens, my gardener friends tell me, for its ability to repel tomato worms, attract pollinators such as bees, and even improve the flavour of some crops such as strawberries. The plant grows well in ordinary soil and is an annual, although it self-seeds so effectively you might not realize this. Traditionally, the plant was grown for its edible flowers and for its ability to attract honeybees and increase yields of honey. The plant typically grows between one and two feet tall and the bright purplish blue, star-shaped flowers about one inch across. White prickly hairs stick out along the length of the stem, giving a fuzzy and translucent appearance and leaving a harmless tingling effect on the skin when handled.

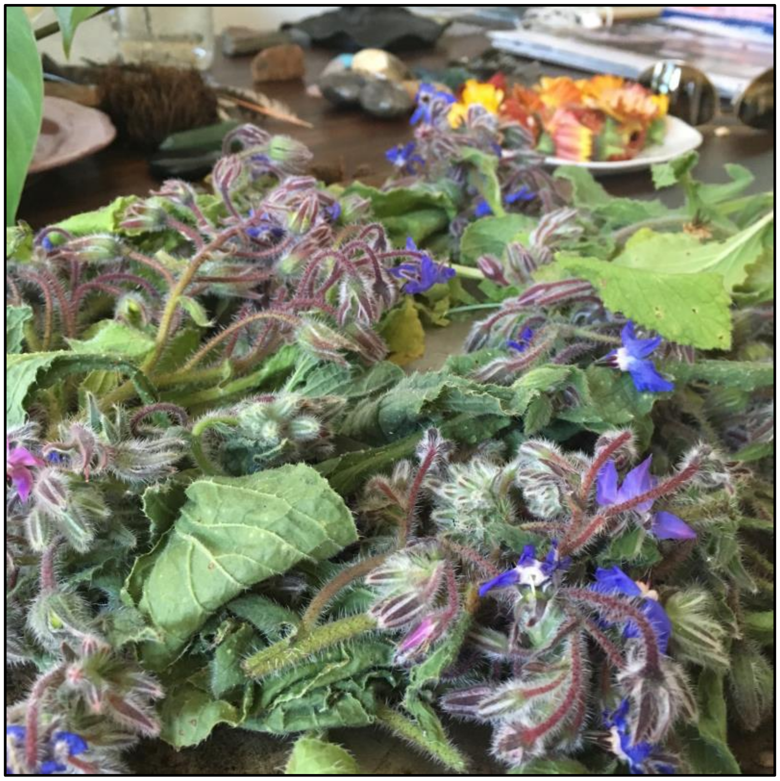

Figure 7. Harvested borage ready for drying (photo by author).

According to the US Department of Agriculture, borage contains macronutrients such as carbohydrates, protein, fats, fiber, glucose and galactose, and gamma-linolenic acid (an essential fatty acid); vitamins such as ascorbic acid (vitamin C), beta carotene (pro-vitamin A), and choline, niacin, riboflavin and thiamine (elements of the B complex); minerals including calcium, cobalt, iron, magnesium, phosphorus, potassium, sodium and zinc; and other plant compounds including allantoin, lactic acid, malic acid, mucilage, rosmarinic acid, and tannin (Kreisberg n.d., USDA n.d.). Borage also has a long history as a medicinal plant for physiological, as well as emotional ailments.

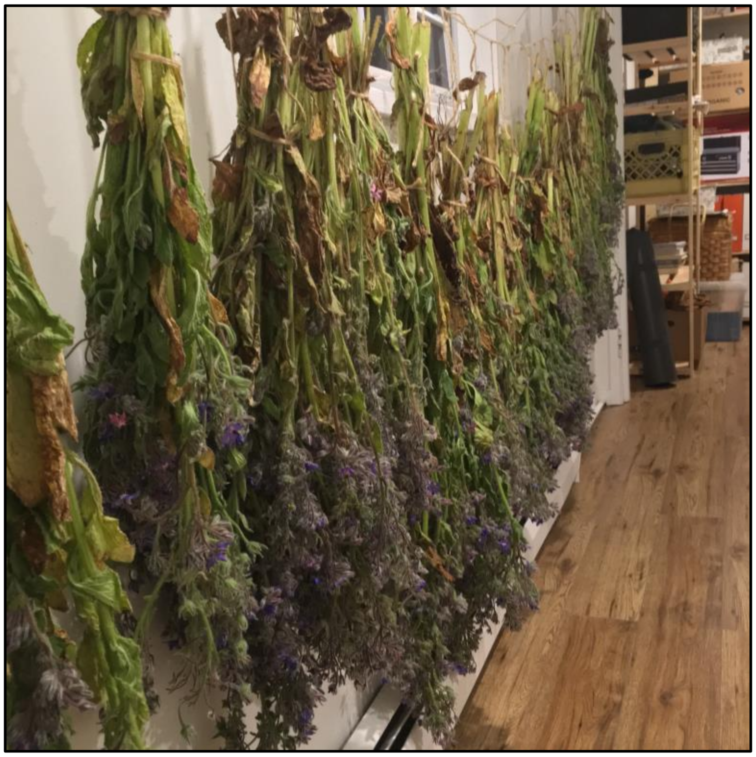

Figure 8. A wall of borage plants cures in the basement (photo by author).

"Borage for courage" is a prescription that has circulated for hundreds of years (Zong n.d., Dobelis, Inge N. et. al, ed. 1986, 117). It is said that Roman soldiers would drink borage tea (or, even more effective, borage steeped in wine) on the eve of battle to bolster their resolve. It is thought that borage originated in Syria and it is now common in many parts of the world including throughout North America. The Latin *borago* is believed to be a corruption of *corrago*, meaning "heart-led" and in Celtic, *barrach* is "a man of courage." The herbal usage dates to the first century by the Greek physician Dioscorides whose medicinal applications included as a diuretic, a demulcent and expectorant, a skin emollient, and for various nerve and heart issues. Homeopath Joel Kreisberg explains the “three faces of borage” in its use an herb, as a homeopathic remedy, and as a flower essence: the herbal use comforts, brings cheer, restores adrenal function, and promotes lactation for nursing mothers; the homeopathic remedy brings playfulness and spontaneity to those who have been burdened; and the flower essence remedy promotes optimism and enthusiasm. He identifies a commonality across each of these uses in borage’s ability to relieve heaviness of the heart (Kreisberg n.d.).

The table below lists more nutritional uses for borage, to treat physiological:

Table 2. The Many Uses of Borage Medicine	
Adrenal and Endocrine (internal)	calms and restores the nervous system; thyroid issues; restores adrenal cortex of those who are overworked, exhausted, or burned out
Diuretic (internal)	kidney health
Demulcent and Expectorant (internal)	soothes respiratory tract and sore throats
Emollient (topical)	soothes dry skin
Cardiovascular	borage seed oil “reduces cardiovascular reactivity to stress by reducing the systolic blood pressure and heart rate and by increased task performance.” (Haughton 2001 in Kreisberg n.d.); heals fevers of pulmonary origin; can reduce blood cholesterol levels when combined with evening primrose oil
Women’s Health	leaves stimulate production of milk for nursing women; menstrual problems; may increase iron absorption

(Sources: Dobelis et. al. 1986, Kreisberg n.d., Wood 2011)

The traditional homeopathic applications of borage are for “a strong-minded person who has difficulty compromising. This type of person becomes hard and abrasive or even angry to the point of rage if not listened to and from an inability to listen to others and to see different points of view.

According to Kreisberg, a person needing Borage fears failure. They feel that it is their duty to take on all the responsibility in a given situation, resulting in resenting their role in life. People in need of borage medicine tend to be warmer than others and to feel worse in the heat. More modern flower essence therapy applications include for heavy heartedness and a lack of confidence when making decisions; borage brings courage and provides “buoyancy of the soul” (Kreisberg n.d.). According to the editors of *Magic and Medicine of Plants*, borage has long been considered a powerful medicine, but in the seventeenth century, people began to doubt its effectiveness as a medicine although they continued to use it to make wine (Dobelis et. al. 1986).

Borage medicine can be prescribed to those who recognize themselves in any of the above descriptions including pessimistic, heavy in heart, burdened, lacking confidence, strong-minded, bull-headed, afraid to fail, or those who find it difficult to listen to others, with different opinions, without becoming angry or frustrated. Borage is of use to those who lack confidence as well as those who might have too much – many plants work in this way, offering a remedy for imbalances of either too much or not enough of a given affect or ability. Plants, including borage, are balancers.

Returning to the question of what is to be sustained, and the main competition I have thus far laid out between Land and Economy, I now delve into a deeper analysis of market-oriented sustainability and several ways this can be heard in Vancouver and in the pipeline project. As the examples will reveal, the struggle between these two is very real which is why I bring borage medicine to my analysis as something to infuse into the struggle to compromise. As you read the descriptions of market-oriented sustainability, Vancouver's Greenest City 2020 Action Plan (GC2020AP), and listen to TMX project recordings, consider your own understandings of the Economy, its fixedness or flexibility, and the ways it relates with the environment.

The Economy and Market-Oriented Sustainability

> Our economic system and our planetary system are now at war. Or, more accurately, *our economy is at war with many forms of life on earth, including human life.* What the climate needs to avoid collapse is a contraction in humanity's use of resources; what our economic model demands to avoid collapse is unfettered expansion. Only one of these sets of rules can be changed, and it's not the laws of nature (Klein 2015, 21 emphasis added).

"Sustainability" was first defined in the UN's Brundtland Report (1987) as a way to meet the needs of today "without compromising the ability of future generations to meet their own needs" (3.27). In the emergent definition, sustainability was meant to balance equity, ecology, and economy factors but the Critical Sustainabilities project at the University of California in Santa Cruz (UCSC) has revealed how usually one of these "E's" is typically favoured over the others in any given plan. As in the case of the TMX project and, I would argue, most Canadian sustainability projects, prioritization of market-oriented sustainability is not uncommon. According to researchers with the UCSC Critical Sustainabilities project,

> In particular today, we see powerful political and economic actors positioning the "economy" as a, if not *the,* priority for major sustainability efforts. Further, this economy is commonly defined in competitive, market-oriented terms. From this perspective, other forms of sustainability emphasizing equity, the environment, and/or alternative economic forms, become 'alternative' or 'non-market' sustainabilities. Very often non-market forms of sustainability can work synergistically with or be incorporated by market-oriented forms. In the tradition of ecological modernism, they can be embraced as "win-win" solutions. Yet insofar they can't, for instance if sustainability goals are deemed irrelevant to or at odds with markets and competitiveness, they can be ignored or become contentious, and may lose out (Critical Sustainabilities "Sustainabilities").

Sounds Along the Pipeline Route

Below I provide links to and describe two very different but related sound recordings of events pertaining to the TMX project. One is a recording of an anti-pipeline rally I attended in Vancouver in 2016 and one is a recording of a rural pipeline access point I discovered on my travels in 2017. I discuss the movements between these two locations, geographically and affectively, and with an ear toward the question of when these recordings begin and end. Ultra-red, the global activist collective that launches local "militant sound investigations" to attempt to answer tough social questions, suggest that there is much to be learned in determining the sounds of, say sustainability in Vancouver, might be (Ultra-red 2008).

One answer to “what is the sound of sustainability in Vancouver?” might be this: it is the sound of a rally that resists fossil fuel extraction. Listen to a rally that happened outside Vancouver City Hall on November 19, 2016.[16] Thousands of people came together to denounce the plans for the pipeline expansion:

Steady drumming. Soon singing voices joins in. Screeching feedback from a microphone on the speakers’ platform. Chatter all around as the drumming continues in the background. One drum song finishes, and people clap. A piece of machinery beeps as if it is backing up. The drone of people talking – there are thousands of us that day. Car horns honk in support as they pass by. A child’s voice. The machinery drones on. A woman explains how wonderful her cell phone case is. The child complains about something. Drumming starts again, faster and singing right away. The talking continues but quiets a little, momentarily, then picks up again. More cars honk their support. A man laughs at something his neighbour has said. The drumming gets louder, closer, and a round of cheering and clapping rises up for a moment. The drums get closer still. It’s men singing, their voices deep and strong. A helicopter circles overhead, its blades rumbling loudly. The singing and the drumming get even louder as they move through the crowd, closer to where I stand and record it all. You can feel the beat BAMbam BAMbam, ONEtwo ONEtwo. They finish this song and loud cheers, claps, and a whistle of support can be heard.

This soundscape involves protest, ceremony, and everyday life all meeting and diverging. The spatial dimensions of the soundscape reach up into the sky where choppers circle and where the prayers of the drummers are directed. It reaches out wide around

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[16] Visit https://soundcloud.com/kristine-lawson-1/sets/acoustic-relations-pipelines to listen.

Vancouver City Hall and even carries beyond as horns honk in support and continue their journey across the Cambie Street Bridge into the heart of downtown. It reaches below the earth as feet, bicycles, strollers, and vehicles move along the surface and send vibrations rippling down. Construction machinery beeps and roars, even on a Saturday, but somehow are silent when a speaker takes the stage – is this respect, an intentional negotiation of the acoustic space, or just coincidence? The conversations heard around me as I record these moments: some are casual, mundane, even playful others express the weight of the situation as voices rise in anger, glide with cynicism, or stay soft in reverence of the ceremony the indigenous community members have gathered to perform. Members of Tsleil-Waututh Nation are in leadership positions at this rally, but they acknowledge the solidarity of many other First Nations that have come to support, including activists and Nations from Standing Rock Sioux. The sound of the drums and stories that are shared that day about how the tar sands have already affected communities so deeply are powerful. Most of us gathered that day did not know the words or the movements of the songs that were sung and drummed or even whether clapping was the proper response when a song ended. From what I have learned since that day, I now realize the performance was perhaps in part to motivate all who gathered, bring us together in rhythm with the drum, but also as a message of respect to the land itself, the waters, and all the life supported within them, that are threatened by increased tanker traffic carrying diluted bitumen. It is the sacred duty of the Tsleil-Waututh Nation, “People of the Inlet,” to ensure that all the waters in their area are well taken care of. This song and dance is a prayer for guidance in this work and a reminder, to those who would disrupt that work, that they will not back down.

At the rally, there was a calmness and steadfastness through the speeches that were made, echoed in the rhythmic drumming. The drums, with their continuous, thundering, deep, resonant sound became the soundtrack that fit the spirit of the people gathered and the words that were spoken. The words were clear, slow, loud without shouting, and confident. The spirit of borage medicine – courage to face the fear of the pipeline project being completed – felt strong at the rally.

According to Ultra-red, to listen is to acknowledge a sound (and therefore something that created a sound) that is beyond ourselves (2011). The main strategies of Ultra-red include their "militant sound investigations" and "public listening sessions," one of which I had the chance to participate in on the University of California, Santa Cruz campus in 2015. To conduct these sessions, first there must be a collection of recorded sounds or "sound artifacts" that participants gather by recording specific sounds in the local area. The sounds usually attempt to answer a critical question being posed by the local community. In our case on the UCSC campus, it was "what is the sound of participation?" In my recorded examples above, the question could be "what is the sound of sustainability" or "what is the sound of pipeline politics?" Participants go out ahead of time and record the answers to these questions in the sounds they hear around them. Then the sounds are brought back to the group where they are listened to and discussed.

During "militant sound investigations," Ultra-red member Niels Van Tomme explains about when to hit the RECORD button. Should the recording start when the political demand is made? Is it best to capture the height of the moment? Or is there something to be recorded before that? After? For Van Tomme, to hit RECORD is an iterative process – he hits record and then he has a record. He listens, records again – every time he learns a little more, adds a little context, understands a little differently (Ultra-red 2008). It is important, Van Tomme says, not to wait until the “demand” to pull out the microphone and hit RECORD:

> Our impulse to take the microphone out of the box and switch it to RECORD must be considered critically. If we wait to RECORD until the demand is articulated, we will be too late. If we use the microphone only to RECORD the demand, we have not listened. The microphone is an instrument for listening to the undifferentiated field of need-demand-desire. Its capacity to privilege the demand must be constrained so that it may call us to the silence that is the condition for listening...When we have a RECORD we compose with it. This is not a repetition of analytic terms. Rather, it is a re-listening inflected by our growing understanding of the conditions that define the sites and moments of our meetings. These compositions are the questions and themes for the next phase of our investigations. We RECORD again. We review this RECORD. We compose, RECORD, review. Each composition is a protocol for investigations to be conducted in organizations, homes, institutions, parks, plazas, streets. Then the apparatus is no longer in our hands. We make a future where we are unnecessary (2-3).

So, what is the demand at the rally and what are the sounds that come before the demands of the Vancouver anti-pipeline rally? The demand is simple: stop the pipeline project. Answering what comes before the demand – discovering where the demand comes from – requires more consideration. One answer came to me during a summer trip to visit my parents in what is known as the Okanagan region of central BC, a part of which traverses the Fraser River watershed and the path of the pipeline.

When I go to visit my parents in the South Okanagan region of BC, I take what our family calls the "low road." Driving along the Nicola River Valley floor in spring and summer, the journey is filled with beautiful vistas of the hills, chains of lakes descending the valley, and, of course, the wildflowers and plant medicines that are establishing themselves for the season. I must remind myself to stay focused on the road as my eyes wander along the ditches, meadows, and hillsides on either side, scanning for plants I've become familiar with. I dream of medicine gathering trips. On my second trip along the low road in the summer of 2017 – an alternative suggested by my dad to make the trip easier for my old pickup truck, I was on a small mission to check out a large company sign I'd seen on my first trip the previous month. Just passed Stump Lake, I found it.

That day, stopped by that big sign, yarrow was growing tall and strong along the perimeter so, with its permission, I gathered a small bundle to bring home with me. I've learned that, when working with the plants, it's important to keep the conversation going – as with any other relationship, communication is key. Each of my teachers has emphasized the importance of introducing myself and explaining my intentions when harvesting medicine. It's also important, as Kimmerer and many others teach, to ask permission. If you're going to ask though, she warns, you must be prepared to listen for the answer, which might be no. On that day, I asked some of this yarrow if it was interested in traveling to Vancouver with me, along what remained of the pipeline route, to come to the city and become medicine for people down there. Remember that yarrow medicine aides in good respiratory health, a timely remedy for the hydrogen sulphide and hydrocarbon vapours the big TMX sign alleged might be present in the area. The land was preemptively growing its own medicine on-site. In fact, yarrow grows everywhere these days, from city parks in Vancouver to my parents' lawn in the dry, arid centre of the province. Local indigenous herbalist Lori Snyder teaches that the land provides for itself, and for people, each season, exactly what it needs. I remember the spring she taught me that, this purple flower was popping up everywhere. Lori told me it was purple vetch and it's a nitrogen fixer for the soil, as well as one of the first plants to flower in the spring (along with dandelions). The vetch not only provides the needed minerals for the spring soil, it can also be made into a tea for those suffering with spring allergy symptoms. Kimmerer notes that "our indigenous herbalists say to pay attention when plants come to you; they're bringing you something you need to learn" (2013, 275).

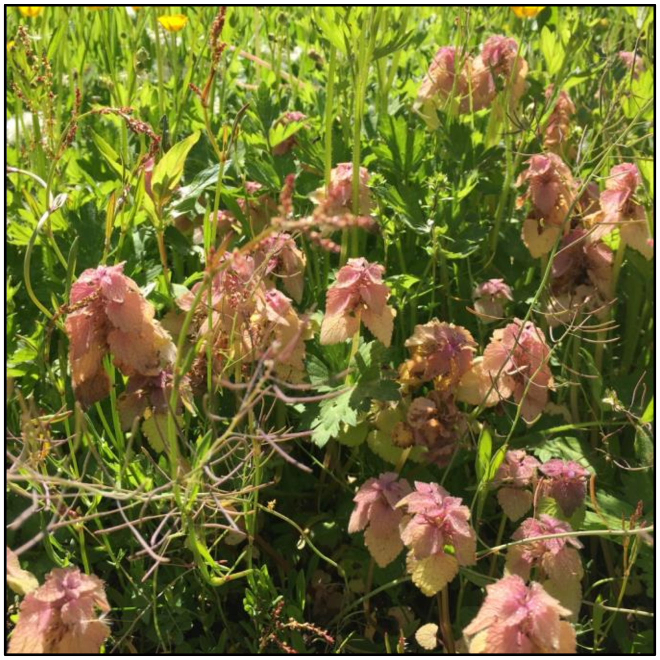

Figure 9. Purple vetch. These plants have turned colour for the season and are about to die back into the soil, fixing nitrogen levels there.

So, on this short exploratory mission, I gathered my evidence: a photo of the TMX real estate amongst the countryside. You can see the wild grasses, the blue sky, the country highway, the fence, the gate, the sign. After about a ten-minute visit, a big Orica truck pulled in – I'm not sure if there is also a mine site up the road or if Orica has been contracted by the TMX to dig or blast. I moved my truck, tiny in comparison, out of the way and carried on down the road.

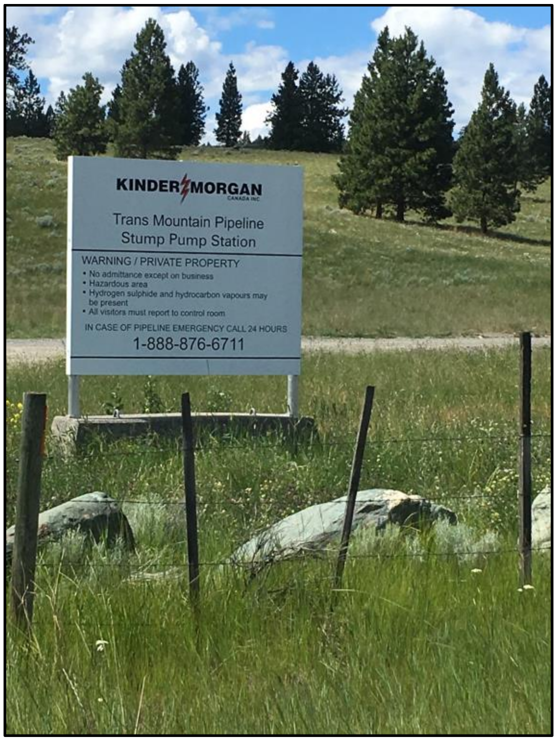
KINDER MORGAN
CANADA INC
Trans Mountain Pipeline
Stump Pump Station
WARNING / PRIVATE PROPERTY
• No admittance except on business
• Hazardous area
• Hydrogen sulphide and hydrocarbon vapours may be present
• All visitors must report to control room
IN CASE OF PIPELINE EMERGENCY CALL 24 HOURS
1-888-876-6711

Figure 10. Trans Mountain Pipeline Stump Pump Station sign (photo by author)

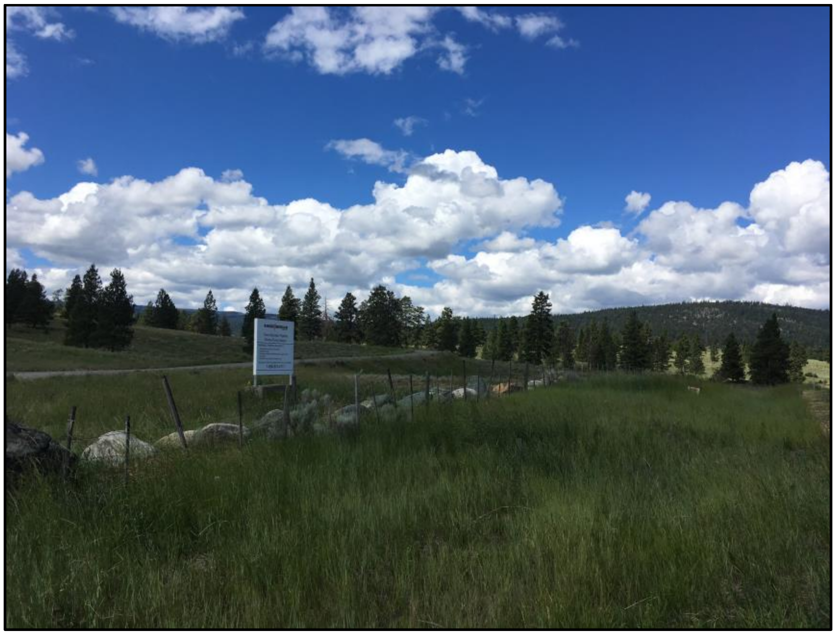

Figure 11. Stump Lake access road. The road runs parallel to the “low road,” Highway 5C, where I recorded the sounds of this mid-pipeline route section. Refer to Map 2 (Appendix I) for a geographic overview of the surrounding area. (photo by author)

Listen to the TMX access point outside Stump Lake:[17]

The sound of a truck zooming passed. Then another. It becomes fully silent in between, you can hear the engine rattle as the sound fades, and it gets quiet again. Birds chirp, a breeze comes up. My footsteps crunch on the gravel as I explore the little pullout. The road is gated off, with a big sign proclaiming….a breeze rises again and the buzz of a fly. A third car, this time you can hear a smaller engine, quieter, rush passed – might have been a motorcycle. Breeze. A fourth car. I should have brought a dead cat to muffle the breeze! A

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[17] Visit https://soundcloud.com/kristine-lawson-1/sets/acoustic-relations-pipelines to listen.

louder bird squawks. The wind picks up. A fifth car. Bird honking. And further off, still speaking. The breeze really picks up – my technology makes it sound far more intense than it actually is. The rustle of the grasses in the wind.

This site is quiet, or at least what is visible and near to the road is quiet. Extraction happens hundreds of kilometers away and the transport happens quietly, for the most part. Pipelines are quiet, on the surface. Perhaps because of this silence, they have unassumingly subsisted and even expanded their capacity to the point where now the volume has finally been turned up (See Map 1 for a view of the full pipeline route).

I get into my old and noisy truck and drive away from the Stump Lake access point, back down to the city and down to a louder politics where large numbers of people gather together to voice support or protest of the TMX project. Where I might have driven right passed the large Kinder Morgan sign at the Stump Lake access point, sighting the big sign on the side of the road registered quickly for me as a part of the before-stage of the Vancouver rally and all the political talk and action I was already hearing in the city. The visual cue of the sign, for me, was part of the answer to Ultra-red's question about what happens before the demand is issued. A part of me is tempted to say not a heck of a lot, based on the quiet abandon of the Stump Lake access point, but I'm not so easily fooled by the quiet country scape. Although I just pass through that area on my way to visit my parents, there is a whole world, a whole set of relations being acted out in that area that I know nothing about, other than their connection to what happens above and below on the pipeline path.

The demand – stop the pipeline – is not isolated. Demands have a history, they come from somewhere, within a context of what is needed, what is desired (Ultra-red 2008). With the pipeline, there is a growing record of all the places, all the sounds, all the people, beings, and aspects of the natural and built world that are a part of that pipeline path. If I ask, “what does sustainability in Vancouver sound like,” I must consider everything that comes before the demand made at City Hall. I must, necessarily, travel outside of Vancouver and listen for the connections. I listen to the drums, the rally, the march in Vancouver with the memory, the record of the wind, the quiet, the yarrow that I heard up at the Stump Lake access point. The demand comes from Land-as relation worldviews. While the demand is uttered, by many in many places, it is heard most loudly in the urban centers where many gather together to amplify their voices through speaking together. The history of the demand, informed by relations to Land can be heard in many places, but the softer overall soundscape of the rural recording allows for a different kind of focus on Land-relations.

Sound is mobile, moving through space, via soundwave, over time. Consider the pipeline route, geographically, as it descends from the Northern Alberta tar sands, through BC, and down to Burnaby, where the route of bitumen transportation is picked up by train and carried out to the Port of Vancouver and to international markets by sea. Consider also the route of the protest march that happened that November day. Sounds exist along pathways such as these and the geographic expanse, as well as the temporal expanse, build understanding of the issue of sustainability and the pipeline project. I recall some sounds that moved with me between the Stump Lake access road and the rally in Vancouver. One was the sound of my old truck – so old that you just never know exactly what kinds of sounds it might make on a given day. The day I was driving down from the interior of BC, my dad had just helped me to replace the radiator and all sounds were quite good to my ear on that trip. My truck sounds follow me around the city as well although they often get a little more interesting on the short and sporadic trips – I don't drive much in the city, since I have good alternatives, so it is more likely my truck acts up and sounds its displeasure at being operated so infrequently.

Another sound that came with me was the conversation I started with the plants up at the Stump Lake access road. It was a yarrow plant that I spoke to and asked whether it would be interested in traveling with me to the coast, to the big city, to provide medicine for those of us down there that might need respiratory support. As Kimmerer teaches, when you ask plants a question, you must then listen for the answer. Listening is also "listening," with both the left and right brain involved in the process – pragmatism will tell whether the plant population in that area is healthy enough to manage a harvest; the right brain is better equipped to converse with the spirit of the plant and its desire to be harvested or not (2013, 176). When I first started conversing with plants and trying to listen for their answers to my questions, I was skeptical. While I haven't yet encountered someone who can confirm whether I've been doing it "right" or not, I can say there is a feeling I get, when I'm asking for permission to harvest, that can be translated into yes and no, somewhere inside me. It's interesting for me to think of this "conversation" that happens, in silence, through asking and listening.

Keeping with this notion of sound movement, Ultra-red employs "sound walks" to learn the places, the politics, and the sounds of the cities where they work. One of their sound walk participants, Argentine artist Eduordo Molinari, described his sound walk that,

> Goes from one place to another, one person to another, one generation to another, carrying – like mules – power/memories, burdens that are viewed as valued and even secret, through territories that are difficult to move

> through, and creating a concept of movement in which it is essential to know when to move and when to stop (in Ultra-red 2011, 19).

Just as Molinari's sound walk traverses places, people, and generations, the pipeline route and the march route span very different kinds of places, territorializing the sounds of sustainability. The quiet expansiveness of the northern reaches of the pipeline are transported down into the noisy city where more direct action takes place.

The sonic and geographic transition from rural quiet to the urban noise brings people together, from across the continent, to speak out. Often these are the sonic stereotypes – urban noise and rural quietness – but listening beyond the stereotypes, what is the importance of the sounds heard in both places? Analysis of these actions, and the words, reveals the emotions that lay underneath: hope for the future but, in order to arrive at that future, there is a serious disruption that must occur. In the urban actions I recorded, people expressed their anger, their frustrations, their sadness, and their fears. As the story of this project unfolds, I will explore the many emotional and affective dimensions of those in favour of and opposed to the pipeline project, but first I examine those which served as the spark of direct action and which can be heard so clearly in talk about the Economy.

Listening to these two soundscapes, ethnographer Stefan Helmreich's concept of "transduction" is useful in understanding the relations between urban and rural, quiet and loud, land-as-commodity and Land-as-relation. Helmreich writes of the different ways to imagine immersion, beyond "a descent into liquid," as also "an absorption in activity, and the all-encompassing entry of an anthropologist into a cultural medium" (2007, 621). He suggests that one of the outcomes of an ethnographer's immersion in culture can be equated with transduction or, as the Oxford English Dictionary defines it, the conversion of variations in one medium into corresponding variations in another medium (in Helmreich 2007, 622). Using this method of conversion, then, consider geography as the medium and the translations to be between urban loudness and rural quiet. The Land-as-relation worldview moves between these two places, as does the land-as commodity belief. Perhaps, then, my conversation with the yarrow plant up at Stump Lake, might translate into the calm, steady, and assertive words that were spoken at the rally in Vancouver. Perhaps the big sign at Stump Lake, the fencing and the road that has been built to access the pipeline is related to the target audience of the speakers that day – not the allies but the adversaries, the supporters of the pipeline. The movements of the sounds or the movement of the ethnographer between the places of listening, offers different kinds of understandings of competing sustainability priorities. Another "place" where I listened frequently was in news stories heard on the radio and read in publication.

The Popular Sounds of Sustainability

The third sound artifact used to hear the Economy is the sound of sustainability in the news and other popular/mainstream and independent sources such as documentaries. I have chosen stories that tended to be widely circulated during the two years of my fieldwork. I focus both on the content of the news stories as well as the underlying affective qualities of these stories. While tuning in to the news stories, my focus is both on the words spoken by political leaders about their policy decisions as well as the news organizations themselves who choose to portray individuals and groups in particular ways that directly shape the tone of the stories they tell. The most common affects that ran through most, if not all the stories I heard about the pipeline during the two years of focused tuning in were anger, divisiveness, and fear. Anger often arose out of the perceived conflicts between pipeline proponents and anti-pipeline activists. Divisiveness stems from the tone of blaming and litigiousness that is common from political leaders in their defense of their own positions and actions. I trace the origins, of both anger and divisiveness, from fear. As I hear it, the fear includes the possibility that such an important project would be disrupted and prevented from delivering the jobs that are so badly needed in Canada or perhaps that one might lose political esteem, strength, or office. It is possible that some of the fear-based communications employ fear-mongering as well. The simplification of the narratives, by tuning out other dynamics that can certainly be heard, and focusing on anger, divisiveness, and fear or fear-mongering, serves as my entry point to introduce borage medicine for those that might subscribe to either of these narratives. Borage medicine, for courage, to soothe fear of failure and soften the hard-minded who have difficulty compromising, or listening to alternatives, can offer great relief and healing. If Part II asks the question of what is to be sustained, I consider the answers not only in terms of the perceived competition between the Economy and the Land but also in terms of the affective qualities that are sustained, perpetuated, or opened up for transformation. Currently, the discourse around the TMX project is one of fear that either that the pipeline won't be built, and the needed jobs not created or that the pipeline will be built, and environmental and social damages will be escalated. I am curious if tuning in to the affective dynamics in news stories about sustainability might offer new ways to hear the complexities of developing sustainability policy and practices that are respectful to all.

Before discussing the details of particular news stories, I provide a brief overview of key groups and their stances on the pipeline. Pipeline proponents include the Federal Liberal

Party (currently the ruling party under Prime Minister Justin Trudeau); conservatives at federal, provincial, and local levels, generally; and the New Democratic Party (NDP) in the province of Alberta. Interestingly, the NDP is considered Canada's biggest, most mainstream socialist party and tends to be quite socially, economically, and politically left-leaning at the federal level and at the provincial level in other provinces besides Alberta. The NDP in British Columbia, for example (which currently holds a minority government in cooperation with the BC Green Party), is opposed to the TMX project. Often, pipeline proponents also include industry workers and rural, often poor, communities, including many First Nations communities, who have been told the TMX will bring much-needed jobs.

However, as my analysis has found, there is considerable variance and discrepancy in the actual number of jobs that will supposedly come with TMX and certainly much discussion around the value of such jobs and whether they might be considered high-quality (in their ability to provide a living wage and long-term employment, at minimum) or worth the environmental sacrifices. Also, there is a growing movement of industry workers, mainly those working on the frontlines in blue collar positions, who have witnessed firsthand the extensive damages to the health of the land and people and are now organizing to resist pipeline expansion and transition into clean energy.

The Economy is typically the most significant reason proponents use to support the TMX project. Perhaps the most common story is that the pipeline will bring with it many jobs. This statement has been the focus of numerous studies, interviews, and fact-checking endeavours since pipeline supporters and protesters tend to come up with sometimes drastically different numbers of jobs that the pipeline will, indeed, provide. Groups and individuals, especially those in rural and often impoverished areas and those who subscribe to land-as commodity beliefs, commonly make decisions about whether they support the TMX project or not based on which figures they choose to believe. In what comes next, I describe differing and opposing stories about the jobs the TMX project promises to deliver. For the most part, the stories are from the news and some are studies generated by nonprofit think tanks. It is important to keep in mind business models of corporate news sources as well as the different models alternative and independent news sources offer. Freelance writer and journalist Mitchell Anderson reminds his readers,

> "As important as the media is this era of misinformation, people often forget that mainstream news organizations are first and foremost competitive business ventures. Truth and profit never align exactly...News, as the name implies, relates to things that are novel. Yet much of what is reported as news is relentlessly repetitive...Alternative media now play an increasingly important role telling stories otherwise ignored by commercial outlets. Reading and supporting these platforms is a meaningful way to diversify the diet of information available to make sense of our evolving world" (2019).

As I listened to stories and sounds of pipeline jobs, I listened also for what was underneath the stories, the tone of the particular words spoken and the affective work that was accomplished through the way the story was told. Always with an ear toward the bigger picture, the social and political implications of what was spoken or shared, and ways the words revealed social and political power dynamics, in what follows I reflect on what I heard as the biggest economic consideration of the TMX project: employment.

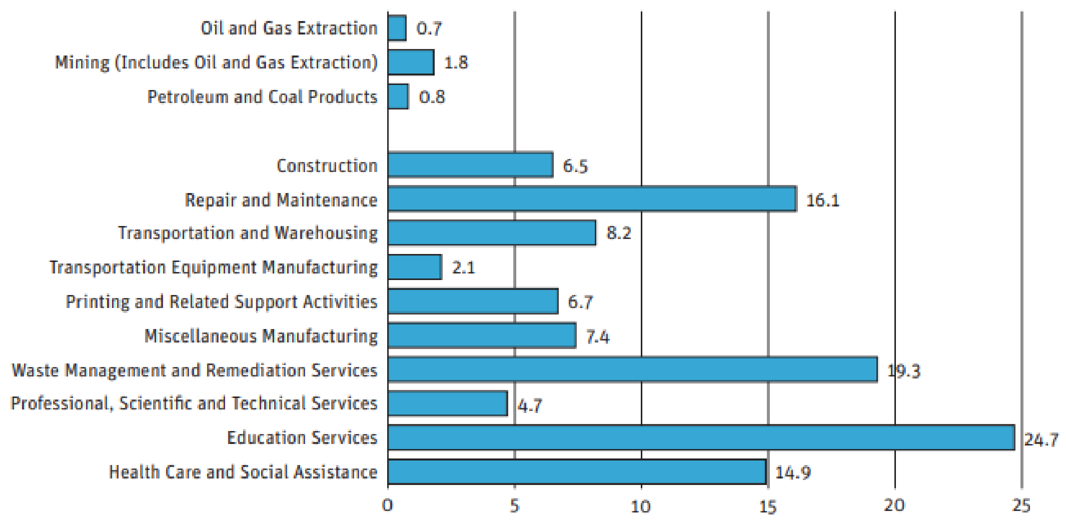
Jobs

The Trans Mountain website includes extensive description and documentation of every aspect of pipeline planning, construction, and consideration from safety to the environment, indigenous consultation to history of the pipeline system. On their "Project Benefits" page, the company includes a colourful infographic that highlights the economic benefits and states that, "according to Conference Board of Canada estimates, the Project would create the equivalent of 15,000 construction jobs and the equivalent of 37,000 direct, indirect and induced jobs per year of operations" (Trans Mountain "Project Benefits," accessed September 6, 2018). Yet, senior economist for the Canadian Centre for Policy Alternatives in BC, Marc Lee, notes that the TMX submission to the National Energy Board (NEB) states the need for about 2,500 full-time workers over a two-year construction period (volume 5B, pages 2–16 in Lee 2018). Lee clarifies that the Trans Mountain application notes how the current pipeline supports 200 permanent jobs split evenly across Alberta and BC and projects the need for an additional 90 workers, 50 in BC, as a result of the expansion (2018). This marks a vast discrepancy between what Lee argues is stated in Trans Mountain's submission to the NEB and what the company lists on their website. The TMX website states

> "the Project would create the equivalent of 15,000 construction jobs and the equivalent of 37,000 direct, indirect and induced jobs per year of operations...Overall, the Project generates more than 800,000 direct, indirect and induced person-years of employment during Project development, operations and higher netbacks" (Trans Mountain "Project Benefits").

Lee goes on to say that the job gains in BC “include temporary construction jobs, many of which may go to workers from outside BC and who would be employed elsewhere in the absence of TMX construction” (Lee 2018). Temporary working-class jobs are not generally considered high-quality jobs since they leave the employee in the precarious position of needing to seek employment yet again once they are completed. Of course, if these low-quality jobs are offered to workers from outside the area, the project then fails to bring the jobs to local workers, as promised. Lee also compares the number of direct jobs created per $1 million investment, by sector and demonstrates how comparatively low job generation in the fossil fuel sector is compared to other sectors such as education services, waste management + remediation services, or repair + maintenance:

FIGURE 2 Direct Jobs Per $1 Million of Output



Source Informetrica Limited, based on Statistics Canada's 2002 w-level public-use Input-Output tables.

Figure 12. “Direct Jobs Per $1 Million of Output” (Lee and Card 2012, 39 Figure 2). The comparison makes clear that the fossil fuel sectors generate relatively low numbers of jobs compared to other sectors, thus suggesting that, even if the pipeline delivered the number of jobs it claims it will, many more jobs would be generated by other sectors, with lower greenhouse gas emissions rates.

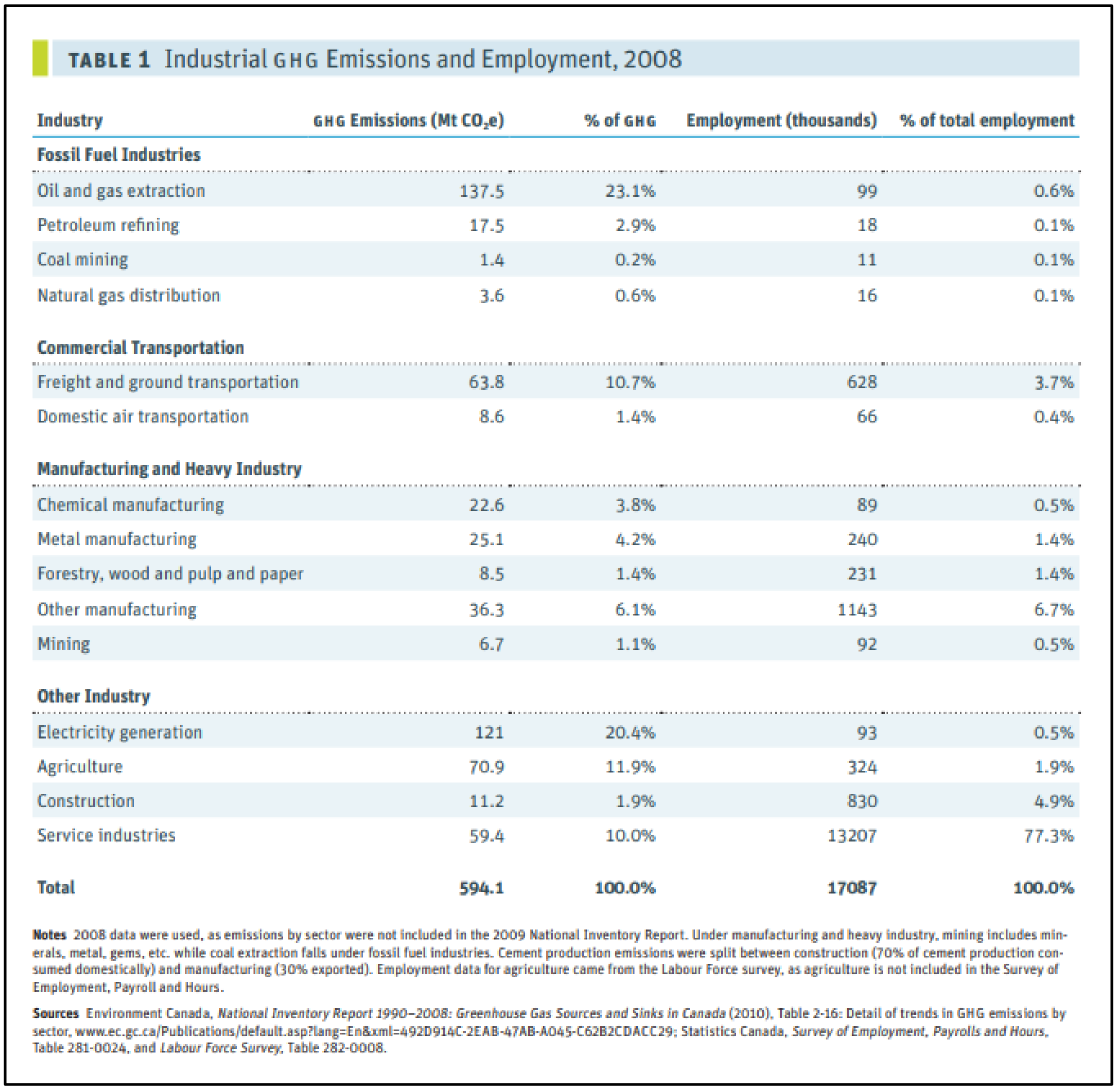


TABLE 1 Industrial GHG Emissions and Employment, 2008

Industry	GHG Emissions (Mt CO_2e)	% of GHG	Employment (thousands)	% of total employment
Fossil Fuel Industries				
Oil and gas extraction	137.5	23.1%	99	0.6%
Petroleum refining	17.5	2.9%	18	0.1%
Coal mining	1.4	0.2%	11	0.1%
Natural gas distribution	3.6	0.6%	16	0.1%
Commercial Transportation				
Freight and ground transportation	63.8	10.7%	628	3.7%
Domestic air transportation	8.6	1.4%	66	0.4%
Manufacturing and Heavy Industry				
Chemical manufacturing	22.6	3.8%	89	0.5%
Metal manufacturing	25.1	4.2%	240	1.4%
Forestry, wood and pulp and paper	8.5	1.4%	231	1.4%
Other manufacturing	36.3	6.1%	1143	6.7%
Mining	6.7	1.1%	92	0.5%
Other Industry				
Electricity generation	121	20.4%	93	0.5%
Agriculture	70.9	11.9%	324	1.9%
Construction	11.2	1.9%	830	4.9%
Service industries	59.4	10.0%	13207	77.3%
Total	**594.1**	**100.0%**	**17087**	**100.0%**

Notes 2008 data were used, as emissions by sector were not included in the 2009 National Inventory Report. Under manufacturing and heavy industry, mining includes minerals, metal, gems, etc. while coal extraction falls under fossil fuel industries. Cement production emissions were split between construction (70% of cement production consumed domestically) and manufacturing (30% exported). Employment data for agriculture came from the Labour Force survey, as agriculture is not included in the Survey of Employment, Payroll and Hours.

Sources Environment Canada, *National Inventory Report 1990–2008: Greenhouse Gas Sources and Sinks in Canada* (2010), Table 2-16: Detail of trends in GHG emissions by sector, www.ec.gc.ca/Publications/default.asp?lang=En&xml=492D914C-2EAB-47AB-A045-C62B2CDACC29; Statistics Canada, *Survey of Employment, Payrolls and Hours*, Table 281-0024, and *Labour Force Survey*, Table 282-0008.

Figure 13. “Industrial GHG Emissions and Employment, 2008” (Lee and Card 2012, 23 Table 1). This table reveals the relatively high rates of greenhouse gas (GHG) emissions of oil and gas extraction (23.1%) alongside relatively low percentage of national employment (0.6%).

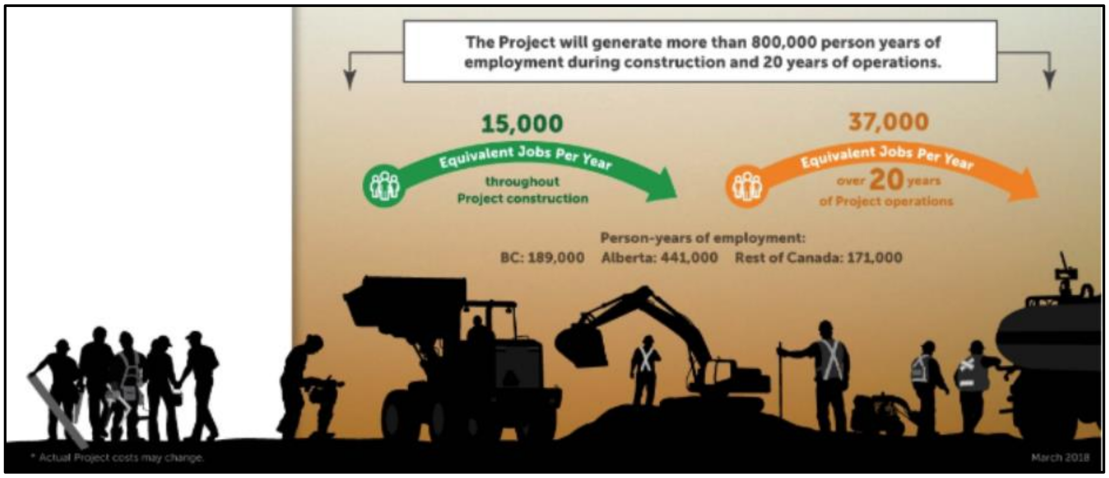

The Project will generate more than 800,000 person years of employment during construction and 20 years of operations.
15,000
Equivalent Jobs Per Year
throughout Project construction
37,000
Equivalent Jobs Per Year
over 20 years of Project operations
Person-years of employment:
BC: 189,000 Alberta: 441,000 Rest of Canada: 171,000
* Actual Project costs may change.
March 2018

Figure 14. “Project Benefits” (*Trans Mountain* accessed September 6, 2018). This is a snip of the “Project Benefits” poster that includes the number “person years of employment” and equivalent jobs per year the TMX company expects to create.

The varying numbers, from TMX and Lee above, are likely believable based on beliefs about the pipeline. Those who are inclined to support the pipeline are likely also inclined to believe the company’s own numbers. But what if there were no way to truly know whose numbers are correct? Anthropologist Danilyn Rutherford’s concept of “kinky empiricism” provides a different set of criteria in such interpretations. Rutherford (2012) describes an empiricism that is radical, innovative, and ethical – an empiricism that is kinky:

> A kinky empiricism: kinky, like a slinky, twisting back on itself, but also kinky, like S and M and other queer elaborations of established scenarios, relationships, and things. An empiricism that admits that one never gets to the bottom of things, yet also accepts and even celebrates the disavowals required of us given a world that forces us to act. An empiricism that is ethical because its methods create obligations, obligations that compel those who seek knowledge to put themselves on the line by making truth

> claims that they know will intervene within the settings and among the people they describe (2012, 465).

Rutherford links the ethical and the empirical (469). She describes the nature of the knowledges anthropology produces – those that might be too relativistic, too partial, too particular, or too theoretical to be useful in answering real-world problems and questions (466). She believes that partial truths are the best an anthropologist can hope to do (468-469). She describes how anthropologists should be interested in what people are interested in...but not to presume “that simply by seeing things their way you are necessarily doing them any good” (472). I use Rutherford’s concept here as a different way to approach the two entrenched pro- and anti-pipeline sides who insist not only that their own calculations are correct but that the others are wrong. Using Rutherford’s ethical empiricism, one useful question might be what’s at stake for the two generators of these numbers – the company and the non-profit research think tank created to research and develop alternatives to provincial and national policy. Asking this question might lead one to assume that the company stands to benefit from over-estimating the number of jobs it will provide by making its project sound more appealing that it perhaps actually is. But what if a kinky empiricism flipped those numbers upside down to reveal what was hidden underneath? Such a move might clarify what both counts share: the widespread concern about Canadian job creation. If Lee’s cross-sector analysis of jobs numbers is any indication, there is also a perceived threat to the fossil fuel sector in the public realizing its miniscule ability to provide jobs at the same rate as clean energy sectors. If the generation of new jobs is as important to Canadians as the constant news and media coverage suggest, then why wouldn’t more people prioritize the development of the clean energy sectors?

Now listen to the sound of this talk about jobs as it kinks and folds around feelings of risk and fear. Catherine Abreu, executive director of the Climate Action Network, makes the following observation:

> It’s politically very risky at this point in Canada for a politician to appear as though they are not supporting the energy industry because the energy industry has become synonymous with Canadian prosperity and jobs — even though it is not actually responsible for the majority of Canadian GDP or jobs (in Livesey 2018).

Abreu’s statement does two interesting things: it notes how the energy industry is equated with Canadian prosperity and it emphasizes the necessity of politicians to support the energy industry. But what if more people were aware, as Abreu notes (and as Lee’s graphic depicts above), that the energy sector doesn’t supply as many jobs, nor is it responsible for as large a portion of Canadian GDP, as many are led to believe? How do you quantify the uncertainty in those job numbers? If there is growing recognition of the perceived obligation of political leaders to support the oil and gas sectors, due to the sectors’ ability to provide jobs, but also a growing awareness of failures of the sectors to actually deliver those jobs, is it possible that there is even another dynamic at play? Is it possible that division is being intentionally deployed as a fear tactic? In other words, if the oil and gas sectors know, on some level, of their inability to deliver the jobs they say they can, might they continue to tell the story of these jobs just as a way to discredit the work of Lee and others even though the data to support the discreditation might not ever appear? Another kinky count might document the number of studies, reports, and news stories that tell of the unreliability of the fossil fuel sector’s data and studies. One recent report stated that tar sands carbon emissions are 30% higher than companies had previously reported (Environmental Defence and stand.earth 2019). Rutherford's kinky empiricism helps to tune for hearing the numbers about jobs as an ethical consideration. I employ the concept here by suggesting the possibility it creates to step back from the numbers and the reports themselves and consider what bigger questions are to be asked about who is generating particular sets of numbers and what the stakes are for them in telling particular kinds of stories about jobs. Just as kinky empiricism can help to refilter the stories of jobs, I turn next to another filtering mechanism that has aided my exploration of the affective qualities that flow through jobs stories.

Affect

As I began to write up this project, I was reminded of my own affective journey as I took up this political work, years ago, and the difficulties I experienced in sharing with beloved family members who did not always share my views. I realized at a certain point that this was so upsetting to me because it felt like their disagreement was an invalidation of the work that I had made great sacrifice of time, money, and energy to do. For years, I took to heart my inability to convince even those closest to me of the truth of how I saw the world, even while I grew more curious about how we could come from the same family and have such different understandings. I also wondered what parallels there were between political dynamics with my own family and the dynamics between political opponents on pipeline matters. As I began writing up my findings on affect, I decided to have the conversation about the pipeline that I'd had so many times with my dad, only this time I would not try to convince him of anything or change his mind – I would only ask questions and listen to his answers. Our conversation covered old ground quickly, but what I really wanted to know was, if we could remove all risk from launching immediately into a green economy, we somehow knew that all the economic models worked and nothing would be lost from abandoning extraction and burning of fossil fuels completely and permanently, would he go for it. He said sure, why not, but pointed out that that assumes a lot of ideals and we can't actually know that the models will work. It's a risk, he said. And he's right.

I learned something about relational thinking from my conversation with my dad that day. This is a kin relationship, as discussed with the Land-as-relation worldview, but what happens when there is conflict amongst kin in an otherwise loving relationship? I cannot deny that in the past, and likely in the future, my dad and I have fought like cats and dogs over political matters. But this conversation, for me, was about listening and, in a sense, was a successful experiment in discovering it is possible, however difficult, to respectfully hear what is being said. Although my emphasis up to now has been on the kin relations of people and Land, it is also worth remembering relations amongst all people.

Another learning I take from my conversation with my dad is that risk and fear of the unknown play a huge role in questions about the major changes that are likely required to avoid catastrophic planetary destruction. I continue with my interest not in who or what is right or wrong but in the beliefs, motivations, actions, and inactions pertaining to climate change and sustainability. With the increasing number of studies, reports, and news coverage of climate change crisis and the accelerating rates of extinction, warming, and other crisis events, it seems obvious that people would be motivated to launch into immediate action and yet so many do not and a significant number still deny the truth of the crisis claims altogether. To try to understand this better, I take up sociologist Deborah Gould's work on affect, which, she claims, can help explain political action and inaction

(2010, 30). Gould examines the edges of emotions and feelings and describes affect as something experienced as a bodily sensation that defies the categories of emotions (2010, 6). Informed by Brian Massumi's work (2002), Gould defines affect as an indicator of "nonconscious and unnamed, but nevertheless registered, experiences of bodily energy and intensity that arise in response to stimuli impinging on the body...affect is bursting with potential" (2010, 26; original emphasis).

Gould says that "affects are bodily intensities with no set direction or route; affect, again, is unbridled potential that might lead one in numerous different directions" (2010, 31). She explains that this undetermined affective experience might be "at the very edge of semantic availability" (Williams 1977 in Gould, 32). These reflections of Gould's might explain why it has been so challenging to attempt to describe the affects that have come up in my fieldwork, organize them and explain the connections to sounds, stories, and actions. Affect is an important focus of study, Gould explains, because these same undetermined pathways are where power moves (33). Gould notes the classic (and harmful) ways that social science analysis has been used in the past to portray protestors and social activists as impassioned, irrational, emotionally unstable fanatics (see also Gustave LeBon's work on "the crowd," [1895 (1960)]) (Gould 2010, 18-21). Contemporary analyses continue this legacy as classifications of activists as insane, young, or stupid persist (20). But what if the attention is shifted to the affective qualities of the media stories themselves, that incorporate messages from journalists, activists, political leaders, and business professionals? If, as Gould argues, analysis of affect can add depth and complexity to understandings of social movements, what are those layers of complexity around pipeline and sustainability news?

The TMX project is politically very contentious and, in an echo of this, news stories about the pipeline tend to both express and/or result in stress-inducing affective responses such as divisiveness, frustration, accusation, fear, fear-mongering, overwhelm, cynicism, and more. In one single news article, a variety of these affects are triggered through framing the project as “corporate blackmail” of the Canadian government (Nikiforuk 2018a). Nikiforuk accuses the company (it was still owned by Kinder Morgan when the article was written) of “privatizing gains and socializing costs” and suggests the project is actually not economically viable, based on flawed economic projections – which, later, was understood as the likely reason Kinder Morgan chose to sell the project to the Canadian government. Regarding jobs, Nikiforuk explains that the pipeline would not provide as many jobs as it could since plans will “commit the original Canadian sin” of failing to refine the crude oil at home. Simultaneously, the jobs the pipeline could provide are deemed even lower value, according to Nikiforuk, since they might all disappear if the project is to fail. The reader is warned of the increased environmental risks to coastal environments including risks to marine life, especially southern resident orcas, as well as risk of declining tourism and property values. Another risk comes with the expansion of the extraction process itself and the subsequent eventual burning of the extracted fossil fuels. All the while, Alberta premier Rachel Notley continues to proclaim that “Alberta is prepared to do whatever it takes to get this pipeline built.” Nikiforuk cynically suggests that, “in a moral world Canadian governments would admit that pipelines and tankers export refinery jobs and greenhouse gas emissions on a disastrous scale.” He ends by reflecting that “Canadians should be more than ashamed. They should be alarmed” (2018a). In a separate article, Federal Natural Resources Minister Jim Carr suggested in 2017 that he might have to call in the troops and Federal Finance Minister

Bill Morneau repeated the vow to use “all means under federal control” to see the project through (Nikiforuk 2018b). Throughout both articles, and many more that were heard and read over the two years I conducted fieldwork, I became convinced that everyone who cared about the pipeline is in a holding pattern of fear-based words and actions – either fear that the pipeline won’t be built or a fear that it will.

When I think of Gould’s observation that affect is “bursting with potential,” I hear the struggle of the pipeline – the anger, the accusations, and underlying it all, the fear. Because affective responses are built up over time, they are rich with the absorption of many sensory experiences (Gould 2010, 31), but in this case I can also hear a ticking time bomb waiting to explode. Although the masks of anger and blame are ever-present, it is fear that unites both pipeline proponents and opponents. Borage for courage, including the courage to be patient, open-minded, and free of frustration. Importantly, the fears experienced by pro- and anti-pipeline proponents are distinct. Generally, the fear of those opposed to the pipeline is rooted in concern over environmental and human rights violations and the lack of action to mitigate climate crisis. The fears of those in support of the pipeline have yet another layer of distinction – the fears of those in power are often over profit margins whereas more socially or economically vulnerable pipeline supporters tend to voice fears involving their ability to provide for themselves and their families. It is difficult to say who will end up the “winner” of the struggle, but it is guaranteed that the larger struggle over shifting away from fossil fuel extraction practices will remain regardless of the outcome of this pipeline project.

Turning Points

TURNING POINT 1: FACING FEARS

Canadian environmentalist Naomi Klein describes fear as a “survival response” – “Fear makes us run, it makes us leap it can make us act superhuman...allow the terror of an unlivable future to be balanced and soothed by the prospect of building something much better than many of us have previously dared hope,” (2015, 28) she says. Klein asks what is to be done with the fear of a burning planet and suggests that first it must be accepted – it’s not going away. Second, it must be used (28).

Klein discusses the specific potential ability of climate change activism to act as a catalyzing force. She maintains that “social movements exist...to change what is politically possible” (Naomi Klein 2015 Interview with Amy Goodman). However, this change will not be accomplished by continuing to “look away” from the damages of climate change (Klein 2015 3-13). Klein describes several different common practices of looking away that she herself has practiced, including making jokes about climate change or making excuses such as being too busy or too small to make a difference or by forgetting that taking action against climate change is a daily commitment to lifestyle change (2015, 3-4). “We look for a split second,” she says, “and then we look away” (3). Klein connects climate change to all other social movements and suggests climate change might serve as a catalyst for mass mobilization and global change. She explains:

> I began to see all kinds of ways that climate change could become a catalyzing force for positive change – how it could be the best argument progressives have ever had to demand the rebuilding and reviving of local

> economies; to reclaim our democracies from corrosive corporate influence; to block harmful new free trade deals and rewrite old ones; to invest in starving public infrastructure like mass transit and affordable housing; to take back ownership of essential services like energy and water; to remake our sick agricultural system into something much healthier; to open borders to migrants whose displacement is linked to climate impacts; to finally respect Indigenous land rights – all of which would help to end grotesque levels of inequality within our nations and between them (7).

Paralleling the mass mobilization of social movements is a movement with a more internal focus.

Organizational change theorist Margaret J. Wheatley made what she calls a "rash statement" in 2002 when she declared how she believed "we can change the world if we start listening to one another again" (2010, 4). Wheatley links an improved listening ability to work together for meaningful change. Both the listening and the change, however, take a lot of courage. One of the fundamental questions Wheatley asks herself is 'Can I be fearless?' She says,

> Fear is everywhere these days, and it's only increasing. Fear destroys human capacity; therefore, we are called to be fearless. Fearless doesn't mean that we are free of fear. It means we learn how to face our fear so that it stops controlling us...If we don't learn how to move past our fears, we will not be able to host conversations or become active on behalf of this troubled, still beautiful world" (2010, 5).

Listening could be a way out of the cycle of fear and anxiety. Listening, according to Ultra-red, must lead to action – this is always the final step in their protocols for listening. They say, “after we listen, then we must act” (2008, 5). Listening is an act of solidarity that requires an ethical response of action, otherwise the listening happens in vain.

TURNING POINT 2: LISTENING FOR SOCIAL SUSTAINABILITY

The City of Vancouver’s Greenest City 2020 Action Plan (GC2020AP) proposes both teamwork and immediate action in the “citizen collaboration” and “quick-start actions” featured in its two-part strategy (City of Vancouver 2012, 6). The GC202AP poses a “strategy for staying on the leading edge of urban sustainability” (Ibid.) and focuses on areas including green economy, climate leadership, green buildings, green transportation, zero waste, access to nature, lighter footprint, clean water, clean air, and local food (City of Vancouver 2012). The first goal stated in the Plan, is to “secure Vancouver’s international reputation as a mecca of green enterprise” (10).

Although the City of Vancouver does not support the TMX project, its prioritization of the Economy is heard throughout the GC2020AP, as discussed above. And yet, the City is beginning to acknowledge the shortcomings of such approaches. Speaking with Lindsay Cole,

a City of Vancouver sustainability policy researcher, we discussed how her and her team understand sustainability: “it’s not about a topic or an issue that can get parceled out...it’s

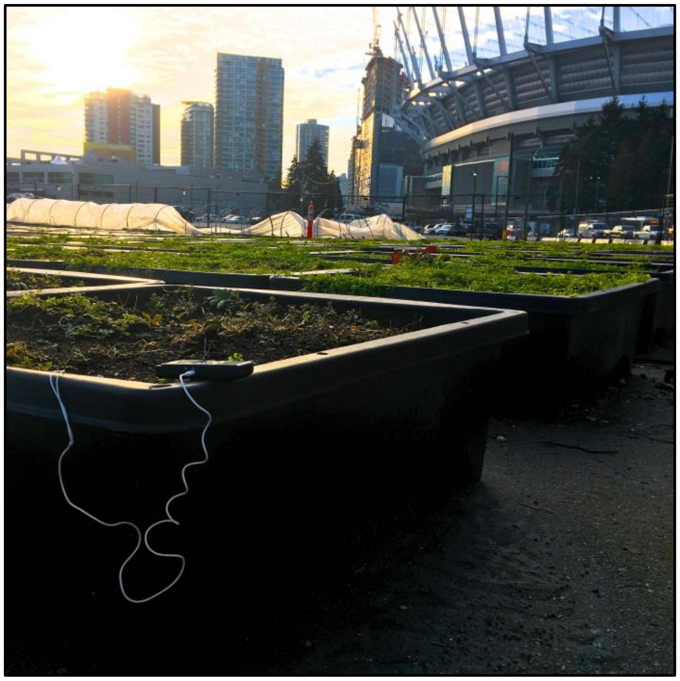


Figure 15. City of Vancouver: “mecca of green enterprise” (City of Vancouver 2012, 10). Downtown is a great place to listen for the sounds of sustainability, including from within the social enterprise Sole Food Street Farms (with a view of BC Place Stadium in the background) (photo by author).

about being truthful and honest and full of integrity and caring for the people and the place. It’s more humane. It connects with your heart and not just your head when you’re talking about sustainability” (interview with the author February 12, 2019). There is a growing realization, based on local feedback from many of the very participants the City recruited to develop the GC2020AP and other city initiatives, that ambitious and well-intentioned plans can lead to further social and economic marginalization.

TURNING POINT 3: TAKING ACTION, TOGETHER

In Zack Embree and Devyn Brugge’s 2018 film *Directly Affected: Pipeline under Pressure*, the filmmakers include a clip of UNIFOR (the union representing Alberta tar sands workers) President Ken Smith speaking at the Paris Climate Accord in 2015. Smith explained then, “we have time if we act now, but we have to act *now* – we need *just* transition (to clean energy) now – we need a plan and we insist on being a part of it” (in Embree and Brugge 2018, emphasis added to depict speech). It is also not uncommon to see oil sands workers at anti-pipeline demonstrations – there is growing realization of the immediate and long term consequences – for people, the environment, and therefore the Economy – of growing and even maintaining this industry. Many workers are speaking out for work security, good jobs, and clean jobs. Ken Smith and the UNIFOR activists who demand to be a part of a labour transition to clean energy give voice to the fear about jobs *at the same time* as fear over the environment, thus demonstrating it need not be an either-or situation. I understand the collective action of UNIFOR as the ethical response to follow listening that Ultra-red calls for.

Political leaders can also sometimes be heard echoing and amplifying messages of collectively moving forward. Speaking about the action his newly-elected government planned to take on a variety of social issues, BC premier John Horgan said,

> The only way forward is to work together. This is not social policy. This is economic policy. Not just for us, but most importantly for Indigenous people who have been here for millennia. We’re late arrivers. *We need to acknowledge that and move on*” (MacLeod 2018b, emphasis added).

Horgan acknowledges the inherent links between the economic and the social, the need for reconciliation, and the need for forward action. His comments bring together pipeline issues as well as many others including tax reform, access to education, and health care. The tone and affect it inspire, is similar to Klein’s argument that climate crisis isn’t just an “issue” – it is “a civilizational wake-up call. A powerful message – spoken in the language of fires, floods, droughts, and extinctions – telling us that we need an entirely new economic model and a new way of sharing this planet. Telling us that we need to evolve" (2015, 25).

TURNING POINT 4: FUNDING THE TRANSITION TO CLEAN ENERGY

In both Horgan's and Klein's statements, there is a feeling of determination to move on and take action quickly. There is a clarity around how social and economic issues are often connected and are matters of justice. And, to combat the fears of those who believe the pipeline is necessary because they cannot bring themselves to trust in the economic feasibility of any untested clean energy alternatives, Klein has assembled a list of possibilities that bring credence to strategies for funding clean energy transitions:

- "A 'low-rate' financial transaction tax – which would hit trades of stocks, derivatives, and other financial instruments – could bring in nearly $650 billion at the global level each year, according to a 2011 resolution of the European Parliament (and it would have the added bonus of slowing down financial speculation) (Klein 2015, 114n49)
- Closing tax havens would yield another windfall. The U.K.-based Tax Justice Network estimates that in 2010, the private financial wealth of individuals stowed unreported in tax havens around the globe was somewhere between $21 trillion and $32 trillion. If that money were brought into the light and its earnings taxed at a 30 percent rate, it would yield at least $190 billion in income tax revenue each year (114n50)

- A 1 percent ‘billionaire’s tax,’ floated by the U.N., could raise $46 billion annually (114n51)
- Slashing the military budgets of each of the top ten military spenders by 25 percent could free up another $325 billion, using 2012 numbers reported by the Stockholm International Peace Research Institute. (Granted, probably the toughest sell of all, particularly in the U.S.) (114n52)
- A $50 tax per metric ton of CO2 emitted in developed countries would raise an estimated $450 billion annually, while a more modest $25 carbon tax would still yield $250 billion per year, according to a 2011 report by the World Bank, the International Monetary Fund, and the Organisation for Economic Co-operation and Development, among others (115n53)
- Phasing out fossil fuel subsidies globally would conservatively save governments a total $775 billion in a single year, according to a 2012 estimate by Oil Change International and the Natural Resources Defense Council. (115n54)

As this list emphasizes, the problem isn’t a lack of good alternatives – it is a problem of political will to act on the alternatives (Klein 2015, 25, 102, 127). In what follows, I take up forms of political leadership, particularly as they pertain to the pipeline. The final shift moves from questions of what is to be sustained and why into the how – the mechanics – which I identify as political leadership. Do the ways in which political leaders *lead* matter? I continue to use sound and affect to hear through words, stories, and sounds in order to bring uncommon understandings of the nature of leadership to the forefront.

Part III - Mullein

the sounds of respect, reciprocity, and spirit in leadership

> But with only two rows in place, the basket is still in jeopardy of pulling apart. It’s only when the third row comes that the first two can hold together. Here is where ecology, economics, and spirit are woven together. By using materials as if they were a gift, and returning that gift through worthy use, we find balance. I think that third row goes by many names: Respect. Reciprocity. All Our Relations. I think of it as the spirit row. Whatever the name, the three rows represent recognition that our lives depend on one another, human needs being only one row in the basket that must hold us all. In relationship, the separate splints become a whole basket, sturdy and resilient enough to carry us into the future (Kimmerer 2013, 153).

Part III takes up forms of leadership and governance as they pertain to sustainability policy, practice and belief. This final part of my analysis takes up the question of how sustainability policy priorities are enforced through messages from leadership. This stage of the sustainability process is contingent on the previous investigations of what is to be sustained and why. Just as there were choices around how to relate to the land, how or whether to protect it (or certain parts of it, at the expense of others), and whether the land is even the priority at all, there are also alternative ways of approaching leadership around sustainability policy. During my time spent engaged in pipeline happenings – tuned in to the news, constantly, attending related events, and listening to talk about it all, I began to hear clear distinctions between two very different forms of leadership. One was what I have come to call “mainstream political leadership,” characterized by Western-style government, electoral politics, political parties, partisan conflicts, and the goal of re-election. The other is more difficult for me to describe – it was characterized by voices and actions motivated from a place of emotion, ethics, and spirit.

Following from Kimmerer's sharing of the lesson of the three rows, I investigate leadership through the concept of "spirit." I take up "spirit," in a broad sense – it could be as in spiritual and pertaining to specific beliefs about a higher power and the cosmic origins of the universe and life on earth. Spirit could also be, simply, a quality of acknowledging the affective, emotional, energetic quality of connection to others. I build a concept of spirit that is an accumulation of concepts developed in Parts I and II from the affective qualities that lay underneath political words and actions to the understanding of other beings in the natural world as kin or relations. In Part III, I pivot from the identification of affect and relationality to consider how these are prioritized and emphasized in leadership. I analyze the ways leaders identify connections between people and other beings, prioritize them, and infuse them throughout leadership strategy. Throughout Part III, I listen for indicators of the spirit of leadership – does it seek out connection and work to nurture these connections? Does it isolate or alienate? Does it acknowledge a higher order beyond humanity? How does it motivate leaders and communities to carry out their plans? From what energetic space are connections being formed?

I have chosen to consider spirit in leadership because it came up again and again during my fieldwork. I am curious about the role spirit plays in shaping political discourse and political action, including the creation of policy. I think consideration of spirit in leadership has much to offer understandings of political action, social movements, and the future of democracy across Turtle Island. If, as Naomi Klein argues, the economic alternatives for living more cleanly, greenly, ethically, more sustainably, already exist and all that is needed is the political desire to enact these alternatives (2015, 25, 102, 127), then the question that remains is *where* that political desire might come from. I investigate whether the desire might come from a place of spirit – prioritization of the connections and the real obligation to caretake the relations.

Another reason for my curiosity about spirit in leadership is that researchers are increasingly realizing the importance of holistic approaches to systems change. A smaller scale example is the "housing first" model that acknowledges the connections between homelessness, extreme poverty, and mental health and addictions issues –

> "The basic underlying principle of Housing First is that people are better able to move forward with their lives if they are first housed...Housing is provided first and then supports are provided including physical and mental health, education, employment, substance abuse and community connections" (The Homeless Hub "Housing First").[18]

Just as establishing and maintaining housing for an unhoused individual requires other considerations beyond the structure of the house itself, so does the health of an individual and, indeed, a planet, involve considerations beyond the biological. Plus, as it turns out, wellness of people is wrapped up in wellness of the Land. Within healthcare, there is a trend of speaking out on the importance of physical, emotional, and spiritual wellness, often amplified by indigenous-led organizations. Vancouver Native Health Society's mission is to "improve and sustain the physical, mental, emotional and spiritual health of individuals" (Vancouver Native Health Society "About VNHS"). It is not as common to hear of spiritual health goals within secular settler society, but can the settler/secular state acknowledge the importance of such beliefs about health, strategies, and outcomes for indigenous nations and communities even if it is not interested in prioritizing the same for its own non-indigenous constituents?

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[18] See also RainCity Housing's "Housing First Assertive Community Treatment" and BC Housing's "Regional Housing First" Program for more info.

Sustainability policy is similar in its need to encompass more than just economic and environmental factors for it to be effective. However, the lesson of the three rows laid out by Kimmerer – the concept of integrating a more holistic approach to wellness for people and planet – requires strong and clear leadership. In what follows, I share stories of leadership in several forms. One form is official elected governments of city, province, and country – what I call “mainstream political leadership.” Another form of leadership is the dissent, civil disobedience, and ceremony that have become characteristic of anti-pipeline political action, often led by indigenous nations and communities. This final point, analysis of ceremony as dissent and ceremony as leadership, was an unexpected discovery that emerged after my fieldwork was complete and through listening back to the recordings and sounds of what I had heard. It is this unexpected discovery that brings together leadership and spirit and suggests the importance of combining these two to guide and oversee the development and implementation of more effective sustainability policy.

To add to my investigation of leadership and governance, I introduce mullein flower medicine. Mullein flower medicine is used to treat and prevent ear infections – the flowers infused in oil support good ear health. The mullein plant sends down a deep taproot that can store energy for future use. Mullein flower medicine is also a medicine of paradoxes.

In this final part, I return to a question asked early on: what does sustainability really mean? As the last two parts have suggested, the focus is usually mostly upon economy and ecology, but there is so much left out in this slice. From the model established in the lesson of the three rows, the third “spirit row” weaves together the previous rows of ecology and economics. It’s about finding balance, understanding the ecology, the Land, as a gift, and reciprocity as an economy of giving and receiving in an honourable way. If I take Kimmerer’s metaphor further, or simply repeat it, as a basket weaver might repeat these series of rows to create their pattern, I get a cycle of these elements of ecology, economy, and spirit.

What if sustainability was instead understood as a part of a repeating cycle of creation and destruction? Included in the cycle is resistance, the stage of destruction, where there is a rejection of things as they are. Protest against the pipeline can be understood as a part of this rejection-stage of the cycle. One form of resistance has been what could be considered classic social movement strategies and tactics: rallies, marches, occupation of key sites, civil disobedience resulting in arrests. Another form has come from indigenous stakeholders as they bring traditional ceremonial practices to the forefront to protect their sovereign land rights, their relations. This is also where I hear the spirit row enter – in forms of leadership that take seriously these reciprocal, respectful relations between people and the Land. When Kimmerer speaks of the spirit row as that most sturdy part of the basket that carries us into the future, I imagine that this is what leaders are supposed to do. Perhaps, then, it was an easy leap to make to begin to hear drums, the prayers, and the slow and steady speaking of First Nations ceremonies at pipeline actions as leadership.

Part III examines the role of ceremony as a form of dissent, disruption, and destruction and as a part of the next stage of the cycle: a creation, a new beginning, a re-emergence or resurgence of a different kind of leadership. To be clear, describing ceremony as re-emerging is from my perspective as a non-indigenous observer. I am told that for many indigenous communities, these ceremonies did not go anywhere and have been practiced and upheld throughout the settler-colonial era. It is from the outsider, non-indigenous perspective, ear, that we are beginning to hear these more loudly as, first, prohibition of some ceremonial practices has been lifted; second there is a growing recognition of the power of healing and leadership from a different source – from the heart.

In Part III, I give a brief overview of mainstream political leadership as heard through more sustainability news stories and a brief ethnographic analysis of Western democracy. Broadly, these descriptions reveal the combativeness and competition underlying leadership province-to-province and province-to-Canadian state. I carry the thread of combat through to indigenous nations' involvement and the ways this can also still very much be understood as combat or even wartime engagement through certain forms of mobilization, but the ways this combat sounds quite different from what is heard through the news from mainstream leadership. I return to mullein as medicine for understanding paradox as I listen to the irony of communications from and about the Canadian state: an environmentalist leader is critiqued as a part of the next generation of climate science deniers. Also, this same leader is first heralded for his agenda of reconciliation with indigenous nations in Canada and then is heard to shift significantly away from this approach.

Finally, I use mullein medicine, with its deep taproot of stored energy, as a metaphor to understand the ways indigenous leadership is rising with what I understand to be a strategic use of ceremony. Flowering out multiple nations' understandings of leadership concepts such as the Anishinaabek concept of *mino-mnaamodzawin* or the "good life," how do these worldviews, and the types of actions and behaviours they inspire, create a different, more peaceful affect? How does it feel to enact that which is desired socially, politically, ecologically, and economically instead of that which is undesirable? What would it mean to shift from a focus on what cannot be done, what is undesirable, or even impossible to a focus on what can be done and what is desired?

Mullein

The great mullein or common mullein plant has a wide base of oblong leaves that are a sage green colour and soft with a fuzzy hair that covers them. The leaves can get quite large – up to twenty inches long and five inches wide, or more. They grow outward from the centre in concentric circles, getting longer and wiser toward the outside. Probably the more notable feature of the mullein plant is the tall and narrow stalk that grows out of the centre as the plant matures. This stalk, that only ever gets an inch or so in diameter, can grow over two metres tall although it does not begin this upward climb until its second year. At full maturity, small yellow flowers bloom out of the top end of the stalk. At the other end of the plant, *Verbascum thapsus* has a thick and deep taproot. Mullein stores up energy in its taproot for its entire first year, so when the plant is harvested for medicine after its first year, all the energy stored in the taproot is also harvested (McDonald 2013 n.p.). Because of its deep taproot, it will break up compacted soil and, as the lowest leaves die, they fall back onto the ground and their nutrients are reabsorbed. Mullein is excellent for soil remediation and often, once the mullein plant has restored the soil enough for other plants to begin to thrive there, it will move on and stop growing in that place (Mountain Rose Herbs "Mullein Leaf"). The name mullein stems from the Latin word *mollis,* meaning soft, and hikers can pad out sore (and cold) feet with the fuzzy leaves (Pojar and MacKinnon 2004, 250).

I learned of the great value of mullein plants from local, mostly Musqueam, medicinal teachings. As with all my herbology and plant medicine teachings, there is a respect for local ways of doing things amongst Musqueam, Squamish, and Tsleil-Waututh peoples but often these knowledges have been shared with other teachers who might come from other nations and communities. I have been taught by those of Cree, Métis, Anishinaabe, Lakota, and European heritages so it has become difficult to separate which teachings belong to whom, but all of my teachers have emphasized that what is more important is that the work is being done in a good way, with an honest heart and with respect to people and the land. When we started working the earth in the indigenous medicine garden, in the late winter, even before spring, I was shown the small fuzzy leaves and instructed to take good care not to disturb them. So, the fuzzy mullein plant was on my radar from the beginning. Later, I learned the teachings of mullein. I was taught to look at the plant and think of what it reminds me of. When you turn the wooly mullein leaf over, you can see the veins underneath and the entire thing, you will realize, is shaped like a lung. The plants, I've learned, will tell us what they are for, if we listen.

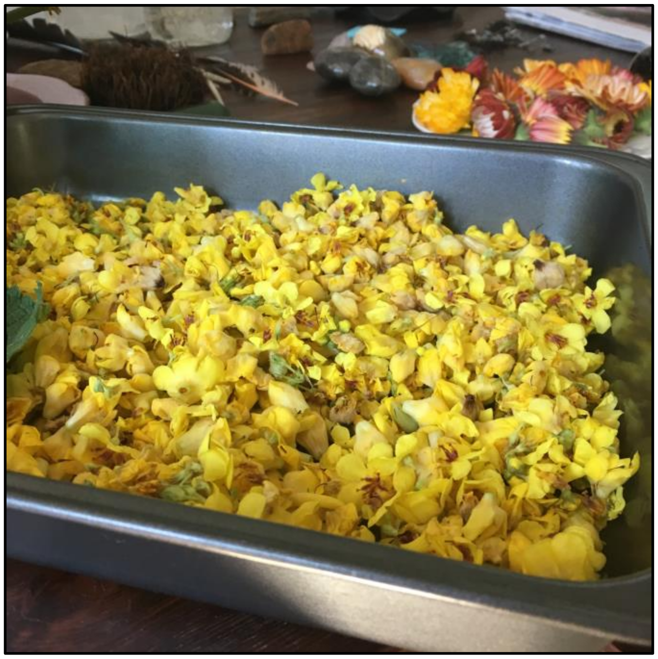

Figure 17. Mullein flowers drying at home (photo by author).

Mullein leaves are for good respiratory health. Sometimes the leaves are dried and ground up as a tobacco substitute in peace pipes or in smudge mixes. As you move up the plant, as if you were also moving up the human body, you reach the top of the long stalk, away from the lungs, to the flowers, small yellow buds that spurt out one by one from the plant. The flowers carry an oil that is good medicine for earaches and infections. The flowers are small and not very abundant on the plant – each one in bloom for one day only – so I get the sense they are to be harvested carefully and cherished. We would pick flowers here and there, as they emerged from the top of the stalk, and save them up, drying in a brown paper bag, until there was enough for a small batch of oil-infused ointment.

It was with mullein that I began to understand what it might feel like to know plants as relations. After I had learned about its gifts, it just seemed that the plant appeared everywhere to me in the garden. My favourite plant was a rogue that grew over by the toolshed. By the middle of summer, it had grown massive – single leaves were over a foot long, the base probably three feet in diameter, and the stalk grew up at least eight feet tall. I always smiled when I saw that plant because I loved how it had decided to break from the rest of the garden and do its own thing by the shed – a plant on the edge. Towards the end of summer, I was over at the shed to grab a tool and found the rogue plant had disappeared. It turns out someone had accidentally uprooted it and chucked it in the compost heap. I still remember the sense of loss over that plant and I continue to think fondly of it. It was like an old, familiar friend waiting to greet me when I arrived and giving me a smile to think of its audacity. Through that plant, I forged a bond with mullein.

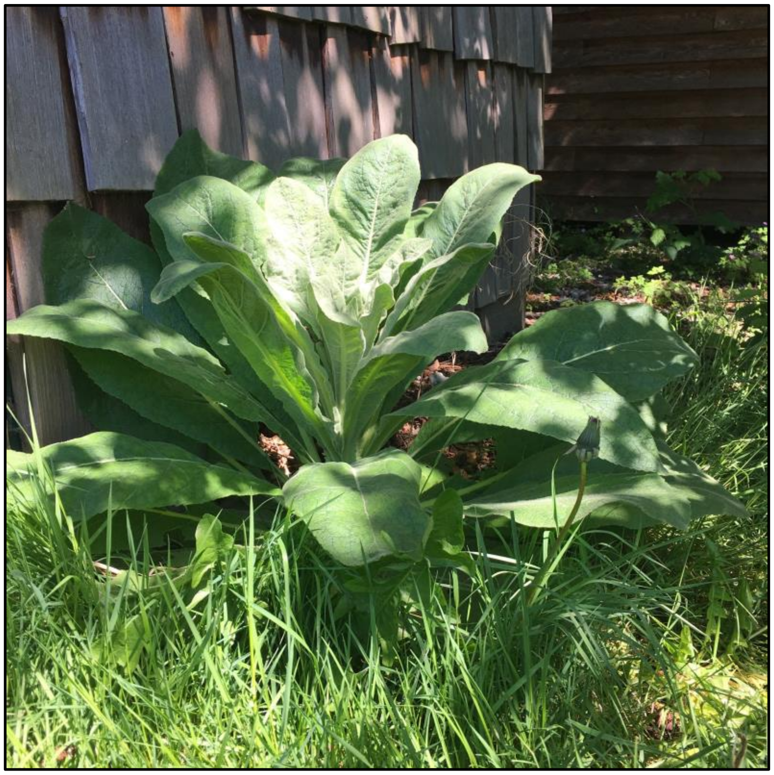

Figure 18. Rogue mullein plant. This large plant grew alongside the shed until it was accidentally uprooted, to our dismay (photo by author).

The magical uses of mullein include its ability to protect the home, enhance curiosity, and aid in one's vision of the future. Mullein will support feelings courage and adventure. Smoking the dried leaves helps to connect with the ancient knowledges of the ancestors and a stalk placed under the pillow will prevent nightmares. A sprinkle of the dried leaves into a shoe will prevent one from straying off their spiritual path and mullein tea added to the bath will support the making of life-enriching decisions (Gregg 2013, 172).

Mullein can also be understood as a plant of paradoxes. In ancient times, the plant was used as a hair rinse to both lighten (flowers) and darken (leaf ash) the hair (Mountain Rose Herbs "Mullein Leaf"). The stalks were used as torches both to ward off witches and used by those same witches themselves. It was also believed to invite conception in women (by wearing a leaf around one's neck) or to repel conception (by placing a leaf in one's shoe) (Dobelis et. al. 1986, 259). The paradoxes of mullein suggest the need to tune in to the plant, work with the plant, and honour its flexibility.

I use mullein and all its medicinal and healing abilities of soil remediation, respiratory health, storing energy for later use, revealing paradoxes, and as a cure for ear ailments as a metaphor for considering struggles around the pipeline project and sustainability policy in Vancouver. Consider the act of breaking up compacted soil as a parallel to breaking up and breaking down compacted ideas and beliefs about the world, the economy, the pipeline, and sustainability. Throughout this final part, listen for ways to pull apart what has become compacted, solidified, blocked, and silenced and for ways to remediate and restore the flow. Mullein performs a certain type of work alongside discussion of leadership since it is a settler on Turtle Island, with its own complicated relationships here. Arriving from Asia, in some regions of British Columbia, mullein is known as an aggressive weed that takes over grassy rangelands and contributes to soil degradation (Turner 2005, 35). Yet, the leaves and the flowers of the plant are used in many different ways by First Nations – those groups that practice smudging, or bringing a cleansing smoke over the external body, use mullein as a part of their smudge mix; others who practice smoking from a peace pipe or the like will commonly use mullein as a part of their smoke mix, as a tobacco alternative. How can the plant be understood as both a pest and highly valuable? My rogue mullein plant friend was both cherished and perceived of as a pest when it was ultimately uprooted and discarded. It's about perspective and acknowledgement of adaptation. Since its arrival on Turtle Island, those who live in rangeland areas may seek to weed out mullein and, even in this process, the extracted plants can be honoured and put to good use. Mullein presents an important opportunity to consider relationship dynamics of contempt and respect. Mullein also signifies another example of land-based, long-resident peoples' ability to adapt to cycles of change over time. These cycles of change apply to the natural world, the Land, but they also apply to the social and political systems and frameworks that have been created by both indigenous and settler groups.

Cycles

Throughout my explorations of sustainability and sustainability policy has run a suggestion that "sustainability," in and of itself, might not be the most ambitious or effective goal to be sought. Aiming for sustainability, in its basic definition – as a maintenance of things the way they are – won't create the desired change. Along with considerations of Land-as-relation comes a remembrance of natural cycles of the earth including the seasons and cycles of germination, growth, and decay. Silvestri, Hartzler, and Lee's provide compelling analysis of another repeating cycle that applies to ideas and systems: create, sustain, destroy. They alternatively understand this cycle as insist (create), love (sustain), resist (destroy) (Silvestri et al. 2017). I return to the concept of cycles to help think through the types of leadership that are heard around the pipeline project and sustainability policy. This cycle of Create > Sustain > Destroy, features sustainability as only one stage that exists for a finite period between stages of creation and destruction. This cycling through feels very different from the concept of sustainability that policy makers seek to support into the infinite, indefinite future through rules and regulations created now. Cycles are a reminder that the world, and everything in it, is constantly in flux. Good policy, then, must also remain flexible. Cycles are also a good way to think about and think *with* the natural world, which is governed by some of the most well-known cycles: the seasons. Silvestri, Hartzler, and Lee started their conversation around the topic of resistance and from the span of three different fields: communications, climate solutions advocacy, and tech. "In the end," they say, "we grounded ourselves in cycles" – "Destruction leads to creation; new creations are sustained; and *when creations outgrow their relevance*, the cycle begins again" (emphasis added, 2017 n.p.). I wonder, what aspects of current sustainability policy in Vancouver, BC, and Canada have outgrown their relevance and I wonder what teachings and laws from indigenous nations are becoming part of a new creation that transcends the separation of settler-colonial states and indigenous nations. In the resist:destroy phase, the authors say,

> We must resist the seduction of old assumptions, and stories that don't align with the world we see or want to create...As we see the ways our

> systems are not serving us, we are waking up: at last, a death to the apathy and overwhelm that has allowed so much suffering to persist. This is where the “how” of resistance becomes crucial...We resist when we encounter threats to our humanity; when we fear for our children...These grief-provoking experiences drain us. Fighting for our human rights drains us (n.p.).

But, through the intense energy expenditures of resist:destroy, new creations necessarily arise, and this is where energy levels, and hope, are restored. In the insist:create stage, motivations may be to overcome outrage or overwhelm or they may be rooted in faith and a recognition that all life forms deserve opportunities to thrive. The investment in creation, they say, is an investment in ourselves (since we are also part of creation) and this is where the sustenance comes. The sustain:love stage is not light or easy, they say – it is the hardest part – it is a “wise love that maturely attends to conflict; that has the tools to stay in relationship through difficult growth periods; that understands the true nature of governance, that of compromise and generosity.” Sustain:love is “an orientation of stewardship over ownership” (Silvestri et al.).

These times of political battles over energy projects and the best ways to go forward that support economy, society, and environment, can be understood as a part of a cycle of resist:destroy, insist:create, love:sustain. I chart indicators of destruction, as heard through the resistance to the pipeline project and the critique of exclusionary policy. Then there are possibilities of new creations, that are based in the insistence on bringing to public light some very old traditions. Finally, there is sustainability or the perseverance of care for self and all other beings.

Next I turn to a local case study of sustainability in policy but before I do so, it is important, as Zoe Todd point out, to remember the lessons of the "resurgent, resistant, resolute, and still-living Indigenous peoples who have already faced the upheaval wrought by the early forces of the Anthropocene" (2016). She goes on,

> In my home territory, the principles of loving accountability and reciprocity are deeply embedded in Indigenous legal orders and relationships. What I have learned from these teachings, from mentors like Tracey Lindberg and Cree legal scholar Val Napoleon, is that reciprocity, love, accountability, and care are tools we require to face uncertain futures and the end of worlds as we know them. Indeed, this ability to face the past, present, and future with care—tending to relationships between people, place, and stories—will be crucial as we face the challenges of the Anthropocene, collectively, in our nations/societies/peoples, and in communities around the globe (Todd 2016).

Now I turn back to the local and to what has been considered a promising plan for sustainability in the city known for its green leadership.

The City of Vancouver's Greenest City 2020 Action Plan

The City of Vancouver's biggest sustainability initiative to date, the Greenest City 2020 Action Plan (GC2020AP), represents many cycles when considered as a document containing the social values of the city. The GC2020AP is composed of two parts – the first, released in 2012, spans the years 2011-2014 and the second part, released in 2015, spans the years 2015-2020. I use these documents and discourse about them as devices for identifying what types of sustainability are prioritized in Vancouver and what can be determined, at this point, about the GC2020AP's effectiveness. I link the documents to my analysis of the Land and the Economy to investigate the city's own understandings of these two entities.

Although I grew up in the Metro Vancouver area, I spent most of my adult life living away from home and didn't realize the reputation Vancouver had earned as a leader on sustainability policy and "going green" until I began studying sustainability elsewhere. While working with urban farming activists in Istanbul, Turkey in 2014-2015, I began to hear about Vancouver's policy and the high standards it had set for other places to follow. Vancouver is a member-city of the "C40 Cities" organization that represents 700+ million citizens and one quarter of the global economy across 94 "of the world's greatest cities" which all "take bold climate action, leading the way towards a healthier and more sustainable future" (C40 Cities "About C40"). When my research plans in Istanbul fell through and I needed to choose a new field site, I decided to shift my focus onto my home city.

Vancouver is often revered as sustainability leader. In addition to its standing as one of the C40 cities, the City of Vancouver has won prestigious international awards for its efforts including Time Magazine's 2014 "Healthiest City in the World" award and second place for the Grosvenor Resilient Cities 2014 "Most Resilient City in the World" award (City of Vancouver 2015, 75). Because of the status as a sustainability leader granted to the city, it is important to continue to critique the city's policies, practices, and beliefs both from within and from the outside. My first read of the City of Vancouver's GC2020AP, then, was one of critique, including, for starters, a question about how in the world the city was going to measure whether they had indeed become the world's "green*est*" city by 2020. That question was never answered, but I now realize that no one is seriously asking it. Some of my critiques remain, and I will share them, but what has become most important for me are the ways in which this plan gives voice to widely, but certainly not unanimously, shared values and beliefs across the city.

The two main critiques that have remained throughout my several years of inquiry into the GC2020AP, its development, and interviews and informal discussions with city planners and policy researchers are around its prioritization of market-oriented sustainability and its inability to factor in the social implications of its market-oriented goals. As I will demonstrate, these two critiques are really two sides of the same coin in that, in this case, the prioritization of markets, business, and development is the de-prioritization of people, especially low-income people.

The University of California, Santa Cruz's Critical Sustainabilities project examines a variety of case studies throughout California in urban and rural settings. Most importantly to my work, the project explores multiple and often competing definitions of sustainability, revealing some of the complications with the use of the term in important policies that affect so many places, people, and environments. After reading through many of the cases presented in the project, I heard similar dynamics as those the researchers presented at play in Vancouver. I appreciate that the contributors to the project come from a variety of social science, arts, and design backgrounds, thus offering perspectives and analytics that are not always heard in news and/or from political leaders who discuss climate science and sustainability policy. Because of these different perspectives and approaches, the Critical Sustainabilities contributors' work offers opportunities to hear sustainability in new or different ways and to understand some of the underlying dynamics at play in sustainability policy. The project is one of a growing number of needed studies that demonstrates why social considerations of sustainability policy matter and how critical reflections on the social considerations might shape more effective future policy.

The Critical Sustainabilities project describes “market-oriented” sustainability as one form that “privileges the competitive ‘environment’ for capital over other environments” (Critical Sustainabilities “Market-Oriented Sustainabilities” 2013). Part one of the GC2020AP states outright its first goal of “Green Economy” (City of Vancouver 2012, 1) or to “secure Vancouver’s international reputation as a mecca for green enterprise” (9). This goal is made up of strategies to double the number of green jobs and green companies in the city (11). By the time the second part was released in 2015, the goal of green economy had shifted to position nine (of ten) but strategies or targets of doubling green jobs and businesses and the language of maintaining Vancouver’s “green mecca” reputation remained (City of Vancouver 2015, 57). What is interesting about this goal, despite its shift in ranking between parts one and two of the plan, is that it is part of the answer to the call for more green jobs from those opposed to the pipeline project (both the current and former city councils have publicly denounced the pipeline project and the City of Vancouver is officially opposed to its construction). However, the jobs that are being created in Vancouver are a part of an approach that does not prioritize people or the environment and is often understood as in conflict with approaches that do.

Adherents to market-oriented sustainability will typically attempt to work with and incorporate other forms of sustainability (eco-oriented, justice-oriented, vernacular, and utopian). But, market-oriented sustainability ultimately remains in competition with, and therefore in opposition to, these other forms. As the Critical Sustainabilities project claims, market-oriented approaches are often used in large-scale projects such as city-wide sustainability branding and often result in consequences such as gentrification (Critical Sustainabilities “Market-Oriented Sustainabilities” 2013) and “environmental gentrification” (Smith 2013 see also Checker 2007). Environmental gentrification occurs when eco-oriented sustainability initiatives are co-opted by businesses and private developers to boost their own bottom lines and the results are typically the displacement of low-income residents as high-cost green buildings and infrastructure are introduced (Smith 2013).

Although gentrification is an unintended consequence, this tendency has persisted for long enough, with research evidence to support as much, that many citizens are not convinced of the unintentionality and there is a growing awareness of and resistance to market-oriented approaches. This approach is another example of “land as commodity,” as discussed in Part I. As such, the relations to people and the connections that are shared between people and Land are forgotten.

The City has realized these shortcomings and has implemented two other initiatives since GC2020AP: Healthy City Strategy and Resilient City Strategy, but still the connections between these three pieces of policy strategy, as they pertain to human, environment, and economic wellness, remain unclear. It is no easy task to identify and strengthen social connections between people, land, economies, and policy even though city officials do recognize both the need for and the difficulty in determining clear pathways to shared wellness. One sustainability policy researcher for the City of Vancouver explained that, “being inside, you’re constantly running up against what feels like a highly constrained environment. We internalize that as staff. We start to say, ‘we can’t do that’” (Interview with Lindsay Cole February 12, 2019). Although the city’s staff is made up of many well-intentioned individuals, the realities of working within a bureaucracy – a keystone institution of settler-colonialism – result in an inability to create the policy that seems to be desired.

An application of mullein medicine here to listen for the paradox and consider the deep taproot of stored energy, is useful. Cole explains the desire to “build a more collaborative governance structure to unlock implementation and action with all of our network of partners in the city” (Interview February 12, 2019). “As we’re going into what the next version (of sustainability policy) looks like,” Cole says, “it’s about how do we learn and/or bring in supports of people with different experiences, cultures, educational backgrounds, whatever that might be, so the world grows a bit” (Ibid.). She goes on to acknowledge more of the learnings and limitations:

> In both cases (GC2020AP and Healthy City Strategy) it was acknowledged that we’ve done most of the things that we can own and if we’re really going to achieve our goals, objectives, targets, and visions, then we need to unlock the potential of a bunch more organizations and people in the city to be able to do that. We can’t do this on our own. That’s the motivator. But we’re not good at that. How do we actually build true collaboration, where it’s not just communication or cooperation but true collaboration, where we’re sharing power and sharing resources, information, and data. It’s difficult for us – we don’t really know how to do that very well. I’m hoping in both these plans, that that’s where we begin to learn. There’s a real interest in doing that. Figuring out what our role in creating that kind of a container would be for implementation in both of those policies (Ibid.).

What’s more, Cole acknowledges that “since GC2020AP and other priorities have come around – being a city of reconciliation, focusing on equity and inclusion, affordability has become more of a challenge – so now, as we go into the next iteration, many of these more social issues are being asked about how do we integrate that into an environmentally-focused plan” (Ibid.). There are also the political implications of who holds the mayor’s seat at any given time and whether or how the city councilors align.

What I hear from Cole and from all the discourse over the last several years of living in Vancouver, is that the critiques of GC2020AP are fairly consistent and they are the same critiques city researchers aim towards their own work. Although there are shortcomings and unintended consequences in the GC2020AP, it has the potential to serve as another model of regeneration as it moves through cycles of Create > Sustain > Destroy. The market-oriented sustainability initiatives were the 2012 creation that were sustained through the two phases of GC2020AP and, during this time, Vancouver became a more unaffordable place to live and fell deeper into housing affordability and drug poisoning crises. Amongst city staff and council members, there is a growing awareness of the connections between all of these factors – when city councilor Christine Boyle put a bill forward to declare a climate emergency in Vancouver in 2019, she invited a local emergency shelter to speak to council on the ways in which climate change disproportionately affects people experiencing homelessness, addictions, and/or extreme poverty.[19] The bill passed unanimously despite council being made up of representatives from parties across the political spectrum (https://www.onecityvancouver.ca/vancouverclimateemergency).

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[19] Presentation by the author to Vancouver City Council on the effects of climate change and extreme weather events on those experiencing homelessness, mental health and addictions issues and/or extreme poverty January 16, 2019.

Not only are those in positions of power increasingly understanding the frequency with which these issues intersect, they are increasingly taking action to address this phenomenon. Pathways are being developed to incorporate stronger justice-oriented sustainability approaches, but the question remains whether the City of Vancouver will choose to remain on that path and continue to carve it out. One of the main challenges to staying on the pathway, of taking intersectionality seriously and building inclusive policy strategies is political divisiveness. So often, leaders or parties must first contend with their political opponents before addressing the difficulties of the work itself – political competition *is* a part of the work. An institution such as the City of Vancouver, like many governments, must overcome barriers to collaboration within its own bureaucracy as well as from political opponents in many places including amongst its own constituents and at various other levels of government. In what follows, I discuss the affective qualities of political discourse that reflect this competition. The stories I share sound the divisive and litigious dynamics of political combat at provincial and federal levels that prevent any party or leader from getting down to the important work at hand.

Mainstream Political Leadership

What I am calling “mainstream political leadership” is the form of leadership that has become common across Turtle Island as perpetuated through electoral politics, Western democracy, and a healthy dose of neoliberalism, meaning the power and influence of business and markets on politics is strong. In other work, I have critiqued this form of leadership and suggested that activists attempt to redefine the terms of democracy in Turtle Island when they participate in collective organizing as seen in the Occupy Movement and other social movements (Lawson 2013). Here, my goal is to describe qualities of this form of leadership, as they have been heard recently around the TMX project, and compare them to other forms of leadership that are heard and demonstrated around the same project. I hope to offer new perspectives and understandings of the different values that are upheld in each approach.

To discuss the quality and feel of mainstream political leadership as it pertains to the pipeline project and sustainability practices more broadly, I return to the concept of how this leadership is heard in the news. I explore three different ways that mainstream political leadership is frequently portrayed in news heard here in BC between 2016-2019. As suggested earlier in Part II, BC is known to be generally more politically liberal/left/environmentalist/socialist-leaning although neoliberal ideals certainly run strong through previous and current provincial governments. It is also important to remember that British Columbians and indigenous nations within the province understand that their geographic location, along the pipeline route, means they will bear the brunt of the ecological disasters that inevitably occur with pipeline malfunctions. I explore several different characteristics of mainstream political leadership. One is the combative language exchanged between the leaders of provinces and nations with different opinions of the pipeline. Another is through the growing awareness of the fossil fuel sector as a “deep state.” Finally, the increasingly complicated relationship with indigenous nations whose lands the project traverses, and in the context of reconciliation initiatives.

Combative Language and the “Deep State” of Oil

You don’t have to listen to the radio for long before you hear an example of the inflammatory language used against any political opponent, but debates around the pipeline project have become particularly hostile and combative. In the spring of 2018, Alberta deputy premier Hoffman said in an interview that “(BC’s) government has caused pain to Alberta families, we can certainly do the same, and we’ve put a bill on the order paper that enables us to do that” (Nikiforuk 2018b). The Conservative Party leader in Alberta, Jason Kenney, has accused Alberta premier Notley of not being combative enough in their treatment of pipeline opposers: “The Alberta NDP government’s weakness, fumbling, and incompetence has given strength to the enemies of our biggest source of jobs and prosperity,” he said (Ibid.). Kenney, who became the Premier of Alberta as I wrote up my findings in spring of 2019, said that, if elected, he would quickly enact the bill that has been passed to sanction imports of BC products unless they remove their opposition to the pipeline project. And, federal natural resources minister Jim Carr suggested in 2017 that he might have to call in the troops and federal finance minister Bill Morneau repeated the vow to use “all means under federal control” to see the project through (Ibid.).

Kwekwecnewtxw also fits with the use of wartime language although the tone in which it is delivered is very different. Will George, a relative of the legendary Chief Dan George and the Tsleil-Waututh representative at the Watch House, explained: “a lone messenger used to run from village to village, warning people about coming enemies. I am so proud to be that messenger now. I am so proud to be that warrior. But I could never do it without the support of my elders and spiritual leaders” (Lambert 2018). Will goes on to describe the spiritual power of Watch Houses – “people were so afraid of our spirituality, they wanted to destroy it (Kwekwecnewtxw). But they couldn't — and in the end the spirituality of our people is going to be what guides us all forward" (Ibid.). Through George's words, the possibility for spiritual aspects of leadership are beginning to be heard by a wider, more public audience.

But what is the relevance of spirit for those who do not identify as indigenous or spiritual? Is there a place for spirit in secular leadership? Perhaps a key to unlocking these questions is to sink into the connections and relations between peoples. One way to come at this is to listen to the words of leaders and understand the bridge-building they do. Before being elected Prime Minister, Justin Trudeau ran on an environmentalist platform that inspired many within and outside Canada. The world was watching to hear how North America might finally step up into climate change leadership. Yet, as was learned several years later, Trudeau actually approved the twinning of the TMX even before he made it into office and this action earned him the reputation of part of the next wave of climate science deniers from Naomi Klein and the Canadian Centre for Policy Alternatives in BC (Naomi Klein interview with Amy Goodman November 30, 2015, [Seth] Klein and Daub 2016). The logic went as follows: to agree that the world is in human-accelerated climate crisis and that large-scale urgent action is needed right away, and then to turn around and approve increased capacity of fossil fuel extraction amounts to actions speaking louder than words. Or, a serious doubt that Trudeau ever really believed in the severity of the climate crisis in the first place if he could take the action he did on the pipeline. But is it possible that he *does* in fact believe in the severity of the climate crisis but is not able or not willing to lead the action that is needed for change? If this is the case, then it could be an indicator that the current form of Canadian leadership has outgrown its relevance and the time has come for a new cycle of resist:destroy, insist:create (Silvestri et al. 2018). To understand how Canada might have arrived in this place, a brief summary of the anthropology of western democracy might be helpful.

Anthropologist Julia Paley's analysis of the anthropology of democracy characterizes democracy in the US and Western Europe as corporate-controlled and operating in secret, or at least out of the view of the public eye (2002, 470). There is strong evidence to support that the same is also true in Canada, as Canadian politician, and the leader of Alberta's provincial Liberal Party from 2003-2008, Kevin Taft, along with investigative journalist Bruce Livesey, have explored in their recent work.

Livesey argues that certain provincial governments have been captured by Canada's fossil fuel industry to the extent that they have formed a "deep state" or a state within a state. With this, he claims "*democracy stops functioning for the people* and begins to function first and foremost for the fossil fuel industry" (2018, emphasis added). Political leaders defend the industry even at the cost of rising emissions, *lost jobs*, and the increasingly unlikelihood of Canada meeting its climate targets from the Paris climate agreement (Taft 2017). This is an interesting paradox in contrast to the promises of the pipeline project to deliver on jobs, as explored in Part II. Other indicators of the "deep state" of oil as presented by Livesey and Taft include:

- Prime Minister Trudeau has supported three different pipeline projects (and one fracked gas project) in BC since taking office in 2016, thus seriously undermining goals to meet the climate targets set in Paris
- Before being elected, Trudeau promised $1.6 billion in cuts to federal subsidies to the oil industry, but in early 2019, this still has not happened

- November 2017 UN report claims that Canada is on track to miss its targets by a “wide margin”
- 368 meetings between federal officials and the Kinder Morgan pipeline company (owners of the pipeline before the Canadian government purchased it in 2018) between 2011-2016
- 2,733 meetings between oil companies and federal officials between 2008-2012
- Canada’s previous (conservative) Prime Minister, Stephen Harper, also supported the deep state by:
    - Withdrawing the nation from the Kyoto climate accord
    - Prohibiting government scientists from doing or speaking to the media about climate science
    - The Royal Canadian Mounted Police, the Canadian Security Intelligence Service, and the Canada Revenue Agency were tasked with spying on activists organizing against pipeline and tar sands development
- In 2017, leaked documents revealed how the 2016 climate plan had secretly been drafted with members of the Canadian Association of Petroleum Producers. This climate plan has impacts and actions for every sector except the fossil fuel sector, which can continue to increase emissions over the course of the plan, according to Climate Action Network Executive Director Catherine Abreu (in Livesey 2018) (Livesey 2018, Taft 2017).

Using mullein medicine to tap down beneath the surface of these official policies, actions, and words, and linking back to analysis from Part II, there is the sound of fossil fuel industry development in the news, but perhaps something very different happening underneath. To what extent is the industry supporting people and the environment and/or to what extent is it supporting itself? What is the role of elected leaders to determine and communicate this truth to their constituents? Do people understand this relationship between political leaders and industry executives, as Taft, Livesey, and others describe it as problematic and/or inevitable?

Paley notes how democracy in the US has become an "unexamined standard-bearer for the rest of the world" (2002, 471). Paley also notes how, currently, Western democracy is linked to free market economics and the pursuit of linear-oriented progress (473). It is important to consider these qualities of democracy as democracy-building projects are underway in many parts of the world. It is also important to consider the strength of support for this style of democracy, or whether that support might be waning, in the places where it prevails.

A couple of people who *have* examined the state of democracy across Turtle Island are Black Bear Warrior and an Anishinaabek acquaintance of his who shared this observation:

> If you look at our leaders in Ottawa, they always seem to be blowing with the wind. In our culture, when you turn fourteen, you go to the mountain and you don't eat, and you don't drink, and you suffer for the knowledge of what it is you're supposed to do with your life. What we have in Ottawa is we have people who have never been to the mountain trying to run the

> mountain. They haven't been there; they don't understand why they're here. Therefore, what happens is, they're like a leaf: the strongest wind blows it this direction and that. In our society, it's been set up that the strongest wind is the wind of money. We go back, again, to the spiritual realm that money is physical, and we haven't got into the spiritual realm yet (Interview with the author August 29, 2018).

To Black Bear Warrior and his acquaintance, it is clear not only what the nature of democracy is upon Turtle Island but also what needs to change in leadership. Using a tool such as plant medicine – to connect to the ecological and the spirit of the ecological – a different set of understandings emerges. Mullein flower medicine is often administered as an oil infusion – a few drops of flowers infused into olive oil seep into the ear cavity, easing aches and facilitating deeper listening. With this, is it possible to hear what lies underneath "deep state" frameworks? Does connecting to mullein medicine create an opportunity for leaders and constituents to ask whether we, collectively, still choose these pathways of allegiance to industry and extraction or whether it's time to explore a different path?

Consent and Consultation

I explore the role of reconciliation in shaping how mainstream political leadership is heard. Since the findings of the United Nations' official inquiry into the treatment of indigenous people in Canada, throughout our nation's history, federal leadership has committed to acting upon the "94 Calls to Action" (Truth and Reconciliation Commission 2015a) that were issued. The Calls to Action include areas of child welfare, education, language and culture, health, justice, reconciliation, special calls for churches of Canada (based on their roles in the residential school system), legal systems, museums, repatriation, missing children, media and communications, sports, newcomers to Canada, and business.

The 92nd call to action, pertaining to the corporate sector of Canada, states it is to "commit to meaningful consultation, building respectful relationships, and obtaining the free, prior, and informed consent of Indigenous peoples before proceeding with economic development projects" (Truth and Reconciliation Commission of Canada 2015a, 10).

Not long after being elected Prime Minister, Justin Trudeau famously said of the TMX project that "governments grant permits, communities grant consent" (CBC Radio-Canada 2016, 2:40). This statement suggested, and was largely taken to mean that local communities along the pipeline route would be entitled to deliberate over the risks and benefits and make a collective decision. However, within the year, it became clear that many communities, indigenous and non-indigenous, did not consent to the project, including the cities of Burnaby and Vancouver, two of the largest and most influential in BC, and Tsleil-Waututh Nation. Mayors and representatives from these three jurisdictions made regular appearances at rallies, marches, and press conferences to state their opposition to the TMX project. It was during these days that Trudeau's rhetoric shifted into a more forceful insistence that the project move forward, for, what he, and other leaders who support the pipeline, call the benefit of all Canadians. I remember a massive rally in Vancouver in late 2016 where that very phrase, "communities grant consent" was used as a rally cry – big oil industry would not win out here because the Prime Minister had the backs of local communities. When he seemed to flip-flop on the issue, there was, and remains, a lot of anger and distrust generated toward him from the communities who had been led to believe their opinions and values mattered.

On April 20, 2018, the United Church of Canada (UCC) issued this statement, calling on leaders of the faith community: “while the debate about Kinder Morgan’s Trans Mountain pipeline reveals many fault lines in Canadian politics and society, it presents particularly serious questions about Canada’s commitment to the UN Declaration on the Rights of Indigenous Peoples and indeed to the work of reconciliation between Indigenous and non-Indigenous peoples,” their statement read. It continues:

> Many people are concerned that recognizing and implementing these rights is a drastic change that will change everything about how Canada works. They are right. It will change the way we make decisions on resource development, which can have both positive and negative impacts for Indigenous communities. It will ensure that the development that occurs on Indigenous land happens with their consent—that it does not harm the land and water they rely on not just for food but for spiritual identity, and that it contributes to their economic development. It will be a new way for Indigenous and non-Indigenous peoples to be in relationship with each other” (The United Church of Canada 2018).

The UCC ultimately called on community leaders to show support for the participation of Indigenous people and to free, prior, and informed consent, as outlined by the TRC’s 92nd call to action (TRC 2015a). The UCC issued a formal apology for its role in the residential school system back in 1986 and a second apology, renewing its commitment to move forward with reconciliation in 1998; in 2018 it marked the 20th anniversary of its second apology. Included in the first apology is the acknowledgement that “We tried to make you be like us and in so doing we helped to destroy the vision that made you what you were" (The United Church of Canada 2016). Since these apologies, the UCC has been a vocal advocate for the 94 Calls to Action. I discuss the stance and statements of the UCC because they are a major, if not the largest, faith-based organization in and across Canada and it is significant that they are taking this stance, in solidarity with other faith-based leaders, as a national organization.

Another example of the consent and consultation debate comes from an interesting description of corporate shareholders, made by an indigenous chief. During one wave of legal cases launched against the TMX project, Bob Chamberlin, chief of the Kwikwasut'inuxw Haxwa'mis First Nation, reminded the public that "the United Nations Declaration on the Rights of Indigenous Peoples clearly articulates the need to secure the free, prior and informed consent of Indigenous Peoples on any project that directly impacts them." He went on to say that his community was "glad that Kinder Morgan and their stockholders *have begun to understand the financial risk of not respecting Indigenous Title and Rights*," and that they are "waiting for Canada to follow suit" (MacLeod 2018c, emphasis added). It is uncertain whether the shareholders would have framed the issue, or their relationship to indigenous rights Chamberlin mentions, in this way. There is also no confirmation from shareholders or any corporate representative, that this was indeed the motivation for the sale of the pipeline to the Canadian government. However, Chamberlin's words should not be taken lightly, especially when aided with mullein plant medicine, in their attribution of dignity and respect, even between adversaries. In an unexpected yet powerful move, Chamberlin seems, in a way, to identify the shareholders as unlikely allies to the indigenous nations that disapprove of the TMX project. He leverages this secondary solidarity to target the Canadian government.

One issue with the complicated and multi-dimensional consent and consultation process is what the terms for consultation even are – whether the terms have already been set or whether indigenous groups are invited to collaborate in the co-creation of the terms. As critical geographer Julie Guthman has written, being “invited to the table” is far less meaningful than being a part of setting the table itself (Guthman 2011). In other words, consultation, an invitation to the table, can be quite meaningless when the important decisions have already been made or will made without needing to take the consultation seriously. A requirement of consultation only – without obtaining consent – minimizes the importance of the voices and opinions of indigenous communities. Current Canadian law seems to require companies or project occurring on indigenous lands to engage in “meaningful consultation,” without regard for the outcome of the consultation. It also assumes the dominance of the Canadian system of governance that grants such rights to consultation *to* indigenous communities and, it is assumed, Canadian courts and officials are the ultimate figures to determine whether consultation was, indeed, “meaningful.”

Yet, Chamberlin’s comments that corporate stakeholders are aware of the risks of “not respecting Indigenous Title and Rights” suggests that the growing frequency and volume of dissent and disruption from indigenous nations and their allies is having a growing effect on corporate decision-making. Rebekah Sinclair, who studies environmental and Native American philosophy, uses the work of indigenous scholars to demonstrate how the language of reconciliation suggests that injustices to indigenous communities are relegated to the past while legitimizing current practices (Corntassel et al. 2009, 145, Sinclair

2018, 100). This approach also avoids other justice issues such as acknowledging and honouring indigenous sovereignty and the proper place of indigenous people in important decision-making processes (Alfred 2005 in Sinclair 2018, 100).

Reciprocity and Gifts

To pivot between discussion of mainstream political leadership and what comes next – analysis of ceremony as form of both dissent and leadership – I elaborate on concepts of reciprocity and gifts, from a Maussean perspective. My intention is to demonstrate how both forms of leadership I discuss, indeed all forms of leadership, involve reciprocity and gifts. By doing so, I hope to avoid pitching mainstream political leadership and ceremony, particularly the indigenous ceremony that makes up the bulk of my analysis, as in a relationship of binary opposition to one another. Instead, I show how these two are in complex relationship with one another and to draw attention to the social dynamics at play so that new understandings of the social and political complexities around the pipeline project and, indeed much of Canadian society, can be reached.

Writing in the early twentieth century, French sociologist Marcel Mauss explained how gift exchange and reciprocity guide the moral, economic, political, legal, and religious domains of society ([1950 1990). Gifts could include exchanges of money, time, labour, prayers or the sentimental exchanges perhaps most commonly understood as ‘gifts’ (Ibid.). Although these last ones might be considered “free” in the sense that no reciprocation is required, anthropologist Mary Douglas writes in the foreword to the 1990 translation of Mauss’ work that “the whole idea of a free gift is based on a misunderstanding” (Douglas

1990, vii). In fact, she went on, “If we persist in thinking that gifts ought to be free and pure, we will always fail to recognize our own grand cycles of exchanges” (xv).

Thinking about gifts and obligations to reciprocate, in terms of political leadership, is important since, in a capitalist context, Mauss says “the state itself, representing the community, owes (the worker)” (Mauss [1950] 1990, 67). Beyond capitalism, Mauss explains that “the law of friendship and contracts, with the gods, came to ensure ‘peace’ within ‘markets’ and towns” (81). He understood gift exchange as a solution to and a progression beyond war – “to trade, the first condition was to be able to lay aside the spear” – “Only then did people learn how to create mutual interests, giving mutual satisfaction, and, in the end, to defend them without having to resort to arms….peoples have learnt how to oppose and to give to one another without sacrificing themselves to one another” (82). He closed his analysis looking toward the future: ”This is what tomorrow, in our so-called civilized world, classes and nations and individuals also, must learn. This is one of the enduring secrets of their wisdom and solidarity” (82-83).

Mauss’ theory is useful, considering current and future political leadership stemming from the TMX project but also expanding beyond pipelines and into the broader realms of human rights and equity. As will become even clearer below, the language of war weaves throughout talk around the pipeline project. Calling in troops, inter-provincial battles and trades wars between BC and Alberta, perceived violations of treaty rights and the very establishment of Kwekwecnewtxw – a Tsleil-Waututh Nation ceremonial Watch House historically erected during wartimes – none of these was spoken or enacted with explicit announcements of wartime, yet each of them absolutely fits within this categorization. I do not mean to suggest that civil war in Canada is on the horizon but I instead wonder if, perhaps, it is still strongly underway since it was initially declared on indigenous people here and now also includes those people and other beings who find themselves marginalized by government policy.

Mauss' theory provides a helpful reminder and a rubric for understanding current systems of exchange in order to imagine, together, what future systems could be. As Douglas says, "there are no free gifts; gift cycles engage persons in permanent commitments that articulate the dominant institutions" (1990, ix). Further, "the theory of the gift is a theory of human solidarity" (x). This theory offers hope that, despite the conflicts that currently shape much of social life, there is a way to understand the basics of exchange so that, as Mauss concluded, we all might give and receive, oppose and agree, without sacrificing ourselves.

I borrow from one of Mauss' case studies to incorporate the theme of of spirit in leadership. The Maori, people of Aotearoa (also known as New Zealand), operate on a system of gift exchange that acknowledge the *hau* or the spirit of the gift ([1950] 1990, 11). This spirit, once gifted, demands to be passed on (11) and, all the while, desires to return to its birthplace and its original owner (12). Items, acts, or services gifted are not necessarily returned directly back to the owner – often times giving of a gift initiates a cycle of giving and receiving that, over time, will relocate the original gift, or the spirit of the gift – the *hau* – back to its original owner (Ibid.). Importantly, this framework for exchange is not just a suggestion – there are serious physical consequences including real harm that can befall a person if they don't honour the hau (11). I use the concept of *hau* in Maori gift exchange to recall the necessity of reciprocity, the dangers of failing to reciprocate, and the important role of spirit in systems of governance.

Ceremony as Dissent, Ceremony as Leadership

The occupants of the Watch House have been asked repeatedly to leave the area and they have repeatedly declined to do so. Yet, I have heard of no arrests within or of any of the Watch House occupants. Perhaps it is because Watch House activists tend to not take too antagonistic an approach toward police or TMX employees. Perhaps it is because the police, the governments, and industry executives suspect the law might not be on their side if they were to arrest or expel individuals occupying a Tsleil-Waututh ceremonial house on unceded Tsleil-Waututh land. At any rate, I understand Kwekwecnewtxw as both a protest of the pipeline project and a display of Tsleil-Waututh power and intention to continue to resist. It might also a rejection of capitalist corporate interests, the extraction industry, and mainstream political leadership, but all these are yet to be determined.

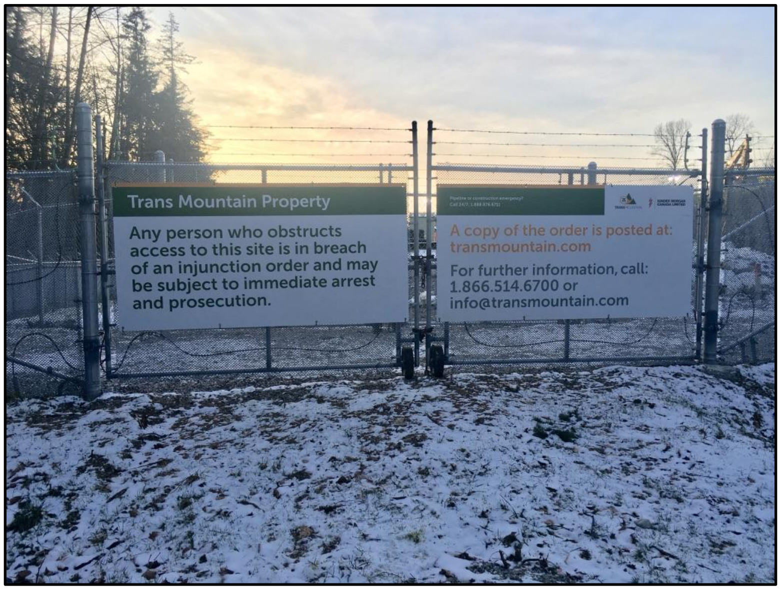
Trans Mountain Property
Any person who obstructs access to this site is in breach of an injunction order and may be subject to immediate arrest and prosecution.
A copy of the order is posted at: transmountain.com
For further information, call: 1.866.514.6700 or info@transmountain.com

Figure 19. Burnaby Mountain tank farm marked perimeter and prohibited area notice. These signs were posted after multiple occupations interrupted TMX project work and a court ordered an injunction against further blocks or occupations (photo by author).

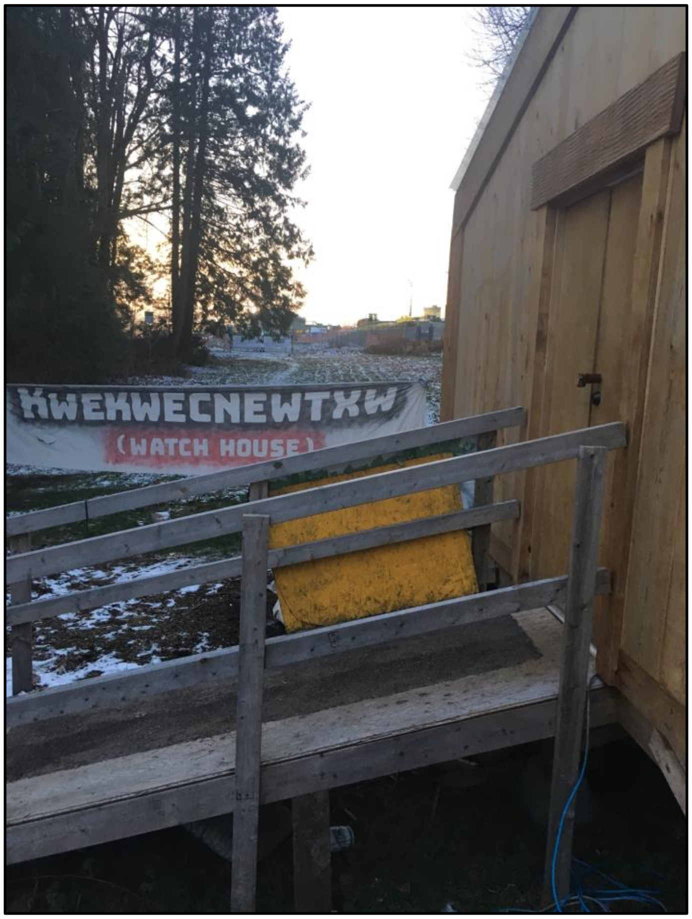

Figure 20. Entrance to Kwekwecnewtxw with secured area in background. See Figure 6. below for a view of the secured area. Black Bear Warrior and occupants of the Watch House understand part of their responsibility as monitoring the perimeters of the tanker terminal (photo by author).

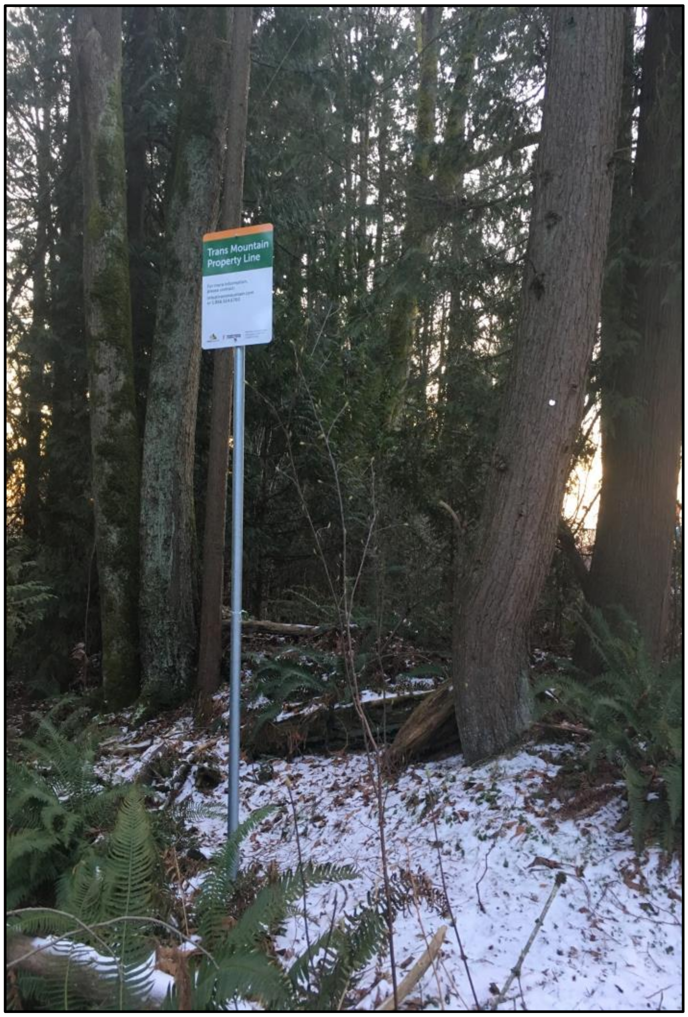

Figure 21. Trans Mountain property line signpost. In other places along the pipeline route, property lines are a little less obvious, as in this lone signpost (photo by author).

Elsewhere in Canada, ceremony has also been used as civil disobedience. Amanda Polchies is a Lakota Sioux and Mi'kmaq woman living on the Elsipogtog First Nation near Rexton, New Brunswick. Polchies shared the story of her involvement in a 2013 resistance effort that eventually stopped the Texas-based SWN Resources’ fracking project on her homelands. In her blog article, entitled “The Day I Held a Feather to Power,” Polchies relates her story:

At that moment I heard a young girl screaming out for them not to touch an eagle feather that one of the boys - who had been arrested - was holding. I don’t remember exactly what I did or said but the next thing I knew, the girl hands me her feather. I’m standing there looking at this feather in my hand and I hear a voice tell me to pray. So I knelt down and started to pray. I prayed for all the women who I had seen in pain from being sprayed (by mace). I prayed for my elder who was in pain (also from being sprayed by mace). I prayed that nobody else would get hurt. On both sides.

I heard footsteps around me and I opened my eyes to see my friend offering tobacco. She made a circle around me, knelt down and started praying. I looked to the other side of me and there was another woman, and another, all kneeling down and praying with me. I felt the hands on my shoulders of women on both sides of me. There were men on the ends watching us and praying.

So I prayed even harder for my people. For the water, and even the RCMP (Royal Canadian Mounted Police) standing in front of me.

I was told to get up as they were coming, but I said no. The other women got up and moved. My friend and I stayed on the ground. I closed my eyes and everything got dark. I heard one RCMP say as he passed me "she’s not scared." Then I opened my eyes and there were no lines - only my friend and I were sitting there. Two RCMP rush over to me, pushed me face down on the road and zip tied me. By that time, the RCMP vehicles had been set on fire so there were huge clouds of black smoke rising up above

> the trees. We stood there, me in handcuffs with my arresting officer just watching the cars burn and the smoke rise.
>
> After a few minutes of standing there watching in amazement, the RCMP officer turned to me and said, "Are you ready? I have to take you now." So we turned and walked down the road as the cars burned and the trail of thick black smoke filled the sky (Polchies 2018).

This story presents one of a growing number of encounters where the “disobedient” actions of those engaged in ceremony as dissent elicit a different kind of response from law enforcement on the frontlines. Although the struggle is usually not with law enforcement – they only become intervenors on behalf of government or company – ceremonial performances tend to command respect in a way that other forms of civil disobedience often do not. Bringing ceremony and the spiritual into civil disobedience and acts of protest is a powerful way to disrupt from a place of honour and reverence which takes away the possibility of pathologizing these activists as “impassioned,” “insane,” or “irrational,” as Gould’s work has suggested (2010). As can be heard in the story above, Polchies’ commitment to her prayer gives the RCMP officer pause. She is still arrested, ultimately, but she is first granted the opportunity to finish her prayer, which was, in part, for the very officer who stands over her to take her away. Her prayer might be considered a gift to the officer and one that perhaps he feels, on some level, obligated to reciprocate in the form of respect and patience. When the officer speaks to her, he asks whether she is ready and sounds reluctant when he explains he must take her to jail. There is much to critique in the power dynamics between officers and their fellow citizens, but I am increasingly understanding the role of ceremony in these actions as an emerging form of leadership.

With his theory of “affective pedagogy,” anthropologist Maple Razsa describes how activists use tactics to cultivate emotional connections with allies elsewhere while they generate new radical desires and therefore new political subjects (Razsa 2014 2, 7). With the increasing use of ceremony in political action related to climate change, sustainability, and extraction industries, activists suggest a radically different approach – one infused with spiritual connection. Retelling these stories generates sensory experiences that influence, inspire, and create “new distributions of the sensible” (Rancière 2006 in Razsa 2014, 17). They also strengthen solidarity and connectedness and build the rhizomatic network of tactics and strategies including common language, images, and sounds (Razsa 2014, 7). When activists can share their story themselves, outside of corporate media retellings (if the story even registers on that radar), they work as decentralizing tools since they present a different perspective from that which we are accustomed to seeing or hearing in corporate news (13). These reproductions, Razsa argues, make possible the emergence of political intimacy (23) and political love, as explored by Hardt and Negri (2009, 186 in Razsa 2014, 26 note 15). With ceremony, I believe the work of emotion and affect become more powerful. To listen to activists describe their participation in ceremony of dissent – how it makes them feel – is impactful according to their own reflections but also from observing the impacts it has on those near them.

Ceremony as Dissent, Dissent as Leadership, Ceremony as Leadership

As mentioned earlier, I frame analysis of ceremony as leadership as re-emergent or resurging, but from my non-indigenous perspective. The ceremonial practices I discuss are, of course, very old practices and have sometimes been used, continuously, within their respective indigenous communities, since time immemorial. In this sense, there is nothing re-emergent about the practices. However, there have been long periods of time, since European settlement, that many of these practices have been banned through the implementation of western rule and western law, as the work of pioneering anthropologist Franz Boas and his analysis of West Coast potlatch practice (and critique of its prohibition) made well-known (Boas 1888). With the rise of settler-colonialism, and especially the residential school system in Canada, indigenous culture was portrayed as inferior, something to be ashamed of, and hidden away. It has been a relatively short period of time since indigenous communities have begun more publicly expressing and sharing some ceremonial practices and ceremony is becoming a more regular part of public events, whether sanctioned and planned or not. I am interested in the growing tendency of these practices to be heard publicly and to consider what can be learned from this form of leadership.

On one of my first visits to Kwekwecnewtxw, the Tsleil-Waututh Nation Watch House erected on Burnaby Mountain, Black Bear Warrior told me that this was a holy place and that “nothing bad will happen here” (Interview with the author, August 29, 2018). He was echoing Ruben George, (nephew of legendary Tsleil-Waututh Chief Dan George) who said “Watch Houses are key to our culture...Nothing will go wrong at the Watch House. It is a respectful place that has been much talked over by our elders. Whatever comes next, we want to do it in a good way” (in Lambert 2018). I remember being struck by those words and the instant rise of question – that I did not ask. What did he mean that nothing bad could happen there? This was the beginning of my understanding of the rising role of ceremony and sacred practices in political action around the pipeline project. As Kimmerer explains, “ceremony focuses attention so that attention becomes intention. If you stand together and profess a thing before your community, it holds you accountable” (2013, 249). When Black Bear Warrior described the spiritual realm and the practice of vision quests – suffering for the knowledge of how one is to live one’s life – he issued a call for a different kind of leadership, stemming from a different place within the human psyche. For him, leadership has to do with stability, comfort, and taking care of one another:

> What gives us the greatest comfort are those things that we invest the spirit in. The trees. Sustainability is all of us taking care of each other – we sustain each other. But that’s not happening. We are all chasing after that leaf and getting blown away with it (interview with Black Bear Warrior, who shares this perspective of an Anishinaabemowin acquaintance, August 2018).

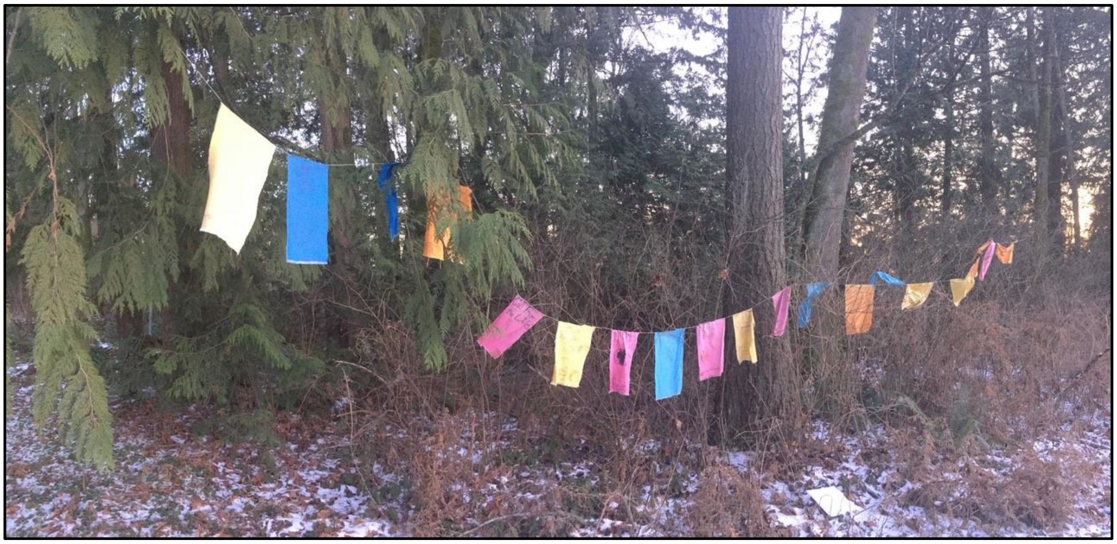

Figure 22. Prayer flags at Kwekwecnewtxw. These flags serve as a reminder that the Watch House is a holy place and “nothing can go wrong” there (photo by author).

What if Kwekwecnewtxw was understood as a gift? One woman who lives in the neighbourhood where the Watch House sits understands Kwekwecnewtxw as exactly that. Megan Bryden, who lives 500 metres from the TMX project gates, believes the pipeline "is a dangerous place to live near" (Lambert 2018). She claims local residents are not informed of tests the company runs, there is a jet fuel line running under her street, and the Burnaby Fire Department has made her and her neighbours aware of the dangers of sulphuric acid, fire and explosions, and the impossibility of safe evacuation due to limited road accessibility in the neighbourhood. Yet, she says, "with the Watch House – it feels like somebody finally has our backs" (Ibid.). This place is undeniably one of war – literally built to house warriors and messengers of war – there is nothing passive about it. Yet it is also a place of growing solidarity and a place filled with and surrounded by people who are led by spirit. Bryden and Kwekwecnewtxw might be understood as in a reciprocal gift relationship – the Watch House provides solidarity, a house for those who would advocate for her family and community – and she, in return, speaks up to advocate for the Watch House.

Another place to hear ceremony and ritual in leadership is through the *Haudenosaunee Thanksgiving Address*. Listen again to the *Address*. Not only is this long invocation an expression of acknowledgement and gratitude for all the beings of the natural world, its use has marked the beginning of Haudenosaunee Nations'[20] negotiating strategy for a very long time (Kimmerer 2013, 113). Kimmerer's description acknowledges the tensions that can accompany the beginning of difficult conversations and the ways Haudenosaunee negotiators use the *Address* as a tactic of connection:

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[20] The Haudenosaunee Confederacy, sometimes referred to as the Iroquois, is made up of five nations including the Mohawks, Oneidas, Onondagas, Cayugas, and Senecas (Haudenosaunee Confederacy "Who We Are"). See https://www.haudenosauneeconfederacy.com/who-we-are/ for more info.

> The Haudenosaunee have been recognized for centuries as masters of negotiation, for the political prowess by which they've survived against all odds. The *Thanksgiving Address* serves the people in myriad ways, including diplomacy. Most everyone knows the tension that squeezes your jaw before a difficult conversation or a meeting that is bound to be contentious. You straighten your pile of papers more than once while the arguments you have prepared stand at attention like soldiers in your throat, ready to be deployed. But then the Words That Come Before All Else begin to flow, and you start to answer. Yes, of course we can agree that we are grateful for Mother Earth. Yes, the same sun shines on each and every one of us. Yes, we are united in our respect for the trees. By the time we greet Grandmother Moon, the harsh faces have softened a bit in the gentle light of remembrance. Piece by piece, the cadence begins to eddy around the boulder of disagreement and erode the edges of the barriers between us. Yes, we can all agree that the waters are still here. Yes, we can unite our minds in gratitude for the winds. Not surprisingly, Haudenosaunee decision-making proceeds from consensus, not by a vote of the majority. A decision is made only "when our minds are one." Those words are a brilliant political preamble to negotiation, strong medicine for soothing partisan fervor. Imagine if our government meetings began with the *Thanksgiving Address*.

> What if our leaders first found common ground before fighting over their differences? (113)

This is a very different way of conducting business – one that may seem almost unrecognizable from the position of mainstream political leadership. An alternative to partisan combat, moving from a place of agreement instead of difference. This is not to say disagreement and conflict are absent, but the decision-making process stems from a different root in this approach. The partisanship of mainstream political leadership can make it feel like a contest, even after the election is over, thus preventing leaders from publicly succumbing to matters of the spirit. But for those who begin their political matters with the *Haudenosaunee Thanksgiving Address*, from a spirit of gratitude and shared connections, this very acknowledgement of spirit is a part of what gives them their strength and their reputation as fierce negotiators.

In 2016, Anishinaabe leader Wab Kinew came to Vancouver from his home in Manitoba to give a talk on the ability of indigenous traditional ways to provide sustainable and holistic solutions to the shortcomings and failures of social, political, economic, and environmental systems. He spoke of the worldviews and practices of the original Turtle Island inhabitants and how these practices had been vetted – tried and true – over so many thousands of years before the arrival of European settlers. He argued, not for a return to the "good old days" but for new practices that incorporate more of what has worked so well in the past. Kinew spent half of his allocated time, the first half, in public ceremony. The publicness of this ceremony provided an educational opportunity for so many of us who are unfamiliar with these traditional ways. Kinew explained the procedures as they unfolded. These are the lessons I learned that day:

- Outsiders, guests, must adhere to arrival protocols to be welcomed in a “good way” – a way that is respectful and honours the traditions and protocols of the local people. Kinew arrived with humility, declaring himself as an outsider, not presuming to be a local, an expert in Vancouver or on the West Coast, or with a sense of entitlement to speak and be knowledgeable there. Instead, he came with his explicitly expressed intention of doing his work to bring greater balance to people and the land.
- When outsiders arrive in a good way, they are to be welcomed with gifts of appreciation from the community. The audience and witnesses saw and heard Kinew receive blankets, money (token amounts – coins that were placed in his pocket), dances were performed for him, songs sung, and words of welcome and appreciation were spoken to community leaders, who were publicly introduced as such.
- Outsiders must introduce themselves and express their intentions in coming. Kinew did this through words, song, and dance of his own.
- To arrive and be welcomed in a good way takes time and takes participation from the whole community and this process is a part of doing the work – the work to do the work, so to speak. Kinew took moments to describe the process out loud as it happened and explained its necessity if his work is to be done in a good way, a lasting and powerful way.

After the lengthy welcome ceremony, Kinew explained it was finally time to get down to work and launched into his descriptions of indigenous society, economics, environmentalism, and politics. One of the biggest lessons I took home from his talk was not actually about his talk at all – it was about the importance of adhering to the protocols for getting down to the work respectfully. This involved proper welcoming of guests and thanking of hosts, exchanging of gifts, and the designation of official witnesses to all of it. I saw and heard in this performance the importance of *how* leaders get down to work It's about right relations and there are many couplings of relations to consider in this place, at this time.

Kinew's presentation was a part of the Simon Fraser University President's Dream Colloquium Series, which states its intention of cultivating an ecology "for a new way forward" through ceremony, public lectures, and dialogue. The fall 2016 series was "born out of our right to dream for the rights of future generations, and for us to reimagine and enact a new reality for them" (see link in Kinew 2016). I roll out the examples of the *Haudenosaunee Thanksgiving Address*, the welcoming ceremony, and the reflections on vision quests alongside descriptions of combative and divisive mainstream political leadership stories to build a sense of what lies underneath the different approaches. My examples are selective, to be sure, but still you can hear the sense of what's on the surface, what's underneath, where these approaches differ and where they converge (in their imaginaries for the future). What is to be learned from separating the goals of political leaders from the approaches to accomplishing the goals? Are there current forms of leadership that possibly no longer serve the public and our collective goals of sustainability? If so, it is time to return to the cycles, identify what is no longer in need of being sustained, and shift into destruction (resist) and subsequent creation (insist). I end Part III with three possible cracks through which a different kind of leadership might emerge.

CRACK 1:

In the 2018 special issue of *Environment and Society* that focused on indigenous resurgence, decolonization, and movements for environmental justice*,* anthropologist Anne Spice contributes an article that takes up the concept of “critical infrastructure” in Canada. Spice, a Tlingit member of Kwanlin Dun First Nation, explains how the Canadian state understands threats to pipelines – which they consider pieces of critical infrastructure – as threats to national security (43) or at least national economic security. The state suggests that disruptions to the pipelines “could result in catastrophic loss of life, adverse economic effects and significant harm to public confidence” (Public Safety Canada 2018 in Spice 2018, 40). In northern British Columbia, Wet’suwet’en clan members have built a permanent encampment at a key pipeline junction on Unist’ot’en territory. Freda Huson, camp spokesperson, says:

> What we’re doing here is protecting *our* critical infrastructure...our critical infrastructure is the clean drinking water, and the very water that the salmon spawn in...it’s our main staple food...they feed the bears. And each and every one of those are all connected, and without each other, we wouldn’t survive on this planet...that whole system is our critical infrastructure (in Spice 2018, 40-41, emphasis added).

Spice points out that the state discourse criminalizes indigenous resistance while naturalizing environmental damages (40), but the crack that opens in this case widens for an even greater possibility than yet another two-sided conflict between the Wet’suwet’en nation and the Canadian state. Huson claims that “resistance to invasive infrastructures requires standing in place, in our territories, and insisting on our prior and continuing relationships to the lands, kin, and other-than-human relations that those infrastructures threaten” (48). This standing in place wedges the crack open further to frame oneness – a connection to all living beings – as critical infrastructure for the Wet’suwet’en. I think back to my connection that grew over one summer to that special mullein plant. The tiny affinity that grew between us, that only lasted for a couple of months, still left me feeling a small sense of loss when it was over. I imagine this very small experience taking root in the crack in my understanding of the spirit of leadership. Beyond my short-lived relationship with this mullein plant, I can recall longer-lasting and more significant relationships with other land-based beings – special animals in my life, favourite trees I’ve known, or sacred places I have visited once or again and again – perhaps many of us have such relations to the Land and perhaps to remember the feelings these relations evoke is to newly understand what it might mean to formalize and prioritize such relations.

Spice identifies that the resistance goes beyond the creation of more “spaces for negation” – as implied in the *anti*-pipeline action – it opens up “spaces of radical possibility under Indigenous leadership and jurisdiction” (48). “If Indigenous resistance forces pipeline projects into suspension,” Spice argues, then “futures might grow in the space between proposal and completion” (50). On both Unist’ot’en territory up north and all the way down the coast in Vancouver, indigenous resistance, characterized by the honouring of spirit-connections between all beings, is creating new possibilities for the development of so many things. The development of better understandings of “critical infrastructure,” of relations and connections, and of industry, energy, and use of natural resources are all opening up.

The possibility of leadership that stems from a different affective root is also opened up in this crack. The work of Huson and her supporters involves “blocking, resisting, and suspending” oil and gas infrastructures, but it also involves “attending to and caring for the networks of relations that make Indigenous survival possible” (52). There is a softness and a nurturing that comes with the firm insistence of Wet’suwet’en action. As the next case will elaborate, this nurturing of relations is understood as an obligation to the natural world by many indigenous nations. I wonder if it’s only a coincidence that the colonial state of Canada finds itself in both an era of reconciliation (with indigenous people here) and in the midst of climate crisis. The links I hear to healing relations between people and the land are strong.

CRACK 2:

The Anishinaabemowin concept of *mino-mnaamodzawin* or “living a good life” is explored by Anishinaabe scholar Deborah McGregor. Her work focuses on indigenous knowledge systems and indigenous approaches to environmental justice, points out that “governments at all levels have not proven themselves sustainable in terms of environmental decision-making,” and therefore “relying solely on Western legal systems and governments will thus achieve neither sustainability nor justice in the way the Anishinabek or other Indigenous peoples may require” (McGregor 2018, 16).

Where things really start to crack open is in McGregor’s emphasis that not only is “respect for the spirit in all things...rooted in Indigenous legal orders” (15) but also that these ‘things’ are actually other “peoples” who are not only deserving of justice but “can dispense justice if balance and interdependence are not respected” (12). Humans acknowledge, respect, and are influenced by beings who hold power greater than their own

(Ibid.). When relations are out of balance, thus creating unjust and potentially dangerous circumstances, reconciliation is necessary. McGregor emphasizes the importance of taking healing seriously (14). She explains that healing is necessary for individuals, communities, and places (13), especially since power flows from the land and into the leaders (15):

> Because we are the Indigenous people from a Place, healing the Place is just as critical as healing the community or the individual. The land has also been a victim of historical trauma; the lands, the waters, and the animals have swallowed the blood, bones, ashes, and screams of our ancestors. Healing the Land, the animals, and the waters is crucial. We heal the Place that makes us who we are; we heal ourselves; we heal the soul wounds that were inflicted on many of the Indigenous people of the earth (Mi'kmaw and Abenaki scholar Lorelei A. Lambert 2014, 46 in McGregor 2018, 13).

Because of the differences in this approach to leadership, there is space that is cracked open for creativity, innovation, and new pathways to justice (McGregor 2018, 13-14). And these pathways are not unique to the indigenous nations of Turtle Island. Around the world communities – most, if not all, indigenous – are securing the rights of sentient other-than-human beings. In Aotearoa (also known as New Zealand) and India rivers have been granted personhood and Bolivia has enacted the Law of the Rights of Mother Earth (20). This is interesting to consider alongside the granting of corporate personhood, as instigated by the rise of western corporate culture and as discussed through the continued prioritization of the Economy.

Through her analysis of "the good life" or a balanced way – *mino-mnaamodzawin* – McGregor depicts leadership that stems from spirit and employs a different set of values from mainstream political leadership. These values involve the honouring and caretaking of relations with all other beings and suggest a rhizomatic network of horizontal connectivity that feels very different from the emphasis placed on growth and progress in mainstream political leadership. Black Bear Warrior frames this notion of balance without striving to overcome in another way:

> In the old culture, they talk about how everything is “level.” But in the colonization and the hierarchy, what we see normally is that people come in down in the hierarchy and people start to want to move up. So in the traditional sense, say I come in and I start as a fire keeper, but after a while, I want to move up, I want to pour (water over the stones in sweat lodge). Well, what happens if I just want to explore exactly what it is to be a fire keeper? In the old culture, there were people who made drums – their whole lives – and there were people who kept fires – their whole lives – and when you take everything you’ve done in that one area for your whole life, that’s an elder and that’s “level” (interview with the author August 29, 2019).

As I remember this conversation with Black Bear Warrior, I’m curious – what if leadership itself is a loop? What if it, too, is a part of a cycle of resist:destroy, insist:create, love:sustain? One of the lessons in this cycle is to perform each stage in such a way as to not limit the possibilities of the other two – destroy so as to create and sustain; create so as to sustain and destroy; sustain so as to destroy...and re-create again. If leadership has become so entrenched in its own creation or in a form of “sustainability” that no longer serves, is it able to recognize as such? Is destruction, is resistance, still possible in a meaningful way?

CRACK 3:

I end by circling back around to the City of Vancouver's Greenest City 2020 Action Plan and some reflections shared by one of the policy researchers who worked on the last plan and is now working on the next plan. Researcher Lindsay Cole described the sense of limitation experienced by her team when working from inside municipal government:

> Being inside, you're constantly running up against what feels like a highly constrained environment. We internalize that as staff. We start to say, 'we can't do that'...or 'it's not our responsibility,' instead of inverting it, and saying what *can* I do about this. Even if it's small, to shift how we're thinking about this, so that new possibilities show up or we get a bit more spaciousness around something or we allow ourselves to really feel the sense of urgency around a particular issue rather than professionalize it and protect ourselves from feeling the acuteness of things. How do you crack that open a little bit, in different ways, so we can start to see? I get why people do that. Because it's very hard to do something else. It's already really hard working here on some of these things. People are putting a lot of themselves into the work that they do. To do more than that can be really hard. I get the challenge. But I think there's something about that internalization of the structures that we're in (Interview with the author February 12, 2019).

Cole's views are important in offering some understanding of the complexities of mainstream political leadership: even for those who recognize and wish to transform the marginalization and vulnerabilities GC2020AP has generated, the structures – the bureaucracies and institutions – that have been created lead to many limitations that can subsequently lead to exhaustion and burnout. This is not destruction in order to re-create and sustain – it is more of an imbalance. Cole recognizes the need for City researchers to be able to "bring (their) full selves to the work" (Ibid.), meaning the researchers do not have to operate as mechanized pieces but are able – encouraged even – to *feel* into their work. She shares that the team "just fundamentally knows what's needed...it's not about an issue that can just get parceled out," instead, she says, "it's about being truthful and honest and full of integrity and caring for the people and the place. It's more humane. It connects with your heart and not just your head when you're talking about sustainability" (Ibid.). So, even from within a settler-colonial governmental structure, there are individuals who recognize the need for new and different forms of leadership.

Outside land-based worldviews, others are also asking questions about inclusivity and leadership. Author and place maker Jay Pitter's homepage features the question "Who's not here?" and suggests "cities are a constant negotiation of distance and difference" (Pitter n.d.). Her call is to "stop empowering people – people are powerful" and instead to:

- Acknowledge histories + systems that have contributed to social inequality and urban stratification
- Define + celebrate multiple forms of individual and community-based power
- Create space + share resources

- Co-create city-building processes/systems that foster individual and community-based power[21].

Current sustainability policies often originate from, are developed and enforced through divisive language that is not only repeated loudly but covers over other sounds. However, careful listening can disclose other ways of communicating conflict, resistance, and possibilities for different forms of leadership through silence, prayer, and ceremony. There will always be difference but what is important is how those differences are heard and honoured.

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[21] Diagram “Stop Empowering People,” copyright Jay Pitter 2018, accessed March 15, 2019 at www.jaypitter.com.

Acoustic Relations, All My Relations

What is the sound of sustainability in Vancouver? Is it the sound of a stream trickling down Burnaby Mountain or the sound of the wind blowing through the city? Is it that same wind moving through lungs as breath or the sound of voices reciting a long prayer of gratitude, thanks, and connection to all things? Is it the sound of the news or political leaders doing battle? Perhaps it is the sound of a drumbeat. Using acoustics to examine relations between people, places, politics, and the land has built understandings of how these relations affect people and motivate actions. Listening through the contexts of the land, the economy, and political leadership, it has been my intention to grow awareness of assumptions about what is to be sustained and who is setting priorities in accomplishing sustainability goals. This is all to shift the collective focus and amplify voices and perspectives that are not as commonly, loudly, and clearly, heard.

In Part I, I introduced the concept of the Land – the earth and all the earthly beings that make up the natural environment. I presented two different understandings of land as commodity and Land as relation and described the implications of both. I used the example of wind or air to understand the connections between people and the land – regardless of whether land is understood as commodity, relation, or something else. Using the sound of wind as an entry point to thinking about air, I linked the movement of air between people and plants in a vital exchange of carbon and oxygen. Air is also something that is protected and cared for through policy initiatives. People notice and are affected when air quality degrades. Yarrow plant medicine is a helpful tool to draw out these connections through its ability to support good respiratory health. With yarrow medicine – perhaps drinking yarrow tea – one's ability to breathe deeply is strengthened. Yarrow is also known as "all heal" and supports almost all the other body systems, which is not surprising when you consider how deep breathing supports and strengthens other systems from adrenals to blood.

Discussion of land as commodity necessarily involves discussion of the ways settler-colonialism built up and over the top of land-based long-resident ways of being. My discussion of land-as-commodity beliefs focused on how this view conflicts with Land-as-relation worldviews. To offer new understandings of the dynamics between these two, I used the sound of the last stream running down Burnaby Mountain and the story that I was told about that stream and the need to protect it. As Black Bear Warrior explained, the many other streams that normally run down the mountain have been destroyed, their beds dug up and disrupted, by the machinery that is building the path for the TMX. Trees that hold the nests of eagles – the birds that fly the highest in the sky in order to deliver messages and prayers straight from earth to The Creator – have been cut down to clear the way for the pipeline. Land is understood as a commodity in this case – something to be extracted from, manipulated, and exploited in order to accomplish an industry objective: a pipeline to transport diluted bitumen from the tar sands of Alberta out through the Port of Vancouver and into the international market.

But, in this very same location, a traditional Tsleil-Waututh Nation Watch House – Kwekwecnewtxw – has been erected. Those who stay there – messengers of war – are also educating those who have ears to listen about what it means to consider the Land as a relation. Behaviours and priorities are very different if Eagle is considered brother and Stream is considered uncle. The destruction of stream beds and eagle nesting grounds are considered "upstream effects" by the National Energy Board of Canada, which is responsible for the approval of the TMX and, to the dismay of the indigenous and environmentalist groups who oppose the pipeline, these upstream effects are not granted any real value by the NEB or the industry (Embree and Brugge 2018). At the same time, those who would critique the problem of land-as-commodity understandings it is not as simple as suggesting the substitution of a Land-as-relation worldview. As Dhillon (2018) rightly argues, to misappropriate Traditional Indigenous Knowledge and proclaim it as the answer to overcoming the dangers and damages of the resource extraction industry, is to fail to adequately acknowledge and atone for the atrocities committed against indigenous nations since the arrival of settlers. It is grossly ironic that the quest to correct the climate crisis – largely brought about by western development – might now seek to use the knowledge of those most marginalized.

This specific location – the top of Burnaby Mountain – is a flashpoint of action and meaning. It is the terminus of the pipeline as well as many marches to protest the building of the pipeline. By tuning in to the many different sounds heard at or associated with this place, I use what is heard to rethink understandings of sustainability. I focus on the sounds of the wind, the stream, and the voices that recite the *Haudenosaunee Thanksgiving Address* to bring together understandings of land as commodity and Land as relation. For those who might believe that the Land-as-relation worldview is only for indigenous people, I share the reminder that we are all indigenous to somewhere. But for those who would not or cannot take on this worldview, and insist on understanding land as commodity, it is useful to consider the system in which these beliefs and practices operate: the economy.

In Part II, I consider the connections between the quiet sound of a rural pipeline entry point and the louder noise of a large urban protest over that pipeline. I listen to the play between geography and volume – in some ways the classic dichotomy between noisy city and quiet, idyllic countryside – but also the sounds that might be less expected. A semi-truck rushes past the rural roadside; a soft and steady drone of drumming takes over the urban protest scene. Why do I choose to hit RECORD (Ultra-red 2008) in these different places, at these different times? If the protest, the urban scene, is where the demand of the activists is issued, then what is their demand a response to? The answer to that has a lot to do with the Economy. The Economy is the most commonly-presented reason for the development of the TMX. Political leaders repeatedly explain the importance of ensuring the strength of the Economy, creating new Canadian jobs, ensuring a reliable supply of fuel to keep transportation costs low for working people, and maintaining Canada's reputation as a good business partner. But the sound of sustainability news presents constant conflict on each of these topics, depending on which media organization is reporting and where its political affiliations lie. For TMX supporters, the Economy is portrayed as a fragile entity that must be cared for at the risk of great peril – those who support the pipeline often frame the issue as a competition between the economy and the environment and suggest that, unfortunately, prioritization of the environment will just have to wait. Those who protest the TMX produce different sets of numbers and data that dispute the proposed profits and benefits of TMX supporters and argue that it is possible to take care of people and the planet, together, by investing in green energy infrastructure.

Proponents and opponents of TMX have become deeply entrenched and the language used to critique the other side has become a steady stream of attack. I tune in to the affect that lies beneath the language and the stories of sustainability in the news to consider what emotional motivations might be found there. In both cases, there are themes of fear – that people won't be taken care of – and anger – that opponents would dare interfere. I introduce borage plant medicine, traditionally known to promote courage to face fears, for those who have difficulty listening to others whose opinions differ from their own, and as a companion plant that fosters mutually beneficial growing conditions for different species. Using Kimmerer's lesson of the three rows, that emphasizes ecology *first*, with economy built up next, I wonder if the political leaders have got it backwards.

I continue to follow the model in Part III as I introduce the "spirit row" and link it to sustainability leadership. The spirit row is the third row that holds the entire basket of plenty together (Kimmerer 2013, 153). I identify "spirit" as a prioritized belief in the inherent connections between all beings that shapes political actions. I argue that this belief is missing from mainstream political leadership, at least to the extent that it shapes political action. I question whether consideration of spirit-motivated leadership might be of value in understanding new ways of approaching sustainability policy. As a global community – beyond Vancouver, or even Canada – sustainability policies and practices have failed to move us where we need to go in order to avoid catastrophic planetary failure. Part III examines two forms of governance – mainstream political leadership (western electoral systems) and indigenous ceremony – to investigate what is needed to create more meaningful sustainability policies, practices, and beliefs. I argue that, as spiritual health is increasingly acknowledged as a necessary part of holistic approaches to good health in individuals, it might also be a part of good health in political leaders. Does current sustainability policy have spirit? Should it?

I introduce mullein flower medicine, which supports good ear health for careful listening. The mullein plant has a deep taproot that stores energy for future use. It is also a plant of paradoxes. Perhaps the largest paradox around my understanding of sustainability came when I returned to the original definition of the word – maintaining relative stasis. Yet, what is needed is major transformation – a strategy of stasis is sure to lead to planetary devastation. So, it seems that sustainability is not what is needed at this time. I use the concept of cycles, as developed by Silvestri, Hartzler, and Lee (2018) to consider sustainability as nested between phases of creation and destruction. Coming back to the sounds of leadership with this in mind, I hear mainstream political leadership, through repetitions of divisive, combative, anxiety-filled and anxiety-provoking words alongside ceremony, even when it is expressed as a form of dissent, with its low and slow cadence, kept by drum beat, filled with words of reverence for the natural world, and sometimes even holding still in silence. These two forms of leadership leave me feeling very different after listening to both. I wonder how much it matters to others, how leaders leave them feeling and whether there might be a growing collective desire to quiet the shouting and the antagonism and uphold stronger practices of listening. Along these lines, I am beginning to hear ceremony, as a form of dissent, as both a destruction (of old forms of leadership) and a re-creation of something new (spirit-in-leadership).

The City of Vancouver’s Greenest City 2020 Action Plan has also cycled through the phases of Create > Sustain > Destroy. I present a critique of the Plan, which will soon come to completion, and the ways its market-oriented sustainability priority has resulted in eco-gentrification and further marginalization of the city’s most vulnerable citizens. But the City, as represented by its policy researchers and social planners, demonstrates its reflexivity as it develops its next sustainability plan. While some remain critical of the City’s priorities, as it now also finds itself in housing affordability and drug-poisoning crises in addition to climate crisis, these might actually be the conditions to build the vast changes that are needed to the old city structure that has also outgrown its relevance. The first two stages – identify the problems and potential solutions – have been carried out. Now the City faces the difficult process of *how* to implement solutions and change. As Cole notes, the City knows it needs to collaborate and share both resources and leadership (Interview with the author February 12, 2019). But there is a lot of space between knowing and implementing. What happens in Vancouver matters because of the reputation the city has maintained of being a leader on climate initiatives.

I take up mainstream political leadership by again listening to the sound of news stories. Just as in the context of the Economy, news about political leaders is characterized by combative language that pits communities, cities, provinces, and nations against one another and focuses on difference. It has been suggested that the oil industry in Canada has become a “deep state” (Livesey 2018) or a state within a state, thus demanding the allegiance of elected leaders. Because some of the main groups in opposition to the TMX are indigenous nations, many stories from or about mainstream political leadership focus on issues of consent from and/or consultation with these nations in the context of reconciliation in Canada. All in all, these conditions result in sounds of antagonism, secrecy, and insincerity in association with mainstream political leadership. Is it true that elected officials are like leaves that blow with the wind of corporate money? Are these the leaders that people chose to vote into power? It sounds as if TMX supporters are dissatisfied with government for not getting the project running already, while opponents are dissatisfied that indigenous and environmental rights are not being valued. Are status-quo governments even able to navigate a fair pathway forward when communities are so conflicted?

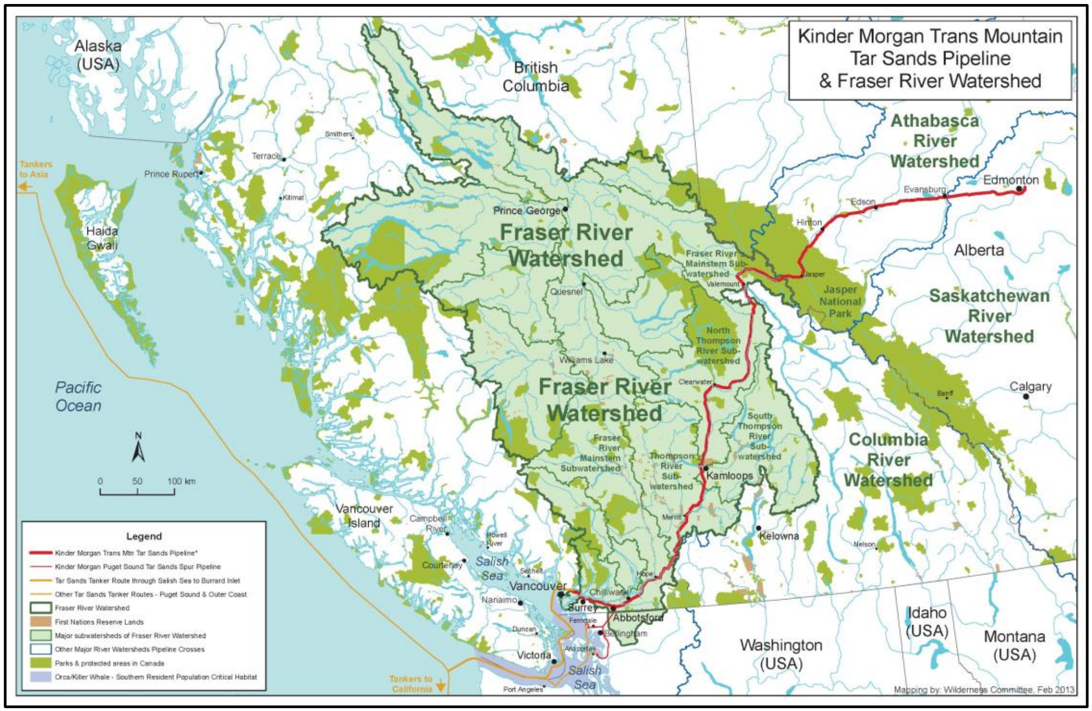
To shake up and reframe these stuck areas of political leadership, I provide an overview of systems of exchange as presented by Mauss ([1950] 1990). Remembering the development of trade as an alternative to war and the obligation to reciprocate any gift received is useful when thinking of the TMX and political leadership. Mauss specifically references the dynamics between worker and state and the ways leaders must maintain peace by ensuring reciprocity. Does the Economy reciprocate back to people everything that people are expected to sacrifice to and for it in the forms of their labour and their natural resources? What are the implications of this theory when mainstream political leadership does not acknowledge the need for reciprocity between people and the Land? What about the need for equitable exchange for the centuries-long use of unceded territory? Can a return to reciprocity signal a return to human solidarity (Mauss [1950] 1990)?

I also take up ceremony as leadership. I began to hear, more and more, of ceremony and spirit-practices being used to talk about sustainability during my fieldwork. Ceremony is used as dissent – a disruption to the status quo – and as a re-emergent form of leadership. As I learned, indigenous ceremonial practices did not disappear, but practitioners were forced to hide for generations as the settler state first prohibited and later shamed indigenous people for practicing the ways of their traditional culture. It is only more recently that those of us from outside the indigenous community have begun to witness again the performance of these practices and they are being used, more and more, in political spaces. The establishment of Kwekwecnewtxw was done without authorization and occupants have been asked by local law enforcement to leave, which is ironic since the structure is built upon Tsleil-Waututh Nation’s own land. This begs the question of authorization from whom and where sovereign power really lies. The TMX project is amplifying the sound of indigenous sovereignty speaking out to advocate for its lands but in a way that sounds very different from mainstream political leadership. Whether it is a physical structure (such as Kwekwecnewtxw), a sound such as drumming or singing, or a silent practice, as told in Polchies' story of holding a feather to power, spirit-centric practices insist on (re-create) different forms of leadership. These forms of leadership also deliver the reciprocity that is harder to hear from mainstream political leadership – respect for the land and advocacy for those who stand to lose from the pipeline. From what I have heard, ceremony also always operates from a place that emphasizes oneness. As in the *Haudenosaunee Thanksgiving Address*, the highly effective negotiators first find common ground through acknowledging gratitude for all the natural world and literally reciting, again and again, "now our minds are one," and then set to working out their differences. Is there something to be learned by mainstream political leaders who find themselves amidst such conflict from this consensus-building strategy?

I used to think that researchers were the ones who oversaw the creation of new knowledge – it's why I became one. I wanted to give my voice to determine which questions should be asked and answered as we shaped what the world knew to be true. But, as I have learned from many of the teachers who have come around me in this work, it might be less about generating new knowledge than remembering the old knowledges that existed long ago and bringing them together in new ways. There are tough political terrains to be navigated in this work as re-weavers and bridge builders amongst us set to work in reconciling past wrongs and holding leaders accountable if they fail to do so themselves.

Appendix I - Maps of Pipeline Routes and Sites[22]

For years now, The Wilderness Committee has been a major organizational presence in the resistance against the Trans Mountain Pipeline. They have dedicated many resources toward gathering information and making publicly available data about the pipeline project. I found their archive of maps documenting pipeline routes at various scales to be very helpful over the course of my investigations and, with The Wilderness Committee's permission, share them here to provide senses of space, scale, and context for the reflections that follow.


Kinder Morgan Trans Mountain
Tar Sands Pipeline
& Fraser River Watershed
Alaska (USA)
British Columbia
Tankers to Asia
Haida Gwaii
Prince Rupert
Terrace
Smithers
Kitimat
Prince George
Fraser River Watershed
Quesnel
Williams Lake
Fraser River Watershed
Fraser River Mainstem Subwatershed
Fraser River Mainstem Sub-watershed
Valemount
North Thompson River Sub-watershed
Clearwater
South Thompson River Sub-watershed
Thompson River Sub-watershed
Kamloops
Merritt
Hope
Kelowna
Athabasca River Watershed
Edmonton
Evansburg
Edson
Hinton
Jasper
Jasper National Park
Alberta
Saskatchewan River Watershed
Banff
Calgary
Columbia River Watershed
Nelson
Pacific Ocean
N
0
50
100 km
Vancouver Island
Campbell River
Powell River
Courtenay
Salish Sea
Vancouver
Nanaimo
Surrey
Chilliwack
Abbotsford
Ferndale
Bellingham
Duncan
Sidney
Anacortes
Victoria
Salish Sea
Port Angeles
Tankers to California
Washington (USA)
Idaho (USA)
Montana (USA)
Legend
Kinder Morgan Trans Mtn Tar Sands Pipeline*
Kinder Morgan Puget Sound Tar Sands Spur Pipeline
Tar Sands Tanker Route through Salish Sea to Burrard Inlet
Other Tar Sands Tanker Routes - Puget Sound & Outer Coast
Fraser River Watershed
First Nations Reserve Lands
Major subwatersheds of Fraser River Watershed
Other Major River Watersheds Pipeline Crosses
Parks & protected areas in Canada
Orca/Killer Whale - Southern Resident Population Critical Habitat
Mapping by: Wilderness Committee, Feb 2013

Map 1. "Trans Mountain Pipeline through the Fraser River Watershed." This is the entire route of the pipeline from the tar sands in Alberta to the Port of Vancouver. The Fraser River Watershed, emphasized here, is a major ecological feature not only in British Columbia but across Turtle Island.

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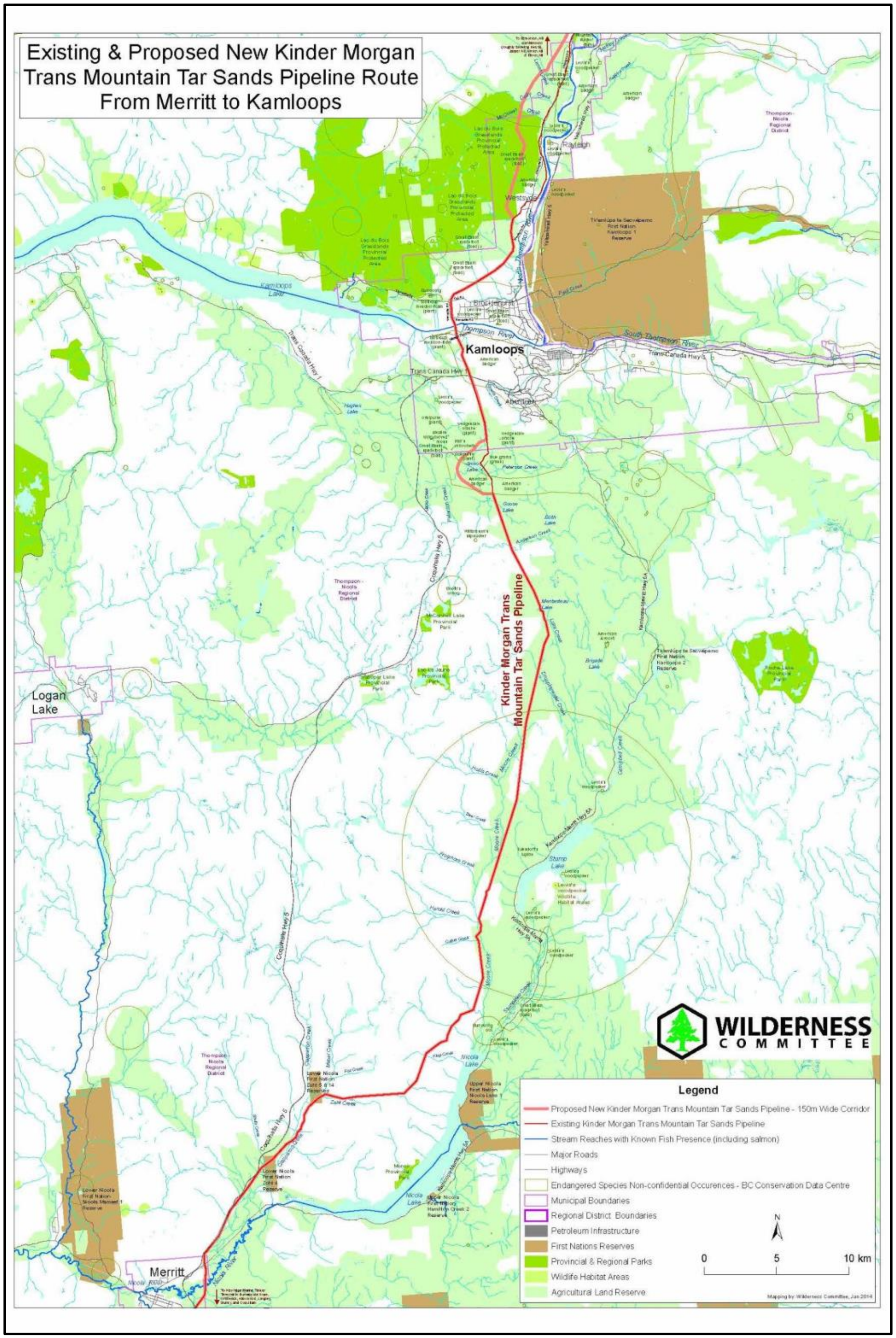
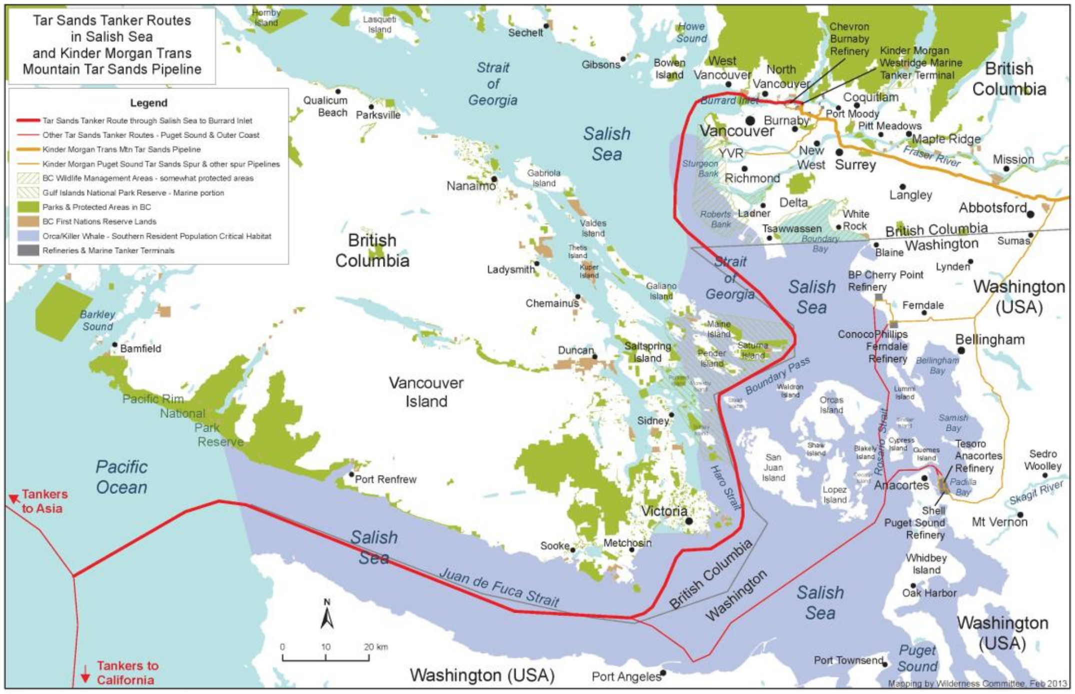
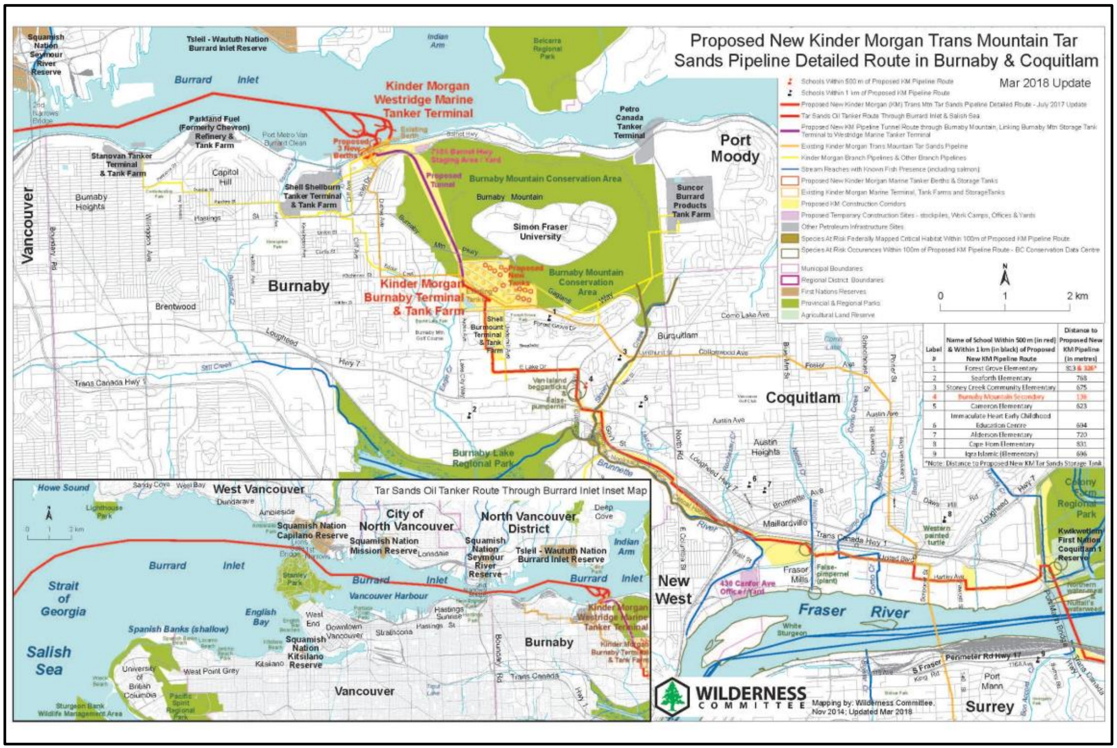
[22] All maps courtesy of The Wilderness Committee visit https://www.wildernesscommittee.org/kinder_morgan_pipeline_route_maps to view all maps online (Wilderness Committee "Kinder Morgan Pipeline Route Maps" n.d.).


Existing & Proposed New Kinder Morgan Trans Mountain Tar Sands Pipeline Route From Merritt to Kamloops
Kamloops
Kamloops Lake
Thompson River
South Thompson River
Trans Canada Hwy
Kinder Morgan Trans Mountain Tar Sands Pipeline
Logan Lake
Stump Lake
Nicola Lake
Merritt
Coquihalla Hwy 5
Thompson-Nicola Regional District
WILDERNESS COMMITTEE
Legend
Proposed New Kinder Morgan Trans Mountain Tar Sands Pipeline - 150m Wide Corridor
Existing Kinder Morgan Trans Mountain Tar Sands Pipeline
Stream Reaches with Known Fish Presence (including salmon)
Major Roads
Highways
Endangered Species Non-confidential Occurences - BC Conservation Data Centre
Municipal Boundaries
Regional District Boundaries
Petroleum Infrastructure
First Nations Reserves
Provincial & Regional Parks
Wildlife Habitat Areas
Agricultural Land Reserve
N
0
5
10 km
Mapping by: Wilderness Committee, Jan 2014

Map 2. "Existing & Proposed New Kinder Morgan Trans Mountain Tar Sands Pipeline Route From Merritt to Kamloops." This mapy features the Stump Lake area that is discussed in Part II.


Tar Sands Tanker Routes
in Salish Sea
and Kinder Morgan Trans
Mountain Tar Sands Pipeline
Legend
Tar Sands Tanker Route through Salish Sea to Burrard Inlet
Other Tar Sands Tanker Routes - Puget Sound & Outer Coast
Kinder Morgan Trans Mtn Tar Sands Pipeline
Kinder Morgan Puget Sound Tar Sands Spur & other spur Pipelines
BC Wildlife Management Areas - somewhat protected areas
Gulf Islands National Park Reserve - Marine portion
Parks & Protected Areas in BC
BC First Nations Reserve Lands
Orca/Killer Whale - Southern Resident Population Critical Habitat
Refineries & Marine Tanker Terminals
Hornby Island
Lasqueti Island
Sechelt
Howe Sound
Gibsons
Bowen Island
West Vancouver
North Vancouver
Chevron Burnaby Refinery
Kinder Morgan Westridge Marine Tanker Terminal
British Columbia
Strait of Georgia
Qualicum Beach
Parksville
Burrard Inlet
Coquitlam
Port Moody
Salish Sea
Vancouver
Burnaby
Pitt Meadows
Maple Ridge
YVR
New West
Surrey
Fraser River
Mission
Sturgeon Bank
Richmond
Nanaimo
Gabriola Island
Langley
Delta
Roberts Bank
Ladner
White Rock
Abbotsford
Tsawwassen
Boundary Bay
British Columbia
Washington
Sumas
Valdes Island
Thetis Island
Kuper Island
British Columbia
Ladysmith
Blaine
Lynden
Strait of Georgia
Salish Sea
BP Cherry Point Refinery
Washington (USA)
Galiano Island
Chemainus
Ferndale
Barkley Sound
Mayne Island
ConocoPhillips Ferndale Refinery
Bellingham
Bamfield
Saturna Island
Duncan
Saltspring Island
Pender Island
Bellingham Bay
Boundary Pass
Vancouver Island
Waldron Island
Orcas Island
Lummi Island
Rosario Strait
Pacific Rim National Park Reserve
Sidney
Samish Bay
Shaw Island
Blakely Island
Cypress Island
Guemes Island
Tesoro Anacortes Refinery
Sedro Woolley
San Juan Island
Pacific Ocean
Port Renfrew
Haro Strait
Lopez Island
Anacortes
Padilla Bay
Skagit River
Tankers to Asia
Victoria
Shell Puget Sound Refinery
Mt Vernon
Salish Sea
Sooke
Metchosin
British Columbia
Whidbey Island
Juan de Fuca Strait
Washington
Salish Sea
Oak Harbor
N
0
10
20 km
Washington (USA)
Puget Sound
Port Townsend
Tankers to California
Washington (USA)
Port Angeles
Mapping by Wilderness Committee, Feb 2013

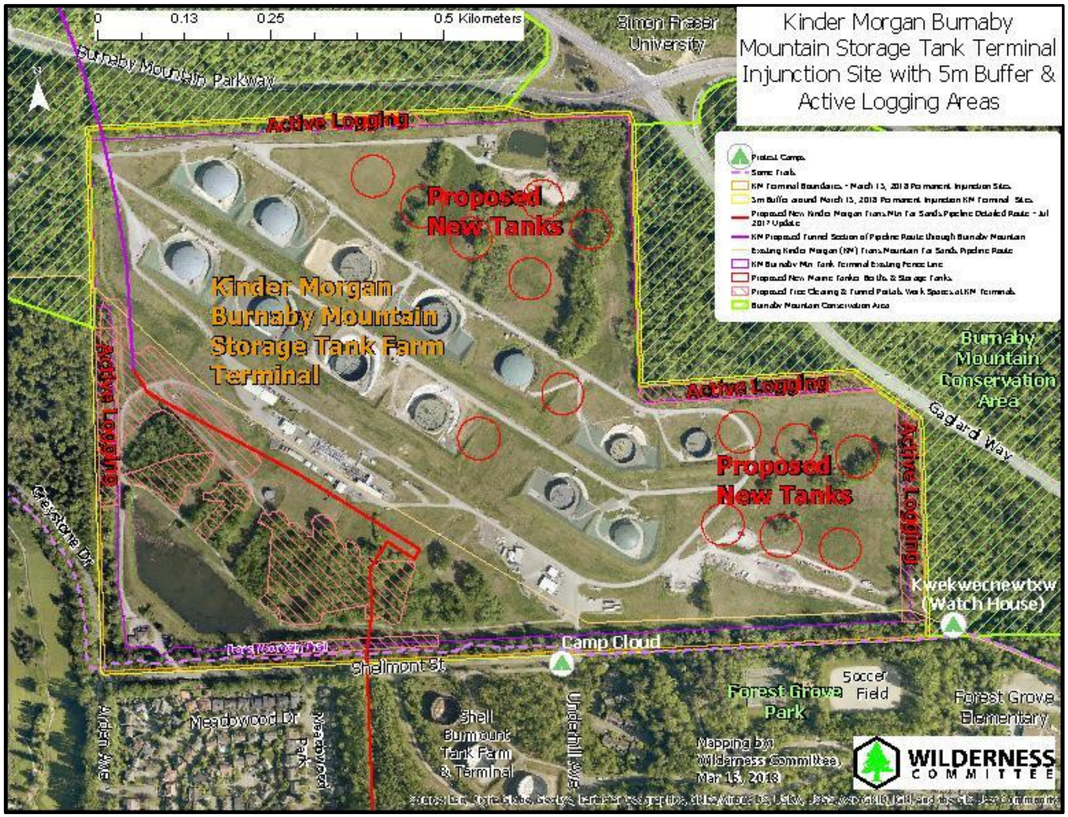
Map 3."Tar Sands Tanker Routes in Salish Sea and Kinder Morgan Trans Mountain Tar Sands Pipeline." This map details the marine routes traveled by oil tankers transporting Trans Mountain Pipeline products including bitumen. The lack of meaningful consideration of marine ecologies placed at risk by the pipeline project was one of the main grounds for the Federal Court of Appeals' overturn of project approval in 2018 (see Overview and Timeline of the Trans Mountain Pipeline in following section).


Proposed New Kinder Morgan Trans Mountain Tar Sands Pipeline Detailed Route in Burnaby & Coquitlam
Mar 2018 Update
Schools Within 500 m of Proposed KM Pipeline Route
Schools Within 1 km of Proposed KM Pipeline Route
Proposed New Kinder Morgan (KM) Trans Mtn Tar Sands Pipeline Detailed Route - July 2017 Update
Tar Sands Oil Tanker Route Through Burrard Inlet & Salish Sea
Proposed New KM Pipeline Tunnel Route through Burnaby Mountain, Linking Burnaby Mtn Storage Tank Terminal to Westridge Marine Tanker Terminal
Existing Kinder Morgan Trans Mountain Tar Sands Pipeline
Kinder Morgan Branch Pipelines & Other Branch Pipelines
Stream Reaches with Known Fish Presence (including salmon)
Proposed New Kinder Morgan Marine Tanker Berths & Storage Tanks
Existing Kinder Morgan Marine Terminal, Tank Farms and StorageTanks
Proposed KM Construction Corridors
Proposed Temporary Construction Sites - stockpiles, Work Camps, Offices & Yards
Other Petroleum Infrastructure Sites
Species At Risk Federally Mapped Critical Habitat Within 100m of Proposed KM Pipeline Route
Species At Risk Occurences Within 100m of Proposed KM Pipeline Route - BC Conservation Data Centre
Municipal Boundaries
Regional District Boundaries
First Nations Reserves
Provincial & Regional Parks
Agricultural Land Reserve
N
0
1
2 km
Squamish Nation Seymour River Reserve
Tsleil - Waututh Nation Burrard Inlet Reserve
Indian Arm
Belcarra Regional Park
Burrard Inlet
Kinder Morgan Westridge Marine Tanker Terminal
Petro Canada Tanker Terminal
Port Moody
Parkland Fuel (Formerly Chevron) Refinery & Tank Farm
Stanovan Tanker Terminal & Tank Farm
Capitol Hill
Shell Shellburn Tanker Terminal & Tank Farm
Proposed Tunnel
Burnaby Mountain Conservation Area
Burnaby Mountain
Simon Fraser University
Suncor Burrard Products Tank Farm
Vancouver
Burnaby Heights
Burnaby
Brentwood
Kinder Morgan Burnaby Terminal & Tank Farm
Proposed New Tanks
Burnaby Mountain Conservation Area
Shell Burmount Terminal & Tank Farm
Lougheed
Hwy 7
Still Creek
Trans Canada Hwy 1
Vancouver Island beggarticks & False pimpernel
Burnaby Lake Regional Park
Burquitlam
Como Lake Ave
Coquitlam
Austin Ave
Austin Heights
North Rd
Brunette River
Maillardville
Trans Canada Hwy 1
Western painted turtle
Colony Farm Regional Park
Kwikwetlem First Nation Coquitlam 1 Reserve
New West
430 Cariboo Ave Office / Yard
Fraser Mills
False-pimpernel (plant)
Fraser River
White Sturgeon
Perimeter Rd Hwy 17
Port Mann
Surrey
Tar Sands Oil Tanker Route Through Burrard Inlet Inset Map
Howe Sound
West Vancouver
City of North Vancouver
North Vancouver District
Deep Cove
Squamish Nation Capilano Reserve
Squamish Nation Mission Reserve
Squamish Nation Seymour River Reserve
Tsleil - Waututh Nation Burrard Inlet Reserve
Strait of Georgia
Burrard Inlet
Stanley Park
Vancouver Harbour
English Bay
West End
Downtown Vancouver
Strathcona
Hastings Sunrise
Spanish Banks (shallow)
Squamish Nation Kitsilano Reserve
Salish Sea
University of British Columbia
West Point Grey
Vancouver
Burnaby
Kinder Morgan Westridge Marine Tanker Terminal
Kinder Morgan Burnaby Terminal & Tank Farm
Sturgeon Bank Wildlife Management Area
WILDERNESS COMMITTEE
Mapping by: Wilderness Committee, Nov 2014; Updated Mar 2018

Label #	Name of School Within 500 m (in red) & Within 1 km (in black) of Proposed New KM Pipeline Route	Distance to Proposed New KM Pipeline (in metres)
1	Forest Grove Elementary	513 & 326*
2	Seaforth Elementary	768
3	Stoney Creek Community Elementary	675
4	Burnaby Mountain Secondary	139
5	Cameron Elementary	623
6	Immaculate Heart Early Childhood Education Centre	694
7	Alderson Elementary	720
8	Cape Horn Elementary	931
9	Iqra Islamic (Elementary)	696

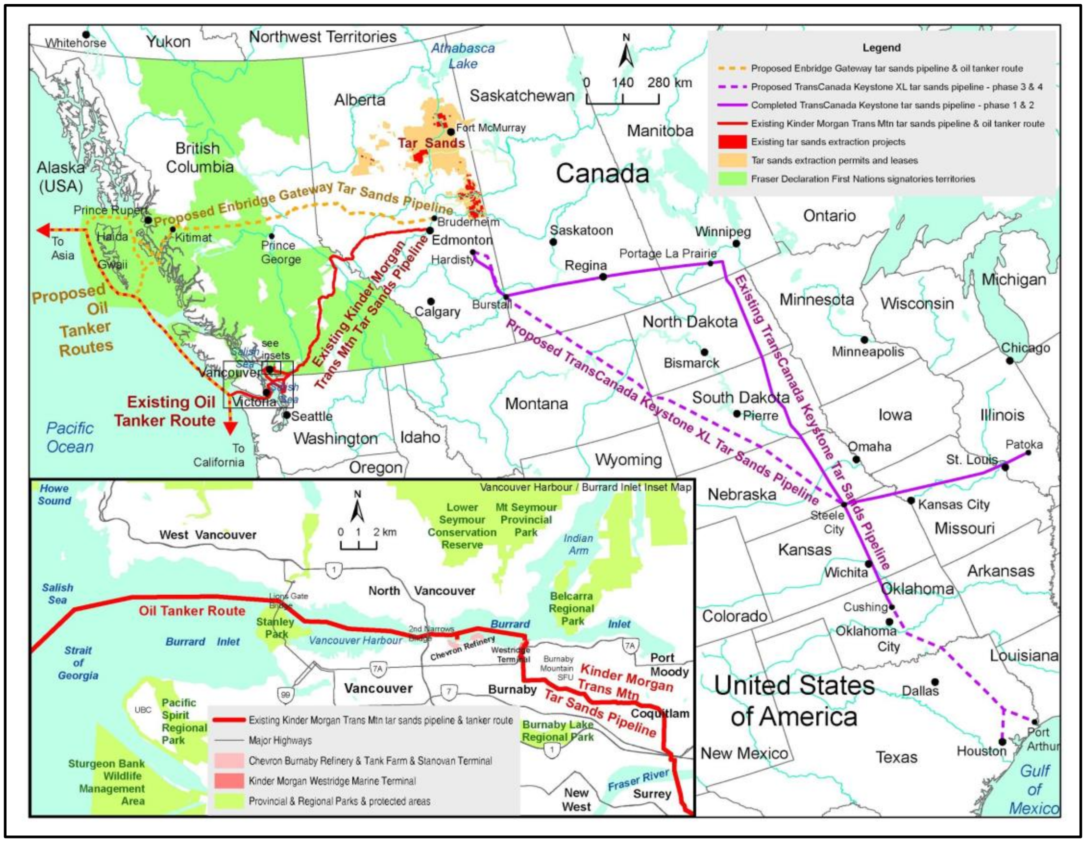
*Note: Distance to Proposed New KM Tar Sands Storage Tank

Map 4. “Proposed Kinder Morgan Trans Mountain Tar Sands Pipeline in Burnaby & Coquitlam – Detailed community-level map showing the proposed New Kinder Morgan Pipeline Detailed Route, existing pipeline, and proximity to schools, waterways and endangered wildlife habitat.” This map highlights the pipeline route in cities neighbouring Vancouver. Notice the Fraser River flowing through (it eventually empties into the Pacific Ocean just south and west of the map boundary).



Kinder Morgan Burnaby Mountain Storage Tank Terminal Injunction Site with 5m Buffer & Active Logging Areas
0
0.13
0.25
0.5 Kilometers
Protest Camps
Some Trails
KM Terminal Boundaries - March 15, 2018 Permanent Injunction Sites
5m Buffer around March 15, 2018 Permanent Injunction KM Terminal Sites
Proposed New Kinder Morgan TransMtn Tar Sands Pipeline Detailed Route - Jul 2017 Update
KM Proposed Tunnel Section of Pipeline Route through Burnaby Mountain
Existing Kinder Morgan (KM) TransMountain Tar Sands Pipeline Route
KM Burnaby Mtn Tank Terminal Existing Fence Line
Proposed New Marine Tanker Berths & Storage Tanks
Proposed Tree Clearing & Tunnel Portals Work Spaces at KM Terminals
Burnaby Mountain Conservation Area
Simon Fraser University
Burnaby Mountain Parkway
Active Logging
Proposed New Tanks
Kinder Morgan Burnaby Mountain Storage Tank Farm Terminal
Active Logging
Active Logging
Proposed New Tanks
Active Logging
Burnaby Mountain Conservation Area
Gaglardi Way
Greystone Dr
Kwekwecnewtxw (Watch House)
Camp Cloud
Shellmont St
Forest Grove Park
Soccer Field
Forest Grove Elementary
Arden Ave
Meadowood Dr
Meadowood Park
Shell Burnmount Tank Farm & Terminal
Underhill Ave
Mapping by: Wilderness Committee, Mar 15, 2018
WILDERNESS COMMITTEE
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Map 5.” Kinder Morgan Burnaby Mountain Storage Tank Terminal Injunction Site with 5 m Buffer – Also shows Active Logging Areas, Protest Camps, Proposed New Storage Tanks and Proposed New Tar Sands Pipeline Route in the area.” This map is a detail of the Burnaby Mountain area highlighted in yellow in Map 4. Notice the location of Kwekwecnewtxw in the bottom right and, as visible in both Map 4 and 5, the conservation area that the tank farm terminal is located within.


Legend
Proposed Enbridge Gateway tar sands pipeline & oil tanker route
Proposed TransCanada Keystone XL tar sands pipeline - phase 3 & 4
Completed TransCanada Keystone tar sands pipeline - phase 1 & 2
Existing Kinder Morgan Trans Mtn tar sands pipeline & oil tanker route
Existing tar sands extraction projects
Tar sands extraction permits and leases
Fraser Declaration First Nations signatories territories
N
0 140 280 km
Whitehorse
Yukon
Northwest Territories
Athabasca Lake
Alberta
Saskatchewan
Manitoba
Fort McMurray
Tar Sands
Alaska (USA)
British Columbia
Canada
Ontario
Prince Rupert
Proposed Enbridge Gateway Tar Sands Pipeline
Bruderheim
Edmonton
Hardisty
To Asia
Haida Gwaii
Kitimat
Prince George
Proposed Oil Tanker Routes
Existing Kinder Morgan Trans Mtn Tar Sands Pipeline
Calgary
Burstall
Saskatoon
Regina
Portage La Prairie
Winnipeg
Existing TransCanada Keystone Tar Sands Pipeline
Minnesota
Wisconsin
Michigan
North Dakota
Bismarck
Minneapolis
Chicago
see insets
Salish Sea
Vancouver
Victoria
Seattle
Existing Oil Tanker Route
To California
Pacific Ocean
Washington
Idaho
Oregon
Montana
Proposed TransCanada Keystone XL Tar Sands Pipeline
South Dakota
Pierre
Iowa
Illinois
Wyoming
Omaha
St. Louis
Patoka
Nebraska
Steele City
Kansas City
Missouri
Kansas
Wichita
Arkansas
Oklahoma
Colorado
Cushing
Oklahoma City
Louisiana
United States of America
Dallas
New Mexico
Texas
Houston
Port Arthur
Gulf of Mexico
Vancouver Harbour / Burrard Inlet Inset Map
Howe Sound
West Vancouver
Lower Seymour Conservation Reserve
Mt Seymour Provincial Park
Indian Arm
0 1 2 km
North Vancouver
Salish Sea
Oil Tanker Route
Lions Gate Bridge
Stanley Park
Belcarra Regional Park
Burrard Inlet
Vancouver Harbour
2nd Narrows Bridge
Chevron Refinery
Westridge Terminal
Port Moody
Strait of Georgia
Burnaby Mountain SFU
Kinder Morgan Trans Mtn Tar Sands Pipeline
Vancouver
Burnaby
Coquitlam
UBC
Pacific Spirit Regional Park
Burnaby Lake Regional Park
Sturgeon Bank Wildlife Management Area
New West
Fraser River
Surrey
Existing Kinder Morgan Trans Mtn tar sands pipeline & tanker route
Major Highways
Chevron Burnaby Refinery & Tank Farm & Stanovan Terminal
Kinder Morgan Westridge Marine Terminal
Provincial & Regional Parks & protected areas

Map 6. "Trans Mountain Pipeline Full Route Map." This map provides an overview of other pipelines originating from the tar sands in Alberta and traveling south into the United States.

Appendix II - Acoustics

List of Sounds

1. Wind
2. Stream
3. *Haudenosaunee Thanksgiving Address* (see Appendix II for transcript)
4. Stump Lake
5. City Hall Rally + Drum

Visit https://soundcloud.com/kristine-lawson-1/sets/acoustic-relations-pipelines to listen.

Acoustic Relations Playlist

Visit https://open.spotify.com/user/1288970258/playlist/1BBnuzSjfflSew0WRWGkt2?si=PUtAat3lRa-sznWPjNuFJw to listen to the playlist on Spotify.

Appendix III - *The Haudenosaunee Thanksgiving Address*[23]

Greetings to the Natural World

Today we have gathered and when we look upon the faces around us we see that the cycles of life continue. We have been given the duty to live in balance and harmony with each other and all living things. So now let us bring our minds together as one as we give greetings and thanks to each other as People. Now our minds are one.

We are thankful to our Mother the Earth, for she gives us everything that we need for life. She supports our feet as we walk about upon her. It gives us joy that she still continues to care for us, just as she has from the beginning of time. To our Mother, we send thanksgiving, love, and respect. Now our minds are one.

We give thanks to all of the waters of the world for quenching our thirst, for providing strength and nurturing life for all beings. We know its power in many forms – waterfalls and rain, mists and streams, rivers and oceans, snow and ice. We are grateful that the waters are still here and meeting their responsibility to the rest of Creation. Can we agree that water is important to our lives and bring our minds together as one to send greetings and thanks to the Water? Now our minds are one.

We turn our thoughts to all of the Fish life in the water. They were instructed to cleanse and purify the water. They also give themselves to us as food. We are grateful that they continue to do their duties and we send to the Fish our greetings and our thanks. Now our minds are one.

Now we turn toward the vast fields of Plant life. As far as the eye can see, the Plants grow, working many wonders. They sustain many life forms. With our minds gathered together, we give thanks and look forward to seeing Plant life for many generations to come. Now our minds are one.

When we look about us, we see that the berries are still here, providing us with delicious foods. The leader of the berries is the strawberry, the first to ripen in the spring. Can we agree that we are grateful that the berries are with us in the world and send our thanksgiving, love, and respect to the berries? Now our minds are one.

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[23] *The Haudenosaunee Thanksgiving Address: Greetings to the Natural World* is reproduced in entirety courtesy of The Tracking Project, which is stewarding *the Thanksgiving Address* as a teaching resource in collaboration with the Six Nations Indian Museum, the Tree of Peace Society, and the Native Self Sufficiency Society. This translation is by John Stokes and David Kanawahienton. Visit https://www.thetrackingproject.org/products/the-tracking-project-teaching-resources/ to learn more.

With one mind, we honor and thank all the Food Plants we harvest from the garden, especially the Three Sisters who feed the people with such abundance. Since the beginning of time, the grains, vegetables, beans, and fruit have helped the people survive. Many other living things draw strength from them as well. We gather together in our minds all the plant foods and send them a greeting and thanks. Now our minds are one.

Now we turn to the Medicine Herbs of the world. From the beginning they were instructed to take away sickness. They are always waiting and ready to heal us. We are so happy that there are still among us those special few who remember how to use the plants for healing. With one mind, we send thanksgiving, love, and respect to the Medicines and the keepers of the Medicines. Now our minds are one.

Standing around us we see all the Trees. The Earth has many families of Trees who each have their own instructions and uses. Some provide shelter and shade, others fruit and beauty and many useful gifts. The Maple is the leader of the trees, to recognize its gift of sugar when the People need it most. Many peoples of the world recognize a Tree as a symbol of peace and strength. With one mind we greet and thank the Tree life. Now our minds are one.

We gather our minds together to send our greetings and thanks to all the beautiful animal life of the world, who walk about with us. They have many things to teach us as people. We are grateful that they continue to share their lives with us and hope that it will always be so. Let us put our minds together as one and send our thanks to the Animals. Now our minds are one.

We put our minds together as one and thank all the Birds who move and fly about over our heads. The Creator gave them the gift of beautiful songs. Each morning they greet the day and with their songs remind us to enjoy and appreciate life. The Eagle was chosen to be their leader and to watch over the world. To all the Birds, from the smallest to the largest, we send our joyful greetings and thanks. Now our minds are one.

We are all thankful for the powers we know as the Four Winds. We hear their voices in the moving air as they refresh us and purify the air we breathe. They help to bring the change of seasons. From the four directions they come, bringing us messages and giving us strength. With one mind we send our greetings and thanks to the Four Winds. Now our minds are one.

Now we turn to the west where our Grandfathers the Thunder Beings live. With lightning and thundering voices they bring with them the water that renews life. We bring our minds together as one to send greetings and thanks to our Grandfathers, the Thunderers.

We now send greetings and thanks to our eldest Brother the Sun. Each day without fail he travels the sky from east to west, bringing the light of a new day. He is the source of all the fires of life. With one mind, we send greetings and thanks to our Brother, the Sun. Now our minds are one.

We put our minds together and give thanks to our oldest Grandmother, the Moon, who lights the nighttime sky. She is the leader of women all over the world and she governs the movement of the ocean tides. By her changing face we measure time and it is the Moon who watches over the arrival of children here on Earth. Let us gather our thanks for Grandmother Moon together in a pile, layer upon layer of gratitude, and then joyfully fling that pile of thanks high into the night sky that she will know. With one mind, we send greetings and thanks to our Grandmother, the Moon.

We give thanks to the Stars who are spread across the sky like jewelry. We see them at night, helping the Moon to light the darkness and bringing dew to the gardens and growing things. When we travel at night, they guide us home. With our minds gathered as one, we send greetings and thanks to all the Stars. Now our minds are one.

We gather our minds to greet and thank the enlightened Teachers who have come to help throughout the ages. When we forget how to live in harmony, they remind us of the way we were instructed to live as people. With one mind, we send greetings and thanks to these caring Teachers. Now our minds are one.

We now turn our thoughts to the Creator, or Great Spirit, and send greetings and thanks for all the gifts of Creation. Everything we need to live a good life is here on Mother Earth. For all the love that is still around us, we gather our minds together as one and send our choicest words of greetings and thanks to the Creator. Now our minds are one.

We have now arrived at the place where we end our words. Of all the things we have named, it is not our intention to leave anything out. If something was forgotten, we leave it to each individual to send such greetings and thanks in their own way. And now our minds are one.

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