Environmental Change and Economic Transformation in Northwest BC: Settler and First Nations Perspectives on Environmental Protection in the Post-Forestry Era

by

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Abstract

This dissertation examines the way that resource-dependent communities in northwest British Columbia respond to environmental problems in the wake of industrial decline. Northwest communities face many challenges in revitalizing their economies, including significant declines in the health of their local resource base and the uncertain impacts of global climate change. Throughout most of the 20th century, the forestry-based economy dominated British Columbia, and relegated Aboriginal rights and the environmental movement to the margins of resource decision-making processes. The decline of forestry, and the weakening of historical structures have created openings for new social movements to influence resource development activities and community planning. Efforts to create a new industrial base thus unfold within a very different social and political environment than in the past era.

The analytical body of this dissertation utilizes data from a study of community leaders and resource managers in three northwest towns. It is argued that environmental change represents an alpha-level risk that threatens the ability of these communities to subsist. However, responses to environmental problems are mitigated by the emergence of environmentalism and Aboriginal rights as important forces in the northwest, and by the continuing influence of relationships between northwest communities and external agencies that seek to exert control over the resource base. Settler communities seek to achieve balance between industrial and environmentalist imperatives, and see localized natural resource issues as continuations of the struggle between heartland and hinterland interests. However, climate change provokes stronger calls for environmental protection, and sensitizes these communities to their reliance upon wider society. In contrast, First Nations view themselves as independent from both industrial and environmentalist forces, and see environmental problems as issues to be managed through the assertion of their cultural and territorial rights. Findings reveal that opportunities for new social movements to influence resource development are shaped by the way that communities adapt to the contours of the post-staples economy. Moreover, theories of modernization and risk that find resonance in metropolitan settings may not apply in the peripheries of staples-producing regions.

Preface

This dissertation is an original intellectual product of the author, Jordan Dennis Tesluk. The fieldwork reported in Chapters 5-7 and in the conclusion was covered by UBC Ethics Certificate number H10-01660. The project was titled "Climate Change Adaptation Planning for Northwest Skeena Communities" (CCAPNSC).

The survey design used in this research was developed in cooperation with Dr. Ralph Matthews, Dr. Robin Sydneysmith, G. Piggot, and D. Brinkman, with assistance from other collaborators in the CCAPNSC project. Collection of survey data was performed by myself, G. Piggot, K. McPherson, A. Kanio, and R. Matthews. The initial entry and analysis of the survey data was performed by G. Piggot and myself. Depictions of frequency data (including Figures 9, 19, 11, 12, 13, 14, 15, and 17) were developed by myself, G. Piggot, and R. Matthews for use in reports for the CCNAPNSC project. Variants of these figures are utilized in final report, "Climate Change Adaptation Planning for Northwest Skeena Communities" (Brinkman et al., 2012).

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List of Abbreviations

AAC Annual Allowable Cut

AANDC Aboriginal Affairs and Northern Development Canada

BCABIC British Columbia Aboriginal Business & Investment Council

AFA Ancient Forest Alliance

BC British Columbia

BCANSI British Columbia Association of Non-Status Indians

CCAPNSC Climate Change Adaptation Planning for Northwest Skeena Communities

CEAA Canadian Environmental Assessment Act

CTR Coast Tsimshian Resources

DFO Department of Fisheries and Oceans

ENGO Environmental Non-Governmental Organizations

FFESC Future Forest Ecosystem Science Council

FLNRO Ministry of Forest Lands and Natural Resource Operations

FOWS Friends of Wild Salmon

FRP Forest Revitalization Plan

GDP Gross Domestic Product

IWA International Woodworkers Association

JRP Joint Review Panel

NAICS North American Industry Classification System

NDP New Democratic Party

NTFP Non-Timber Forest Products

NGO Non-Governmental Organization

NOCS National Occupational Classification System

NTL Northwest Transmission Line

PNCIMA Pacific North Coast Integrated Management Area

PRES Prince Rupert Environmental Society

PRPA Prince Rupert Port Authority

SNCIRE Skeena Nass Centre of Innovation in Resource Economics

SWTC Skeena Wild Conservation Trust

TEDA Terrace Economic Development Association

KTIDS Kitimat Terrace Industrial Development Society

TEK Traditional Ecological Knowledge

TFL Tree Farm License

TSA Timber Supply Area

TSL Timber Sale License

UBC University of British Columbia

UBCIC Union of British Columbia Indian Chiefs

UNBC University of Northern British Columbia

WCEL West Coast Environmental Law

WWF World Wildlife Fund

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Dedication

This thesis is dedicated to several people that have passed by. These include Dr. Patricia Marchak whose work directly inspired my own, and my grandparents Kenneth and Emma who I miss greatly.

Second, I dedicate this work to the people that live in British Columbia today, particularly those in the northwest who are working to create a new future for themselves in an age of change and challenge.

Finally, I dedicate this work to the future of my child, soon to arrive. I hope you will have the privilege of experiencing this land and its people in the same way that I have.

Introduction

This thesis examines the role of environmentalism and Aboriginal rights within northwest British Columbia communities as they seek to recover from the decline of the forest industry and adapt to changing environmental and economic conditions. The decline of forestry has corresponded with an exodus of population and capital from the region, resulting in significant social disruption and economic difficulties for forestry-dependent communities. In the wake of shifting resource markets and changes in the role of the state in protecting and supporting rural areas, northwest B.C. communities face the challenge of finding new ways to revitalize local economies.

However, other changes are also occurring that affect the direction of development in the region. Communities that formerly were the core of the northwest forest economy, are now caught up in a renewal process that involves three dominant dynamics: (1) the growing influence of environmentalism and pro-environmental organizations (ENGOs); (2) the growing importance of Aboriginal rights and increased engagement of aboriginal communities in regional development; and, (3) the development of new industrial actors centred around mining, oil and gas developments – including pipelines and liquefied natural gas facilities, as well as transport and port infrastructure. There are varying levels of competition and alliance among these three interests to assert control over economic (and ultimately social) activities in the region.

There are also changes occurring in the environment on both a local and global level, which pose threats to the well-being of northwest communities, and which create challenges for resource development activities. The spread of new blights into northwest forests and unprecedented closures in local fisheries indicate the emergence of new threats to the two most important historical drivers of the regional economy. Human intervention is directly implicated in many of the problems affecting the northwest resource base. This includes the failure of past resource management regimes to adequately protect the resource base from over-exploitation. The acknowledgment of human-induced climate change in the global scientific community indicates that problems in fisheries and forests can no longer be dismissed as parts of natural cycles. These problems are compounded by a new set of pressures that accompany the growth of energy and mineral industries in the region. Northwest communities are thus caught

up with competing interests in a battle to negotiate a balance between the need to protect the environment they rely upon while enabling the resource development activities that allow them to subsist.

This study is about the transformation of society, political economy, and culture in northwest British Columbia. It focuses on the role that environmental protection and Aboriginal rights play in reshaping the way that northwest communities respond to environmental problems. At the centre of this analysis are three communities that represent, in particularly dramatic form, the changing social dynamics of northwest BC. These communities include Terrace, Prince Rupert, and Lax Kw'alaams (see Figure 1).

British Columbia Alaska ax Kw'Alaams Prince Terrace Rupert Kitimat Prince George **Pacific** Ocean

Figure 1: Northwest Region

(World Atlas, 2013).

The key question at the heart of this study is that in light of the impending wave of industry, how do northwest BC communities (both settler and First Nations) engage with the emerging environmental movement and the intersecting influence of Aboriginal rights as they attempt to deal with environmental problems? Before providing an analysis of these social processes, it is helpful to first provide, in somewhat broader

detail, more information about the transformations that I have just identified. In doing so, I provide a preview of the analysis and discussion that constitutes the body of this work.

Settler and Aboriginal Communities: Forestry and Environmentalism

Since the arrival of Europeans on the west coast, the history of BC has largely unfolded as a story of society's relationship with forestry. While fur trading, fishing, and mining have played important roles in the growth of the province, the forest industry has occupied the centre of analysis in studies of BC development, and has played a pivotal role in defining the relationship between the province and the global economy. Industrial forestry reshaped lands, gave rise to new communities, and provided the province with an identity as a global superpower in pulp and timber production. However, the rise of industrial forestry also privileged the interests of specific groups over others. Throughout most of the 20th century, the combined forces of industrial capital, the state, and unionized labour held sway over the forests of BC, while relegating other interests in society to the margins of resource development. Within the context of the era in which forestry defined the political and economic makeup of the province, environmentalism and Aboriginal rights were positioned as challenges to the status quo. The rise of environmentalism and Aboriginal rights thus emerged as challenges against the primary driver of economic development and social organization in resourcedependent communities of BC.

Over the past 20 years, the industry endured an unprecedented and prolonged recession. This negatively impacted the northwest, and contributed to an exodus of population and capital. However, the decline of the forestry-driven political economy also created space for new forms of social, economic, and political influence to gain a footing. First Nations, supported by court rulings recognizing the existence of Aboriginal title and their right to be consulted in activities that affect their people and their land, have emerged as important players in resource development. First Nations have strengthened their positions not only as stakeholders in northwest development, but also as partners and leaders in industrial activities. During the same time, environmentalists have moved beyond the bounds of provincial urban centres and

established new organizations throughout the province and in the northwest. Tactics of blockading and protesting, although not completely abandoned, have been largely replaced by strategies that bring market pressures to bear on development activities, The BC environmental movement has increasingly developed cooperative relationships with industry and state bodies that contrast with the antagonistic relationships of the past that culminated in the "War in the Woods" of the 1990s. Changes in the strategy and positioning of the environmental movement also reflect a change in their relationship with the rural working class, and a shift in the forestry labour movement.

The relationship between environmentalism and forestry-dependent communities in British Columbia has historically been defined through conflicts between environmentalists and the combined forces of industry, labour, and the state. With changes in appurtenancy, the export of raw logs from BC has increased, thus enabling resource extraction to continue without the benefits of processing accruing to local communities. At the same time, there have been significant losses in the forestry workforce (particularly the unionized workers in manufacturing and processing), including a near disappearance of jobs in large mills in the northwest. As a result, there is no longer as strong a contingent of resident forestry workers to stand as proxies for forest industry interests in rural communities, and rural forestry workers no longer stand united with the state and industry as opposition to the environmentalist movement in province-wide debate over forest policy and practices. Increasingly, there is common ground to be found between environmentalists and forestry workers in resisting the management of BC forests. This was clearly demonstrated in October, 2008 when over 2,700 environmentalists and forestry workers rallied at the BC legislature to protest against raw log exports, and to jointly voice opposition against the environmental destruction and loss of working opportunities produced by the export of old-growth raw logs out of the country (Lavoie, 2008).

As these changes in the social and economic structure have unfolded over the past two decades, important shifts have also occurred in society's understanding of the environment. Awareness of environmental change and humanity's role in the

¹ An exception to this is the re-opening of the Skeena Sawmill near Terrace in 2012, with a limited workforce.

degradation of the environment has been buoyed by new understandings of climate change, and resource-dependent communities have been confronted by the risks associated with humanity's impact on their resource base on an unprecedented scale.

The forests of BC have played host to a prominent manifestation of these impacts in the form of the mountain pine beetle outbreak, which has swept across nearly 20 percent of the provincial land base. The mountain pine beetle outbreak has been linked to industrial forestry practices and changes in the climate that have rendered the forests more susceptible to the pest. The outbreak poses threats to the economic survival of communities dependent upon forestry, and to the safety of communities that now find themselves surrounded by millions of hectares of dead timber that require only a period of extended heat and a source of combustion to create wildfires that could reduce them to ashes.

While the northwest has sat on the fringe of the mountain pine beetle outbreak, it has encountered other new threats to forest health and faces a future in which the landscape is predicted to change dramatically. As the climate has changed and temperatures have risen in the northwest, dothistroma needle blight has emerged as a new threat to local forests (Woods et al., 2005). Such challenges can be expected to become more frequent, with world scientists reaching nearly unanimous agreement that global temperatures will continue to rise in the coming century. These environmental changes compound the economic disruptions that have afflicted the forest industry, and add to the uncertainties facing northwest communities.

Northwest fisheries have endured their own crises with the cyclical collapse of the salmon stocks. The record low returns in the 2013 salmon runs resulted in the closure of fisheries that provide essential food and employment to many northwest families, and the unprecedented shutdown of First Nations fisheries on the Skeena

² Researchers in the northwest have predicted a variety of potential climate shifts, nearly all of which include increases in temperature (Melton et al., 2012, p.78).

³ Another implication of global climate change is the increasing occurrence of extreme weather events (McCarthy, 2001). Such changes could increase the frequency of climate-related problems for the northwest such as the 2010 windstorm that fell trees throughout the areas surrounding Terrace. This storm produced extensive damage to the forests and prompted requests for the nearby town of Rosswood to be declared a provincial disaster area (Ritchie, 2010).

River.⁴ As northwest communities seek to build new futures in the wake of the forestry recession, they do so while confronting their own vulnerability to environmental change, and the consequences of failure to manage natural resources in a manner that provides stability for their economies.

The paths of these communities are shaped by political-economic changes occurring on both a local and global basis. Two aspects of these changes provide the defining lens for this study. The first of these is BC's movement from the primarily forest-centred staples economy into new patterns of economic activity. This study begins with an examination of the northwest as a staples-producing region during the earliest stages of BC's entry into the Canadian Confederation, and the province's subsequent growth and transition into new roles in the changing economy. This study provides an extension to this field by examining the challenges faced by resource-dependent regions as they enter an era in which the broader economy places more emphasis on services, technology, and other "post-staples" sectors, and less emphasis on the production of wood, minerals, and other staples goods. The work of Marchak (1983, 1995) and Hutton (1994, 2007) figure prominently in my analysis. However, I focus my work specifically on the way this transition affects relationships between the northwest region and the forces of environmentalism and Aboriginal rights, while including the uncertainties surrounding environmental changes as a key element of my analysis.

The second key aspect of political-economic change that frames this study, is the transformation of the state and the rise of neoliberal models of governance. Drawing on the work of Matthews and Young (2005, 2007), I examine the way that changes in the state have affected resource-dependent communities and their relationships with the rest of society. As I explore the role of environmental protection and Aboriginal rights in northwest BC, I do so while following the development of these movements as responses to state and industrial actions. However, I also examine the way in which these movements have been transformed alongside the state, and how they exert their

⁴ Salmon stocks have fluctuated dramatically in recent years, with different areas of the province experiencing different levels of returns, and in some cases record lows have been followed by record highs. Scientists continue to work to understand these fluctuations. The implications for the northwest fisheries are outlined in Chapter Five.

influence as manifestations of globalization and the shifting relationship between society and the forces through which it governs itself.

Within the context of transforming economies and the shifting role of the state in regulating resource-development activities, the environmental movement provides access to broader spheres of social, scientific, and economic influence that assist local communities in asserting their own local values in resource development activities. That is, the environmental movement provides support to those who wish to challenge historical patterns of subordination to industrial capital. However, at the same time that it provides support for some local interests, the pursuit of environmental protection poses challenges to other aspects of economic revitalization in the northwest. While the environmental movement provides a means to address industry impacts on valued resources, in some ways it has characteristics similar to those same industries. Like them, the environmental movement introduces into the region a set of social processes and political influences that cannot fully be controlled through local means. In particular, it provides a foothold for wider anti-industrial discourse and activism, thereby posing challenges to resource development projects that hold promise for economic revival for the region. This complicates the agenda for the future that is being developed in local communities. They are unable to detach themselves from their dependency on resource development for economic growth, and they cannot fully control either the potential impacts of industry on the resources they rely upon for both social and economic activity, or the forces of environmental protection that function to mitigate these impacts.

However, by engaging with a growing environmental movement on both a local and global basis, northwest communities may be able to influence the balance between their dependence on industry and their need to protect the resources upon which they rely. In my subsequent analysis, I examine the relationship between this effort to achieve balance and the movement within 'settler' (i.e. non-indigenous) society to alter unsustainable relationships with the environment. I draw on Ulrich Beck's *Risk Society* thesis to explain how threats to natural resources (and to society) are linked to new forms of social and political activism, and efforts to develop more sustainable relationships with the environment. I contend that these efforts are inhibited by

geopolitical and cultural cleavages between resource-dependent communities and the environmental movement, and between these communities and the institutions that define environmental protection, and which regulate resource development activities in BC.

The challenge of reconciling the balance between industry and environmental protection with historical frictions in settler society is further complicated by the intersection of environmentalism and Aboriginal rights. I contend that the rise of environmentalism in the northwest presents a different set of considerations to First Nations communities than to settler communities. First Nations neither base their understandings of the environment, nor do they structure their relationship with natural resources, through opposing institutions of resource exploitation and resource protection. Like settler communities, First Nation communities align themselves with both industrial capital and environmental groups, when such arrangements are compatible with their own interests and specific resource values. However, it will be demonstrated here that efforts by both the environmental movement and the state to balance resource development with resource protection, remain forces external to First Nations communities. As a result, they are supported only to the extent that they are compatible with First Nation interests and their particular goals related to self-determination.

Thus, a major theme of my analysis is that settler communities and First Nation communities have differing foundations for their alignments with industrial and environmentalist interests, and these differences also reflect their own unique and somewhat differing paths of development. While settler communities rely on institutions of environmental protection to assist them in asserting local interests in the course of resource development, First Nations instead pursue this goal through the assertion of Aboriginal rights and title against historical oppression under colonial rule. These competing strategies for influencing resource development highlight the continuing impact of historic political and economic structure on contemporary development in northwest British Columbia (BC). More importantly, while settler and First Nation communities share mutual goals in achieving greater control over the resource base and revitalizing their economies, they differ in regard to the tools and strategies deemed

appropriate for achieving these objectives. The ways in which northwest communities navigate these tensions provides insights into the way that diverse local communities respond to social and environmental change. It also helps define the relationship between northwest communities and the evolving structures of governance that mediate control over their resource base.

New Industrial Developments and Community Responses

The interplay between northwest communities and the forces they draw upon in their respective paths of development occurs within the context not only of a changing environment and a shifting economy but also a changing state. In response to the decline of the previous political economic structure, the state has introduced policies that liberalize natural resources rights while reducing the role of government in determining the relationship between local communities and the economy (Matthews and Young, 2007). These changes simultaneously place increased onus on local communities to define their roles in the economy and build linkages with external capital, even as they experience the dismantling of state mechanisms that had heretofore sought to ensure that these relationships provided an appropriate balance of benefits to the local area. Corresponding with these changes in governance, increased emphasis has been placed on the role of technical experts and systems of environmental assessment and community consultation. Thus, institutions and agencies from outside the local area strongly influence the configuration of political, economic and social processes in ways that do not always recognize the complexity of the local and regional relationships between settler and First Nation communities, nor their sometimes different relationship to the environment.

Of course, as I have indicated, all of these more 'social' processes involving the shifting interplay between environmentalism and Aboriginal rights are taking place in a context wherein northwest BC currently faces a wave of industrial activity greater than anything that the region has witnessed in half a century. After two decades of closing businesses and population exodus, the northwest now appears to be on the cusp of an economic revival in the form of new hydroelectric projects, mineral exploration, oil and gas development, as well as fresh interest in the forest industry. This imminent wave of

development can be seen as a *fourth industrial revolution* in the northwest, with the first being the development of indigenous resource activities, the second being the arrival of European industry, and the third being the post-war boom. The fourth is the hungry queue of industrial suitors that now stands at the door of the northwest, looking to extract profits from the resources of the region.

Among these projects is the Enbridge Gateway Project, a \$5 billion dollar twinned oil and light natural gas (LNG) pipeline that would travel through the northwest from Alberta to the BC coast. The project has caused protests in both local communities and in southern urban centres of the province. Mixed groupings of First Nations, environmental groups, and other local residents have been marching through various northwest communities to demonstrate opposition to the oil pipeline construction and increased tanker traffic in coastal waters that would be associated with it. Although Enbridge remains the highest profile project in the region, equally significant developments are occurring in other industries. A \$1 billion molybdenum mine is being planned near the community of Kitsault, with an associated expansion of the community's role as a deepwater port. However, the project faces opposition from a developer that purchased the majority of the town land and buildings with the intent of establishing a nature retreat and resort in the same area.

In early 2012, the town councils for the cities of Terrace and Prince Rupert voted in favour of stating their official opposition to the Enbridge oil pipeline (Benn, 2012; The Northern View, 2012a; The Northern View, 2012b), while the neighbouring community of Kitimat chose to take a neutral position pending the outcome of environmental assessments. A series of community and technical hearings were conducted between 2011 and 2013 through a Joint Review Panel (JRP) administered through the federal Canadian Environmental Assessment Agency (CEAA). While various ENGOs and local community representatives attended those hearings, an alliance of Coastal First Nations as well as the Lax Kw'alaams First Nation boycotted the JRP, citing financial difficulties in attending hearings and lack of faith in the fairness of the process. In December 2013, the JRP granted approval to the Enbridge project, providing its ability to meet the demands of 209 required conditions identified by the JRP, and pending approval of the application by the federal government as it faces legal

challenges from First Nations and ENGOs, as well as the complicated task of obtaining social license for the project. As of January 2014, ten court challenges had been filed against the JRP, including appeals from the Gitga'at, Haisla, and Gitxaala First Nations, the Federation of BC Naturalists, and Ecojustice, a Vancouver-based ENGO. (Moore, 2014; Linnet, 2014)

No matter the outcome of the Enbridge project, the passage of resource exports through the region is expected to increase greatly, leading to a planned port expansion in Prince Rupert that is projected to quadruple the city's capacity for handling container traffic. As the infrastructure for this expansion is put into place, newly opened offices of ENGOs based outside the region have been at the centre of the environmental assessment processes that evaluate the environmental impacts of these developments. ENGOs have also been central in organizing resistance to projects that would potentially fuel the export markets.

In late 2012, following a campaign led by local residents and environmental organizations, a tripartite agreement among industry, government, and First Nations was reached to extend a moratorium on coal bed methane mining in the Klappan region (headwaters of the Skeena River) in exchange for expansion of industrial opportunities in other parts of the province. However, continuing plans for coal mining in the region have re-ignited resistance from the Tahltan First Nation, and attracted the attention of ENGOs concerned with clean energy solutions.

Meanwhile, construction has already begun on the \$560 million Northwest Transmission Line, being built to provide power to the new wave of industry anticipated in the region, including the mining projects north of Terrace and Prince Rupert. The project broke ground in early 2012, but only after completion of an environmental assessment that resulted in 71 separate commitments and the successful negotiation of agreements with seven local First Nations who approved passage of the line across what they have claimed as their traditional territories.

While energy and mining projects provide the main driver for northwest industrial expansion, forestry remains an important contributor to the regional economy, and forms an area of potential growth. In 2003, the Lax Kw'alaams First Nation acquired the rights to the largest timber forest license in the northwest, and became the

primary driver of forestry activity in the region between Prince Rupert and Terrace. New opportunities are being explored in the use of wood products for bio-energy and innovative wood products, and in early 2013, the City of Terrace signed a 10-year lease with a Chinese firm for use of the primary local mill site on the edge of town. However, the mill faces obstacles in obtaining timber for its operations as many of the local timber licenses are now controlled by First Nations that sell their timber on the open market, resulting in the shipment of raw logs globally and away from local processing facilities. The export of logs has attracted criticism from ENGOs and labour groups, concerned about the lack of benefits to rural communities from the practice of exporting logs from a region in need of employment in processing and manufacturing.

As forestry companies move forward with plans for use of the resources in their tenure, advertisements are placed in local newspapers and letters are sent out to invite local First Nations, environmental groups, and other members of the public to provide input prior to the finalization of Forest Stewardship Plans. This is in line with similar agreements in other areas such as on the mid-coast and on Haida Gwaii. For example, in 2009, an agreement among various forestry companies, First Nations, and environmental groups was put into affect to protect from logging, 2 million hectares of the mid-coast in an area now known as the Great Bear Rainforest. In 2011, Taan Forest, the largest forest license holder in Haida Gwaii, obtained Forest Stewardship Council (FSC) certification for its operations, providing accreditation supported by environmental organizations to assist the company in marketing its products.

These examples, in various ways, provide insight into the roles of environmentalism and Aboriginal rights, their potential to either enable or constrain economic and industrial action, and the jockeying among different communities and social movements to assert their interests in northwest development activities. In the pages that follow, I will argue that environmental changes and economic decline have produced an atmosphere of critical uncertainty that provokes northwest communities to place greater emphasis on the protection of the environment. Within this atmosphere of change and uncertainty, opportunities are created for new social movements to take root in northwest communities and exert their influence on resource-development activities. However, the impulse to protect the environment must be understood within the context

of structural conditions and relationships with broader society that constrain and enable the ability of these communities to act as agents in shaping their own futures. The ways that northwest settler and First Nations communities encounter and respond to environmental and economic problems occurs within two distinct and contrasting, yet inextricably linked, development trajectories. My analysis provides a new perspective for understanding the challenges these communities face in their efforts to adapt to a changing world, and sheds light on the issues that both divide them and bring them together in this endeavour.

Chapter One: Analytical Framework for Examining Contemporary Northwest BC

In this chapter, I lay out the analytical framework that I use to explain how the three communities that are at the centre of my analysis, engage with environmental protection as they adapt to changing economic and social conditions. My analysis focuses on two key issues. The first is the way that the relationship between northwest communities and new forms of environmental governance has been re-shaped by changing structural conditions. These new forms of environmental governance include a growing environmental movement, the rising influence of Aboriginal rights and title, and changes in the structure of the state. I argue that the decline of the historical political economic structure has created openings for new social movements to influence the course of resource development activities. However, relationships between northwest communities and new forms of environmental governance should be viewed as part of a broader struggle to exercise control over the resource base.

My second focus is on the way that environmental problems are perceived in northwest communities, and how these communities prioritize environmental protection in relation to other important objectives related to community well-being. I frame this issue as a response to risk on both a local and global level, and place it within the context of communities that are experiencing changes in the way that they use their resource base while attempting to revitalize their economies.

The development processes currently occurring in the northwest do not exist in a vacuum, nor are they wholly determined by the history of the region and its position relative to global resource markets. The paths that lay northwest communities behind do not dictate their ways forward. However, the position from which they proceed and the choices they face, can only be understood by accounting for the distinct historically-based experiences of the settler community residents and First Nations that share the region, and the continuing transformation of their relationships with each other and the rest of society. Understanding their relationships with forces such as resource development and environmental protection as they adapt to the challenges of globalization is a story of both continuity and change. I thus begin my study in *Chapter Three* with an analysis of literature and archival sources to reveal the central role that the

forestry industry has played in the economic and social organization of northwest BC. This examination outlines the roles that economy, politics, and culture have played in shaping the relationships between environmental protection and northwest resource-dependent communities. In *Chapter Four*, I examine the impacts of the forestry recession on resource-dependent communities in BC, and changes in Aboriginal rights and the environmental movement that have occurred over the past 20 years. *Chapter Five*, *Six*, and *Seven* examine the social dynamics associated with these transformations as they are unfolding in three northwest communities.

Research Questions

In this thesis, I seek to demonstrate that the role of environmental protection in northwest BC is one key manifestation of a changing political economic structure, and an indicator of the ways that northwest communities are seeking to adapt to and reposition themselves with this structure. I define environmental protection as involving a combination of social movements and state processes aimed at exerting control over natural resources for the purpose of shielding them from harm, including the potential harms posed to the environment by industrial activity. The way in which these communities incorporate environmental protection into their strategies for economic renewal must be understood as a response both to past experiences and to current pressures on the resource base, including the uncertainties posed by new environmental risks. While threats to the environment are expected to provoke efforts to protect valued resources, localized responses to these problems are mitigated by the relationship between resource-dependent communities and the institutions that define the competing processes of protection and exploitation. As northwest communities engage with a changing economy, they are caught in a vortex of tensions involving a growing awareness of environmental change on both a local and global level, the challenge of adapting to a new regulatory environment and the demands of local residents for new ways of earning a living in a revitalized community. The ways in which they navigate such tensions provides insight to the relationship between emerging systems of environmental governance, and the historical and cultural context of resource-dependent communities.

By examining environmental protection within the complexity of these relationships, I also seek to explain the ways that the emerging environmental movement is supporting northwest communities in their efforts to shape their own futures. This study is located amidst five key developments that underlie my analysis. These include: (1) the transition of BC into the post-staples economy; (2) strategies for economic renewal in the BC hinterland; (3) the impact of risk and environmental decline on the management of natural resources; (4) the influence of new models of governance (particularly the ascendant neoliberal state) on relationships between resource-dependent communities and the environment; and, (5) the contrast between First Nation and settler community experiences amidst these changes. These interrelated areas in turn correspond with five key research questions that together shape my analysis of environmentalism and Aboriginal rights in northwest communities.

- 1. How have changing economic conditions shaped the relationships between northwest communities and environmental protection?
- 2. How does environmental protection become incorporated into northwest communities' strategies for economic revitalization as they adapt to the new economy?
- 3. How does environmental decline and associated responses to risk (on both a local and global level) affect the relationship between northwest communities and environmental protection?
- 4. How do northwest communities engage with new forms of governance as they seek to balance the interests of economic expansion and environmental protection?
- 5. How do settler and First Nations communities differ in regard to the way they adapt to the changes occurring in the northwest?

Question One

How do changing structural conditions shape the relationships between northwest communities and environmental protection?

My analysis follows the work of Marchak (1983, 1995), Rajala (2006), and Hayter (2000), among others, whose work I examine in *Chapter Three* of my study. In the subsequent chapters, I continue their analyses into the current context of northwest economic development, allowing me to examine environmental protection and Aboriginal rights according to conditions today. I have two objectives in answering this question. The first is to explain how the economy shapes resource development, and to identify the environmental pressures that accompany these activities. The second is to examine the ways in which northwest communities are able to capitalize on the structure of opportunity in the post-staples economy, and how their stakes in the economy shape their role as either supporters or opponents of resource development activities.

I examine recent changes in the northwest economy on both a regional and community scale, and situate these changes within the broader fabric of Canadian and BC economic structure, with reference to the post-staples analyses of Hutton (1994, 2007), Wellstead (2007), McAllister (2007), and Howlett and Brownsey (2001). I base my analysis on employment data, and a review of ongoing and proposed resource development activities in the northwest.

Traditional staples theory focused on the position of the northwest relative to the core and periphery of an integrated national structure, with northwest communities providing raw materials within a forestry driven economy, structured and guided by the provincial government. In contrast, my analysis assesses the position of northwest communities relative to globalized forces of mobilized capital, and a metropolitan core that Rayner and Howlett describe as being, "increasingly disconnected from resource extraction activities." (2007, p.53).

Hutton argues that, in the wake of a declining resource base, BC has moved away from an exclusive reliance upon natural resource exports, and towards an economy based more upon service and knowledge-based industries (1994).⁵ Hutton contends the new society is characterized by "a sharper divide in the socioeconomic welfare of

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⁵ He defined this transition as the move from a "mature" staples economy to a "post-staples" economy.

resource-dependent communities vis-à-vis urban society, a growing sense of social alienation and isolation, and a national policy and governance structure dominated increasingly by urban (and more especially metropolitan) interests." (2007, p.25). Despite the broader shifts toward metropolitan economies, Hutton predicted that ongoing staples development would persist in dependent regions. The bias of the new society towards new technologies (including those that reduce employment in primary industries) and globalized trade means that staples industries will no longer <u>lead</u>
Canadian development, but instead will be delegated to increased subservience beneath the social and economic dominance of metropolitan centres of technical innovation, politics, and commerce (2007, p.25).

In this respect, the provincial economy may be "post-staples", but may be better understood as "post-forestry" within the regional northwest context, as the prominence of industry has decreased while the local reliance upon resource exports persists. For regions such as northwest BC, the post-staples economy assigns them a lesser degree of importance and relevance in the provincial and national structure, and a greater level of dependency upon the wealth-producing modern industries of technology and information based in the metropolitan core of the province. Resource-dependent regions face difficult futures with the relative importance of primary industries decreasing in the provincial and national economy, urban areas holding distinct advantages in developing new opportunities, and society directing increased scrutiny towards the use of natural resources. My study therefore considers the precarious position of northwest communities, and evaluates their efforts to revitalize their resource-based economies in the context of a broader society that is seeking to transcend primary industry dependence.

I examine data on employment and economic activity from Statistics Canada, combined with secondary literary sources from industry and government to identify how the conditions of the post-staples economy are affecting the course of resource development activities in my study communities. I utilize interviews with civic leaders and resource managers to provide a view of these trends from the perspectives of the directing minds of these communities, and I use their input to define the environmental

issues facing their region as they attempt to adapt to changing economic conditions.⁶ Within this context, I examine the challenges facing northwest economic expansion in various industries, with recognition of difficulties faced in forestry (Rayner and Howlett, 2007; Thorpe and Sandberg, 2007), oil and gas (Carroll et al., 2011), fisheries (Rayner and Howlett, 2007), and non-extractive industries such as tourism (Schmallegger and Carson, 2010). This analysis establishes the fundamental economic conditions within which northwest communities engage with the competing influences of resource development and environmental protection. I provide both a regional level of analysis in answering this research question, as well as a community level of analysis, which leads me directly into my second research question.

Question Two

How does environmental protection fit into northwest communities' strategies for economic revitalization as they adapt to the new economy?

The second focus of my analysis is on the efforts of resource-dependent communities to rebuild their economies and adapt to new roles within the region and, in turn, reshape their community identities. This perspective looks beyond the viability of resource development activities and the broader forces that enable or inhibit industry, and examines the relationship between: (a) community development strategies, identities, capacities, and resource values, and (b) the emerging structure of opportunity in the northwest region, and the environmental issues it entails. I examine the ways that northwest communities incorporate natural resource values into the strategies they use to attract new investors while maintaining agreeable conditions for residents. I draw on observations from community and regional development plans and economic initiatives, as well as community visions shared by civic leaders and resource managers, and their valuations of various environmental and community resources.

Markey et al. (2012) examine the creation of an "economy of place" among northern communities, and assess the respective capacities and unique assets of

⁶ This approach digs beneath the surface of "person-on-the-street" studies, and explores the environmental issues from the perspective of people that; (A) are directly involved in dealing with resource management and community development, (B) possess a higher level of knowledge of such issues than average citizens, and (C) who play an active role in shaping the position of the community in relation to these issues.

northwest communities in terms of their value to both attracting industry and supporting quality of life. While Markey et al., draw a broad scope to their study, I draw a tighter focus to the role of natural resources and environmental protection in community visions. In this respect, I follow the work of Birkeland (2008), who contends that, in times of industrial transition, resource-dependent communities experience an opportunity to reconsider and re-establish their relationships with the environment and to articulate a new identity rooted in the environmental bases of their community culture. Like Birkeland, I account for the influence of industrial history on community culture, and I consider the challenges inherent in the transition between past and future community identities.

With the decline of the Fordist forestry monolith that drove the northwest economy and held sway over the landscape, I examine new ways that northwest communities are using their resource base (including both extractive and non-extractive industries) and the position given to these activities in visions of these communities' futures. In this respect, I identify the new functions and identities that my study communities are carving out within the regional structures outlined in the previous question. This includes challenges to traditional use of forestry lands, and conflict over new resource development activities such as the emerging friction between northwest recreation and tourism industries and the growing oil, gas, and mineral sector. I examine the conceptualizations of environmental protection advanced by the proponents of competing development visions, and the ways that civic leaders and resource managers see the environmental movement as either contributing to or inhibiting the revival of their communities.

Question Three

How does environmental decline and associated responses to risk (on both a local and global level) affect the relationship between northwest communities and environmental protection?

In my third area of analysis, I examine how the collapse of the forestry and fishing industries and the emergence of new threats to these resources (including both local impacts and a changing climate), affect the level of importance attached to protecting the environment, and how does this shape relationships between northwest

communities and the environmental movement that is developing in the region. In *Chapter Four*, I examine failures in forest management, and the associated decline of the forest industry. In subsequent stages of my analysis, I examine more specific manifestations of environmental problems in the northwest, the way that these issues are perceived within the communities, and they way that they shape understandings of environmental protection. I base my analysis on interviews with civic leaders and local resource managers, their appraisals of the environmental threats posed by new development activities, and the relationship between these perceptions and the importance attached to environmental protection.

I evaluate the uncertainties posed to northwest communities today as an exemplar of what Ulrich Beck described as the shift from modern to late-modern risk (1992). Compared to historical threats to human welfare, modern risks are inescapable and unforeseen products of human action that embody "irreversible threats to the life of plants, animals, and human beings" (Beck, 1992, p.13). Unlike the risks of the previous era, the risks of late-modernity cannot be delimited spatially, temporally, or socially. In this sense, previous methods of social insurance and risk assessment fail, and society is unable to adequately quantify or control the risks we face today (ibid).

For the northwest, the uncertainties of the past era revolved around challenges of supply and demand; this included the ability of modern resource management strategies to ensure a stable supply of staples to local communities, and a political economic structure through which to connect them to the market. The historical challenges of northwest communities thus focused on the production of wealth and the sustained growth of industrial capacity. These challenges reflected Beck's characterization of the problems faced by the previous (early modern) era as the production of "goods", which contrast sharply with (late) modern problems, which embody the prevention of "bads" (Lupton, 1999, p.59).

According to Beck (1992), the dangers of the late modern era differ from the past in terms of the nature of impacts, the scope of effects, and the ability of scientific management principles to mitigate the threats posed to society. Dangers of modern society involve unprecedented levels of risk, such as nuclear disaster and irreversible global climate change. Modern dangers escape localized management regimes, and pose

threats to human welfare on a global level, as the impact of modern dangers such as radiation and climate change defy science's best effort at either containment or mitigation. The inability of historically trusted institutions of knowledge and power to protect society from modern risks thus undermines not only the authority of science over assessing risks, but also the public's trust its capacity to do so (Beck, 1995). In the northwest, the unprecedented closure of the Skeena sockeye fishery in 2013, and the advance of disease and pests into northern forests reflect the failure of traditional resource management regimes to control the risks now permeating the northwest landscape. On a global scale, the concerns of forestry management policies, and of impending oil and gas development, transcend the localized impacts of erosion or pollution, and hold ties to broader impacts on the planet.

Beck argues that upon being confronted by the escalating risks of humanity's own creation, society engages in a process of "reflexive modernization" in which new social movements emerge to challenge the institutions that have failed us, creating the possibility for the "creative (self-) destruction for an entire epoch: that of industrial society." (1994, p.2). The seemingly irrational rejection of scientific management, in favour of morally-based and socially-based arguments for addressing threats to human welfare, becomes part of a truly rational reaction to the failure of science to protect society (Beck, 1992, p.58-60). Societal responses include new political movements based on international collaboration to reduce perceived dangers, and new social movements that apply pressure to political and economic institutions to achieve change, and to protect interests of mutual concern to all members of society, including the health of the environment.

The advent of *Risk Society* is thus tied to both the physical dangers that society faces, as well as the uncertainties of the social changes that accompany the rejection of traditional modes of social organization. Beck explains that the rejection of historical and traditional channels of social order result in a crisis of identity that he refers to as 'individualization'. "Put in plain terms, individualization means the disintegration of the certainties of industrial society as well as the compulsion to find and invent new certainties for oneself and others without them." (Beck, 1994, p.14) In the forthcoming chapters, I track this process within the context of the northwest (as described in the

previous research question) as it continues its transition out of the forestry-driven economy of the past era in which its role in the provincial political economy was clear, and its cultural identity was firmly rooted in the workplaces of logging and commercial fisheries, and its progression into the new "post-staples" economy in which the northwest is grappling with competing industries and competing identities, amidst a shifting political economic landscape in which its ties to both the state and industry undergo continual renegotiation.

In my analysis, I examine the pressures that are exerted upon northwest communities as they confront the environmental impacts of past and pending resource development activities, and contemplate new identities for their communities. These communities face the challenge of developing new relationships with the economy, and new methods of using their resource base that will enable them to persevere under new and emerging (local and global) environmental and social pressures. To explore this tension, I examine what are deemed to be the most important threats facing northwest communities from the perspective of civic leaders and resource managers, and interpret these in the context of the Risk Society framework provided here. To assess their response to these risks, I analyze the relationship between perceptions of environmental problems, and of the importance attached to environmental protection. I evaluate both the local context of risk as represented by problems identified with the local resource base, and the global context of risk as represented by the perceived influence of climate change on the future of the region. This approach joins the work of Olofsson and Ohman (2007) by evaluating empirical support for the Risk Society thesis by assessments of, and responses to, risk.8

My analysis of risks and response occurs far from the context of the cosmopolitan core of society in a culturally diverse milieu, and is written from the contrasting perspectives of settler and First Nations communities. In this regard, I evaluate the applicability of Beck's work against critiques of its Eurocentric and urbancentred biases based on its origins in the urban environmental movement of advanced

⁷ The assessment of environmental problems includes perceptions of conditions of valued environmental resources, changes in the environment, and assessments of climate changes as an environmental issue. ⁸ Olofsson and Ohman (2007, p.177-8) observe the lack of empirical support as a key critique of Beck's work (citing Dingwall, 1999; Lupton and Tulloch, 2001, 2002, Wilkinson, 2001).

western European nations (Buttell, 2000; Lam. 2009)⁹. As Schnaiberg and Gould (1994) observed, the hierarchy of risks identified in one part of the world or one segment of society cannot be assumed to occupy the consciousness of populations in another part of the world, where different sets of environmental and social pressures weigh upon society. Moreover, the path of modernization that is followed by settler culture and its struggle to achieve balance between the interests of industry and environment cannot be assumed to represent the path followed by First Nations (High, 1996; Nadasdy, 2005).

My analysis contributes to understandings of environmental change and societal response by examining these issues within the context of a rural environment. Flint and Luloff assert that resource-dependent communities have always occupied a sensitive position at "the dynamic interface between social and environmental processes." (2005, p. 408). The location of resource communities relative to resource development activities sensitizes them to the risks of industrial society not only through their proximal exposure to the physical consequences of development, but also by virtue of their central role in shaping the relationship between society and the environment. As Herbert and Cheshire-Higgins explain, "The relations of rule established between rural development experts and local communities, are central to the operation of these networks of governance." (2004, p.290). In this respect, my examination of the relationship between perceptions of risks and the importance of environmental protections sets the stage for the progression of my analysis in the fourth research question that explores the relationship between northwest communities and new models of environmental governance.

Question Four

How do northwest communities engage with new forms of governance as they seek to balance the interests of economic expansion and environmental protection?

The fourth area of my analysis focuses on the challenges that northwest communities face in managing environmental risks amidst a shifting political landscape. In *Chapter Three*, I argue that the balancing of economic and environmental interests

⁹ Even Beck recognizes the Eurocentrism of his own work, and the need to branch out and explore different types of cosmopolitanism in different social contexts (Beck and Levy, 2013, p.26)

was largely determined by an axis of state, capital, and working class interests that collectively reshaped the resource base in a manner that supported a particular model of industry. In the current era, the historic models of industry have collapsed, and a more diverse set of actors converges upon resource decision-making processes. As northwest communities respond to environmental issues, they do so while no longer occupying a clear position in provincial economy. As a result, they are left to assert their interests in resource development activities and respond to environmental problems without the linkages they historically held with the aforementioned axis of powers that dominated resource management in the past era.

The way in which northwest communities respond to environmental issues must be understood not only in terms of their exposure to risk, but also within the context of these communities' relationships with the emergent forms of governance that enable and constrain control over the resource base. I focus on two key issues within this milieu. The first is the challenge that northwest communities face in overcoming the political and geographic isolation from resource decision-making processes. The second is the way that northwest communities interact with ENGOs, and with the impact of Aboriginal rights and title, as growing influences on environmental management.¹⁰

The isolation of northwest communities from the control of their resource base originally developed as a result of their position within the staples economy. However, the rise of the neoliberal state (as part of an ongoing process of economic globalization) brings new dimensions to this challenge, that northwest communities must deal with as they seek to become efficacious participants in the management and protection of their resource base. ¹¹ I adopt Matthews and Young's definition of neoliberalization as "a strategy and process that aims to establish new means of accumulation and social

¹⁰ These two lines of examination place the structural analysis and response to environmental risk (as explained in the first three research questions), within the context of communities adapting to new forms of governance.

¹¹ This situates neoliberalism as a response, primarily led by capitalist interests, to the previous (Keynesian) state, which managed the growth of industry by balancing it against regulatory models intended to support community development and environmental protection (McCarthy and Prudham, 2004, p.278). However, my primary goal is not to theorize about the nature of neoliberalism, trace its origins in systems of global governance, or evaluate the actions of the current provincial political regime in relation to these matters. Instead, I examine the way that specific practices of governance (that have been characterized as neoliberal) are shaping the relationship between northwest communities and environmental protection.

regulation through the partial transfer of authority and/or responsibility from the public sphere (where it is subject to collective claims and/or contestation) to private domains (be they corporate, group and/or individual)." (2007, p.177). I also recognize McCarthy and Prudham's characterization of neoliberalism as a more complex and diffuse manifestation of economic and political globalization that brings a wide array of market and social forces to bear on local milieus (2005). This includes a more prominent role for market forces in the regulation and development of natural resources, and the participation of a wider range of actors in economic and environmental management arenas once reserved for the state.

I recognize that neoliberal processes are defined by two dimensions: the "roll-back" of impediments to economic development, and the "roll-out" of new initiatives to promote the rational growth of markets and to empower private actors to engage with the challenges of resource management without reduced government interference (Lockie and Higgins, 2007; Peck and Tickell, 2002). Under conditions of neoliberal governance, northwest communities are more distant from the control of their resource base by virtue of their increased isolation from a receding state, yet at the same time brought closer to this process through their opportunity to engage as one among many parties involved in the protection and management of the environment.

Neoliberal models of governance create problems for environmental protection, as the reduction of state intervention stimulates a natural "race to the bottom" in environmental management, as competitors in the private sector naturally follow the capitalist imperative of securing profit above all other objectives (McCarthy, 2004, p.340). The withdrawal of the state from resource management includes reduction of enforcement staff and closure of regional offices in key ministries dealing with natural resources. Environmental challenges also arise from the sheer volume of resource development activity enabled by the removal of regulatory restrictions. An example of this is the proliferation of mineral development applications that followed changes to the *Land Act*, which provided corporations with access to 85 percent of the province for

¹² The potential for environmental harm is enabled by reductions in state capacity for enforcement, as reflected by the reduction in enforcement staff and the corresponding drop in enforcement actions by the BC Ministry of the Environment between 2001 and 2005 (Gage and Saha, 2007).

mineral exploration (Matthews and Young, 2007, p. 181). The most important aspect of the neoliberal era, for the purpose of my analysis, is the state's withdrawal from the direct management of natural resources and the increased role played by private actors and market forces in determining the balance between resource development and environmental protection.¹³

I draw on interview data with civic leaders and resource managers in order to explain the effects of the described changes in governance on northwest communities' response to environmental issues. ¹⁴ I examine obstacles that local actors encounter while dealing with environmental issues, the ability of local actors to gain access to state agencies, and assessments of their efficacy as participants in resource management decision-making processes. ¹⁵ These data provide me with a means to evaluate the neoliberal logic that assumes that these communities are able to engage in the rational market-driven process of resource management in the age of globalization, in a manner that supports a desirable balance of economic development and environmental protection. I use these findings to assess the way that these communities' adaptations to neoliberal styles of governance shape their response to environmental issues, and how they believe environmental protection should be pursued in the current era.

Of course, the influence of Aboriginal rights and the environmental movement on northwest communities' response to environmental issues is expected to vary between settler and First Nations communities. I address this important issue in my fifth and final research question.

Question Five

How do settler and First Nations communities differ in regard to the ways that they adapt to the changes occurring in the northwest?¹⁶

¹³ An example of the advance of market forces into resource policy is the implementation of market value-based rates (over government set rates) for royalties (stumpage) paid to the province by forestry companies in exchange for the rights to harvest timber (Matthews and Young, 2007).

¹⁴ These include representatives from senior leadership, community outreach, technical advisory, and front-line resource management positions. More details on the respondents is provided in the methods chapter that follows.

¹⁵ A list of the interview questions utilized in this analysis is provided in the methods chapter.

¹⁶ The term "First Nation" and "settler" communities belies the diversity within northwest communities. It must be acknowledged that there are many First Nations people living in and playing key roles in "settler" communities, and there are also non-First Nations people living in and playing key roles in First Nations

The fifth area of my analysis is the study of the ongoing efforts of First Nations groups and communities to assert their right to self-determination from the period of early colonization and through into the current era. This line of analysis is not independent from the previous four research questions and in that sense is not an additional consideration. Instead, this question serves as an orienting lens for the study that brings balance to the historical and cultural context of this work, while providing insight to the intersection between environmental protection and Aboriginal rights.¹⁷ The first four research questions focus exclusively on the interaction between northwest communities and institutional forces originating from within settler culture, with a focus on the processes of environmental protection. To provide balance to my analysis, I also examine the interaction between these communities and the influence of Aboriginal rights in the management of natural resources. I examine survey data that show the level of importance attached to Aboriginal rights and title and First Nations treaty settlements by the residents and leaders of First Nation communities in the region. In that context, I examine the perceptions that the residents of all three of my respective study communities have with regard to the assertion of Aboriginal rights and title in relation to resource development activities.

Aboriginal rights and environmental protection represent overlapping spheres of social movements and state processes oriented in particular around exerting control over land and natural resources. While the primary target of these two movements is common, the objectives are not always the same as the assertion of Aboriginal rights and title is oriented around a broader set of objectives than environmental protection. In my analysis I examine circumstances in which the assertion of Aboriginal rights and title is consistent with settler culture's effort to protect the environment, including examples of cooperation between ENGOs and First Nations in resisting specific forms of resource development. However, I also examine circumstances in which in the assertion of Aboriginal rights is aligned with the expansion of resource development, including

communities. The more appropriate terms may be First Nations-led and settler-led communities. However, the shortened titles suffice for this study, with the caveat provided here.

¹⁷ In this sense, the contrasting First Nations and settler community viewpoints function like a pair of three-dimensional glasses that provide depth to the analysis that goes beyond a single image.

projects driven forward by settlers as well as projects under the exclusive control of First Nations.

My examination of differences between First Nations and settler communities is grounded in High's (1996) analysis of First Nations' relationship to the wage economy, and Nadasdy's (2005) analysis of the relationship between Aboriginal rights and environmental movements. First Nations are following distinct paths of development that sometimes run parallel to those of settler society. However, I recognize that First Nations experiences cannot be subsumed within or compared directly to those of the settler culture.

The struggles that society faces in adapting to neoliberal models of governance is often traced to the essential tension that Polanyi described as the "double movement", which occurs as capital seeks to free itself of its obligations to society, and society reacts to defend values that it believes cannot be reduced to functions of the market (Polanyi, 1944; Bakker, 2010; Higgins et al., 2008; McCarthy and Prudham, 2004; Palacios, 2001). In contrast, the *Risk Society* thesis uses the concept of "reflexive modernization" to describe the societal response to the disintegration of its traditional identities as a result of globalization and immersion in a world of shared risks, and the corresponding decline of trust in the political and scientific institutions that historically provided protection from danger (Beck, 1992, 1994).

Both Beck and Polanyi focus upon social responses to disruptions in the balance between institutional functions that support economic and industrial growth on one hand, versus functions that support social welfare on the other. However, I shall seek to demonstrate that in the northwest milieu, First Nations and settlers differ in terms of their attachments to the previous era of resource management and the models of social organization from which they originated. As the Keynesian and Fordist foundations of the staples economy give way to the forces of globalization, settler communities are witnessing the decline of the political economic arrangements that provided them with a means to subsistence, and guarantees of service and relevance in relation to the core of the province and the country. While First Nations share in the uncertainties posed by the changes occurring in economic and political structures, they also witness the decline of a

structure that for nearly two centuries stood as an obstacle between them and their ability to shape their own future and exercise control over their resource base.

As the neoliberal shift continues and the state yields increasing control to the private sector, all segments of society face challenges in ensuring that their social needs are met and their values remain protected amidst the advance of new global market influences. Amid these changes, the federal government has promoted self-government for First Nations as a means of freeing them from dependence upon the state, and as a way of entering global society as sovereign actors (ibid, p.265-6). At the same time, the province of BC has encouraged First Nations to enter into direct negotiations with corporate actors and other local groups in order to allow industrial growth to continue, while deflecting attention away from the underlying issues of Aboriginal title (Vernon, 2007).

In some cases, First Nations have seized the opportunity to take more active roles in the management of natural resources and create new influential roles for themselves in the economy, both as self-governing treaty nations (Salee and Levesque, 1998; Feit et al., 2001), and while continuing to assert Aboriginal rights and title in absence of treaty agreements (Matthews and Young, 2005). Salee and Levesque suggest that these actions comprise a means by which First Nations can separate themselves from the politics of dependency that was defined by the assertion of their interests through the paternal intervention of the state. Instead, they see it as a method of establishing their sovereignty in the global economy and for challenging courses of development that threaten their interests (1998, p.100; 127-8). Neoliberal models of governance, with their emphasis on the role of private actors, provide new opportunities for First Nations to assert their interests in resource development activities (Scott, 2006).

However, critics have warned that the state's withdrawal from the spheres of economic and social development, and the corresponding advance of First Nations into arenas of co-management and self-sufficiency exposes First Nations to increasing assimilation by corporate influence and pose a threat to their culture and independence (Slowey, 2008). Others have warned that the expectation for First Nations to engage in co-management of resources while industry continues to advance overlooks fundamental

differences between settler and First Nation ideals regarding what environmental protection entails and what values should be preserved (Coombes et al., 2012).

Both settlers and First Nations face challenges in asserting their interests as they engage with a new suite of private actors in the management of their resource base. However, for First Nations, these challenges represent a continuation of a struggle that has been unfolding over a longer timeframe, and one that overlaps a broader struggle towards self-determination. With settler communities comprising a part of the broader culture against which First Nations are seeking to assert their sovereignty, it is likely that there will be differences in the ways in which each group believes environmental protection should best be pursued. The investigation of that outcome is a dominant focus of the following chapters.

I build on previous studies, many of which have been previously cited here. In doing so, I provide an analysis that directly compares First Nations and settler experiences within a shared milieu, in which the respective groups interact with each other while seeking to exert control over a common resource base. This provides an opportunity to examine similarities and differences in their response to threats to their resource base, and in the ways in which they engage with the emerging forms of governance that serve to protect against these risks. By examining the differences between these groups, and identifying the ground they hold in common, I aim to provide insight to ways that First Nations and settlers can come closer together in the protection of the environment that they share.

Chapter Two: Methodology

Study Area

The northwest region of British Columbia forms the focal point in this study. There are many overlapping boundaries that define the northwest, including various districts of forest and land management, and different electoral areas, census divisions, and economic development areas. This complex set of boundaries overlaps with distinct geographic areas divided by land and water, and with the traditional territories of the many First Nation groups that live and travel through the region. However, it is helpful at this point to provide a general outline of the region at the centre of this study so that references to the northwest and comparisons with the rest of the province can be situated in a geographic context.

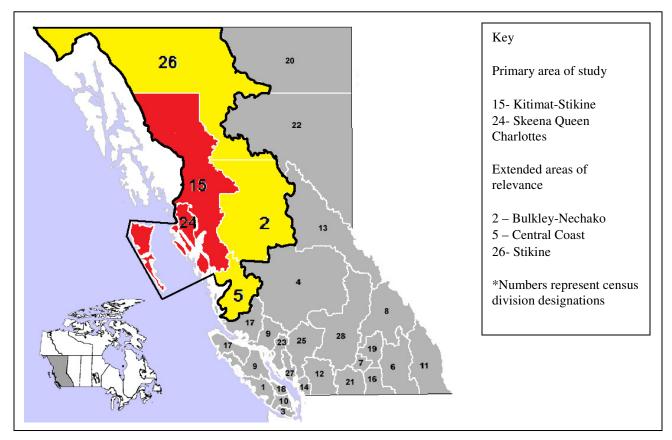
For the purposes of this study, the northwest comprises an area surrounding the communities of Terrace, Prince Rupert, and Kitimat. Terrace and Prince Rupert are among the three communities from which data was collected for the final analysis in this study, with the third being the First Nations community of Lax Kw'alaams. The Skeena-Queen Charlottes and Kitimat-Stikine census divisions (or regional districts) form the area at the centre of this study (see units 15 and 24 in Figure 2). These districts include the major population centres mentioned previously, while excluding other larger communities in the northwest quadrant of the province. There are numerous smaller towns in the area, including both First Nation and settler communities.

In many parts of this study, a broader northwest perspective is utilized that includes references to areas that extend beyond the Skeena-Queen Charlottes and Kitimat-Stikine districts from which statistical data is drawn. These districts are host to

¹⁸ Economic data for these two districts are often combined into a single area referred to as the North Coast, in order to enable adequate comparison with the rest of the province (British Columbia, 2013). Within this study, analysis of Statistics Canada data follows the same pattern. From a forestry perspective, the area encompasses the current Kalum forest district and a portion of the Skeena-Stikine forest district (also covering the major population centres mentioned previously). These areas overlap with the former Prince Rupert Forest district. Changes in forest district boundaries have occurred several times in the past, but dates and specific boundaries of theses changes are not readily available. However, approximation of these areas is sufficient for this study, as the focus is on a general area that is acknowledged to overlap with a multitude of geographic, political, cultural, and economic boundaries. Politically, the area encompasses the North Coast and Skeena provincial electoral areas, and a portion of the Skeena-Bulkley Valley federal electoral district. First Nations in the region include the Tsimshian, Nisga'a, Tahltan, Haida, and Haisla, as well as other nations possessing overlapping traditional territories in the area.

industrial activities and patterns of social organization that interconnect with those in the selected census districts, and their boundaries overlap with many of the other political and economic areas referred to in the literature. Relevant neighbouring areas include the Bulkley-Nechako, Central Coast, and Stikine census divisions (see units 2, 5, and 26 in Figure 1). A more detailed description of the focus area will be provided later, when examining the primary data utilized in this study.

Figure 2: Study Area



(British Columbia Census Divisions, 2013)

Data Source

The primary source of data is a research project that was titled "Climate Change Adaptation Planning for Northwest Skeena Communities." (CCAPNSC) The project was funded by the Future Forest Ecosystem Science Council (FFESC), which includes representation from the Ministry of Forests Lands and Natural Resource Operations (FLNRO), Ministry of the Environment, University of British Columbia (UBC), and the

University of Northern British Columbia (UNBC).¹⁹ The FFESC was assembled to support research on forest and range management within the context of a changing climate.

The CCAPNSC was led by Coast Tsimshian Resources (CTR) and Brinkman and Associates Reforestation Ltd.²⁰ The project was staffed by an interdisciplinary team of researchers and advisors that included social science researchers, environmental organizations, provincial and federal ministry representatives, and experts in biophysical modelling of forest ecosystems and climate change.²¹ The goal of the project was to combine the latest scientific modelling techniques with expertise in sociology and resource management, and to combine these pools of knowledge in a community engagement process aimed at supporting adaptive response capacity in the northwest. The geographic boundaries of the modelling projects, and the general reference area for the project, closely approximate the study area identified in this thesis (see Appendix 1, Figure 18).

Social science researchers from the University of British Columbia were responsible for engaging community leaders and resource users from each of the participating communities, and examining their collective understandings of environmental change and their opinions related to the future of their communities and their ability to adapt to future challenges. The social science team was headed by Dr. Ralph Matthews, and included myself along with several other graduate students. The social science team worked in cooperation with a committee including CTR and Brinkman representatives and other members of the interdisciplinary team to develop the survey tools used in this study.

¹⁹ Funding for the FFESC is provided through FLNRO, in the form of grants to support research on forest and range management adaptations to climate change.

²⁰ Coast Tsimshian Resources is a business owned by the Lax Kw'alaams First Nation. Brinkman and Associates is a contractor that has been hired by Coast Tsimshian Resources to assist in the management of their northwest forest licenses. The community of Lax Kw'alaams is one of the three communities included in my study.

²¹Participants included the University of British Columbia, Coast Tsimshian Resources, Ecole Polytechnique Fédérale de Lausanne, University of Victoria, BC Ministry of Environment, Environment Canada, World Wildlife Fund, ESSA Technologies Ltd., Cortex Consultants Ltd., Brinkman Forest Ltd., and BC Ministry of Forests, Lands and Natural Resource Operations.

Study Communities and Sampling Method

The selected communities provide input from a selected segment of the northwest region, and are oriented towards centres of regional decision-making and resource management. The communities of Terrace and Prince Rupert were selected for the study as they form the primary centres of political and economic activity in the region. They comprise the two largest population centres in the northwest, and represent nexus points for regional resource management and the intersection of different levels of state and private sector activity. Terrace provides a distinctly forestry-centric viewpoint due to its historic role in timber harvesting and wood milling. For Terrace, the decline of forestry represents a dynamic shift in identity, and provides insight to a community undergoing a fundamental shift in both economy and regional function. In this respect, Terrace played a central role in the CCAPNSC study, functioning as ground zero for the transition between the age of forestry and the future. Terrace thus serves as the reference community in my own study, and the starting point from which I branch out into my comparisons of the other study communities.

Prince Rupert has also borne strong bonds with forestry as the home to pulp and wood milling industries. However, it also has a strong history in commercial fisheries, and has played a central role in connecting the northwest with global markets as a shipping port and nexus point for northern transportation. Prince Rupert thus provides the perspective of a community adapting to new industrial opportunities, while retaining its fundamental role in the regional economy.

Lax Kw'alaams was included in the study due to their direct relationship with the industrial representative in the CCAPNSC project (CTR), and the central role that Lax Kw'alaams plays in the regional forestry sector as a major license-holder. Most importantly, Lax Kw'alaams provides insight to northwest development from a First Nations perspective, and acts as a focal point in the assertion of Aboriginal rights and title throughout the northwest region. While the inclusion of Lax Kw'alaams provides input from a smaller community, it is acknowledged that there are many other small

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²² Throughout this study, the study communities are generally referred to and examined in the order of Terrace, Prince Rupert, and Lax Kw'alaams. This ordering reflects the sequence in which the interviews began in each community (with overlap between them).

communities (both settler and First Nations) in the region that are not represented in this study. Efforts were made to include additional First Nations in the study, but negotiations could not be completed prior to the completion of the project.

Prior to beginning the research, permission was sought from the Mayors of Prince Rupert and Terrace, as the work would inevitably involve members of city staff and elected officials. In Lax Kw'alaams, permission was sought from both the elected Chief and Council and from the community Elders. This practice is consistent with ensuring that the research is conducted with respect to both formal and traditional lines of authority and knowledge within the respective communities.

The researchers directing the CCAPNSC project determined that understanding the way in which the study communities adapt to climate change required going beyond the public sphere of knowledge, and examining the inner workings of these communities and the sources of influence that shape their relationships with the rest of the world. The social science team of the CCAPNSC was thus charged with gathering data from community leaders and resource managers in the three study communities.

The respondents targeted for the social science study for CCAPNSC project represent the essential acting and directing leaders of the communities, and they are believed to possess a higher level of knowledge about the study topics than the general population. These respondents are not representative of the general public, but instead comprise a highly influential group that provide a view to the interaction of their respective communities with industry, government, and other groups involved in the management of natural resources. These respondents play a central role in establishing the direction of their communities as they adapt to changing economic, environmental, and social conditions, and they have an important influence on the articulation of their respective communities' identities. Throughout the analytical sections of this study, I refer to the respondents collectively as "local leaders". Although many of them are more directly engaged with resource management activities, and others deal more directly with civic leadership activities, the collective term "local leaders" is representative of their role in shaping the direction of the community in terms of its process of growth and relationship with resource development activities.

The CCAPNSC project was funded by the Future Forest Ecosystems Science Council, and thus held a focus on forestry-related activities, particularly within the work of the other project members which covered topics such as changes in tree species and land-based impacts of forestry. However, the social science component of the project cast a wider net, and gathered input from local leaders involved in many non-forestry related fields, including the fishing industry, recreation and tourism, education, and service industries. Although this study revolves around forestry, it draws on input from a diverse range of activities.

Between the fall of 2010 and the summer of 2011, interviews were conducted with a total of 150 respondents, with 50 interviews completed in each community. There was no complete sampling frame for the target population, and no available list of contact information for all potential respondents. In order to adapt to these circumstances, the project utilized a modified snowball sampling methodology (Goodman, 1961) with multiple starting points. Initial starting points included individuals that were believed to be closest to the nexus of resource development and community activities, including Town Councillors, Band Council Members, and senior managers in local government agencies and NGOs. The use of multiple starting points helped reduce the probability that one individual would have an undue influence on the shape of the final sample, and to ensure access to pre-determined key areas of activity.²³ Individuals were selected based on their membership in various central political, economic, and resource management organizations. During the course of each interview, respondents were asked to identify other individuals who would be able to provide insightful information on the topics discussed. Each identified name was not automatically included for interviews. Instead, a list of names was accumulated, and respondents were selected based upon their name or their organization being identified by multiple respondents, and by their organization or personal occupation providing a new branch to the network covered by the sample. 24 As the research progressed, the

²³ This included City Council and Band Council, key government office, ENGOs, and major employers in the resource sector.

²⁴ Once a potential respondent was identified, they were sent a letter that described the research project along with a permission form that outlined the steps taken to protect the identities of the respondents.

names identified in interviews were continually tracked, in order to verify that appropriate respondents were selected for the interviews. As new names were no longer identified, it was determined that new starting points were needed. When new starting points failed to produce suitable new respondents, it was determined that satisfactory coverage of the target population had occurred.

This sampling method bore similarity to the "reputational" method employed by Saunders in his study of urban politics (1979). Saunders' approach was found to be effective in identifying individuals that were deemed to hold power within specific areas of political activity. In the current study, the target was the arena of resource management and civic leadership, and the objective was to penetrate both formal and informal layers of leadership and knowledge, particularly for the purpose of locating individuals that possessed informed perspectives that spanned a period of time that would allow them to provide input on changes in the region. This sampling method was also particularly helpful in the First Nations community, which lacked the same formal economic and bureaucratic structures of the settler communities, and where traditional lines of authority and knowledge were equally important to those in the political and industrial spheres.

A potential drawback of the snowball sampling method is that it follows patterns of social, professional, and occupational networks. It is possible that influential and knowledgeable individuals occupying isolated positions in local networks are excluded from selection when using this sampling strategy. However, the sampling was conducted based on the premise that influential leadership and resource management positions are both attached to other agencies, and known within the networks that were accessed within the sampling process. There was also a degree of qualitative judgement exercised in the selection process, and respondents often provided additional information that explained why specific individuals should be included in the sample.²⁵ Therefore, even individuals that were identified as a suitable candidate by only one other respondent

After delivery of the letters, potential respondents were contacted by telephone and arrangements were made for interviews at a location convenient to and comfortable for them.

²⁵ Examples of such qualifying information included citing the breadth of experience of a potential respondent, their direct involvement in key resource development projects, and (in the case of Elders) their length of time in the community.

stood a chance of being included in the sample, if they were determined to hold a position of significant importance and insight for the research. Nonetheless, the potential exclusion of some isolated individuals is acknowledged as a limitation.

Although no clear response rate was recorded during the sampling process, only a very small number of selected people declined to participate in the research, or failed to respond to the written notices and telephone calls made to solicit their participation.²⁶ The high level of response in the sampling process was attributed to the pre-selection of respondents with involvement and interest in the research topic.

The pool of respondents interviewed in Lax Kw'alaams differed somewhat from the respondents in the settler communities. Local leadership in Lax Kw'alaams is provided by a Chief and 11 councillors elected under the *Indian Act*, who form various subcommittees to deal with portfolios such as economic development. The traditional structure of leadership of the Lax Kw'alaams First Nations includes the heads of four clans that are distinguished by lineage that determines the standing of respective families and their position within the clan (Halpin and Seguin, 1990).²⁷ As with many First Nations, Elders hold an elevated status within the community, and are active in various roles of consultation and representation. Other informal groups include a group of mothers known as the "Grandmas", who are considered important providers of traditional knowledge and community insight. These various levels of traditional and formal bureaucratic lines of authority and leadership contrast sharply with the political and economic structures found in the larger settler communities included in this study.

The comparative lack of business development in Lax Kw'alaams provided a smaller pool of entrepreneurs and business owners to include within the sampling frame. The community also lacks the multiple levels of municipal, regional, provincial, and federal government that are located in the Prince Rupert and Terrace, and does not host the same types of labour and business representation groups (such as unions and Chambers of Commerce). With a smaller infrastructure and local industrial base, there

²⁷ Both the Tsimshian and Nisga'a are divided among four clans that include the Laxgiik (Eagle), Ginhada (Raven), Laxgibuu (Wolf), and Gispwudha (killer whale).

²⁶ Approximately fifteen people declined to participate throughout the three study communities. A greater number of people were unable to be reached through mail, telephone, or electronic means. This number is estimated at approximately thirty people throughout the three study communities. Based on these estimates, the response rate is estimated to have been close to 75%.

are also fewer persons in Lax Kw'alaams directly involved in the formal administration of community planning and industrial development.

More importantly for this study, the types of knowledge considered to be most important in Lax Kw'alaams in terms of resource management do not necessarily parallel the types of knowledge that are deferred to in the settler communities. Traditional ecological knowledge (TEK) plays an important role in guiding First Nations and other indigenous peoples in shaping their relationship with the environment. (Berkes, 1993, 1999). Berkes (2000, p.1252) defines TEK as a "cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment." TEK is also recognized as including empirical observations that support survival, detailed understandings of ecological processes and natural resource management principles, understandings of socio-economic organization necessary for community functions, and a distinct worldview or "cosmovision" that guides the broader body of knowledge (Berkes, 1999). TEK is also recognized by non-First Nations scholars as holding value comparable to western scientific approaches to the study of natural resources, and as holding the potential to assist western scientific perspectives in understanding humannature interactions (Huntington, 2000; Turner et al., 2000).

In order to recognize the value of TEK, and the different lines of authority and leadership that guide resource management and community development in Lax Kw'alaams, the sampling frame was expanded to include additional groups that may not be as important in settler communities. This included Elders, community social groups, and heads of traditional families (or houses) that play a key role in the community.

The inclusion of community "Elders" in the sampling frame was not limited to Lax Kw'alaams. In both Terrace and Prince Rupert, several respondents were included based on their status as "elder statespersons" of forestry and resource industries. These individuals included people that remained involved in various facets of resource management and civic leadership as volunteers, historians, or consultants. The sampling process thus included consideration of both professional and cultural dimensions of community leadership in both the settler and First Nation communities.

Community leadership institutions included in the sampling strategy included a variety of different agencies, including groups affiliated with health, education, recreation, and community support services. However, there was a greater emphasis placed upon agencies dealing with resource management, political representation, and economic development. Despite the wide array of agencies and individuals considered for inclusion in the sampling strategy, the sample ultimately included more men than women in all of the study communities. This included 78 percent, 72 percent, and 64 percent male respondents in Terrace, Prince Rupert, and Lax Kw'alaams, respectively (see Appendix 2). This ratio is viewed as being reflective of the gender division within the community and resource-management institutions targeted in this study, rather than a product of sampling bias.²⁸ It is important to acknowledge that a different sampling strategy that focuses on a different set of community institutions may have obtained a different set of respondents, and included a higher percentage of women. The results in this study therefore hold limited generalization to the broader community, and may not reflect the ratio of men and women that are active in leadership and resourcemanagement positions in other communities.

The sampling method ultimately provided a pool of respondents that were believed by the researchers and by the respondents to be among those most directly involved in the civic leadership of their community and knowledgeable of the natural resources and resource development activities in the region. A summary of the respondents' key characteristics is provided in Appendix 2.

Survey Instrument

The social science research component of the CCAPNSC revolved around a survey that was designed in a cooperative effort between the UBC sociology team, headed by Dr. Ralph Matthews, and Brinkman and Associates led by Mr. Dirk Brinkman. The survey incorporated a series of numerical scales (referred to within the project as a sustainability matrix), combined with a series of open and close-ended questions delivered through in-person interviews performed in the communities. The sustainability

²⁸ For example, at the time of the study, 19 of 27 (70 percent) positions in the local municipal governments and band council were occupied by men (including Mayors, Chief, and Councillors). In comparison, 71 percent of the respondents sampled from the three study communities were male.

matrix was based on a concept introduced by Dirk Brinkman, drawn from work he had done with researchers studying deforestation and indigenous peoples in Amazonas. The design of the questions included in the interview schedule was based on work conducted by Matthews and Sydneysmith (2010a; 2010b) on climate change and adaptive capacity community in northern Canadian communities. The interview schedule was reviewed and revised multiple times with members of the CCAPNSC team, and tested in trial runs with respondents approximating the background and positions of those projected to be included in the research.

The matrix incorporated a set of colour-coded scales upon which respondents were asked to indicate the respective importance and condition of various resources. The matrix included three topic areas, including natural or environmental resources, social or community-level resources, and drivers of future change in the region. Environmental resources included a set of selected natural resources and features of the region that were agreed upon by the contributing members of the CCAPNSC project, with validation provided by those familiar with the region, its history, and most economically and socially important resources.²⁹ Their collective expertise was utilized to reach an agreement on a set of environmental resources that were deemed to reflect a set of items that bore importance to each of the study communities.

Community resources included various civic and social functions, areas of activity, and community features. As with the environmental resources, the CCAPNSC members worked together to finalize a list of items that reflect important building blocks of community development, and resources that are tied to the well-being of each of the study communities. The environmental and community level resources included the items identified in Table 1.³⁰

²⁹ The CCAPNSC project included numerous members with extensive experience working in the northwest region and conducting both social science and environmental research in the study communities.

³⁰ Later in this section, I explain the methodology utilized to collect data on community and environmental resources not included in the original list that was created by the CCAPNSC.

Respondents were asked to identify the current condition of both environmental and community level resources on a scale of one to ten, with 'one' representing "poor condition" or a vulnerable resource, and 'ten' representing good condition or a flourishing resource. However, instead of numbers, a colour-coded scale was utilized that moved from red to green, with red indicating critical vulnerability and green representing flourishing (see Figure 3).

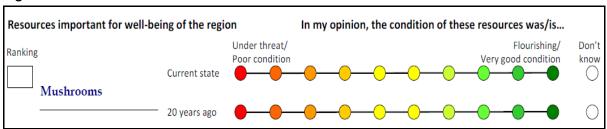
Respondents were asked, on a second parallel line, to indicate what they believed the condition of the resource to be approximately 20 years ago, or in the year 1990. This temporal context

Table 1: Sustainability Matrix Items

Environmental Resources	
Salmon	
Drinking water	
Oolichan ³¹	
Rivers and waterways	
Animals and wild game	
Forest health and diversity	
Berries	
Timber supply	
Mushrooms	
Community Resources	
Local government and	city administration
Environmental protection	
Small business development	
Local infrastructure	
Forest industry	
Natural resource trade and exporting	
Outdoor recreation	
Tourism	
Access to education	
Heritage and local culture	

provided a desirable fit for this thesis, as 1990 comprises a key date that marks the division between the era of forestry discussed in *Chapter Three* and the era of change that followed.

Figure 3: Matrix Format for Resources



³¹ Oolichan (also spelled "eulachon") are small sardine like fish, valued as a source of food, oil, and feed fish for larger species.

³² During the development of the methodology, it was acknowledged that there may be limitations for some respondents in their ability to provide assessments from 20 years ago. Factors influencing the ability to do so include the age of the respondent, amount of time spent in the area, and inaccurate recall. However, it was also determined that the respondents to be included in the research would comprise a select set of the population that hold a more detailed knowledge of the subject area and of the community than most people would possess. They would ostensibly have access to more detailed data on such topics, and be directly involved in the management, monitoring, or evaluation of the items addressed in a temporal context within the survey.

from past work by Mr. Dirk Brinkman, innovations by the social science team, and the desire to ensure that the scales were relevant within the cultural context of both settler and First Nations populations. Respondents were also asked to assign each resource a numerical ranking to indicate its respective importance to the well-being of the region, with 'one' representing the most important resource. This created a hierarchy of resources for both environmental and social dimensions of each community, and for the overall region of the study.³³

Table 2: Drivers of Change

Natural resource policies Global economy Climate change Transportation Availability of Natural Resources People moving out of the community New people moving into the community First Nations Treaty Settlements/

Aboriginal Rights and Title

While the rating and ranking of various resources provided a past and present view of the study communities, the "drivers of change" provided a view of what the respondents expected in the future for their respective communities. Drivers of future changes included various phenomena and areas of activity that CCAPNSC members deemed to be relevant to the study of adaptation in resource-dependent communities.³⁴ These included the items listed in Table 2.

The selection of colours instead of numbers was based on a combination of input

Respondents were first asked to rate the drivers of change on a scale of 'one' to 'nine', based on the strength of their influence on the future of the region, with 'one' representing no influence and 'nine' representing a powerful influence. 35 Instead of the "red-to-green, critical-to-flourishing" continuum scale utilized for resources, the strength of influence was measured upon a graduated "power-metre" scale that progressed from transparent to bright yellow (see Figure 4).³⁶

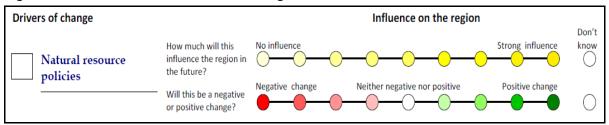
³³ The environmental and community resources were rated and ranked separately, with a different matrix sheet provided for each set of resources.

³⁴ As with the environmental and community resources, members of the CCAPNSC project consulted with the social science team to assist in establishing a set of items that were believed to represent the most important factors shaping the future of the region.

³⁵ A nine-point scales was used instead of a ten-point scale, in order to provide a neutral midpoint with a score of "5".

³⁶ The underlying concept here was that of a "power bar" that increased in power as it increased in colour saturation.

Figure 4: Matrix Format for Drivers of Change



Second, respondents were asked to rate each driver on the familiar red-to-green scale to indicate the nature of the influence as either positive or negative, with 'red indicating the most negative effect and 'green' indicating the most positive effect. As with the environmental and community resources, respondents were also asked to rank the drivers of change numerically to indicate their respective levels of importance in determining the future of the region.

With both the drivers of change and the environmental and community resources, respondents were permitted to remove items from, or add items to, the matrix, based on their opinions regarding the most important resources or drivers of change. This process rarely involved removal of items, but did provide a list of additional items that were identified as being important in each community.

This process resulted in the alteration of one item in the list of drivers of change. Although consultations were held prior to the research project, Lax Kw'alaams members expressed a wish midway through the project for one of the items on the drivers of change to be changed. The item "First Nations Treaty Settlements" was replaced with the item "Aboriginal rights and Title" in matrices completed with Lax Kw'alaams respondents. Key representatives of Lax Kw'alaams asserted that the change should be made to best reflect their beliefs regarding which drivers of change are most important. Therefore, measurements of this item cannot be directly compared between Lax Kw'alaams and the other participating communities, and analysis of qualitative data must be used for making direct comparisons between Lax Kw'alaams and the other

³⁷ Completion of surveys in Terrace and Prince Rupert was already partially complete by the time the alteration was made for the Lax Kw'alaams respondents. Therefore, it was not possible to include both items (Treaty Settlements and Rights and Title) on the matrices. Secondly, it was believed that doing so may cause confusion for some respondents. The request was accommodated based on respect for the participating community, despite the challenge it presented to the analysis of data. As noted earlier, the Lax Kw'alaams First Nation remains at stage two of the treaty process, and has secured the majority of their benefits agreement through the assertion of their rights and title in the northwest region.

study communities on matrix items related to Aboriginal rights and title and treaty settlements.

Interviews

The matrix was completed in conjunction with a semi-structured interview that asked questions related to the respondent's own activities, the activities of their organization, assessments of social and environmental issues, and the ability of the community and their organization to respond to change. Like the matrix, the interview schedule maintained a focus on past, current, and future conditions in the community and the region, grounding the research within the context of a changing community and environment.

The interviews were organized into six areas of inquiry. In section one, respondent were asked to provide information related to their personal characteristics, history in the community, community and civic involvement, personal and household reliance upon natural resources, and their professional and personal affiliations.

Section two focused on a cascading series of questions regarding the key issues related to the community, the environment or natural resources, and forestry. Respondents were first asked to identify the three most important issues related to the community and its future. Environmental or forestry related issues identified at this stage were carried forward and entered as responses in the following questions related to environment and forestry. If no environmental or natural resource issues were identified among the most important community issues, respondents were directly asked to identify the three most important environmental issues in the community. Forestry issues identified at this point were carried forward entered as in the following question about forestry. If respondents did not yet identify specific forestry issues for the community, they were asked to do so and the answers were entered into the final part of the question series. The cascading question structure produced a hierarchical list of issues that civic leaders, resource managers, and resource users perceived as being important for their communities. Respondents were also asked, following the full series of questions, if they perceived any relationship between the issues and climate change.

Section three of the interview examined respondents' use of, and perceptions of, various sources of information on environmental and natural resources issues. The

fourth section of the interview examined respondents' roles within their various organizations, the way in which their organizations functioned, and their capacity for dealing with challenges related to environmental changes. Section five explored relationships between respondents (and their organizations) and various other organizations and groups both within and outside of their community. This included reference to ENGOs, First Nations, and various levels of government. The final section of the interview examined respondents' perceptions of the general community, and its capacity for coping with environmental change, and their opinions regarding the forces that are likely to influence the future of their communities. A complete set of interview questions is provided in Appendix 3.

The various sections of the interview were staged intermittently with separate sections of the matrix, with the arrangement designed to prevent queuing respondents towards assuming a definitive climate change orientation in their responses, and to provide the opportunity to follow up on rated and ranked information from the matrix with more detail in the semi-structured questions. Interviews were recorded on a digital device, and transcribed to enable entry and analysis in Nvivo qualitative software.

Interactive Methodology and Refinements

Four different interviewers were involved in the collection of data, and extensive measures were taken to protect inter-rater reliability and to ensure consistency in delivery of the interview.³⁸ The research was conducted in a variety of physical and social settings, and dealt with a wide array of complex information, that in some cases pertained to contentious issues and personal or cultural beliefs about the environment and the community. The focus on civic leaders, research managers, and research users meant that many respondents would occupy central roles in the community and would require assurances that their answers would not be shared with other parties. I played a central role in the training of the social science research team, and was directly involved in the refinement of the interview delivery practices. I personally completed nearly 50

³⁸ One additional researcher (the head of the sociology team) was involved in the delivery of a single interview, in order to verify that the established routine and schedule satisfied the objectives that were established for the sociology team, and to better acquaint himself with the subtleties of the project.

percent of the interviews in the project, and had direct access to the range of responses provided in each community.

New interviewers were provided with sample transcripts (written and recorded) to review as part of their training and preparation of the research. Prior to proceeding to the field settings, the researchers would meet with the team leader (myself), and review the interview schedule question-by-question in order to discuss appropriate ways of responding to questions from the respondents and defining particular concepts.³⁹ The four participating interviewers also met several times as a group at the beginning of the research project to discuss appropriate ways of managing interviews, responding to questions, and entering the data. This process covered a wide array of interview methodology topics, that although numerous and subtle, are seen as important considerations in gaining candid and informative information from the respondents. Most importantly, this process of interviewer-training was aimed at enhancing inter-rater reliability. The training focused on ensuring that the different interviewers asked the questions in the same manner, and used the same systems for recording answers. Researchers were also coached in the use of appropriate body language, and management of the research setting in order to ensure the comfort and privacy of respondents, and to facilitate candid responses.

Respondents were provided with the choice of either filling in the matrix themselves, or having the researcher assist them in selecting appropriate response categories to ensure that the recorded data matched their intended answers. In the case of respondents self-completing the matrix, researchers were instructed to maintain intermittent broken eye-contact, and to only monitor the general process of response to ensure correct interpretation of written directions by the respondent.

To assist with proper completion of the matrix, the researchers guided the respondent through their first response, and paraphrased their indicated answer to ensure that they understood the response categories and scales being utilized, and had selected

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³⁹ I led a series of training seminars with all of the participating researchers, in which we compared modelled our interpersonal methodology, reviewed sample interview recordings, and provided feedback on each other's practices.

the answer they desire. 40 Respondents were then prompted to proceed at their own pace, with only intermittent attention from the researcher. Researchers maintained only broken eye contact while the respondent was completing the matrix, to afford a feeling of privacy as they provided their answers. Researchers were also coached in regard to appropriate positioning of chairs, open versus closed body language, and selection of appropriate attire. Respondents were asked for permission to use a recording device for the interviews, but researchers were instructed to draw as little attention as possible to the device to help preserve the sense of privacy that was promised to the respondents in the research. 41

Data Analysis and Coding

The interviews provided a mixture of qualitative and quantitative data, with the former obtained through the semi-structured interview questions and the latter obtained primarily from the matrix questions. This study draws upon a mixture of these two forms of data, using each according to its particular merits and limitations. The matrix data is utilized to identify broad trends and patterns of belief among the local leaders in each study community. The interview data is used to provide finer detail and examples of the trends indicated by the matrix data, and to examine issues and relationships that go beyond the more clearly delineated boundaries of the matrix questions. For example, the activity of ENGOs was not addressed in any matrix questions. However, the subject of ENGO activity in the community arose frequently in the interviews when respondents were asked about other groups in the community that they work with (Question 51), or groups that they consult in order to obtain knowledge regarding environmental issues (Question 39).⁴²

The matrix data was entered into an SPSS database for statistical analysis. The resultant data produced hierarchical assessments of the resources considered most

⁴⁰ For example, if a respondent selected the far green circle to represent the current state of mushrooms, the researcher would verbally confirm that the respondent intended to indicate that he or she believes mushrooms are currently in a flourishing or very good condition.

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⁴¹ For example, researchers were instructed to place the recorder on one of the interview documents. This way, in the case of a quiet speaker, the interviewer could simply move the paper thus better positioning the recorder, instead of drawing attention to the recorder by handling it directly.

⁴² A complete list of the interview questions is provided in Appendix 3

important to the community, assessments of changes in the condition of the resource, and ratings of the social and environmental forces that are seen as being most important in shaping the future of the region. The ratings of the conditions of resources are treated as interval level data when examined as part of a Likert scale. The rankings of resources and drivers of change are treated as ordinal level variables. I will first explain the considerations guiding the treatment of the ranking data, and then explain the considerations guiding the treatment of the rating data.

The rankings of environmental and community resources provide a means of measuring the emphasis that the study communities place on specific natural resources and different aspects of industrial and community activity as they rebuild their economies. As indicated earlier, drivers of change also received rankings in the matrix. However, I will refer to the resource rankings for the purposes of this explanation. The designation of the rankings as ordinal level variables is based on the conceptual properties of the rankings, examination of the resultant data, and consideration of demands associated with the statistical methods used to analyze the data. Recognizing Steven's theory on the scale of measurements (1946), the rankings can be viewed as ordinal variables because it is not possible to definitively measure the distance between the rankings, or to assert that the distance between the rankings are all equal. The ordering of the rankings does provide a clear progression from resources considered more important to resources considered less important, but measuring the distance between rankings and determining if the differences between rankings at one level are the same as the differences at another is not possible.⁴³

Some researchers contend that Likert-type items, such as the individual rankings of resources used in this study, can be used as interval level variables despite questions regarding the specific measurement of distance between response categories. Clason and Dormody (1994) observe that singular Likert-type items are commonly treated as interval level data and analyzed using parametric statistical methods in social science

⁴³ For example, it is not possible to determine if the difference between the first and second most importance resource is the same as the difference between the ninth and tenth most important resource. Similar considerations apply to the drivers of change, which are ranked according to their importance in determining the future of the region.

research.⁴⁴ However, others argue that such methods are not acceptable when the variable does not produce a normal distribution of values, and when definitive (lower or higher) boundaries produce accumulations of responses at either end of the scale (Clason and Dormody, 1994; Borgatta and Bohrnstedt, 1980).⁴⁵

Preliminary analysis of the ranking of environmental protection and its relationship with other key variables indicated that the data would not meet the assumptions necessary for regression analysis and other similar tests. These limitations were partly due to the small sample size obtained within the community ($N \le 50$), and partly due to the failure to identify linear relationships between environmental protection and selected independent variables. ⁴⁶ Guided by the caveats observed in the literature, I ultimately decided to treat the ranking data as ordinal data because the ranking of environmental protection plays a key role in this study, and because initial parametric testing presented problems in meeting assumptions for regression analysis.

The primary objective in this study is to examine the relationships between the importance of environmental protection and other variables. The use of more sophisticated forms of statistical analysis, such as ordinal regression, was ruled out due to the limited sample size and the associated difficult in obtaining highly accurate results in multivariate analysis. Therefore, I based my analysis upon the use of more simplistic, but more applicable, statistical methods, while relying upon the interview data and qualitative coding to provide further detail on the general patterns identified in the matrix data. My main focus involves measurements of association between the importance of environmental protection, and other variables related to community resources, environmental resources, and drivers of change. Exploration of results obtained using various statistics (including Pearson's r, Kendall's tau, and Spearman's rho) yielded similar results for all measures of association involving environmental

⁴⁴ The authors conducted a survey of journal articles, and found that such approaches were evident in 34% of the 188 sampled articles (1994, p.35).

⁴⁵ Typically, responses were clustered at the high end of the scale, where high rankings were indicated by a low numerical indicator ('1' represents the highest rank). Responses tended to be distributed with lower concentrations at the low end of the scale, as respondents were able to add items to the rankings, thus increasing the total number of rankings provided.

⁴⁶ Fifty respondents were interviewed in each community. However, due to lack of complete data for every respondent, measurements occasionally yielded an "N" less than 50.

⁴⁷ As indicated earlier, linear regression was ruled out due to the inability to establish linear relationships between the independent variables and the dependent variable, and other violations of key assumptions.

protection. Ultimately, Spearman's rho was selected as the appropriate measure of association. I selected this statistic as it is suited for analysis of ordinal level data, such as rankings, that are close to interval level data, but which lack a high level of clarity in relation to the distance between the response categories. Spearman's is also appropriate for data in which "ties" in values are unlikely, and for the analysis of relationships between ordinal and interval level data variables. It is also particularly useful for my analysis as the use of rankings instead of values in the calculation of Spearman's rho renders the statistic less vulnerable than Pearson's r to the influence of outliers. This consideration allows for the inclusion of particularly strong viewpoints in the analysis, without the risk of them unduly influencing the outcome. Moreover, calculation of Spearman's rho does not rely upon the use of variables that approximate a normal distribution of values. This consideration is helpful in my application for cases in which a large number of respondents share a similar opinion, or place a similar level of importance on a particular resource.

As indicated earlier, the ratings of resource conditions are treated as interval level variables in this study. This approach is taken specifically for the analysis of changes in the perceived condition of different environmental resources, and to create a Likert-scale that represents perceptions of localized environmental conditions based on an index of perceived conditions for multiple resources. In comparison with the ranking data, the underlying concept for the resource ratings is more clearly articulated by the survey instrument. Ratings are assigned on a clear numerical scale of '1' to '10' that is accompanied by a colour-coded "slider" bar, with clear definitions for the end points of the scale.⁴⁹

While the number of response categories varied with the number of items to rank, the rating categories adhered to a strict scale of '1' to '10'. Although the ideal number of response categories for obtaining interval level data from Likert-items remains subject to debate, the use of 10 response categories has been found to support

⁴⁸ Spearman's rho can be used to measure association between an interval level variable and an ordinal variable. "Ties" are unlikely to occur, due to the large number of response categories in the variables. In the case of correlations between different community-resource rankings, ties are not possible due to the exclusive application of a single unique ranking to each resource.

⁴⁹ In contrast, rankings are assigned according to a fill-in box, without any other visual or conceptual guides by which to guide the response.

high levels of reliability and validity in social science research, and produces high levels of approval from respondents based on the ease of comprehension and completion (Preston and Colman, 2000). Sisson and Stocker (1989) contend that calculation of means and use of t-tests is acceptable for Likert items. In this study, I use both forms of measurement in order to analyze perceived difference in the condition of natural resources.⁵⁰

I also utilize Likert-items as interval level data for measuring the perceived conditions of environmental and community level resources, and for measuring the perceived change in these resources as perceived by the respondents. This includes the calculation of means, and the use of t-tests to determine if the average level of change perceived in individual resources is statistically significant. To obtain data on perceived changes in individual resources within each study community and for the region as a whole, I calculated means for the current and past conditions of the resource, and measured the difference between the means using a paired sample t-test in order to determine if the perceived difference is statistically significant.

Together, the perceptions of environmental conditions, changes in key resources, and rankings of drivers of future change provide a basis upon which to examine the concerns that local leaders hold about the future of their communities and the health of the environment. I utilize measures of association to determine the relationship between these variables and the importance that is based on environmental protection. However, I also acknowledge that the response to environmental issues is a complex social process that is shaped by relationships with the institutions involved in the initial production of, and corresponding systems of mitigating, risks to the environment. The selection of variables available in study and the characteristics of the data set being utilized make it impractical to use quantitative methods to analyze the factors that shape the relationship between perceived threats to the natural resource base and the importance of environmental protection. Therefore, additional data (from beyond the matrix) is required in order to explore the more complex relationships between the way northwest communities perceive environmental protection, and the forms of governance that

⁵⁰ I also provide means for ranking data, but include medians to ensure that the ordinal nature of the data is also represented.

enable and constrain control of the resource base. My analysis of these issues, and the data used for my fourth research question, is thus based primarily upon a qualitative analysis of my study communities' interactions with the forms of governance that guide resource management in the northwest region, and their experience in working with various agencies in responding to environmental issues.⁵¹

Qualitative Analysis

My work represents a departure from the original purpose of the CCAPNSC project, which focused more directly on forestry activities, forest ecosystems, and adaptation to climate change impacts. I was able to utilize the raw matrix data from the project to support several parts of my analysis. I was also able to utilize a portion of the qualitative data that was originally coded for the purpose of the CCAPNSC project. However, it was necessary to conduct a separate coding process to obtain information that provided a better fit for my analysis of the study communities.

Following transcription, interviews were entered and coded using Nvivo9 qualitative software. The initial coding process was completed by a single researcher, which supported a high level of reliability in the coding outcomes. Specific questions from the interview were coded by grouping responses into categories that formed distinct ways of answering specific questions. This approach provided the ability to conduct basic statistical analyses on broad areas of inquiry, such as identification of the most important issues in the community. The initial substantive and thematic coding process (and the specific formulation of the actual questions) was designed to satisfy the needs of a series of community reports produced for the CCAPNSC project. The substantive coding was directly applicable for this study, as it organized the interview data into clearly delineated categories of response.⁵² However, much of the original thematic coding focused on issues that are not central to this work. It was therefore

community were substantively coded (categorized) into categories including environmental issues, economic issues, and social issues.

My fourth research question focuses on the way in which new forms of environmental governance (including environmentalism and Aboriginal rights) affect the response to environmental problems.
 For example, answers to questions that sought to identify the most important issues facing the

necessary to complete a second wave of both substantive and thematic coding to derive an original set of data that I could use to analyze my research questions.

In this study, I set out to shed light on the roles that environmentalism and Aboriginal rights play in northwest communities as they move from the foundations of their forestry based histories, through the challenges of the past two decades of recession, and into a future of social, environmental, and industrial change. Specifically, I have sought to examine the way these communities are able to reconcile the competing pressures of influential social movements with the emerging economic structure that is developing around them.

The impact that new resource development will have on these communities is complex, and it involves difficult challenges of supporting economic revival while protecting the natural resources that are valued in these communities. Similarly, the way that environmentalism and Aboriginal rights are perceived in relation to development activities in these communities is neither simple, nor easy to measure. In some cases these movements function as constraints on resource development activities, as illustrated in the protests against oil pipeline development, and the actions of ENGOs and First Nations in achieving a can on shale gas drilling in the northern parts of the region. In other cases, these movements function as enablers of new forms of activity, such as the proliferation of new industrial initiatives led by First Nations partners, and the development of environmentally sustainable certified timber products. The linkages between these communities, the environment, and the forces of development that affect them embody layers of complexity that are sensitive to the pushes and pulls of these relationships, and recognize the historic, geographic, and cultural milieu within which they operate. Thus, sheer measures of importance only provide insight to the outer layers of these issues in terms of their impacts in the region.

I contend that the relationships between northwest communities, environmental protection, and new forms of governance can only be understood within the context of the specific types of influences that these forces exert upon development activities and community growth. In my qualitative analysis of the CCAPNSC data, I engage in a more detailed coding of the interviews that reveals the complexity of these relationships.

My substantive coding process included three distinct phases. These phases included more detailed coding of discussions related to the effects of resource development activities on the communities, coding of respondents' perceptions of the various forces affecting the governance of these development activities, and coding of the emergent themes that were produced during my review of the data and the first two phases of coding.

The matrix only provided data for a limited set of resource development activities, particularly forestry and natural resource trade. Therefore, the first key phase in the analytical coding for this work focused on the way that respondents view various resource development activities in the region. This coding phase included three stages.

- I identified references to resource development activities. This included reference to forestry, fishing, oil and gas development, mining and mineral exploration, hydroelectric development, and other forms of resource development.
- 2. I coded the influence of these development activities into negative or positive impacts.⁵³ It also included coding of singular responses that refer to complex or contradictory influences that are neither purely negative nor positive.
- 3. I coded these impacts into distinct either social (community) impacts or environmental impacts.

This coding scheme supports my analysis of my research questions in two ways. First, it provided me with additional data related to the way that the study communities are seeking to adapt to the new northwest economy, and the types of resource development activities they are seeking to support. This provided me with insight to the identities that these communities are seeking to articulate as they engage with other groups and agencies involved in the northwest development projects, and to identify their vested interests in specific resource development activities.

⁵³ This coding scheme allowed me to identify respondents that identified both positive and negative impacts, and to distinguish them from respondents that only identified negative or positive impacts.

Second, this coding scheme assisted in identifying what aspects of the environment and the community are seen as needing protection, and the type of the protection that is desired. This coding scheme provides the means to understand how the various resource development activities are expected to impact the region in the context of risk. I examined the data in combination with the matrix data that identified which resources are valued most in each community. I used this approach to identify specific resource development activities that are seen as affecting highly valued resources, and to gain insight to the nature of the risks perceived by the community.

The second key phase in my coding process focused on a more sensitive examination of the way that the respondents perceive environmental protection, and Aboriginal rights and title. As indicated earlier, the matrix data only provided basic indicators of how environmental protection and Aboriginal rights are perceived, relative to other community resources and drivers of change. The goal of my study is to examine the specific functions and roles that these two movements play in northwest communities, and to better understand the relationships that they hold with resource development activities and response to environmental problems. To support this objective, I coded the interview data in four distinct four stages.

- 1. I identified references to environmental protection and Aboriginal rights in relation to resource development activities.
- 2. I coded the influence of environmental protection and Aboriginal rights as either negative or positive for the community.
- 3. I distinguished the influence (either negative or positive) as based in enabling development activities, or constraining development activities.
- 4. I coded the basis of the influence in actions comprised state actions or the effects of law and policy, or the result of private actions and the effects of public activities.

This substantive coding process produced a more sophisticated set of data relating to Aboriginal rights and environmental protection than provided by the matrix data, with detailed insight regarding the roles these movements are seen to play in

relation to resource development activities in the northwest. In the findings and analysis chapter, I delve into each of the three communities to examine the ways that they are managing the competing pressures of these movements and the drive towards economic revitalization.

The third phase of coding overlapped with and extended beyond the first two coding phases. The first two coding phases provided a simple categorization of responses, and created large general groups of quotes associated with either positive or negative views on specific forms of resource development and environmental governance. Within these categories, I organized responses into natural groupings of quotes that illustrated the specific way in which resource development and environmental governance issues are understood and discussed in each community.

For example, within the coded categories for negative and positive assessments of resource development activities, I created codes for the specific types of impacts that are viewed as being associated with specific resource development activities. As the original coding process progressed, new categories of specific impacts emerged, such as impacts to marine environments, and pollution of their air. This process assisted in identifying key themes that characterized the primary resource development issues within each community, and the way in which respondents characterized the specific nature of the impacts. Within the coded categories for positive and negative assessments of environmental protection and Aboriginal rights, I distinguished whether respondents directed their comments toward state actions taken to protect the environment or the actions of ENGOs and public parties. I also identified emergent categories based of the specific type of influences that respondents associated with these groups, including distinct types of economic and social effects. This assisted in identifying the specific manifestations of environmental governance that are seen as either beneficial or harmful within each community, and for articulating the way in which they are understood within each community.

I utilize quotes from respondents to illustrate my findings, and to provide examples of key themes in my study. Each quote is followed by a letter that indicates the community that the respondent lives in, with "T" for Terrace, "P" for Prince Rupert, and

"L" for Lax Kw'alaams. The letter is followed by a numerical code based on the respondent's interview file.

Additional Data

Additional data for this study includes press articles, industry reports, government publications, census data, and other sources from the public domain. These data are used predominantly to provide detail on events occurring in the study area, and to explore the activities of specific companies and agencies. This pool of information helps place the interview data from the respondent communities into context with specific activities occurring around them.

Chapter Three: Rural Development in British Columbia

This chapter covers three key aspects of resource community development in BC that assist in defining the challenges that northwest communities face in the present day. The first part of the chapter examines the defining characteristics of social organization and economic growth in these communities, with emphasis on the role of forestry in shaping the political-economic and cultural landscape onto which Aboriginal rights and environmentalism have emerged. I argue that the forestry-based economy created obstacles that relegated environmentalism and Aboriginal rights to the margins of development in northwest communities. Close relations between state and industry allowed big business and foreign capital to expand their control over rural areas and facilitated the development of alliances between industrial forestry and the rural working class that pushed other groups aside in the negotiation of control over the resource base. However, the structure of the forest industry was also defined by inherent instability that eventually resulted in an economic collapse that created new opportunities for environmentalism and Aboriginal rights to emerge as influential forces in both settler and First Nations communities.

The second part of the chapter examines the historical relationship between First Nations and the structural forces driving rural development, and identifies the conflicts that fuelled the Aboriginal rights movement in the northwest. First Nations have faced, and continue to face, many challenges in asserting their rights and their title to their lands. Key among these has been the assertion of their own human-nature relationships, distinct from both western environmental ethos and purely utilitarian perspectives on nature.

Throughout the twentieth century, First Nations have held cooperative and conflicting relationships with both industry and environmentalism. However, First Nations' paths of development cannot merely be viewed as a middle road between these forces. The assertion of Aboriginal rights in northwest resource development activities must be understood as an effort to advance a distinct set of relationships with nature and a unique path of industrialization that has been directly impacted by, yet stands apart from, that of settler society. Understanding the difference between settler and First

Nations paths of development through the age of industrial forestry helps explain the way in which these communities are responding to environmental problems today.

The third part of the chapter explores the roots of the environmental movement in BC, its growing role in rural community development activities, and the background of the relationship between environmentalism and First Nations people. I argue that the historical frictions between environmentalism and rural BC communities were products of the class structure and power relations that drove the provincial political economy. This analysis will set the stage for explaining how the reconfiguration of the political-economic and social structure creates opportunities for both environmentalism and Aboriginal rights to play new roles within contemporary rural communities as they seek to adapt to a changing environment.

Part One: Historical Perspectives on Resource Dependent Communities in BC

Each stage of industrial growth and community development that has occurred in rural BC since colonization has contributed to the tension that is experienced in the northwest today. Likewise, each school of thought that has been brought to bear on this subject has made an enduring contribution to the way that these communities are understood. I review some of the most important and influential analyses of rural development in BC (and in Canada) so that I may outline the tensions affecting the northwest today, and so I can explain how this thesis builds upon the work of past scholars.

The study of Canadian development and economic activity has been strongly influenced by the work of Harold Innis (1930, 1933), who focused on the country's early origins as a supplier of raw materials to the British empire and other developed countries. Innis played a key role in articulating several key concepts in the economic history of Canadian rural resource development, and his work serves as a proxy for a widely accepted characterization of BC history and political economy. Innis described the early Canadian economy as being characterized by central urban industrialized regions (heartlands) contrasted with dependent peripheral rural resource-supplying regions (hinterlands), high levels of dependency on foreign markets with corresponding fluctuations in economic stability, and underdevelopment in secondary and tertiary industrial sectors (Ley and Hutton, 1997).

Instability was a fundamental feature of the core-periphery model, with the succession of changing export-dependent resource markets producing disruptive effects on communities and cultures. Innis' (1933) early work examined the cultural destruction of First Nations in eastern Canada by the European fur trade. This occurred first through exploitation of First Nations by Europeans for indigenous knowledge of the land to develop the fur industry, and later through the pervasive spread of technology and economic systems that pushed traditional practices aside (ibid). Similar impacts of industrial forestry in western Canada on First Nations will be explored later in this chapter. To be sure, the destruction of First Nations culture was carried out through various modalities, including the spread of disease, the implementation of residential schools, assimilation and religious conversion, social degradation, and discriminatory government policies. However, industry provided the conduit by which European influences spread throughout the rural areas of the province.

Innis's model provided a structurally deterministic view of rural development that viewed social organization as contingent upon dominant economic forces. Innis contended that new forms of society develop to serve new markets, and old forms are destroyed as their utility to changing markets declines.⁵⁴ The collapse of the fur trade in eastern Canada and the shift to forest products as the next economic staple corresponded with a decline of nomadic fur-trading culture (Innis, 1930). This shift was accompanied by a steep rise in immigration and the population of western Canada by European settlers as new forms of industry spread across the country (ibid).

Although the eastern fur trade forms the focus of Innis' work, the fur trade also played a key role in establishing early relations between First Nations and settler populations in west (Mackie, 1993, 1997; Marsden and Galois, 1995; Gibson, 1992). Lax Kw'alaams (formerly known as Fort Simpson) became a destination for settlers in the late 1820s, as the Hudson's Bay Company sought to extend its influence into the northwest region (Mackie 1997, p.59-60). The location played a key role in the expansion of British influence against the advance of American fur traders, providing

⁵⁴ Innis's early work examined the fur trade in eastern Canada (1930), including the negative impact the industry had on First Nations cultures as European technology and trading system displaced traditional trapping culture.

colonists with a strategic position in establishing access to fur-producing territories. Additionally, Lax Kw'alaams' location provided access to the established trade networks of the northwest First Nations, and to crucial pools of knowledge and labour that enabled the expansion of settler commerce (ibid, 60,150).

The arrival of colonial fur traders had a significant impact on First Nations political and economic organization. The balance of power among different First Nations and among different houses within them was altered by the new trading relationships established with the settler forces (Marsden and Galois, 1995). The marine fur-trading routes were soon followed by the creation of land-based transportation routes and the arrival of new immigrants as part of the northern gold rush in the Yukon territories (McKay, 1978, p.159). Although the importance of the fur and gold-mining industries declined greatly by the end of the 17th century, they provided the early commercial infrastructure and population bases that supported the early growth of forestry as a staples industry in BC. The progression from fur trading and gold mining to forestry and fisheries led to the founding of numerous settler communities in northwest BC, with their development following steps within a larger productive process that unfolded according to the progressive exploitation and exhaustion of desired resources.

By the early twentieth century, a heartland base in Vancouver and the lower mainland assumed ownership, management, processing, and shipping functions over the rural coastal and interior hinterlands of the province (Ley and Hutton, 1987). Examining Prince Rupert, Rajala (2006, p.32) explains that the town experienced stages of growth corresponding with development of new trade routes such as the Grand Trunk Pacific Railway (GTP) in 1914, and the subsequent construction of new mills and canneries connected to it. In addition to providing milling sites and an access point for harvesting timber in the coastal region, the town of Prince Rupert was originally developed to act as a port for export of raw materials to developed countries via ocean trade routes, and for

⁵⁵ The earliest transportation routes (for settlers) between Terrace and Prince Rupert in northwest BC were established by steamboat, as part of gold rush exploration in the mid-1800s (Downs, 1972). During the same era, many of the 30,000 prospectors travelling through BC moved into the early log-cutting industry after the Gold Rush, providing valuable human resources in an area geographically isolated from the population centres of the country (McKay, 1978).

⁵⁶ This pattern of community development does not apply to the First Nation communities that were already established in the region, long before the arrival of European settlers.

import of products such as silk from Asia (Large, 1973). Similar to many other towns along the GTP, the town of Terrace was surveyed in 1910 following construction of a sawmill near the Skeena River, which (together with the railway) acted as a resource corridor to the coast (Rajala 2006; 32).

The founding and growth of northwest BC resource towns has thus unfolded as an industrial narrative, with the northwest (and other hinterland areas) functioning as a resource-providing region to the lower mainland and overseas market, and BC playing a similar role to eastern Canada and its international trading partners. The *Innisian* model incorporated relations of dependence and subordination of the hinterland to the heartland, and of the staples-providing country serving its export partners. The instability of rural areas and their dependence upon the urban core is a product of the institutional structure of the core-periphery pattern of development. Hayter and Barnes explain that the staples model is characterized a large interventionist state body that is purposively designed to secure the participation of large scale businesses (and their capital) in creating the infrastructure necessary to enable the growth of a natural resource export based economy (1990, p.161).⁵⁷ Emphasis is placed on ensuring the stability of institutions in the urban core to coordinate access to foreign markets and secure relationships with large industrial partners, while sacrificing entrepreneurial development and stability in rural areas.

This pattern of organization poses problems to economic stability when there are changes in demand for raw materials from primary trading partners. Building on the work of Innis and his contemporaries, Watkins coined the term "staples trap" to describe conditions in which over-reliance upon raw material exports inhibits the industrial diversification needed to endure fluctuations in external markets (1963, p.151). Hayter and Barnes (1990) contend that the Innisian model, and the staples trap that it entails, provides an accurate explanation for BC rural development, not only through its formative stages, but also through to the latter stages of the 20th century. The staples

⁵⁷ Hayter and Barnes cite railroads and canals as examples of the infrastructure required to support historic Canadian staples industries. Railroads played a key role in BC industrial development, while the flooding of river valleys to create reservoir lakes not only provided power to processing facilities, but also created functional canals, which were used for transporting timber through areas of the province where roads and rail did not reach.

model of development, the challenges that accompany it, and the role of the state in maintaining this economic framework, have formed a central focus in the study of rural BC development. As critical schools of thought developed in Canadian academia, increasing scrutiny was directed towards the role of both state and industry in the shaping of the Canadian political economy, and the implications of these patterns of industry for social organization in resource dependent communities. Influential works included Lucas's study of the sequential development of resource towns (1972), Clement's study of the mining industry (1981), and Marchak's analyses of the BC forest industry (1983, 1995).

This thesis examines the northwest region within these broader frames of analysis, and focuses specifically on the way that this course of development shaped the relationships between northwest communities and the rest of the world. The tenuous relationship between core and periphery, and town and country, forms an important theme that is rooted in historical analyses that preceded this study, and the enduring influence of the staples model of development on the northwest today.

The Rise of Industrial Forestry

Just as the European fur trade in eastern Canada introduced economic systems that disrupted previous patterns of culture and trade, the rise of the BC forest staples economy disrupted First Nations societies in the northwest. The history of BC forestry pays limited attention to First Nations and their use of the forests. Drushka states, "Indigenous inhabitants did not make extensive use of this forest." (1999, p.67). McKay (1978, p.160) acknowledges First Nations engaged in hand-logging prior to Europeans, but does not provide any detail about their activities. In contrast, Taylor (1975) devotes several pages of his book *Timber* to First Nations woodcutters. However, these historical sources make reference only to First Nations' use of wood and ignore other forest uses,

⁵⁸ Hand-logging involves cutting trees by axe or saw, and transporting it to its next point of transit (usually boat or animal pull) through manual means. Hand-logging, and the small scale to which it was confined by reliance upon manual labour, was soon subsumed by export-oriented forestry and the application of industrial technology.

treating trees (particularly marketable timber) and forests as interchangeable concepts.⁵⁹ Rajala (2006, p.115) notes the contrast between these narrow (economically-based) and utilitarian definitions of forests and a wider spectrum of ideas regarding land use, stating "the aboriginal one gave way to the market-driven conception of nature."

The four decades spanning 1871 to 1911 witnessed a 700 percent increase in the population of BC, and an increase from 24 to 224 sawmills (Marchak, 1983, p.33). This period included the construction of the Georgetown sawmill between Prince Rupert and Port Simpson (present day Lax Kw'alaams) in 1875 and a yellow cedar mill in Hartley Bay in 1905 (Rajala, 2006, p.34). American investors purchased the Hartley Bay mill in 1908 (ibid), providing an early sign of a trend of foreign ownership of BC resources that would follow in subsequent years. ⁶⁰

State legitimation of industrial forestry through tenure and licensing provided valuable public revenue, and played a key role in asserting national sovereignty over perceived "wilderness" areas in the era surrounding Confederation (Marchak, 1983, p.32).⁶¹ However, the patchwork system of leases, grants, and tenures that emerged in the late 19th and early 20th centuries produced circumstances in which the Crown had limited control over development of the land, and accrued limited royalties and payments as market conditions changed. With growing concerns over resource control and public revenue streams, the Crown introduced a new system of Timber Sale Licenses (TSLs) in the *Forest Act* of 1912 (ibid, p.15), with the price of the TSLs determined through bidding processes.⁶²

⁵⁹ The treatment of forests as trees is done despite the diversity of flora and fauna in BC forests and their value to First Nations people These different uses will be touched on in more detail later in this chapter when discussing the Aboriginal rights movement.

⁶⁰ Other American acquisitions in this period included the purchases of 89 square miles of Crown timber on the Queen Charlotte Islands by Midwest investors, and 156 square miles of timber on Graham Island by a Los Angeles controlled company (Rajala, 2006, p.32). In 1907 alone, 258 American investors acquired timber licenses in BC (Bernsohn, 1981, p.11).

⁶¹ The word "wilderness" is used in parentheses in acknowledgement that the areas in question were inhabited by First Nations, and were designated as empty as part of the colonization process which involved claiming of lands that were never yielded by the First Nations. Marchak explained that American influence in northern BC remained a concern even after joining Confederation, and the development of resource exports without connection to a clear industrial plan of maturation for the province was based on a strategy of occupying the territory rather than developing it (1983, p.32).

⁶² The intention of the TSL system was to encourage competition and extract more royalty value from the forest (Marchak, 1983, p.36).

The creation of these private holdings was a pivotal linkage in the commodification of forests into new forms of value, and a key step in establishing limitations on forest uses that relegated other perspectives on forests to the margins of the political economic structure. The application of scientific forestry management strategies, and the quantification of forests as timber stands defined by wood volume and market value, enabled the transformation of forests into areas of governmental and capital control (Demeritt, 2001, p.435-437). Braun (2002) explained that the transformation of forests into tree farms left no room for other forest uses, making the economic value of the forests prominent, and rendering other types of value invisible.⁶³ Access to land and forest resources became subject to regulations and systems based in Victoria and controlled through increasingly complex abstractions of the timber market, with the traditions of First Nations and the recent historical practices of European pioneers relegated to the margins of industry. This system allowed corporate powers (including many American firms) to enter the market (Marchak, 1983, p.36) and gain influence on Canadian rural development. Between 1900 and 1913, forestry investments in BC increased from \$2 million to \$150 million per annum, 60 percent of which was American funding (Taylor, 1975, p.98).⁶⁴ Those unable to compete for licenses (including most First Nations people) were excluded from management of the land (Rajala, 2006, p.42-43).

The expansion of industrial forestry and the reconfigured ownership of natural resources did not go uncontested. Although hand-logging provided valued work for many First Nation people, First Nations in northwest BC mounted objections to this commodification of the forests, and the new forms of ownership affecting lands they had occupied and resources they had utilized for centuries. During the 1880s, Nisga'a leaders blocked settlers from accessing timberlands in the Nass Valley north of Terrace

⁶³ Prudham described the industrial forest as something that came to be "bought and sold on the basis of such highly abstracted renderings that the very notion of the commodity fetish is given new meaning" (2007, p.259).

⁶⁴ Taylor (1975, p.68) described the expansion of forestry licensing in the early 20th century as "The American Invasion", citing the mass purchase of timber leases near Prince Rupert by Washington-based speculators as northwest context for this trend.

⁶⁵ Hand-logging still played a role in the industry during this period, and was one of the few areas of the industry that First Nations people were able to participate. "If I now take any sticks of timber from these places the white men will come along and say 'leave that alone, it belongs to me." (unidentified Bella Coola man in Rajala, 2006, p.42)

and other local tribal leaders protested to provincial and federal leaders about the seizure of traditional lands for timber license purposes (Rajala, 2006, p.42). Hayter (2000, p.33) explains that the assignment of First Nations people to isolated reserves on limited tracts of land supported an "empty land assumption" among colonizers and the (unjust) claiming of BC wilderness by the Crown, and subsequent allocation to industrial uses. ⁶⁶ The earliest manifestations of industrial forestry thus functioned to push Aboriginal rights to the margins of the development process that was sweeping through northwest BC and the rest of the province.

Despite such objections, allocation of timber tenures continued in a manner that cut off both First Nation and settler populations from direct relationships with the resource base that surrounded them. The history of forestry license development and growth of the industry in the northwest provides important insights to the relationship that developed between northwest resource communities and corporate capital, a bond which was important in mediating future relationships between northwest communities and new social movements such as Aboriginal rights and environmentalism.

Although the increase of forestry investment portended new industrial opportunities, the manner in which the forests were controlled and the locus of the control meant that opportunities would be funnelled into specific sets of productive relations that emphasized enrichment of foreign investors over the long-term stability of rural communities. Thus, the economic structure of the industry that would define rural development in much of BC reflected deference to increasing the power of the provincial heartland and its relationships with external markets, while sacrificing the enrichment of entrepreneurship in the hinterland.

Lumber production in BC tripled in the period between 1915 and 1945 (Bernsohn, 1981, p.55), during which advances in technology and a rapidly growing pulp industry increased demands for timber in a province already known for its sawmill industries.⁶⁷ Throughout this period there were numerous fluctuations in both the

⁶⁶ This assumption was based on the belief that if the First Nations were not utilizing the land in a manner similar to Europeans, then the land is empty and open development.

⁶⁷ In the 1930s, advances in chemistry drove the development of pulp milling, which stimulated demands for resources to provide materials for printing, munitions, and packaging industries in the global

provincial and local northwest forest industries, with timber production rising sharply following periods of war or depression. Demand for northwest timber products during this era drew momentum in the Terrace region from pole manufacturing and saw milling, and in Prince Rupert from saw milling and shipping of wood to other BC processing facilities for pulp milling (Rajala, 2006; Taylor, 1975). Despite repeated cycles of boom and bust, a trend of overall forestry growth persisted, with sawmills in the Prince Rupert district increasing in number from 18 to 44 between 1914 and 1939 (Hayter, 2000, p.43). By 1943, more than 60 small sawmills were operating along the Skeena River in the area east of Terrace (Rajala, 2006, p.113).

These increases in activity, however, did not necessarily correspond with increased local prosperity, as the northwest region was hindered by volatile market conditions in the saw milling industry and a peripheral position in the emerging pulp industry. Distance from markets created obstacles for northwest sawmills in competing with their southern competitors, and northwest booms were often based on short-term needs such as the construction of military barracks in Prince Rupert during World War II, or the surge in railway tie production during the expansion of the Canadian National Railway (CNR) and its supporting spurs (Rajala, 2006, p.91-114). In the absence of a pulp mill in Prince Rupert until 1947, local logging contractors were forced to deal with monopolistic log-buyers as the market for spruce increased in importance in the coastal industry.

Concerns about the optimization and renewal of forest resources had been growing in the province during the 1930s, with new replanting programs being initiated by the BC Forest Service and private landowners on Vancouver Island (Drushka, 1999, p.41-42). As the ability and capacity of the industry to extract timber from the landscape increased, concerns about future timber supplies and effective utilization of the resource also rose. Criticisms of wasteful logging practices and fears about dwindling supplies of accessible timber on a provincial level were also evident in the northwest. Efforts to maximize spruce production during World War II resulted in the waste of non-target

species trees in the Queen Charlotte Islands (Rajala, 2006, p.112-113).⁶⁸ Meanwhile, expanding pole production resulted in increased depletion of cedar in the Skeena watershed, prompting the need to seek new sources of resources farther from the main processing sites near Terrace (ibid). Although harvesting was increasing in both the northwest and throughout the province, value-producing activity was not increasing in lockstep. While cutting continued to rise from 1919 to 1946, no additional pulp mills were built in the province (Taylor, 1975, p.164).

Early models of industrial forestry in the northwest served to benefit foreign investors at the cost of local enrichment, and the model that would come to dominate the region in the following decades only ingrained this pattern more deeply. In the subsequent decades, the role of the state, its relationship with industrial capital, and the impact of this partnership on the social organization of northwest communities became increasingly clear. The decisions that were made during this period were critical in shaping the industry by further defining ownership of forest resource rights, increasing the centralization of timber cutting rights, and providing the means to accelerated production in future years.

Tenures and Control of the Forests

The primary linkage supporting the state-capital relationship was the system of tenure used to allocate rights to forest resources. The evolution of the tenure system reflects a specific type set of economic relations that included cooperation between government and big industry to reshape rural BC. The embedment of this industry model played an important role in shaping the class culture of forestry communities, and defining the relationships between these communities and Aboriginal rights and environmentalism in future decades.

The forest tenure system that was developed in the period following WW II provided the fundamental framework for the development of rural BC. Concerns about the rate of timber depletion, particularly on the coast, prompted BC Chief Forester C.D. Orchard to call for a Royal Commission in 1943 to assist in remodelling the timber

⁶⁸ Sitka spruce was widely used in construction of aircraft during World War II.

license system.⁶⁹ After consulting various members of industry, government, and the public, the Sloan Commission endorsed the Chief Forester's proposals, and a new system of tenure was introduced with the new *Forest Act* (Drushka, 1999, p.43).

The new system included two new types of tenure units. The new forms of forest tenure included "private working circles" that combined old Crown grants and tenures with additional Crown land into units called Forest Management Licenses (later renamed Tree Farm Licenses or TFLs), and "public working circles" composed entirely of Crown lands that were called Timber Supply Areas (TSAs) within which licenses (Timber Sale Licenses or TSLs) to harvest timber were allocated to companies using a complex quota system (Pearse, 1992, p.17-19).⁷⁰ While the TFLs were designed around single company ownership, the TSAs were designed to operate according to the same sustained yield principles as TFLs, with the goal of allowing smaller operators to remain in the industry, with the government retaining the primary forest management responsibilities (Hak, 2007, p.51). The administrative requirements of TFLs were tailored toward big business, as small operators could not meet management demands of a TFL, even if working in cooperation with each other (Hak, 2007, p.56). The new tenure units were larger than the previous timber licences, and provided a system in which the Crown maintained ownership of the land, while the licensees (particularly in relation to TFLs) took on new levels of responsibility for forest management, including silviculture.

Corporate response to the new tenure system was positive, based on the greater access to timber and longer security in tenure.⁷¹ However, many forest service and private sector parties (particularly small operators) opposed new TFL system due to belief it would lead to concentration of cutting rights, poor management of the publicly owned resource, and damage to local economies as large corporations swallowed up small operators. (Drushka, 1999, p.45). Under the new tenure system, the government held exclusive discretion in granting forest tenure, and the system of forest land-use

⁶⁹ Often referred to as the Sloan Commission of the 1940s, which was later repeated as the Sloan Commission of the 1950s.

⁷⁰ In 1957, these became termed as public sustained yield units (Hak, 2007, p.59). However, the term "Timber Supply Area" remains in use today.

⁷¹ The first 23 TFLs carried perpetual terms that could only be revoked if the licensee violated the conditions of the contract (Pearse, 20, p.1992).

decision-making did not provide any avenues for public participation, and such matters remained insulated from meaningful public input until the mid-1990s (Pearse, 1992, p.19; DesRoches, 2007, p.672).⁷² The fundamental framework for assigning forest resource ownership and for determining the uses to be imposed on forest landscapes was thus structured to exclude non-industrial interests (including environmentalist and Aboriginal rights concerns), and favour a specific set of capitalist interests.

The result of the new tenures system was a gold rush for trees, with companies buying up all they could to secure access to trees and establish their market position in the forestry boom to follow (Drushka, 1999, p.152). Labour unions were supportive of the new tenure system and provided its passage into legislation, largely based on its deference towards the large forestry corporations that supported the majority of union jobs (Hayter, 2000; Prudham, 2007).⁷³ Within the Ministry of Forests, foresters favoured the awarding of TFLs to large companies based on the belief in their financial capacity to weather boom-bust periods without either going out of business or abandoning forest practices in favour of quicker more profitable logging methods (Hak, 2007, p.64).⁷⁴ However, small operators protested the award of every TFL in the coastal region, fearing that the way the system was unfolding was leading to consolidation of timber rights in a corporate elite, and in turn relegating small companies to sub-contractor status in servitude of an oligopoly with power to control the market (ibid, p.56). In this sense, the industry that drove growth in northwest BC was predicated upon subjugation of local interests to foreign capital and state control over the resource base.

The tenure system not only facilitated the concentration of harvesting rights in the hands of large corporations, but also provided fuel to the acceleration of harvesting

⁷² The government-led method of allocating TFLs represented a significant departure from the past system in which the Forest Service made such decisions (Drushka, 1985, p.72). DesRoches notes that public participation prior to the 1970s was limited only to special enquiries, such as Royal Commissions. From the 1970s to the mid-1990s, systems for public participation in forestry activities remained poorly developed, and were not embodied in any comprehensive policy or strategic planning process (2007, p.672-676).

⁷³ Unions tended to favour large employers, and have historically opposed to any type of community level forest tenure due to the belief that non-unionized labour would infiltrate the industry through such small and independent tenures (Prudham, 2007, p.267). Marchak adds that unions favoured large employers due to reliability of employment, higher wages, and greater emphasis on safety measures (1983, p.156).

⁷⁴ Large companies were favoured as recipients of TFLs due to their stability through recessions, greater capacity for forest management, and the larger scales of profit for the Crown (Marchak, 1983, p.30-49).

based on the allocation of larger areas of timber to license-holders. Hayter (2000, p.49) observes that the Annual Allowable Cut (AAC) was adjusted repeatedly throughout the two decades following the new *Forest Act*, and each adjustment followed an upward direction. ⁷⁵ The government's logic in the implementation of large-scale TFLs with increasing AACs was that large corporations would be attracted to invest heavily in the region based on guaranteed access to resources, and would have the incentive to follow through on resource renewal to preserve the value of their long-term tenures (ibid).

The large scale of new timber tenures and the calculation of the AAC based upon human-assisted forest regeneration incorporated a "logic" of exchanging the complex values of biologically diverse old growth forests with the pure economic calculus of plantations. (Prudham, 2007, p.265). Thus, the new tenures system provided a mechanism for the liquidation of old growth forests and expanded the territory under scientific forest management within which limited forest uses were possible. The arrangements set out in the modern tenure system set the foundation for future conflicts between industry and environmental and Aboriginal rights by enabling mass harvest of old-growth forests and facilitating increased harvesting across the traditional lands of First Nations peoples. In 1958, the first road into the Nass Valley in northwest BC was built, as part of the continued expansion of activity centred around the Prince Rupert pulp mill, which formed the centrepiece in the first TFL ever awarded (TFL 1). (Taylor 1975, p.166). This allowed the forest industry to extend its mass harvest activities into the traditional territories of the Tsimshian, Nisga'a, and Gitxsan First Nations in northwest BC.

The system of tenure arising from the (first) Sloan Commission exerted a powerful influence on the forestry industry during the post-war boom, and throughout one of the busiest periods of BC rural development, during which forestry communities expanded and the provincial infrastructure solidified. There would be many amendments made to the tenure system throughout the 40 years following the Sloan Commission, with various alterations made to the names of licenses, the way in which

⁷⁵The AAC is a system of calculation that seeks to balance the amount of timber cut each year with the ability of the forest to regenerate, thus ensuring sustained yield over time. This includes calculation of silviculture programs to replant, and fire prevention to reduce loss of timber stocks.

volume of harvestable timber would be assigned, and the way in which licenses could be acquired and amalgamated. However, the basis of the tenure system as one favouring large corporations and mass harvesting remained consistent. The resulting pattern of development formed strong economic linkages between rural communities and large corporations, and these linkages were reinforced through processes of license amalgamation and concentration and through the regulatory revisions that enabled these processes. The reliance of rural communities upon large forestry corporations served to align industry and rural working class interests when the dominance of industrial forestry was challenged by environmentalism and Aboriginal rights in future decades.

The deference toward large-scale operations in awarding and structuring of tenures was characteristic of what Hayter (2000) described as a purposive movement by the BC government towards building a *Fordist* forest industry that would be equipped to compete in the global market. Fordism is characterized by large corporations using advanced technology to increase efficiency and profits, while working cooperatively with government to stimulate mass-production and economic growth. The ability of large companies to afford new technology provided them with advantages in meeting the demands of government regarding the types of community growth that would accompany award of a TFL. An example of this was the granting of the very first TFL to the New York-based Celanese Corporation in 1947, with the agreement to build a new \$25 million kraft pulp mill near Prince Rupert (Rajala 2006, p.146).⁷⁸ Following the acquisition of the TFL and the construction of the pulp mill, Celanese made intensive investment into new mechanized logging processes, such as the increased use of chainsaws, caterpillar tractors, and high-lead rigging systems for movement of fallen

⁷⁶ By the late 1990s, there were seven different types of tenure in BC forests, with TFLs and Forest Licenses (or FLs) being the dominant license types, accounting for over 80 percent of the AAC (Marchak, 1999, p.16-17). Forest Licenses effectively replaced Timber Sale Harvesting Licenses (TSHLs), which had earlier replaced the TSLs (Pearse, 1992).

⁷⁷ TSHLs and TSLs underwent processes of acquisition and amalgamation throughout the Fordist era in which cutting rights were concentrated in the hands of the few. When TSLs were replaced with FLs, the new form of license was made much larger in scale than the former license (Pearse, 1992, p.34), catering again to a big industry model of forestry.

⁷⁸ TFL 1 is located in northwest BC, covering an area that stretches from Prince Rupert to Terrace. Celanese was the controlling party in the creation of Columbia Cellulose Company (Colcel). The development of new boilers allowed the kraft process to surpass the sulphite process in pulp milling in the mid-20th century. The new process provided both economic and environmental advantages to the sulphite process.

timber, allowing the company to increase efficiency and volume in feeding their new mill (Rajala, 2006, p.148). However, these advances also impacted employment negatively, as timber production in the Prince Rupert Forest District increased by 60% between 1955 and 1962, while logging jobs increased by only 3% (ibid, p.166).

On a provincial level, the number of employees per 1,000 cubic metres (cm³) of harvested wood steadily declined between 1965 and 1996, falling from 1.69 to 1.02 employees per cm³ (a fifty percent decline) (British Columbia, 2000, p.91). Marchak et al (1999, p.102) assert that the primary reason for employment decline in forestry has been the application of labour-saving technologies. Workers expressed little resistance to the advances in technology that made increases in production possible, and instead sought to secure increased wages through their union representatives as a way of sharing in the wealth produced by the growing industry (Hak, 2007, p. 158-167; Marchak et al, 1999, p.103). The general complicity of forest workers in the trend of increased production prompted Marchak (1983) to characterize labour (along with forestry communities) as "partners with industry", based upon the support they provided labour to large forestry companies during revision to the Forest Act and tenure structure, and their shared opposition to forest preservation efforts.

In the northwest, Celanese expanded its influence throughout the decades following the award of TFL 1 by purchasing the Prince Rupert Sawmill operation in 1965, the Pohle sawmill in Terrace in 1969, and an additional 20 timber sale licenses from Hazelton Sawmills farther up the Skeena River (Rajala, 2006, p.179-180). BC lumber production increased by 49 percent between 1961 and 1972, but the number of sawmills decreased by 61 percent (Hak, 2007, p.60). Small operators, facing increased operating costs and management requirements associated with tenure requirements, were forced to sell their licenses to larger corporate bodies (ibid, p.65). During this time, Celanese expanded its operations, and many smaller operators in the Terrace region found themselves either bought out by a large company or out of business as a result of being unable to secure access to the timber needed to run their own operations (Marchak, 1983, p.326). This pattern of industrial development increased the level of

⁷⁹ A more detailed examination of the role of unions in supporting the industry and shaping rural communities will be provided later in this chapter.

dependence between northwest communities and large forestry companies, while further undermining entrepreneurial development and the growth of secondary manufacturing in the region.

Columbia Cellulose was eventually purchased by the BC Government in 1972, and reorganized as a Crown Corporation called Canadian Cellulose (CanCel) (Drushka, 1985, p.82). Decal contractors and independent industry members were opposed to the sale, and were critical of having such a large corporate entity continuing to expand its influence over the region (Drushka, 1985, p.82-83). Only the Terrace mill (Skeena Forest Products) was locally owned, but it fell to foreign ownership in 1969 under the US-based Price Company, which later sold the company to CanCel as it sought to secure access to more wood for its pulp operations (Rajala, 2006, p.193). This sale effectively left every lumber mill in Terrace under the control of CanCel by 1980, and the region increasingly dependent upon the success of this large corporation (Marchak, 1983, p.327). Thus, the convergence of technology with the new tenure system and large corporations set the foundations for the centralization of timber rights and the rise of an industrial forestry oligopoly with increasing influence over rural BC communities.

The defining characteristic of the Fordist era of forestry was that of increased production, and increased consolidation of cutting rights. The provincial timber harvest increased from 26.6 million cubic metres in 1955 to 60 million cubic metres in 1975 (Drushka, 1999, p.49). During the course of this rise, the ten largest forestry companies increased their control over the industry from 37 percent of the AAC to 59 percent (ibid). The same 10 companies owned between 70 percent and 90 percent of all timber licenses at this time, 34 percent of all lumber facilities, 74 percent of all plywood and veneer facilities, and 90 percent of all pulp mills (Marchak, 1983, p.30). Seven of the ten companies were owned outside of Canada (ibid), including the New York based Celanese and the San Francisco based Crown Zellerbach corporations that were influential in the northwest. By 1973, the 43 original TFLs awarded by the province had fallen to 34 through surrender and consolidation (Taylor, 1975, p.163). The vast majority of wood being harvested at this time was being directed towards low-value

⁸⁰ CanCel was renamed BC Timber in 1981, and remained under provincial ownership until 2002, when the Liberal Government sold the Skeena operations to NWBC Timber and Pulp Co. (Rajala, 2006, p.214).

products such as pulp and dimensional lumber, leaving small mills and wood product makers without access to timber (Drushka 1999, p.56).

By 1989, the provincial harvest peaked at 89.1 million cubic metres (ibid, p.56), with 69 percent of the harvest controlled by the ten largest companies by 1990 (ibid, p.91). However, the emphasis on large corporate operations under foreign ownership with a focus on production of staple materials for export (such as pulp and dimensional lumber) set the pillars of the industry in a pattern that would later prove to be unstable. In this sense, the staples trap that ensnared the northwest was constructed from raw dimensional lumber and pulp. Drushka aptly stated, "The tenures system has been the primary factor in the development of a monolithic forest industry, as susceptible to destruction by natural economic events as is a monocultural forest also susceptible to an insect or disease attack." (1999, p.156)

The settlement structure of rural BC was based upon direct involvement of the state and large corporate partners in maintaining local economies (Matthews and Young, 2007, p.179-180). For all but four years of the post-war period between 1951 and 1991, BC remained under the control of a single political party (Social Credit Party) that remained committed to the use of the tenure system to fuel corporate industrial forestry as a means to generate royalties and develop the rural areas of the province (Jackson and Illsley, 2008, p.164). The state played a key role not only in designing, revising, and administering the tenure system, but also in supporting forest communities through provision of social welfare programs and building the provincial infrastructure that connected rural communities to the market and heartland processing centres (Marchak, 1983, p.30).

In addition to provision of services and infrastructure, the state maintained the critical linkage between forestry companies and rural communities through the use of appurtenancy policies. Appurtenancy (meaning "attachment to") policies were enacted to require that the use of natural resources must provide benefits to the communities in the region from which the resources are extracted. In British Columbia, forestry, appurtenancy requirements have included regulatory mechanisms such as amendments to the Forest Act of 1947 and the Timber Manufacture Act of 1906, which restricted log exports and required that timber cut on Crown Lands be processed in the local region

(Pearse, 1992, p.10; Hayter and Barnes, 2012, p.14). Initial awards of licenses to harvest timber included clauses to require processing of trees at a specific mill or within the region, and were often made conditional upon agreements between state and corporate bodies on construction of new mills, bringing jobs and potential tax revenue (based on the processing activity) to a community. An example of these arrangements was Columbia Cellulose's agreement to construct a new pulp mill in Prince Rupert in 1948 in exchange for receiving a TFL covering 809,400 hectares of forest (Drushka, 1999, p.45; Rajala, 1999, p.198).

Appurtenancy policies compelled companies to process forest resources within the region they are harvested, even during economic conditions in which doing so was less profitable than exporting raw materials outside the region. Jackson and Curry (2004, p.44) explain that market conditions created by appurtenancy policies prompted the government to support ultimately unsustainable resource policies to ensure their corporate partners in provincial development would continue operating. As Marchak (1995, p.88) explained, "When an entire economy rests on a few large corporations, governments are unlikely to apply rules that could damage or even inconvenience the "stakeholders"."

Forestry and Social Organization in Northwest BC

Given the Fordist corporate structure just described, what did it mean to live in a forestry-dependent community during the heyday of industrial forestry? That is, how did the structure of centralized control of forest resource ownership and increased levels of resource extraction, shape the social organization and culture of the region that is our focus here? Did such a system produce specific forms of social organization and community identity that aligned rural communities with forestry interests?

In this section, I argue that there are strong such linkages. I demonstrate that forest industry dependence imposed a specific social hierarchy in rural BC communities that emphasized working class interests, influenced local relationships with political structures, and positioned harvesting workers as key figures in community social organization. By examining the influence of forestry on social organization in northwest communities during this period, we will provide both a cultural and social organizational

context within which to explain how Aboriginal rights and environmentalism were situated as marginalized social movements in rural BC communities during the era of prosperity in industrial forestry.

The influence of forestry on northwest communities penetrates occupational structures, migration, political activity, and the very culture and identity of the communities. Forestry's role in the provincial economy is subject to debate. Estimates of the provincial workforce that relies upon forestry are subject to what is defined as forestry or forestry-dependent work, and estimates of profits generated to companies and revenue to the province differ between government and industry figures. However, there is little argument that the industry has historically been one of the most important employers in the province, and one of the largest sources of provincial government revenue and export value. The forest industry claimed to account for 10 percent of all jobs in the province at the beginning of the 1970s (Marchak et al, 1999, p.101). At the peak of activity in the province in 1981, over 97,000 people were employed directly in forestry, including logging, wood processing, and paper and pulp industries (British Columbia, 2000, p.91). When indirect jobs are included, approximately 20 percent of the workforce was dependent upon forestry (Drushka, 1999, p.92). Source of the workforce was dependent upon forestry (Drushka, 1999, p.92).

Within British Columbia, the economic importance of forestry varies greatly from region to region, depending upon the level of forestry activity relative to other activities. The focus of this study is the northwest, and there, forestry has played a central role in local employment and economic activity, with a degree of employment dependence far higher than the provincial average. The influence of forestry on community organization goes beyond immediate employment opportunities. Forestry has a direct impact on other economic activity, and stimulates business in supporting industries such as those providing food, accommodation, and supplies to workers and

⁸¹ Forest products accounted for over 60 percent of provincial export values in 1952, rising to over 80 percent by 1966, and upwards to over 90 percent in 1996 (Hayter, 2000, p.73). Figures have varied greatly over the past half century, but as of 1996, forestry still accounted for 60 percent of provincial export revenue, and provided \$1.7 billion dollars in stumpage fees and \$20 million in rent to the province (British Columbia, 1996).

⁸²Census statistics indicate a total population of 2,168,055 over the age of 15, with 1,417,285 people employed in BC in 1981.

⁸³ Drushka (1999, p.92) contends that economists provide varying estimates of indirect/direct job rations, from 4:1 to 1:1. Based on a conservative 2:1 ratio, and 7 percent of the provincial workforce participating directly in forestry, approximately 20 percent of the workforce depended upon forestry in 1980.

industry and driving overall population growth. A research group survey indicated up to 50 percent of employed persons in the Skeena region were involved in forestry in 1976, while Statistics Canada estimated forestry employment at 63 percent in 1971 for the region between Prince Rupert to Hazelton (Marchak, 1983, p.332). Within these figures, nearly 50 percent of workers were employed by CanCel, with many additional contractors dependent upon the company for work (ibid).

Work shapes the population of resource towns starting with the initial residents.⁸⁴ In rural BC, this working class make-up has been found to persevere through growth and community change, as the majority of in-migrants to BC forestry towns arrive for the purpose of securing employment (Halseth, 1999, p. 374). The majority of forestry workers in the Fordist period were unionized, with membership in the International Woodworkers of America (IWA), the Canadian Paperworkers Union (CPU), or the Pulp Paper and Woodworkers of Canada (PPWC) (Hayter, 2000, p.58; Drushka, 1999, p.81).⁸⁵

By 1974, 46.8 percent of all forestry workers in Canada were members of a trade union (Statistics Canada, 2000a). By 1980, 55.7 percent of all BC workers in primary industry occupations were members of a union (Statistics Canada, 2000b). Marchak's 1983 study of forestry workers in three communities, including one northern and one northwest community, found 65 percent of workers were union members, with 37 percent (of union members) in the IWA and 41 percent in one of the other two aforementioned pulp unions (1983, p.256). Unions were highly supportive of Fordist forestry policies that enabled industry expansion through new licensing tenures and the increased influence of large forestry corporations. As we will see later in this chapter, unions have also played a key role in representing forestry workers and their communities in the face of challenges to industrial forestry from new social movements, including Aboriginal rights and environmentalism.

⁸⁴ Lucas (1972) noted that all resource-based communities begin with a building phase, and the working class construction workers make a formative contribution to the town culture and identity that follows.

⁸⁵ Determining the exact level of union membership in either BC or the northwest over time is problematic due to the complex politics between different unions, and the frequent mergers and changes of union names.

⁸⁶ Data on forestry is not provided at the provincial level for this time period. Primary industries include forestry, mining, fishing and other resource sectors.

Forestry figures prominently in politics of rural communities, and the provincial government has made a practice of assigning the ministerial portfolio for forestry to MLAs representing rural forestry-dependent areas. In the northwest, the provincial seat for the Skeena region of northwest BC was occupied by Edward Kenney from 1941 to 1953, with Kenney serving as the Minister of Lands and Forests from 1944 to 1952. The During the peak years of the post-war forestry boom between 1956 and 1972, the Ministry of Forests was headed by Ray Williston of the Fort George provincial electoral district, which surrounds Prince George. Forestry backgrounds also figured prominently in Skeena district Members of Parliament, including former logger and union organizer Frank Howard who held the seat as a representative for the New Democratic Party (NDP) from 1957-1974, and the provincial MLA seat for the Skeena region from 1979 to 1986.

The heavily unionized working population of rural BC provided an important source of support for the NDP, which has historically represented working class interests in provincial politics. The IWA and other unions played a key role in supporting the NDP both in terms of financial backing and voting support (Hak, 2007, p.108; Blake et al, 1985). The northwest electoral districts of Skeena and Prince Rupert have exhibited voting patterns that reflect working class and union tendencies, with higher support for the NDP/CCF parties occurring in these two ridings than in the rest of the province for nearly every election between 1953 and 1991 (Elections BC, 1988; 2002). 88 Thus, both the leadership and the general population of the northwest rural communities have traditionally held strong ties to industrial forestry.

Although forestry has endured multiple periods of boom and bust, the industry that emerged in BC during the Fordist era following WWII brought higher incomes and more consistent employment to forestry communities than they had seen in the past

⁸⁷ Kenney served as Minister of Lands and Forests from 1944 to 1952. A similar arrangement followed in 1986, with the election of David Parker, who served as Minister of Forests for the Social Credit party from 1987 to 1989. Wilson (1998, p.59) notes that environmentalists considered Parker to be openly antagonistic towards their movement. The North Coast riding (created in 1990) which covers the area surrounding Prince Rupert has also been represented by a Minister of Forest, under NDP politician Dan Miller from 1990-1991.

⁸⁸ During the 12 election years, NDP/CCF support fell below the provincial average only once in the Prince Rupert electoral district (1956) and only twice in the Skeena district (1966 and 1986) (Elections BC, 1986). The Prince Rupert district was renamed as North Coast during district realignment prior to the 1991 election.

(Hayter, 2000, p.58). ⁸⁹ Grass and Hayter (1989, p.243) explain that unions have played a key role in protecting forestry wages in BC, by securing wage protection, even during times of employment recession. The benefits of forestry work, however, are unevenly distributed through the rural population, and the stratification of forestry employment is reflected in the social hierarchies that help characterize forestry town culture. Understanding the occupational hierarchy of forestry towns provides insights to the social barriers that Aboriginal rights and environmentalism faced in forestry-dependent communities.

Employment in primary occupations has been important in northwest communities, particularly for men, and forestry in particular has provided a source of highly paid work. Wages in forestry through the 1980s did not appear to be based upon education or other types of human capital (Marchak, 1983, p.136), and the workforce has exhibited divisions that have positioned white male harvesting workers as key figures in the economic and social structure of forestry communities. In the northwest in 1981, where forestry dominates the primary sector, 15.2 percent of employed men and 2.9 percent of women were employed in primary industry occupations, compared with only 7.6 percent of men and 2.3 percent of women throughout BC (Statistics Canada, 2010a).⁹⁰

The forestry workforce has also been characterized by divisions of race and ethnicity that have historically posed barriers to minorities, including First Nations people. During the early era of the BC forestry industry, racial hierarchies not only subjected immigrants who differed from ideal colonial norms to marginalized positions in the workplace, but also awarded lesser pay to workers from non-white ethnic backgrounds (Li, 1988, p.45). In the early days of the industry, First Nations people were often paid a fraction of the rate paid to non-First Nations workers for doing the

⁸⁹ Forestry, as a source of employment, exerted a prolonged positive effect on income levels in BC communities, and studies in the 1990s continued to find that forestry-dependence was associated with higher levels of income in BC communities (Parkins et al, 2003; Stedman et al, 2005). Drushka (1999, p.166-167) notes that loggers in BC are more highly paid than anywhere else in North America.
⁹⁰ Primary industry employment includes forestry, fishing, and other industries involving direct extraction of resources, without secondary processing. Figures are based upon number of men and women employed in primary industry as share of men and women within the employed workforce. Selected census districts included the Skeena- Queen Charlotte and Kitimat-Stikine districts, which encompasses the communities of Terrace, Prince Rupert, Kitimat, and other small communities.

same job (Menzies and Butler, 2001). As the union drive intensified during the post-war boom, and new mills were built, First Nations shared unequally in the opportunities. Surveys of pulp and plywood plants in 1954-1955 indicated that no First Nations people were yet employed in the more modern operations, even in operations located close to communities with large First Nation populations (Jamieson, 1961, p.223). As the industry developed and colonization of BC intensified, First Nations people were forced to compete with marginalized non-European immigrant populations for employment and experienced little success in securing steady access to work (Marchak, 1983, p.341). Examining data from northwest BC, Marchak found that aboriginal people who were successful in securing forestry employment through the boom of the post-war industry, found high levels of segregation in the workplace and limited access to positions as supervisors or managers (1983, p.336-337). Despite the clear discrimination suffered by BC First Nations, Marchak found that northwest residents expressed very little sympathy for aboriginal people both in regard to employment challenges and their rights to the lands (ibid, p.342-343). As the Aboriginal rights movement gathered momentum in the latter half of the 20th century and sought to address natural resource issues, it faced patterns of social organization, defined largely by industry, in which First Nations people had historically faced exclusion and marginalization.

The clear divisions of race and gender within the highly unionized workforce have contributed to the development of a stable occupational hierarchy in forestry-dependent communities that places white male workers at the top. Social movements that challenge the dominance of this hierarchy thus pose implicit threats to the economic and social arrangements that they support. The range of occupations included in the forestry sector is diverse, and there are numerous other industry sectors that are dependent upon the forestry industry within small towns. However, the image of the industry and the identities of forestry-dependent communities have been strongly rooted in the image of men who harvest trees. Their activities are celebrated in community events, arts and literature, and the outwards appearance of forestry towns. To give but one example, when one travels to the northwest, one is greeted at the outskirts of Prince George by a 30-foot tall log figurine in a hardhat, named "Mr. PG". The famous Mr. PG

was erected in 1960 as a tribute to the logging industry and its importance to the region.⁹¹

Forestry-dependent towns are sometimes referred to as "logger towns", even though the workers involved in the actual logging activity comprise only one occupation among the many that depend on forestry directly or indirectly for employment and prosperity. Within the forest industry, those who actually cut trees enjoy an elevated status in social and occupational hierarchies and their exploits are celebrated in chronicles such as "The Lumberjacks" (McKay, 1978), and in the poetry of the famous "Bard of the Woods" Robert Swanson. 92 The romanticized image of loggers and tree fallers is rooted in the extreme physical demands and dangers of the job. Falling has historically held an alpha status within forestry work, and members of this profession have enjoyed elevated social recognition and economic rewards. Occupying a critical position in the productive process, in the past fallers have been able to command pay rates approaching double the average of other harvesting workers by resisting union and employer efforts to convert them from piece rate to wage-based pay scales (Hak, 2007, p.192).⁹³ The skills of falling and cutting trees are celebrated as a sport in many forestry towns, and in 1971 Premiere W.A.C. Bennett proclaimed logger sports to be the official industry sport of the province (Moore, 1971). 94 Today, forestry festivals in numerous towns throughout the province, including Terrace, continue to showcase the skills of lumberjacks in logger sports events as part of these towns' summer celebrations, demonstrating the importance of such activities to community heritage and history.

⁹¹ A smaller scale figure of a similar heritage, named "Sookie Sam", can be seen on the outskirts of Sooke, a town with a long logging and milling history on the west coast of Vancouver Island. Visitors to the town of Mackenzie are greeted by the world's largest tree-crusher (a large yellow machine resembling an oversized steam-roller). In the town of Squamish, a similar-sized statue of a lumberjack (named Sam) with an axe stands at the entrance to town.

⁹² Born in 1905, Swanson worked throughout BC in various logging, camps, and published six books of poetry that are popular among forestry workers and the general population alike.

⁹³ In settings where mechanical falling is impractical or impossible (including coastal and mountainous areas), the productive process begins with the abilities of highly trained fallers that are able to cut down large trees with minimal damage to the valuable wood and human safety.

⁹⁴ Logger sports include competitions in activities such as tree falling, log sawing, and axe throwing. These events showcase the skills of workers that cut trees using power saws and hand tools. The events pay little attention to the activities of other forestry workers, or the women that work in supporting roles I the industry.

Forestry has played in influential role in the social organization and representation of rural communities in many ways. This has included influencing workforce stratification, shaping political activity, and articulating the working class identity of rural communities. However, forestry dependence has also represented a source of disruption for rural communities due to the dramatic cycles of boom and bust that have affected the industry. The dependence of the BC forest industry on foreign export markets (particularly the US) has made it highly susceptible to shifts in the demand for pulp or timber outside of Canada. 95

When forestry downturns have occurred, the northwest has suffered accordingly. Between 1975 and 1977, the town of Terrace experienced significant declines in population, employment, and other economic activity during a time in which CanCel was unable to find markets for its pulp and timber (ibid, 1983, p.334). The collapse of CanCel and pulp milling in the Skeena region would later be part of a major economic recession in the northwest region as the forest industry fell into a more pronounced and prolonged recession near the end of the century.

Rajala (2006, p.82) contends that the northern lumber industry is particularly susceptible to the impact of booms and busts due to competition from southern mills, high freight rates, and challenges of marketing the lumber from the region (ibid). For the 30years following the release of the new Forest Act in 1948 and the advent of the modern forest industry, population in the northwest followed a steady increase. Between 1951 and 1981 the population of Prince Rupert steadily increased, with a small ebb occurring only in the mid-1970s (City of Prince Rupert, 1995). The community of Terrace also experienced significant growth during the forestry boom. Although census statistics were not gathered in Terrace during the early part of the post-war forestry boom, the community experienced its largest period of population growth during the peak decades of the forestry boom between 1961 and 1980, before the flow of new residents dried up in the early 1980s. With the collapse of the American lumber market in 1974 providing the first signal of recession (Rajala, 2006, p. 181-196; Hak, 2007, p.3), the forest industry in Prince Rupert began to experience the effects of the first

⁹⁵ It is estimated that a rise of one cent in the Canadian dollar versus the US dollar decreased BC forest revenues by \$180 million (Drushka, 1999, p.86).

waves of forestry recessions that would continue intermittently throughout the region over the coming decades. Decline in one community often resulted in decline in neighbouring communities. As a source of logs and labour for large mills in other northwest towns, Terrace was hit hard when major closures occurred in either Prince Rupert or Kitimat (Rajala, 2006, p.191).

Rapid changes in population and industrial activity have been associated with various forms of social instability. Literature on boom-bust resource towns has connected the rapid expansion and contraction of population and industry with wellbeing and welfare dependence (Lawrie et al., 2011, p. 143), availability of public services (Gilmore 1976), and incidence of various social problems (Gilmore and Duff, 1975; Murdock and Leistritz, 1975; Freudenburg and Jones, 1991). Marchak contends that in staples-based economies, social stability in resource communities is impeded by the structure of the industry. Cycles of boom and bust and concentration of managerial power and technological development in urban areas or foreign countries inhibit the maintenance of local capacity and community stability by pushing workers out of the region, rather than providing them with the means to develop opportunities for localized industrial enrichment and adaptation (Marchak, 1983, p.24-28). Over-reliance upon an externally based corporate managerial class, and failure to nurture business ownership with direct ties to the long-term interests of the community, facilitate an exodus of ownership and capital when industrial recessions occur (Marchak, 1983, p.319).

These effects are most noticeable in "instant" towns where industry plays a direct role as the builder and administrator of the community. Marchak contends that in older resource towns (such as Terrace) a more committed group of long-term residents provides a source of social stability. However, the structure of the industry (including the concentration of ownership and focus on mass extraction and the exhaustion of the forest resource by the history of mass extraction) poses barriers to the community using forestry to create more sustainable and consistent economic opportunities based on

⁹⁶ Marchak distinguishes between "instant" towns and older forestry towns. Instant towns are built in a short period of time specifically for the purpose of providing labour to a new industrial development, and corporate bodies play a direct role in forming civic governance structures and providing public amenities. Marchak uses Mackenzie as an example of an "instant" town. Kitimat provides a comparable example in the northwest.

localized control and investment (ibid, p. 345-346). Thus, the same features of the industry that drove the growth and success of industrial forestry from the post-war period through to the 1980s, came to stand as obstacles to creating a more stable and long-lasting form of prosperity in the northwest.

In this section I have argued that forestry exerts a profound influence on the social organization and identity of communities that rely upon the industry. Northwest BC communities relied heavily upon the mass extraction and export of forest resources to drive their own growth and prosperity. Harvesting and exporting were emphasized over value-added manufacturing and industry diversification. Those with prominence in extraction processes, namely loggers, have figured prominently in the occupational hierarchy and culture of northwest communities. These arrangements have been reinforced by union organizations and relations with the state that focus on negotiation of benefits within a model of corporate forestry dependence. As a result, attempts to negotiate alternatives to forest uses or to question the legitimacy of forest resource ownership stand as challenges to the way that northwest communities have historically developed and organized. The remainder of this chapter provides a more detailed examination of Aboriginal rights and environmentalism, and their relationships with rural BC and the forest industry.

Part Two: First Nations and the Forestry Era

First Nations have been directly affected by the rise of industrial forestry in BC, but in ways that are dramatically different from the experience of non-First Nations residents of rural BC. This section looks at the experience of First Nations in relation to the forces of industrial capitalism that shaped rural BC, specifically industrial forestry. The exclusion of First Nations people from rural development activities within the industrial forest-driven economy of the northwest was part of a larger pattern of domination. Although it is not possible to review all aspects of First Nations colonial experiences in this study, it is necessary to examine how First Nations experiences in forestry (and other industries) and their position within the general socio-economic structure affected the positions they occupy today in relation to resource development activities.

Before proceeding further, the diversity of the First Nations population must be acknowledged. Although provincial and international boundaries do not provide accurate boundaries for First Nations or their traditional territories, it is estimated that there are 235 First Nations bands in BC, with 29 different tribal councils, with 196,075 people spread throughout 1,701 reserves and other areas of the province (British Columbia, 2012a). First Nations are neither a homogenous group, nor one that is represented by a single unified political voice. At certain points in this chapter and this study, First Nations are referred to by their individual nation or band name. Some generalizations are made regarding patterns of social organization and interaction with industrial, political, and social forces. It is nonetheless acknowledged that First Nations do not all share common histories or similar experiences with the issues at the core of this study.

References to First Nations' experiences in forestry and northwest community development activities tend to be divided into three areas of examination. The first involves the impact of colonization and industrial expansion on First Nations and their role in early stages of industrial forestry and colonial rural development activities. The second examines the marginalization of First Nations both within industry, and within the broader social structure. ⁹⁷ The third way in which First Nations are mentioned in literature about forestry-dependent communities is their empowerment through the progression of Aboriginal rights, and their increasing role in forestry and northwest development activities.

The Aboriginal rights movement is defined for the purposes of this study as the collective efforts aimed at bringing First Nation societies to be on even footing with the colonizing society, and to overcome the disadvantages that they have endured through various forms of mistreatment, the primary being the unlawful seizure of their lands and resources. It is important to acknowledge that Aboriginal rights cover a wide range of freedoms and social justice issues. Within Aboriginal rights, Aboriginal title refers to the right of Aboriginal people to use and occupy the lands that they have occupied since time immemorial. Aboriginal title plays a key role within the broader sphere of rights,

 $^{^{97}}$ Some level of detail was already provided from this area during the examination of occupational hierarchies in the forest industry.

and is essential for the exercise of many other Aboriginal freedoms. The ability of First Nations to self-govern and determine their own paths of development is directly affected by their ability to exert control over the lands and resources they rely upon for cultural practices, direct sustenance, and economic development. Aboriginal rights are, to some extent, incomplete without recognition of Aboriginal title. The colonization and industrialization of the northwest infringed on many forms of Aboriginal rights, and the disregard for Aboriginal title that was inherent in the creation of industrial forests was perhaps the most significant of these violations within the context of this study.

First Nations and the Industrial Colonization of BC

The first Europeans arrived in northwest BC in 1787, shortly after James Cook made first contact with the First Nations in Nootka Sound on Vancouver Island in 1778 (Menzies and Butler, 2001, p.411). By the 1800s, the influence of early industrial capitalism had arrived in the northwest, with the establishment in 1834 of a Hudson's Bay trading post in Port Simpson (now known by the traditional name of Lax Kw'alaams) (ibid). Full-scale colonization occurred much later in the northwest than in the rest of BC with the growth of fully established communities near the late 1800s and early 1900s (Tennant, 1990, p.20). Early treaties limited recognition of First Nations lands to those that they had placed buildings upon, and early governors proceeded with development as if the land were empty prior to colonial arrival (Tennant, 1990, p.25-39). This approach to colonization assisted the early growth of resource industries, and served to confine First Nations to reserves, often in marginal locations. The early colonization of the northwest was focused heavily on establishing communities to support forestry, fishing, and fur industries that sought to exploit a resource base that First Nations had relied upon for thousands of years, thus setting the stage for enduring conflict between First Nations and the primary industrial drivers of northwest development. By the end of the 19th century, timber speculators and forestry companies seeking to increase their tenures were encroaching on the territories of northwest First Nations, staking claims to vast areas of forest and cutting off First Nations from the resource base (Rajala, 2006, p.42).

The displacement of First Nations from their lands and resources by the forces of capitalism was not unique to forestry. The rise of industrial fishing occurred in parallel to that of forestry, and compounded the dislocation of First Nations people from their lands and resources. Historically, the most prosperous tribes had located their settlements close to major salmon spawning streams (Gladstone, 1953, p.21), but they were cut off from control of these fisheries by the rise of commercial canning operations. Upon complaints from the canners, First Nations were forced by the government to destroy their traditional fishing weirs and utilize less effective nets, and European fishers exploited First Nation knowledge to increase colonist adaptations to northwest conditions (Pinkerton, 1987, p.252; Key, 1990 in Trosper, 2002, p. 331). 98 Despite these disadvantages, northwest First Nations experienced relative success in the fishing industry, gaining status and resources comparably better than that of First Nations in other areas of the province (Tennant, 1990, p.73). However, this relative success is nonetheless rooted in a history of structural disadvantage and exploitation. Northwest canneries successfully exploited First Nations' labour due to their disadvantaged positions within other parts of the labour market, including forestry (Pinkerton, 1987, p.257). The development of the commercial fishing license system in the 1968 Davis Plan, made fishing commercially unviable for aboriginal fishers by creating further economic barriers to their ability to compete with settler fisheries (Rajala 2006, p.185). Thus, the deference towards corporations in the allocation of resource rights in fishing reflected the same inequalities that occurred in allocation of timber licenses, with First Nations left largely outside the flow of benefits.

The forestry-focus in this study is not intended to diminish the importance of fishing to First Nations, or to discount the industry's role in shaping First Nations' relationships with institutions of capitalism and settler society. Indeed, fisheries played a key role in introducing First Nations to the wage economy, comprised an important venue of interaction between First Nations and settler cultures, and continues to play such roles today. However, forestry had a much larger role in shaping the broader

⁹⁸ First nations were further hindered in competing with industrial fisheries by the inability to sell their reserve lands in order to obtain the necessary capital for purchasing modern fishing equipment (ibid, p. 256). First Nations were also penalized by restrictions on their ability to operate motorized fishing boats until 1923 (Tennant, 1990, p.73).

provincial economy, and determining economic relationships between BC and the rest of the world. Forestry was equally influential in the interior of the province as it was on the coast. Moreover, the industry played a central role in reshaping the landscape and redefining the way in which the territories in BC are divided and managed by the state.

Although known primarily for their relationship with fisheries, northwest First Nations have, and continue to be, active harvesters and traders of a variety of non-timber forest products (NTFPs), including berries, barks, roots, and medicinal plants. Krech contends, "Narratives about North American Indians are contingent on the times in which they are created" (1999, p.26), and their non-industrialized use of forests has functioned to frame settler understandings of First Nations-forest relationship in limited terms through to the modern era. First Nations people have engaged in forestry "since time immemorial", but did not have their practices recognized as such by Eurocentric definitions of forest management (Parsons and Prest, 2003, p. 779).

Braun explains that western scientific approaches to forest management excluded First Nations and their traditional practices, thus undermining their claim to forests and legitimizing the claims of settlers (2002). Through the 1930s and 1940, as the Forest Service implemented bans against the traditional burning practices that had been used to produce berry-growing sites (Rajala, 2006, p.114). The growth of industrial forestry also interfered with First Nations trap lines and their access to NTFPs (ibid, p.42), and these impacts were compounded by the development of mineral exploration and mine development in the northwest (Baker and McLelland, 2003).

Disruption of traditional practices has had far-reaching impacts on First Nations, and interruption of harvesting activities has interfered with kin relations established during harvest season and other forms of social organizations such as traditional sharing rituals, rites of passage, and intergenerational transmission of knowledge (Nelson et al., 2005).¹⁰⁰ The narrow industrial view of forest values by the settler population not only

⁹⁹ The reason for imposing such bans was to protect timber values (Rajala, 2006). First Nations affected by the burning ban included the Gitskan, Wet'suwet'en, and Nisga'a peoples (Gottesfeld, 1994). ¹⁰⁰ Demands of employment and education have left limited time for traditional activities, furthering the destruction of culture and disrupting the transmission of traditional ecological knowledge critical for maintaining First Nations' relationships with the environment and with each other (Nelson et al., 2005, p.292).

included the failure to acknowledge the role of NTFPs in First Nations society, but also the different ways in which they utilized timber.

"I want to stress that even before contact, Indian people practiced forestry and traded in the products of the forest land. It is not something new brought by the white man. Our language, and I believe just about every language in this province, has a word for lumber, a word for tree. There is a name for every kind of tree in this province in our languages." (Gordon Antoine of the Coldwater First Nation in Nathan, 1993, p.161).

Trees seen as worthless to industrial forestry, such as the birch, provide a variety of products to northwest First Nations, including masks, woven products such as hats and other clothing, utensils, and canoes. Such products not only possess substantial market value in modern economies, but also provide social value in the preservation of educational and cultural practices by virtue of the very act of production (Turner and Cocksedge, 2001, p.37).

Collectively, the increase of northern settlement and the spread of industrial resource development presented major sources of disruption for First Nations at a time when they had not yet obtained recognition of the fundamental rights that are crucial for preserving their culture and their populations. Still, First Nations were not passive witnesses to the commodification of their landscapes, and northwest nations were prominent in expressing early resistance to the advance of industrialization. After initial incursions of European fishers and loggers to the northwest, Chief Mountain of the Nisga'a came to Victoria in 1881 to protest the intrusions upon his people's lands, and four years later a group of three Tsimshian Chiefs visited Prime Minister Macdonald in Ottawa (Tennant, 1990, p.55). Specific complaints about timber use in the northwest were brought to Victoria in 1887 (Rajala, 2006, p.42). The formation of the Nisga'a Land Committee in 1909 represented the first long-lasting First Nation political organization in the province (Tennant, 1982, p.27). These early events demonstrated the regional political capacity of northwest First Nations, and represented the roots of the Aboriginal rights and title movement in the region.

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¹⁰¹ The committee includes the name "Nishga", while other reference to this Nation utilize the spelling "Nisga'a".

First Nations in the Forestry Economy

The aboriginal population in BC is estimated by some researchers to have exceeded 250,000 at the time of European contact (British Columbia, 2007, p.4). After several decades of disruptive contact with European colonists, the BC aboriginal population is estimated to have fallen to a mere 28,000 by 1885 and to a historic low of approximately 23,000 in 1929 (ibid). The decimation of the population left aboriginal people with a monumental challenge in retracing their presence on the land as their rights movement gained momentum in the late twentieth century. Quality of life indicators have shown (and continue to show) that in comparison with non-aboriginals, First Nations experience higher infant mortality rates and lower life expectancy (Kendall, 2001), increased social problems such as substance abuse and suicide (Zimmerman, 1992), and lower levels of education and employment (Stanbury, 1973,1975). Social inequalities have been historically been accompanied by differences in access to and control over natural resources, that have only recently begun to be corrected. As of 1987, only 0.5 percent of forestry tenures in BC were held by First Nations (Nathan, 1993, p.139).

Literature focusing on industrial forestry and northwest rural development includes ample reference to the impacts of early industry on First Nations, their response to these early incursions, and their roles in the early colonization and development of the northwest industry (Rajala, 2006; Marchak, 1983; Menzies and Butler, 2001; Hayter; 2000; Drushka; 1999; McKay 1978; Knight, 1978; Bernsohn, 1981; Taylor, 1975). Literature on more recent developments focuses on First Nations and their growing influence on resource development activities in the late 1980s and 1990s as the movement to recognize Aboriginal rights and title gained momentum and a series of court decisions provided First Nations with new means through which to involve themselves in resource use and regional decision-making (Hayter, 2000; Rajala 2006; Drushka, 1999; Parungao, 2011; Parsons and Prest, 2003). However, these sources provide scant reference to changes in the relationship between First Nations and industrial forestry during the period between colonization and the rise of Aboriginal

¹⁰² Epidemics of small pox and other diseases were helped cause these declines, along with an array of destructive social and physical impacts on Aboriginal communities.

rights. This gap in the literature presents an impression that First Nations at first resisted the colonization of their territories by corporate industry (to varying degrees), but this resistance became subsumed within a larger pattern of marginalization until First Nations became empowered to exercise their rights in a more influential way. This neglects the ongoing transformation and progression that was occurring within First Nations communities during this time, and fails to account for the possibility that First Nations were continuing to advance along a different path of development than the rest of society.

The middle half of the 20th century has been called the "era of irrelevance" for First Nations (Miller, 2000, p.221). High (1996) contends that the experience of First Nations in the colonization process and their contributions to the early foundations of Canadian staples industries including forestry has been well-documented, but their roles as members of the growing wage economy, including their involvement in the rise of industrial forestry, has remained poorly understood (ibid).

Lutz (1994 in High, 1996) argues that between the time of colonization and the rise of Aboriginal rights (both as a social movement and as a comprehensive body of law), First Nations were hindered from effectively integrating with the rising industrial capitalist economy due to paternalistic state and court interventions that restricted their economic opportunities while treating them as wards of the state requiring assistance. ¹⁰⁴

Discrimination against First Nations (discussed earlier in this chapter) has also been implicated in structural inequality experienced by First Nations during the industrialization of the northwest. Deficits in education and other quality-of-life

Miller identifies 1932 to 1978 as the "era of irrelevance". This era extends roughly from the beginning of the period in which First Nations began to be assimilated into the wage economy, until the period in which the Aboriginal rights movement began to gain momentum and draw on new sources of law and social action to assert their title to land, resources, and self-governance. However, the end of this era can be argued to have occurred earlier. In 1969 BC First Nations rejected Federal proposals to abolish the Indian Act and the Department of Indian and Northern Affairs in exchange for cash payouts delivered through a provincial decentralization of Aboriginal assistance (Menzies, 1994, p.779). First Nations instead demanded they "deserved all the normal rights and advantages of Canadian citizenship, as well as special government assistance to compensate them for the hardships imposed by arbitrary government administration of their affairs." (Dyck, 1991, p.110 in Menzies, 1994, p.779).

¹⁰⁴ An example of this was the law preventing First Nations from selling their land to generate capital for business purposes (Tennant, 1990, p.73). First Nations were also restricted in their ability to utilize modern technology for fishing and hunting activities or to conduct such activities for profit, based on the assumption that Aboriginal rights to engage in such activities (whether for personal gain or profit) must only utilize "traditional" methods and must only be conducted for "traditional" purposes (Elias, 1990).

indicators posed further challenges to First Nations in competing for equality within the workplace and society in general. High (1996), however, argues that structural barriers are overstated and that First Nations remained selectively involved with industrial employment opportunities during the middle half of the 20th century as a means of strengthening their culture without submitting to assimilation within the western industrial wage-labour economy.

Drawing on the ethnography of Rolf Knight (1978), High explains that First Nations engaged in a variety of 'work" activities that were not historically recognized as work within the wage economy, and that these activities provided great value not only to First Nations, but also to the settler economies around them. 105 During the period of industrial expansion that connected the northwest to the rest of the province by rail, First Nations provided labour for hand logging and millwork in Kitsumkalum (near Terrace), and beach combing in Metlakatla (near Prince Rupert) prior to the development of populous settler communities (Menzies and Butler, 2001, p.415). Although these activities seldom provided consistent employment for northwest First Nations, who divided their time among fishing and food harvesting activities, they important sources of supplemental income (ibid, 2001, p.413). First Nations thus resisted being "proletarianized" along with the rest of the rural population, but nonetheless remained involved in and (to a degree) dependent upon the resource industries that drove rural development (High, 1996, p.261-3).

Acknowledgement of the role of First Nations in the early forest industry challenges naturalizing assumptions that present First Nations as nature-based people with no stake in modern resource industries (Thorpe and Sandberg, 2007). It would be a mistake to assume that every form of industrial development was resisted by First Nations, and that they opposed the growth of forestry and other industries in their territories. Lutz (1992, p.87-88) notes that the Kitimat band in the northwest actively sought the construction of a sawmill in their territory in the 1880s, and some Tsimshian

¹⁰⁵ High draws on ethnographic studies of First Nations involvement in wage labour, including forestry work, and utilizes some statistical data to validate his position. High contends, "The seasonal round appropriated aspects of the capitalist economy to strengthen the whole. Hence, the native economy involved not only hunting, fishing, and trapping activities but also included seasonal and occasional wage labour. Native participation in the wage labour economy must, therefore, be seen in relation to the resiliency of aboriginal societies." (1996, p.263)

bands permitted the development of canneries in their territories. These occurrences do not contradict the negative impacts that rural development had on First Nations in the northwest, but instead shows the complexity of their interaction with their interactions with the colonization and industrialization processes. First Nations did not follow the same trajectories as settler populations in the adoption of capitalist industrialization, and did not enjoy the same measures of success as non-First Nations populations. However, they nonetheless incorporated capitalism and industrialization into their own developmental processes, albeit in a way that must be understood as being different from non-aboriginal society.

There are numerous small First Nations communities spread throughout the northwest, including towns such as Gitwinksihlkw, Laxgalsts'ap, and Kitwanga. Although many of them are difficult to find on a map or to locate within forestry literature, these communities have not stood still in time. Despite the barriers they faced in sharing the benefits of industry and land development, they remained attached to and dependent upon forestry and other capitalist activities and have developed along with the forestry dependent settler communities, albeit along a different path.

Based on High's position, it would be a mistake to judge the progress of First Nations based on their success within the industrial economy that drove northwest development, or to assume that the primary objective of Aboriginal rights and title movement in this region is to correct inequalities in the existing division of benefits within the existing industrial-driven structure and to obtain a more equitable division of lands with industrial potential. Instead, Aboriginal rights in the northwest should be viewed as a social movement seeking to ameliorate the incongruence between the dominant model of rural development and a (sometimes) parallel, but distinct, path of development. ¹⁰⁶ The aboriginal path of development and industrialization was not visible through much of the 19th and 20th centuries due to structural barriers that prevented First Nations from fully utilizing their resource base and influencing rural development activities in a more profound way. However, as Aboriginal rights and title

¹⁰⁶ This does include a significant emphasis on ameliorating economic and structural inequalities. However, the goals of the dominant economic model should not be presumed to be the same as those of First Nations society.

gained recognition, the ability of First Nations to determine their own paths, and for these paths to influence northwest development activities, became increasingly clear.

Aboriginal Rights and Northwest Development: The Early Stages

As indicated earlier, northwest First Nations were active in protesting industrial activity as early as the 1880s. First Nations faced many obstacles in their efforts to assert their rights to the land and the resource base, including a 1927 parliamentary ban on claim-related political activity among aboriginals (Tennant, 1990). This policy was consistent with the state functioning to eliminate opposition to the expansion of its control over rural areas and natural resources, and reduce challenges to the economic partnerships it formed with industry.

As a deeper understanding of human rights developed, state strategies shifted from simple neutralization of aboriginal challenges, to a more sophisticated bureaucratic strategy of containment that tied First Nations closer to the colonial system of governance. Major steps in Aboriginal rights occurred in the 1950s with the removal of the ban on land claims-related political activity, and with First Nations obtaining the right to vote in 1960 (Tennant, 1990, p. 130). Increased access to provincial and federal funds aided the organization of First Nations in BC through the 1960s, and led to the creation of the BC Association of Non-Status Indians (BCANSI) and the Union of BC Indian Chiefs (UBCIC) (ibid, p.154). However, the formal rationalization of Aboriginal rights also exerted inhibiting influences on the efficacy of First Nations in asserting their rights and titles, as the closer First Nations organizations became tied to the state, the more tightly they were required to define their mandate. This resulted in cleavages between groups and produced challenges to the unity of the BC Aboriginal rights movement (Tennant, 1990). First Nations were aware of the contradictory influence of their close ties to the state, and in a key turning point in 1975, the UBCIC and the BCANSI voted to reject all government funding in an effort to break free of state control (ibid, p.179).

Despite the limitations of these new formal organizations, Morris and Fondahl (2002, p.116-117) contend that the development of these organizations provided a sense of collective identity, and established networks of influence and information that

supported First Nations in their efforts to assert their sovereignty in the face of ongoing development activities in their territories. Additionally, the organizations provided formal institutional bodies through which assistance could be rendered to First Nations. To give but one example from the northwest, the UBCIC provided legal advice to the Tl'azt'en Nation in negotiations with the province in the mid 1970s over impacts of logging activities and railway construction on both reserve and non-reserve lands (ibid). This case represented an important step for Aboriginal rights in BC, as it signalled an increasing ability for First Nations to influence development activities in their region, and to extend their influence beyond the confines of their reserves, even in the absence of an effective land claims process. The negotiations between the band and the province eventually led to the Tl'azt'en becoming the first First Nation to be awarded a TFL in BC In 1992 (Booth, 1998, p.350). 109

The BCANSI and UBCIC played prominent roles for only a short period, and their collapse resulted in BC First Nations returning to the practice of asserting their rights and title on an individual Nation-by-Nation basis (Tennant, 1990). Northwest First Nations acted as leaders in this role, continuing the pattern of active resistance that began in the late 1800s with the Nisga'a's first trip to Ottawa. Throughout the period in which the BCANSI and UBCIC sought to represent collective First Nations' interests, the Nisga'a had continued to assert their interests independently. In 1967, the Nisga'a initiated a case that would lead to profound changes in the way that Aboriginal rights and title are defined in the courts and understood in our society.

Led by Frank Calder, cofounder of the Nisga'a Tribal Council, the Nisga'a made a legal declaration that Aboriginal title to their lands had never been extinguished, and that the Nisga'a had the right to occupy their lands and manage their resource base until a treaty was reached with the Canadian and British Columbia Governments (Allen,

¹⁰⁷ The Aboriginal rights movement also drew upon increasing pools of national strength in the 1980s, as pan-Indian identity was bolstered by the prominence of Aboriginal people's recognition in the 1982 Constitution, their role in blocking the Meech Lake Accord, and nationally publicized events of political resistance in various locations in Canada (Menzies, 1994, p.784).

¹⁰⁸ Negotiations occurred following a long period of blockade action of industrial activities by the Tl'azt'en (Morris and Fondahl, 2002). The Tl'azet'en First Nation is located between the communities of Fort St. James and Smithers, along the north shore of Stuart Lake.

¹⁰⁹ The Tl'azt'en established both a mill and a timber company, marking an important step forward for northwest First Nations into the resource economy (Booth, 1998, p.350).

2013). ¹¹⁰ The Nisg'a's declaration was rejected in the Supreme Court of BC, and in the BC Court of Appeal, before proceeding to the Supreme Court of Canada. The Supreme Court ultimately denied the Nisga'a appeal. Six of the seven judges asserted that the Nisga'a's Aboriginal title had existed at the time of colonization. However, the six judges split on the matter of whether or not Aboriginal title still existed, and the seventh judge rejecting the case on a technicality. Although the Nisga'a's attempt to achieve recognition of their Aboriginal title did not succeed, Asch (2007) explains that the case represented a ground breaking step forward due to the way in which Aboriginal title was characterized in the ruling in the Supreme Court of Canada.

In the BC Court of Appeal, Chief Justice Davey, rejected the Nisga'a claims, while providing a dim view of Aboriginal culture, characterizing them as primitive and lacking the institutions of civilized society (ibid, p.102). In contrast, the Supreme Court of Canada took a very different view of Aboriginal culture, and its conceptualizations of property and governance:

"The [Nishgas] in fact are and were from time immemorial a distinctive cultural entity with concepts of ownership indigenous to their culture and capable of articulation under the common law." (Calder et al. v. Attorney-General of British Columbia, [1973] SCR 313, p. 375)

The Calder decision not only provided a correction against the limited views of Aboriginal culture expressed in the lower courts, but in recognizing the qualities of Aboriginal systems of governance, set the stage for recognition of Aboriginal people's right to self-determination (McNeil, 2007). Further cases with more direct implications on the issue of Aboriginal title would follow in the 1990s. However, in the years following the Calder decision, the lack of progress in negotiating land rights and access to resources with the provincial government resulted in waves of further protests and blockade activities by First Nations in BC (Blomley, 1996).

Success by one Nation provided examples for others to follow across the province. Shortly after the Tla-o-qui-aht and Ahousaht Nu-Cha-Nulth's obtained

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¹¹⁰ The Nisga'a chose a legal declaration as their method of asserting their title as it provided an opportunity for the courts to rule upon the issue of Aboriginal title without having to be concerned with the potential consequences of their decision (Allen, 2013, p.16).

injunctions against logging of their traditional territories on Meares Island in 1985, the Haida Nation began blockades against logging on Lyell Island. These tactics proved successful in Haida Gwaii and elsewhere in the northwest and, when Courts of Appeal began granting injunctions on the basis that industrial activity should cease until relevant land claims were settled (Tennant, 1990, p.224). ¹¹¹

The Gitxsan and Wet'suwet'en staged blockades against logging near Kitwanga (located north of Terrace), following Chief Justice Allan McEachern's ruling against aboriginal title in the *Delgamuukw* case in the Supreme Court of British Columbia in 1991 (Rajala, 2006, p.210). Further forestry-related blockades occurred in the area through the early 1990s, until the *Delgamuukw* case was settled in 1997. Public assertions of Aboriginal rights was not limited to land-based issues in the northwest, as fishing rights also figured prominently in First Nations protests in this region. In 1989, First Nations members marched through the streets of Prince Rupert, following a public protest by non-aboriginal fishers against fishing privileges protected for First Nations (Menzies, 1994, p.781).

These developments represented a significant shift in the assertion of Aboriginal rights towards pursuing change in the local region. Although the legal precedents enabling more widespread meaningful action would not occur until the late 1980s and early 1990s, actions to assert the Aboriginal rights of northwest First Nations demonstrated a growing local capacity for action and a clear intent to challenge development activities that exclude First Nation interests. However, the prospect of increased self-determination brought new challenges to First Nations and they faced the task of developing institutional structures with not only the capacity, but also the traditional and legal authority to engage in treaty negotiations. In 1988, the Tsimshian Tribal Council (TTC) was formed to represent the interests of the seven Tsimshian tribes, and assumed a mandate to manage issues and negotiate treaties for the member nations (British Columbia, 2012b). However, the TTC represented the traditional chiefs of the seven Tsimshian tribes, and not the leaders of the bands as elected according to

¹¹¹ Haida Gwaii is commonly referred to as the Queen Charlotte Islands among settler populations. ¹¹²The case was subsequently heard in the Supreme Court of Canada. The final decision affirmed the existence of Aboriginal title, providing First Nations with new formalized means by which to influence land-use decisions (Rajala, 2006, p.210-211).

the process imposed by the Indian Act. Friction developed between the two groups regarding the way in which the treaty process should be conducted (Kelly, 2005), resulting in a prolonged court battle between the elected and traditional leaders that took nearly 10 years to resolve.¹¹³

While First Nations faced challenges within their own communities in determining the path to take in negotiation of treaties and assertion of Aboriginal rights, they also faced obstacles as a result of the attitudes of the settler population. Tennant contends that public support for land claims began to grow during the 1980s, due to the desire to resolve potential challenges to industrial and economic activity (1990, p.236). In contrast, Marchak's (1983) findings suggest that any interest in solving challenges to industrial progress did not necessarily flow from a strong basis of support for Aboriginal rights among the non-aboriginal population, as the majority of respondents in her survey of Terrace residents were reluctant to acknowledge discrimination against First Nations, let alone support their claims to territorial rights (ibid, p.342-342). The challenges First Nations faced in gaining support for their grievances was made difficult by attitudes of open antagonism towards First Nations land claims among several members of the BC Provincial government in the early 1980s (Tennant, 1990, p.229-233). 115 Concerns about the impact of aboriginal land claim settlements on forestry resources included potential changes in the efficient utilization of forest resources under First Nations control, loss of provincial revenue from forestry activity, reduction to (nonaboriginal) of economic and social benefits derived from forests people, and difficulties in coordinating government and First Nations forest management (Cassidy and Dale, 1988, p.90). Thus, the Provincial government of the early 1980s treated aboriginal land

¹¹³ Six of the represented Tsimshian bands sought an injunction to prevent the BC Treaty Commission from dispersing funds to the TTC. In a 2005 decision, the BC Supreme Court affirmed the elected leaders as parties with authority to represent First Nations in treaty negotiations (Tsimshian Tribal Council v. British Columbia Treaty Commission et al, 2005 BCSC 860).

¹¹⁴Lack of public support for First Nations assertion of Aboriginal rights were also observed elsewhere in the region, in regard to other resource issues. In 1989, non-Aboriginal fishers in Prince Rupert conducted a protest against fishing privileges granted to Aboriginal fishers (Menzies, 1994, p.781).

¹¹⁵ "All they want is dollars. They don't want to throw anybody off the land, they just want billions and billions of dollars." Social Credit Spokesman Brian Smith, in Tennant, 1990, p.229). Smith would later compare the willingness of the government to negotiate land claims with First Nations with the actions of former Prime Minister of England Neville Chamberlain negotiating with Adolf Hitler prior to World War II (ibid). Smith left the government in 1986, and the official government position on negotiations would eventually soften and acknowledge the provincial obligation to engage in negotiations with First Nations.

claims as a threat to the economic and industrial structure of the province, and as a liability to be managed by the Federal government (Tennant, 1990, p.229-233).

Still, by the 1980s, Aboriginal rights were progressing as a movement within First Nations communities and organizations, and to a more limited extent within the economic and legal arenas. First Nations were beginning to achieve positive results for some of their efforts to influence northwest development activities. However, First Nations still faced social barriers among the general public and members of the institutional bodies with which they interacted. The transition of Aboriginal rights and title from a social movement to an influential form of governance in the northwest did not occur until key legal precedents were established, resulting in important regulatory changes.

As later chapters will demonstrate, the relationship between Aboriginal rights and the environmental movement would provide a key platform on which First Nations' would assert their relationships to the environment. The political economic structure that excluded environmentalism and Aboriginal rights from northwest development activities also functioned to bring the two movements together in mutual resistance against industrial forestry. Although the two movements supported each other in many efforts to resist industrial forestry, environmentalism and Aboriginal rights also became distinguished from each other by contrasting views on, and stakes in, the industrialization of the northwest. The following section will explore the growth of the environmental movement, along with an examination of how environmentalism and Aboriginal rights both aligned and departed in regard to their relationships with northwest development activities.

Part Three: Environmentalism in BC

The third part of this chapter explores the roots of the environmental movement in BC, its relationship with the primary forces of resource community development, and the relationship between environmentalism and First Nations. It will be argued that forestry-dependent communities and the rural working class were not pre-disposed to oppose environmentalism based on differences in environmental values or beliefs, and expressed strong attachment to the protection of and control over their resource base

prior to the development of antagonisms between the environmental movement and the forestry industry. The friction that developed between the environmental movement and forestry-dependent communities was a product of a specific set of structural conditions combined with class and cultural-based frictions that placed the objectives of the environmental movement at odds with the interests of forestry workers. These circumstances were aggravated by the failure of the environmental movement to develop alliances with the rural working class, and by the success of forestry companies and their political allies in exploiting geopolitical and cultural cleavages in securing working class support for their model of development.

Early Environmentalism and Northwest Communities

In BC, early expressions of environmentalism were largely based in urban centres, with a focus on protecting wilderness areas within reach of urban areas such as Victoria and Vancouver (Wilson, 1998; Hak, 2007). One of the earliest conservation campaigns in BC occurred on central Vancouver Island, with the creation of Strathcona Park in 1911, with lower mainland nature reserves following in the Garibaldi, Mt. Seymour, and Cypress Mountain areas (Wilson, 1998, p.100). These early movements reflected a pattern of heartland urban areas seeking to exert control over the resource-producing hinterland of the province, with recreational and aesthetic interests of the urban middle class conflicting with the industrialization of BC forests.

Within forestry communities, specific concerns about environmental impacts of logging first arose regarding pulp mills and their impacts on human and animal health. During the post-war boom, residents in Port Alberni expressed concerns to the government about pulp effluent and its effects on people and on salmon (Hak, 2007, p.175). However, protests against environmental impacts of forestry and other industrial projects were extremely rare in rural communities during the middle half of the 20th century, despite the massive scale of industrial transformation that was occurring on the land (Wilson, 1998, p.100). In the northwest, the damming of the Nechako River for the Alcan smelter in Kitimat in 1954, and policy changes to allow

116 These conditions were considered during ensuing public inquiries and the development of the Pollution

Control Act of 1967 (Hak, 2007, p.176).

industrial activity in Tweedsmuir Park attracted no organized resistance from nearby northwest settler communities (ibid). 117

Between 1950 and the early 1970s, the post-war boom accelerated resource industries in BC to new heights, with the doubling of lumber production in the interior, doubling of provincial hydroelectric production, tripling of mineral production, the doubling of paved kilometres of highway, and a massive increase in the construction of logging roads (Wilson, 1998, p.41, 80; British Columbia, 2012c). This period of prosperity also corresponded with the growth of interests in recreation and tourism (Drushka, 1999, p.83), bringing a growing middle class into contact (and conflict) with logging and other resource-extraction activities. Bernsohn (1981, p.36) explains that the massive increase in logging roads that accompanied the forestry boom provided increased public access to the backcountry. Recreation-seekers (including fishers and hunters) were able to expand their range, and the public acquired a means by which to discover the impacts that industrial forestry was having upon the environment (ibid). In the northwest, the expansion of freshwater fishing licenses brought an increasingly affluent section of society into the wilderness where only industry had previously ventured as representatives of colonization, resulting in conflict between outdoor enthusiasts and logging companies over backcountry access (ibid). These developments were significant enough that in 1966, the British Columbia Lumberman magazine identified fishery conservationists as one of the most important problems facing the forest industry (Hak, 2007, p.187).

In response to the increasing demand for park and recreation land and the emerging environmental movement, the NDP government expanded BC parklands from 2.9 to 4.5 million hectares between 1972 and 1975 (Wilson, 1998, p.131). However, most of the additional area was located in inaccessible regions of little interest to industry, including large areas of land in the northwest (ibid). Approximately 42 percent of the additional area was included in the Spatsizi Plateau Wilderness Area north of

¹¹⁷ Wilson notes that only those flooded out by the Kenney dam expressed resistance to the project (1998, p.100). A small number of ranchers were displaced by the flooding caused by the dam, but were paid \$1544 for each acre of lost land (Windsor 2005, p.155). The majority of displaced people, however, were Cheslatta First Nation, who were given a mere 10 days notice of the flooding and were paid a mere \$190 per acre of lost land (ibid).

Terrace, with an additional 21 percent of the additional area included in two other remote northwest parks. ¹¹⁸ Spatsizi, in particular, was favoured by the government for park status due to its lack of marketable timber or other attractive resources, and was selected despite a lack of support from environmental organizations and wilderness groups that were more interested in conserving other areas of the province (ibid, p.135). ¹¹⁹ In contrast, the Khutzeymateen watershed (located in the northwest, near Prince Rupert) was proposed for park status by university researchers and Fish and Wildlife officers, based on its high population of grizzly bears and rich salmon runs (ibid, p.133). However, high timber values in the Khutzeymateen area prompted the Ministry of Forests to approve harvesting in the area, and the site remained unprotected until receiving protection as a park in the early 1990s (Rajala 2006, p.199-200; Drushka, 1999, p.61).

The main sites of tension between environmentalists and the forest industry at this time were in the Vancouver Island and Lower Mainland region, and in the east Kootenays. 120 Thus, the creation of parks in the northwest was not a result of environmentalist activity in the area, but instead may be viewed as part of a political strategy to appease growing demands from an increasingly environmentally conscious and recreation-minded voting public without substantially interfering with the forest industry that continued to function as the primary economic driver for the northwest and the province. While the growing environmental movement was successful in battles to protect contested areas in the southwest of the province (such as Mt. Arrowsmith and Pacific Rim Park) where the majority of the recreation-seeking population was located, the movement was less influential in the more isolated northwest region where industrial considerations remained the primary factor in selection of parklands.

¹¹⁸ The Spatsizi Wilderness Area currently encompasses 696,160 hectares, and originally included 675,000 hectares (Wilson, 1998, p.130). The additional 21 percent of the additional park area added to the northwest region included Atlin Park (233,00 hectares) and Tatlatui Park (105,500) hectares (ibid). ¹¹⁹ Bernsohn (1981, p.138) notes that between 1973 and 1976 only a small number of people visited Tatlatui Park and other northwest parks created during this era.

¹²⁰ The East Kootenays are notable for hosting a diverse population of First Nations and settler populations, including Doukhobors, Quakers, "hippies", and young Americans who had fled the US draft during the Vietnam conflict. These groups have been associated with a strong "living off the land" ethic, and resistance against the influence of large industry and corporate control (Martineau, 2007; Janovicek, 2012).

The environmental movement had developed more extensively in the US prior to its growth in Canada (Hak, 2007, p.179), feeding off the counter-culture social radicalism that accompanied the Vietnam War. Zelko (2004, p.79) contends that ecological consciousness was perceived in Canada as a force flowing northwards from the US, stimulating Canadian nationalist critiques about the 'Americanization' of Canada in the 1970. The emergence of environmental advocacy organizations in BC was perceived as a foreign influence that took root in the urban middle class. By the late 1960s and early 1970s, Vancouver was considered a counter-cultural centre and an attractive destination for hippies, new leftists, and draft dodgers, along with the social activism causes they supported (ibid). The city played host to a growing middle class, two major universities, and was situated within close proximity to majestic natural resources attractive for recreation, increasing the suitability of the city for the growth of environmentalism.

Prior to the 1969, Zelko (2004, p.197) contends there were no influential environmental organizations in British Columbia. The first two effective formal environmental organizations in BC included the Vancouver chapter of the Sierra Club (opened in 1969), and the Society for Pollution and Environmental Control (SPEC), which was founded at Simon Fraser University in the early 1970s (Hak, 2007). The former focused on establishing parks and protecting wilderness, while the latter focused on pulp mill pollution and deforestation, and pursued tighter standards and increased enforcement of pollution regulation (ibid). The most influential and high-profile organization to develop in BC was Greenpeace, which formed in 1970 to protest nuclear weapons testing in the Pacific Ocean (Zelko, 2004). The Greenpeace's early emphasis on issues that cross international boundaries provided a blueprint that would define its influence in future years as an opponent to the impact of globalized corporate forestry on the BC landscape. The germination of Greenpeace in the suburbs of Vancouver staffed the organization with a heavily professional managerial class membership, whose

¹²¹ Following Maslow's hierarchy of needs, Zelko (2004, p.63) suggests cities nurture post-material values in people with more wealth and education, who are secure with their economic situation and can afford to focus more intensely on quality-of-life issues.

¹²²Between 1970 and 1995, Greenpeace grew from 12 members to 2.9 million members in 158 different countries (Hayter and Soyez, 1996, p.145)

interests did not necessarily find resonance with the interests and concerns of the working class (Harter, 2004, p.88-90). The characterization of BC environmentalism as an urban middle-class movement is thus rooted in not only the geographic origins of the major founding organizations, but also the class origins of their early membership and leadership ranks, and the cultural milieu in which they developed.

Early research on environmental attitudes found that rural populations support environmental protection less than their urban counterparts (Lowe and Pinhey, 1982; Tremblay and Dunlap, 1977). Explanations for these patterns include claims that rural populations favour utilitarian versus recreational uses of the environment, and possess stronger attachment to resource industries (Hendee, 1969; Murdock and Shriner, 1977). Social class has also been identified as a potential determinant for environmental attitudes, with assertions that middle and upper class populations are more engaged with social issues and possess material advantages that allow them to engage with such issues once their more fundamental needs are satisfied (Morrison et al., 1972; Martinson and Wilkening, 1975). 123 However, review of evidence to support class-based differences in environmental beliefs has found little support for the existences of such patterns on a widespread basis (Van Liere and Dunlap, 1980). 124 Norton (2003, p.101-102) notes that assumptions of working class ideology as being unsupportive of environmentalism are not generally supported by empirical research. Instead, he argues that there have been industry-specific circumstances that have placed environmental concerns at odds with the interests of certain groups of workers, and that the views of these workers do no not necessarily reflect working class ideology on a general basis.

Not all environmental groups in BC were based in cities or established as local chapters of a foreign organization, and friction between environmentalism and rural communities did not develop upon immediate contact. In some parts of BC, local community groups formed to protest logging practices and to provide opposition to

¹²³ These explanations revolve around Maslow's hierarchy of needs, and the belief that once basic needs (such as shelter and food) are met, people are more willing and able to deal with other issues in society (Van Liere and Dunlap, 1980).

¹²⁴ Evidence for generalized differences in environmental concern between rural and urban populations has also been inconsistent, and has been found to be contingent upon how the environment is defined, particularly, whether local of global issues are identified as the focus of concern (Van Liere and Dunlap, 1980).

foreign capital's increasing control of over local resources. ¹²⁵ For example, the town of Smithers in northwest BC developed a reputation for harbouring many residents with strong pro-environmental sentiments. The town was considered a focal point for environmentalism in the northwest in the 70s and 80s, and was regarded with caution by the forestry industry as a community with an unusual tendency to demand input on resource development decisions (Bernsohn, 1981, p.139). A local chapter of SPEC was established in Smithers in the early 1970s. The chapter expressed criticism towards increased forestry production and reduced local processing, and the associated impacts on the community and local environment (Moore, 2002, p.222).

Among the general northwest population, industry was not always uncritically embraced as with local community interests. Thus, Marchak's 1979 survey of Terrace residents found significant opposition to pipeline construction in the region, based on potential threats posed to the environment by such a project (1983, p.338-339). Marchak explained, "These responses would indicate not that residents were opposed to industrial development, but that they were opposed to a form of development that is directed by outsiders in their own interests." (1983, p.340).

Northwest communities did not occupy clear pro-industrial and anti-environmentalist positions. Indeed, residents expressed clear concerns about the environment and their resource base when they believed it faced significant threats. Northwest communities also expressed reluctance to accept control over their resource base by external parties. ¹²⁶ But, as I have noted, environmental groups themselves were external parties with strong social class, cultural, and environmental values that differed from the majority of the residents of northwest BC. Environmental groups thus faced obstacles in gaining influence in regions where they were clearly distinguished from local populations by markers of class, culture, and geography.

¹²⁵ For example, the Valhalla Wilderness Society was formed by local residents of the Slocan Valley in 1974 as part of an effort to resist external corporate control of the forestry land-base (Wilson, 1998, p.205).

¹²⁶ As discussed earlier in this chapter, resistance against external control of the local resource base was also evident in early resistance among local contractors and workers against centralization of cutting rights among the industrial elite, and the development of timber tenures that favoured foreign corporate bodies over locally based small operators.

The Environmentalism-Forestry Conflict

The relationship between environmentalism and rural communities was influenced greatly by its relationship with forestry workers. This relationship started off with cooperation in many cases, before devolving into conflict. The IWA had expressed concerns to industry about forestry pollution at numerous times throughout the 1950s, and various labour organizations lent their support to environmental groups during the early 1970s in efforts to reduce pollution in the pulp milling industry (Hak, 2007, p.183). The Sierra Club and Greenpeace joined with local fishers in Prince Rupert in the late 1970s to protest logging impacts on fish habitat in the Queen Charlottes Islands (Rajala, 2006, p.204-5). SPEC made early inroads with forestry workers on issues such as the toxicity of lumber sprays. However, these relationships were short-lived and eventually gave way to antagonistic relationships between the organization and forestry labour groups (Hak, 2007, p.183-185).

Hak links the falling out between SPEC and forest unions to cultural differences between the groups and SPEC's failure to understand union politics. SPEC's more radical counter-culture urban membership clashed with the straight-laced conservative working person culture of the IWA, causing distrust among the union members. SPEC also made demands that unions found unreasonable, such as applying taxes to union members to fund SPEC and asking the union to focus on environmental issues instead of worker wages during industry negotiations (Hak, 2007, p.184-186). The Sierra Club also alienated potential labour allies with positions taken regarding logging practices, and proposals to tax the industry for environmental purposes (ibid).

Harter (2004) contends that Greenpeace (like SPEC) originally sought an alliance with workers against corporate resource exploitation, but turned against workers when the organization decided that such agreements would compromise the organizations' values.¹²⁸ Instead, Greenpeace turned to the international stage to

¹²⁷ "It was a simple fact...that trade unionists, office workers, and housewives hate students. Overwhelmingly, university students came from families that were not headed by industrial workers, and protesting students were seen as pampered, destined to be higher up the social scale than industrial workers, and ungrateful for the privileges of attending university" (Hak, 2007, p.186, citing Perry, 1968,

¹²⁸ Harter (2004) argues that Green peace failed to appreciate the importance of cultural attachments to occupations and their inherent relationships with nature. This lack of empathy was demonstrated in the

pressure forestry companies through global markets, thus alienating labour groups and advancing the characterization of environmentalism as an external force attempting to exert control over rural areas (ibid). ¹²⁹ These outcomes are consistent with Foster's assertion that the environmental movement failed from an early stage to take advantage of opportunities to align itself with the working class at moments when capitalism has attacked the workers (2003, p.31). ¹³⁰ The cultural and class-based contrast between urban environmentalists and rural workers functioned as an aggravating factor in a divide between environmentalism and an "exploitation axis" consisting of industrial capital, rural labour, and a government bureaucracy that produced policy complicit with industrial interests (Nelles in Wilson, 1998, p.91).

Environmentalism's focus on BC forestry began to increase in the early 1980s, and grew in response to pressure on provincial resources and increasing global awareness of environmental change. Forestry activism was fuelled by the prominence of clearcuts on the BC landscape, which provided a more visual type of impact than other environmental problems such as ozone depletion or pollution. (Wilson, 1998, p.48-49). The environmental movement achieved an increased level of influence under the 1972-75 NDP government that had sought to increase state and limit corporate control over forests. However, the movement faced increased opposition with the re-election of the Social Credit government in 1975. In response to the growing influence of the environmental movement, the more business-friendly Social Credit government assumed an agenda to 'contain' the environmental movement through reshaping of

lack of sensitivity shown towards loggers as well as seal hunters and fishers. Meanwhile the company claimed to represent the environment on behalf of all people, casting resource worker relationships with nature as lacking legitimacy.

¹²⁹ Greenpeace's most well known international market activities targeted publishing companies in Europe that utilize BC pulp products, staging protests at their German headquarters and at the Canadian embassy in an effort to induce boycotts on BC timber products from areas deemed environmentally sensitive (Hayter and Soyez, 1996).

¹³⁰ Foster notes that environmentalists were absent during class struggles between resource workers and industrial capital in fights over wages and working conditions. When the spotted owl became the focal point of conflict between loggers and environmentalists in the northwest US, it occurred at a time when there was a class war occurring between rural workers and industrial capital. However, environmentalists remained insensitive to the circumstances of the workers increasing a gap where a bridge may have been built (Foster 1993, p.131).

forest policy and tenure reform while also reshaping the *Forestry Act* in an attempt to revitalize the industry (Wilson 1998, p.149-151).¹³¹

The 1978 *Forest Act* abandoned sustained yield for a system of "high yield" forestry that incorporated increases to the AAC (ostensibly) balanced by increased silviculture methods to justify increased extraction (Drushka, 1999, p.52). The Minister of Forests contended that the forests were overly mature, and increased cutting of old timber was required in order to provide room for new growth (Marchak, 1983, p.81). The new *Act* favoured large forestry companies, paying only lip service to public input and the needs of small operators. In the wake of declining economic conditions in forestry, unions aligned themselves with industry and the government in supporting the new *Act* and in pushing back against the environmental movement (Martin, 2008, p.159). Under the new regime, BC forestry employment sharply rebounded, reaching its highest point in the second half of the 20th century in 1979 (at 97,307 employees), with an annual harvest that climbed steadily through the early 1980s to reach a post-war peak of 90,591 cubic metres in 1987 (Marchak et al, 1999, p.91).

In addition to an increase in harvesting volume and overall employment, the new *Act* was accompanied by several changes that contributed to the increase of environmental-industry conflict. These changes included the careful funnelling of public input to harvesting plans into consultation forums with no actual impact on outcomes (Drushka, 1999, p.126; DesRoches, 2007). A second key change in forestry policy was a mandate to provide forestry companies with increased flexibility when failing to meet forest regulations (Hayter, 2000, p.88). ¹³² The government's willingness to overlook poor forestry practices (a policy referred to as sympathetic administration) angered environmental groups and prompted increased protest activity (Hayter, 2000, p.88).

A third key change was a series of policies designed to streamline the management of multiple forest uses through an integrated process of land management. This policy was based on recommendations from the 1975 Royal Commission that were intended to protect multiple forest uses (Drushka, 1999, p.52-53). However, the

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¹³¹ Tenure reform was based largely on economic factors. However, new features of the tenure system were designed to limit the influence of environmentalists and other public input on forestry activities. ¹³² Examples of this included allowing forest companies to leave lower value logs to rot or burning them instead of processing them (Drushka, 1999, p.53).

implementation of the policy resulted in the rejection of applications to designate areas with a singular use (such as "wilderness"). This resulted in logging and recreation uses applying to common areas, thus allowing harvesting to occur while leaving clearcut areas behind for recreation (ibid). Wilson (1998, p.150-151) explained that replacing the comprehensive approach to land management that balanced BC's industrial forests with designations of new parklands (as conducted under the previous NDP government) with a case-by-case approach of overlapping and conflicting forest usages in which industry trumped other uses resulted in environmentalists setting out upon a series of prolonged "valley by valley' battles" to protect alternative forest values.

Following the temporary boom of the forestry industry that accompanied the business-friendly *Forest Act* of 1978, the industry was hit by a sudden and severe recession in the early 1980s that cost the industry approximately \$1.1 billion and saw unemployment rise from 6.4 percent to 19.2 percent between 1979 and 1982 (Hayter, 2000, p.67). The failure of the province to engage in adequate silviculture programs eroded its timber supply, leading to a situation in which it no longer held a depth of forest stocks to allow it to compete with other wood-supplying nations on the global marketplace (Marchak, 1991). This resulted in a lack of sufficient high quality second or third growth timber to fuel industry needs, and increased pressure from environmentalists to protect the remaining old growth forests which were becoming subject to increasing logging pressure due to their high economic value (Wilson, 1998, p.124). The failure of environmentalism to bridge the divide between its urban core and the forces of rural labour resulted in environmentalism forming a convenient target for resentment when the industry went into decline.

Industrial capital responded to the environmentalist pressures with public relations campaigns to cast environmentalism as a threat to rural workers, despite the fact that job loss was linked to other factors (Doyle et al., 1997; Dunk, 1994, p.15). The main sources of job loss within forestry have been advances in technology, and the use

¹³³ The term "falldown" is utilized to describe the declining productivity of the forests after shifting from mature timber supplies to younger stock. The falldown effect in BC is linked to a chronic failure of the BC forestry industry to pace timber extraction in a sustainable manner, the failure to match extractions with effective silviculture practices (tree planting and growing), and the failure of the government to implement policies to effectively require industry to carry out silviculture responsibilities (Marchak et al, 1999; Drushka, 1995; Wilson, 1998, p.124).

of machines that replace the labour of entire crews of workers (Dunk, 1994, p.16; Marchak, p. 1995, p.38; Marchak et al, 1999, p.102; Hayter, 2000, p.264-7). Of the 27,000 jobs lost in forestry between 1981 and 1991, it is estimated that only two percent were lost due to conservation measures with the remainder attributed to advances in technology (Goldberg, 1994, p.27). During this time period, the number of workers per 1000 cubic metres of harvested wood declined from 1.41 to 0.98 (BC/Canada Statistics, 2000, p.19). Thus, the structure of the industry continued to shift towards arrangements in which fewer jobs were available for workers and increased pressure was placed on old-growth forests, which had become the target of protection for environmentalists.

Throughout the 1980's, the forest industry (led by the Council of Forest Industries as the dominant representative group for forestry capital), spent between \$1.5 and \$2 million per year on publicity campaigns titled "Forests Forever" (Wilson, 1990, 154 in Doyle et al., 1997, p.248). This campaign, intended to elicit public support for industrial forestry in the face of challenging global economic conditions and increasing environmental critiques, was paralleled by a series of locally-based 'Share' movements, which created networks of forest workers, local citizens, businesses, and forest companies to support industrial forestry while preserving recreation in the woods (Wilson, 1998, p.66). The "Share" movement countered the localized strategies of environmental groups by using images of forestry-dependent families and conscientious forest harvesting, and portraying opponents of industrial forestry as urbanites that lacked appreciation for rural culture (Moore, 2002, p. 249).

The environmental movement responded to the reinvigorated state-industry coalition of forestry control by engaging in increased on-site protests and acts of civil disobedience, combined with strategies to highlight the unique aesthetics of west coast forests to build a broader base of support for the movement (ibid, p.236-8). Through the 1980s, high-profile conflicts between environmentalists and the logging industry

¹³⁴ American anti-environmentalist, Ron Arnold provided the following advice to MacMillan Bloedell and other BC forestry companies regarding the 'Share' movement and publicity campaigns: "It can be an effective and convincing advocate for your industry. It can evoke powerful archetypes such as the sanctity of the family, the virtue of the close - knit community, the natural wisdom of the rural dweller...And it can turn the public against your enemies...I think you'll find it one of your wisest investments over time."(Arnold in Goldberg, 1994, p.27).

occurred in the Stein, Carmanah, and Walbran valleys, as well as South Moresby and the Stikine Valley in the northwest (Hayter, 2005, p.25). 135

While the locations of conflict in BC during the early environmental movement were concentrated in the southern part of the province, the growth of environmentalism and the new site-by-site format of the movement brought a new presence to the northwest, and small environmental groups began to sprout up in response to specific industrial activities. The Sierra Club assisted the Friends of Stikine and Residents for a Free-Flowing Stikine in organizing resistance in conjunction with the Tahltan First Nation, against logging and hydro development in the Stikine River Valley, an area also known as the Sacred Headwaters (Demchuk, 1985). 136 The more highly publicized South Moresby protests involved Canada Parks and Wilderness Society, the Sierra Club of Western Canada, the Friends of Ecological Reserves, Canadian Nature Federation, and the World Wildlife Fund, with international support provided by Audubon, National Parks and Conservation Society, the Sierra Club, and Earthlife (Sewell et al, 1989, p.156). In an effort to gain national and international attention, a caravan of environmentalists and Haida Gwaii First Nations travelled from St. John's, Newfoundland to Vancouver, BC (Sewell et al, 1989, p.159). Publicity of the South Moresby protests was included in MacLeans, Nature Canada, National Geographic, the New York Times, the London Observer, and The New Yorker (Gardner, 1994, p.174). A total of 89 people, mostly Haida, were arrested for blockade and protest activities (Sewell et al, 1989, p.148). Industry asserted that preserving the area would cost the province \$75 million in revenue and deprive the local region of up to 1,100 logging and woodworking jobs (Gardner, 1994, p.163). Thus, the initial spread of the environmental movement into the northwest occurred along provincial battle lines drawn between new local interest groups supported by larger international environmental organizations with ties to global media and large urban centres, versus the interests of forestry workers in rural communities.

¹³⁵ South Moresby includes a chain of islands in the southern area of Haida Gwaii, including Burnaby, Lyell, and the southern portion of Moresby Island.

¹³⁶ Efforts to prevent development in the Stikine region extended into the 21st century, and continue today over concerns regarding mineral and hydro development.

¹³⁷ Opponents disagreed with these figures and contended the true costs were close to 2 million dollars in revenue and only 210 jobs (Gardner, 1994, p.163).

Leading into the early 1990s, the environmental movement's critique of industrial forestry in BC had developed into a network of locally-based protests linked to a series of globally-mobilized boycott campaigns orchestrated by Greenpeace and the US-based Rainforest Action Network (RAN) and the National Resource Defense Council (NRDC) (Hayter, 2005, p.25). The most well-known protest occurred at Clayoquot Sound in 1993, in which more than 12,000 people protested (including people from many countries around the world) and more than 850 arrests were made (Langer, 2003). Protest activities included actions such as blockades of roads to prevent industrial activity, sabotage of equipment, sit-ins at government and corporate offices, and various publicity-generating activities such as a free concert at Clayoquot Sound by the Australian rock band *Midnight Oil*. The result was a series of (sometimes violent) confrontations between environmentalists and loggers and forestry town residents.

Violence was not uncommon in confrontations between protestors and local residents. Forestry dependent communities often reacted negatively when environmental protests targeted resources in their region, and some residents and workers took action to assert the importance of forestry to the livelihoods. At Clayoquot, local residents dumped human waste at the protest site, and a protestor was shot with a pellet gun and was injured when loggers cut down the tree that the protestor was occupying (Langer, 2003; Harter, 2004). In the town of Squamish, a group of 70 to 100 forestry workers raided a protest camp outside the town of Squamish and assaulted the protestors, resulting in the arrest of five forestry workers (Moore, 2002, p.409-410). The IWA responded to the latter event with a statement that reaffirmed the battle lines that had been drawn between the environmental movement and forestry-town residents.

"We don't condone what happened- but we certainly won't apologize for what happened out there. These people aren't fighting for the TFL, they're fighting for their families, their children, their jobs" (*The Chief*, September 28, 1999 in Moore, 2002, p.410).

Detachment from the realities of labour characterized working class critiques of environmentalists and their urban origins, along with detachments from genuine relationships with nature, and detachment from the status quo. Wilson noted that during conflict over forest resource, local workers made sharp distinctions between local

residents and outsiders, describing protesters as hippies and draft dodgers with no bond to the economic structure of the community (1998, p.217). However, assuming rural residents were unwitting pawns of industry in the 'war in the woods' fails to do justice to the complexity of the relationships between rural workers and the environment, and the experience of rural workers as their livelihoods came under increasing environmentalist critique.

The friction between environmentalists and forestry town workers was part of a larger pattern of social conflict occurring throughout western North America. Drushka (1999, p.106) contends that throughout the 1980s forestry workers were portrayed in the media as, "an uneducated, ecologically insensitive underclass," and this portrayal held sway throughout North America. 138 Reed (2003, p.52) contends that anti-logging campaigns in BC were harmful to rural communities not only due to the targeting of their primary industrial drivers, but also due to their isolation from the political, social, and information resources that are used to fight battles of morality on issues such as the environmental impacts of forestry. Examining the conflict between environmentalists and loggers in Oregon, Satterfield (2002, p.70-77) explains that the romanticized and respected image of loggers was subverted in environmentalist critiques of the industry. The masculine rugged personality of the job was recast as lacking balanced emotional relationships with the land and other people, transforming the public image of the heroic family provider into that of a villainous destroyer of nature. Satterfield contends that while forestry workers perceive this stigmatization as a painful betrayal by society, it also provides impetus for them to reaffirm their group solidarity and assert their identity as part of an under-appreciated working class (ibid).

Reed (2003) reached similar conclusions in her study of BC coastal logging towns. In response to environmentalist attacks on logging, rural communities responded with efforts to reaffirm their identities as working class forestry towns. Forestry

¹³⁸ Drushka's portrayal of the media as pro-environmentalist contrasts with that of others (Doyle et al, 1997) who point out the ability of industry to manipulate the press to portray forestry in a sympathetic light while framing environmentalists as left-wing extremists. Drushka (who worked as a journalist before his career in forestry) contends that the vilification of forestry workers in the media is due to journalists belonging to "a technocratic urban elite with no cultural connection to the rural people who still maintain the foundation of the economy" (1999, p.107). Drushka does, however, acknowledge that the conflict between the groups was also aggravated by loggers that continued to log in a destructive manner, despite changes in regulation and practice (ibid).

community animosity towards environmentalism may thus be viewed as a defensive response to the attack on rural labour by competing demands of a changing economic system and shifting cultural views on the environment that forestry workers find impossible to reconcile while fighting for their own survival. A new discourse of rights emerged among forestry workers, in which the loggers countered environmentalists' portrayal of them as pawns of industrial capital with narratives about the economic hardships of rural living and their right to earn a living, while retaining their traditional relationships with the resource base (Satterfield, 2002, p. 63).

"Briefly and generally stated, loggers see themselves as members of historically rooted land-based communities whose experiential knowledge of the forest is sound and wise, but who nonetheless have been cast unfairly as violent antagonists and treated without respect, despite their wood-cutting contributions to society." (Satterfield 2002, p.160)

It would be presumptuous to assume that the perspectives of resource workers comprise a homogenous voice, or that such a voice represents all rural residents. The literature on the conflict between environmentalism and forestry provides little room for the experiences of resource town residents holding perspectives aligned with the environmentalist movement, or for rural residents and workers who were unwilling to express their opinions due to the pressure of the social norms in their community.

At the beginning of environmentalism's growth in BC, there was potential for a rural-based environmental movement that includes forestry workers. These relationships were largely undermined by environmentalism's failure to understand and connect with rural labour as well as by the efforts of capital to cast environmentalism as an enemy of rural communities. Thus, it is my argument that the potential remains for cooperative and productive relationships between forestry dependent communities and environmentalism if the aforementioned structural and cultural barriers can be overcome.

Environmentalism and First Nations

The relationship between environmentalism and Aboriginal rights is based on unsteady foundations, and moments of both cooperation and conflict have occurred between these

two social movements in BC and elsewhere in the northwest region. In the beginning, the need for support from each other was based on the position of both movements on the fringes of the mainstream and their standing as outside challenges to the economic and political arrangements that control rural development activities. Within American society, where the radical roots of environmentalism formed, Native American practices provided inspiration to early wilderness preservation and conservation movements, and other outdoor activity groups (Cornell, 1985). The development of ecology as a distinct field of science has been described as "a return to the land wisdom of the Indian." (Udall 1973, p.32 in Nadasdy, 2005, p.298). First Nations traditional relationships with nature have been utilized by both First Nations and environmentalists as a critique of industry's destruction of nature (Milton, 1996). At the base of this collaboration was a shared interest in preservation and conservation that was illustrated vividly in research that outlined the correspondence between support for environmentalist and First Nations causes (Robinson et al, 2007). However, environmentalists and First Nations have ultimately possessed different objectives in their resistance to industrial capitalism, which for First Nations is subsumed within a broader resistance against colonial domination.

The environmental movement drew upon support from BC First Nations at numerous times throughout its development in the province. By the time environmental advocacy emerged as a meaningful force in BC, First Nations had already been in conflict with the colonial state and industrial capital over natural resources and land use for more than two centuries. This provided the environmental movement with a well-established ally that held a legitimate claim to the resources deemed in need of protection.¹³⁹

Wilson (1998, p.57) contends that most environmental groups have supported First Nations land claims and the right to self-government. Prominent examples of alliances between First Nations and the environmental movement include the cooperation of the Friends of Clayoquot Sound (FOCS) and the Nuu-chah-nulth Tribal

¹³⁹ Nadasdy explains that the use of Aboriginal imagery in environmental campaigns possessed potent political power that evokes sympathy on a global level while tapping into influential local social relations (2005, p.312).

Council in preventing logging on Meares Island in 1979 (Robinson et al, 2007, p.585). Environmentalism-First Nations cooperation also figured prominently in preservation campaigns in the Stein Valley and in the Kitlope watershed near Bella Coola, and the aforementioned protests in South Moresby (Rajala, 2006; Wilson, 1998). In these examples of cooperation, the different groups generally supported each other's objectives, based on the premise that establishment of First Nations title to forested land would result in management regimes that would be more sensitive to the environment than those proposed by large forestry corporations.

In the northwest, First Nations and local environmentalists acted in unison against the proposed damming of the Stikine River by BC Hydro. A highly publicized banner that hung across the Alaskan highway included a slogan that placed the interests of First Nations and other people on the same side of the battle. The sign read "'Dam the Stikine, Dam the Iskut, Dam the people."(Peyton, 2011, p.368).

Although First Nations found allies in environmentalists when defending their territories from the forces of industrial capital, it did not necessarily follow that First Nations were anti-logging or anti-industry. It was shown in many cases that First Nations' resistance was not based on opposing industrialization altogether, but was instead focused more squarely upon the unfair division of resource control. At the peak of conflict in Clayoquot Sound, the Ahousat and Tla-o-qui-aht First Nations distanced themselves from environmentalists when protest methods became more radical (Nathan, 1993, p.156). The Tla-o-qui-aht, specifically, indicated that their people were in favour of logging, with 60% of their members involved in forestry prior to the court injunction that halted logging, and they simply objected to the way that logging was being proposed on the site in question (ibid).

First Nations involved in northwest environmental protests also expressed the difficulty of being caught between siding with environmentalists in resisting industrialization of their territories versus the tension of their own path of industrialization and development. This is reflected in the following quote from the Chief of the Tahltan First Nation during the fight to prevent damming of the Stikine River:

"In our traditional territories we have the largest block of trap lines in BC, which is an important source of income for our people. These areas are being logged, and our people were promised jobs to replace trapping but they haven't happened. We are not opposed to development. We want our people to develop along with the resources." (Chief Pat Edzerza of the Tahltan First Nation in Nathan, 1993, p. 163).

Nadasdy contends that alliances between environmentalists and aboriginal people cannot succeed when the nature of aboriginal relationships to the environment is actually expressed according to aboriginal people's own terms. Nadasdy warns, "Any attempt to place First Nation people somewhere on the environmental spectrum, for whatever reason, is to impose on them the terms of a debate that is not their own." (2005, p.313). While many examples of cooperation and alliance between First Nations and environmentalism exist, there has also been friction, and occasionally conflict, between the two groups. Nadasdy (2005, p.313) contends that the occasional alliances that have occurred have often been based upon environmentalists deploying a stereotyped image of indigenous people as ecologically noble beings, and this image has ultimately hindered First Nations in their quest to achieve self-determination. Kalland (2003, p.11) explains that such representations of aboriginal people as environmentalists act as a "double edged sword". Images of aboriginals as environmentalists provide moral power in legitimizing aboriginal land claims, but holds them up to out-dated notions of what comprises indigeneity, thus denying them the right to exercise true selfdetermination as they follow their own distinct path of modernization.

In his study of images and discourse deployed by environmentalists in the battle over Clayoquout Sound in the early 1990s, Braun (2002) explained that any sign of modernity (including motors on boats or modern clothing) threatened to disqualify the legitimacy of aboriginal people's identity and undermined their symbolic value as part of the nature that environmentalists were trying to preserve. Drawing on a similar example from northwest BC, Rossiter (2004) contends that, during environmentalists' campaigns to preserve the Great Bear Rainforest, First Nations people were treated as natural features of the landscape and referred to with deference to their traditional lifestyles, while manifestations of their modern activities are neglected or denied. The imposition of stereotyped images of First Nations people as naturally ecological beings

placed them in a double bind in which they continue in the marginalization that has resulted from their treatment under colonialism as inferior beings, but are deprived of their claims to heritage and self-determination when they display features associated with western modernization.

Wilson (1998, p.57) contends that a turning point in environmental-First Nation relationships occurred in 1991 when the Provincial government recognized aboriginal title and right to self-government. This change provided First Nations with a distinct form of empowerment, thus reducing their need for alliances with other parties. As First Nations have obtained increased control in the development and usage of forests and other natural resources, friction with environmentalism has become more common. Like settler communities, First Nations have in some cases come to view environmentalists as yet another external party seeking to cast their control over the resource base upon which they rely.

One of the earliest signs of the growing gap between environmentalism and First Nations occurred in 1996 at Clayoquot when the Nuu-chah-nulth (who entered the treaty process in 1994) told Greenpeace that they had no right to interfere in the management of First Nations lands, and asked that environmentalist blockades against logging be abandoned (Hayter, 2000, p.338). More recently in the northwest, the Lax Kw'alaams First Nation attracted criticism from the Wilderness Committee for its involvement in the export of raw logs (MacDonald, 2009). However, after being shut out of the forestry economy for so many decades, the ability to benefit from the use of the local resource base provides a valuable opportunity for First Nations at a time when they are still struggling to close the prosperity gap with the rest of society. As First Nations take on an increased role in controlling resource development, their relationship with the environmental movement is likely to face new tests. In her 1995 book, Marchak wrote:

"Cynics may anticipate that if native bands succeed in claiming territory, they will simply become the forestry entrepreneurs of the twenty-first century. Since native people are neither more saintly nor more sinful than other folk, they are unlikely to re-create the world totally as self-sufficient village communities, but there is reasonable evidence that some bands at least are fully capable of changing the forest-exploitation patterns established by other settlers in the profligate century." (1995, p.107)

Chapter One: Conclusion

In this chapter it has been argued that forestry dependent communities in BC are not anti-environmental and have complex relationships of dependency with the environment that surrounds them. However, the BC environmental movement emerged at a time when rural working class interests were facing the first signs of the decline of industrial forestry. Antagonisms between environmentalism and forestry-dependent communities were aggravated by the environmental movement's failure to overcome the class and cultural barriers with the rural working class, by industrial capital's deflection of blame for economic pressures onto the shoulders of environmentalism, and by state actions to support economic and regulatory structures that perpetuated unsustainable models of forest resource extraction. First Nations and the environmental movement at first found common ground in their resistance to industrial capitalism. However, as First Nations increased their capacity to determine their own futures and assert their interests in the use of natural resources, it became apparent that the challenges that environmentalism and Aboriginal rights had posed to industrial capitalism were based on profoundly different objectives.

Chapter Four: Times of Change

Throughout the era in which forestry defined the shape of northwest communities, both Aboriginal rights and environmentalism had been relegated to positions of limited influence on resource development activities. These conditions were reinforced by a close partnership between the state and the forest industry, and a political economic structure that pitted the interests of these movements against those of the rural working class. However, in this chapter, I show that the primary threats to the well-being of forestry-dependent communities leading up to the 1990s were revealed not to be environmentalism and Aboriginal rights. Instead, forestry communities were decimated by the collapse of an industrial model based on political and economic arrangements that had ceded control of resources to external parties, while emphasizing the mass harvest and export of raw materials over the enrichment of local entrepreneurial development and protection of the forests.

The late 1980s and early 1990s comprise an important turning point in the history of the province, and a key period of reference for three interrelated shifts that are central to this study. First, it marks a key moment in the decline of forestry, as the industry entered a period of recession from which it has not yet recovered. Second, the environmental movement gathered momentum following the protests in Clayoquot Sound. As the power of the forest industry waned, the environmental movement developed new market-based strategies that provided it with a potent new source of power through which to influence resource development in the new era of industry that would follow. Third, the Aboriginal rights movement, empowered by key legal precedents recognizing Aboriginal rights and title, emerged as an influential force in the management of lands and resources.

The collapse of forestry dismantled the occupational structure that placed forestry workers at the top of economic and social hierarchies, thus altering the conditions under which Aboriginal rights and environmentalism engage with economic

¹⁴⁰ Although forestry remains an important part of the BC economy today, the industry stands as a shadow of its former self, and the political and economic arrangements that supported the rise of industrial forestry no longer function as the driving force of social organization in the province. However, I refer to the period following the late 1980s and early 1990s as the "post-forestry" era only partly because of the recession in the forest industry.

development activities. Critiques of forestry thus no longer equate with attacks on the core identity and economic interests of the region. The failure of the Fordist model of forestry-based development to provide secure futures for northwest communities has created the potential for environmentalism and Aboriginal rights to locate common ground with other local groups seeking to find a better way of managing the resource base.

In the first section of the chapter, I review the decline of forestry in BC and in the northwest over the past 20 years, and the impacts that this shift has had on affected communities. In the subsequent sections, I examine changes in Aboriginal rights and environmentalism, and the ways that these changes have affected the roles these movements play in resource development activities today. Together these three shifts provide an update to the context in which my study takes place, and explain why a new perspective is needed to understand the way that northwest communities deal with environmental issues today.

The Decline of Northwest Forestry

The BC forestry industry has endured numerous cycles of boom and bust throughout its long history. However, the downward cycles that began occurring in the 1980s and intensified into the 1990s went beyond temporary fluctuations in the Canadian dollar or shifts in the global demand for pulp and lumber. These changes were linked to fundamental changes in BC's position in the global pulp and timber market, and were accompanied by a radical restructuring of the industry, resulting in significant change to forestry-dependent communities in BC.

At the beginning of the 1990s, the northwest remained heavily reliant upon forestry and logging, with 7.2 percent of the labour force employed directly within these industries, versus only 2.2 percent of the provincial workforce (Statistics Canada, 2010b).¹⁴¹ However, a series of significant recessions in the forest industry prosperity

¹⁴¹ The northwest region, for this analysis, includes the census districts of Skeena-Queen Charlottes and Kitimat-Stikine. These districts include the communities of Terrace and Prince Rupert in addition to those areas identified in the district titles. The data for forestry and logging as an occupational category is only available for 1991, and is not available in subsequent years for comparison due to changes in the job classification schemes utilized by Statistics Canada. This job classification only reflects persons employed

through the 1990s severely impacted the vitality of forestry-dependent communities. Tracking the health of the forestry industry presents challenges when comparing data across several decades due to inconsistencies in the types of measures used by Statistics Canada, and in the BC forest industry. However, examination of overlapping economic and occupational measures, combined with observations of specific industry, provides a consistent picture of a decline both in forestry and in general economic conditions in the northwest region.

Problems in the forest industry were apparent in BC prior to 1990, even though timber production data indicates continued growth in the industry up to this date. Between 1979 and 1989, forestry employment decreased throughout the province by 14 percent, resulting in the loss of over 13,800 jobs from the peak of employment prosperity at the beginning of the 1980s (British Columbia, 2000, p.91). Between 1996 and 2006, the number of workers employed in occupations unique to primary industries (including forestry) declined on a province-wide basis by approximately 30 percent (Statistics Canada, 2010c). Labourers in wood, pulp, and paper industries comprised the fastest shrinking category of workers in BC between 2001 and 2006 (British Columbia, 2008). This shift was particularly drastic in the northwest, where the number of such workers declined by nearly 44 percent (ibid).

Contributing to this decline was the closure of numerous mills in Prince Rupert, Terrace, Hazelton, and Smithers, putting a total of 2,400 people out of work (Rajala, 1996, p.2012). Skeena Cellulose operations in Prince Rupert experienced chronic economic problems through the 1980s and 1990s, undergoing numerous changes through this period. The BC government became partial owner in 1997, but the Skeena pulp mill continued to be hindered by high costs of business. The Skeena pulp mill, which had been the largest forestry employment driver in the northwest region for several decades, finally closed in 2001 and declared bankruptcy in 2002. This closure deprived Prince Rupert of a critical pillar that once supported 25 percent of the local

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directly in forestry and logging, and does not capture persons employed in other industries (such as transportation and service) that rely directly upon forestry and logging activities.

¹⁴² Earlier it was noted that the number of jobs per 1000 cubic metre had declined steadily between the 1960s and 1980s. Thus, an increase in volume harvested did not necessarily correspond with increased prosperity for forestry-dependent communities or industry employees.

economy and 20 percent of the workforce, while leaving behind a municipal tax debt that had reached \$22 million by 2004 (Rajala, 1996, p.214-222).

Erosion of the few forestry jobs that remained in the northwest continued into the first decade of the 21st century. Throughout BC, forestry and logging jobs continued to steadily decline a further 40 percent between 2001 and 2011 (BC Stats, 2013a). In the northwest, job losses in forestry, logging, and supporting occupations declined by a further 31 percent, reducing the number of workers from 3,200 to only 1500 (BC Stats, 2013b). During the same period, wood manufacturing jobs in the northwest decreased by 41 percent, falling from 3,600 jobs to only 1500 (ibid). Part of this decline occurred in 2009 when West Fraser announced the shutdown of the Eurocan pulp mill in Kitimat, cutting 535 northwest jobs. Had These job losses also represented a loss of high-quality jobs, as forestry workers earn on average 12 percent more than workers in other industries, with the highest earners being in the pulp and paper industries (British Columbia, 2010a, p.188).

The decline of forestry contributed to a wider pattern of decline in northwest employment that contrasted with improving employment conditions and economic expansion throughout the rest of the province. The contrast between provincial growth and northwest decline was clearly reflected in the population changes that overlapped this period and extend to the present day. Between 1991 and 2011, population in BC increased by 34 percent, while population in the northwest decreased by nearly 15 percent during this same time (Statistics Canada, 2012).

The recession of the forest industry is linked to a number of interrelated factors, including a decline in the availability and quality of timber, high labour and processing costs, increasing competition from emerging timber and pulp producers elsewhere in the world, and failure of the BC industry to develop industrial models well suited to the demands of the shifting global economy (Marchak, 1983, 1995; Hayter, 2000). The linkage between the decline in forest resources and shifting global markets is complex,

¹⁴³ Data based on North Coast and Nechako region. This differs from other references to the northwest region that centre on census districts of Skeena Queen Charlottes and Kitimat Stikine which are subsumed within the North Coast and Nechako development region.

¹⁴⁴ Many workers affected by this closure lived in Terrace, and commuted to Kitimat.

and it tells a story of interconnected human and natural forces that are continuing to pose uncertainties to northwest communities.

The term "falldown" is used to describe circumstances in which the harvested and now re-growing forests are no longer able to produce a timber supply that keeps pace with forest consumption. The falldown effect in BC was initially a product of the failure of the industry to engage in adequate silviculture practices. The area of land reforested in BC did not become equal to that which was harvested until 1990 (British Columbia, 2000, p.9-32). At the peak of disparity between harvesting and planting in 1970, there were 150 million hectares harvested compared to only 30 million hectares replanted (Hayter, 2000, p.87). The failure to engage in adequate reforestation had compound impacts on the forests as it takes a minimum of 50 years for a newly planted forest to reach maturity and become viable for re-harvest. 145 While harvested land will naturally regenerate with time, modern silviculture methods can accelerate the process, and allow industry to ensure that desirable species are planted in place of those harvested. However, even with intensive silviculture programs, some plantations may not thrive adequately to produce a crop that will be suitable for harvest within an 80year time span. 146 Such areas are referred to as non-sufficiently restocked land (NSR) (Marchak et al, 1999, p.21). By 1995, the backlog of NSR land in BC had reached a total of 956,988 hectares (ibid, p.22), accounting for more than 4 percent of the timber harvesting land base (British Columbia, 2000, p.2). The Prince Rupert forest district (encompassing the northwest region) has one of the highest rates of NSR land, with nearly 10 percent of timber areas classified as NSR in 1991 (Marchak, 1995, p.91). 147 This deficit left the northwest forest industry facing a distinct disadvantage as it moved into the 21st century with a greatly depleted resource base.

With the decline of readily available wood, and changes in demand for BC products, the amount of timber harvested in BC decreased steadily from 1992 to 1998, falling 22 percent from 221,559 hectares of forest harvested to 173,801. Lack of

¹⁴⁵ The length of time can vary greatly in an upwards direction depending on the tree species, the conditions of the growing site, and the other factors.

¹⁴⁶ A plantation may be hindered by weather conditions, pests or disease, fires, faulty planting, application of unsuitable species to the land, or other factors such as climate change.

¹⁴⁷ Only the Prince George District was worse with 12 percent of timber areas classified as NSR, with the provincial average approximating 8 percent.

available timber posed a serious challenge to forestry operations in the northwest. In the Prince Rupert forest district, the harvest fell 28 percent from 20,843 hectares to only 14,839 over this period (BC, 2000, p.10). The depletion of coastal old-growth timber, contributed to a widespread change in the landscape of BC, and effectively deprived the BC industry of a critical advantage (abundant and accessible high quality timber) that it enjoyed during its dominance in the global pulp and timber markets of the Fordist era (Hayter, 2000, p.76; Markey et al, 2006). Until mid-1980s, over 80 percent of all industrial wood in the world was produced in the northern hemisphere (Marchak, 1993, p.67). However, through the late 1980s and early 1990s, new suppliers emerged in the southern hemisphere, particularly in countries experimenting with new faster growing tree species and new fibre sources (Marchak, 1993, p.67-68; 1995, p.79-81). Hayter (2000, p.74) explains that by the turn of the 21st century, BC was no longer among the low-cost producers in the global pulp and paper markets, while competing countries had advanced both their timber processing technology and cost-efficiency.

The challenge of rebuilding the timber supply after historical over-exploitation has been compounded by insect infestations and blights. The mountain pine beetle infestation in the interior of BC has affected over 18 million hectares of land, the equivalent of more than one third of the total forested area in the province (British Columbia, 2013).¹⁴⁸ The provincial (and increasingly national) scale of the infestation is projected to have wide-reaching effects throughout the entire interior forest industry, including downsizing of operations, further mill closures, and reorganization of the industry (Patriquin et al. 2005). While the mountain pine beetle has had less impact on northwest timber supplies than other areas of the province, the region has faced other pests and blights including the emergence of dothistroma needle blight in the Kispiox forest district located north of Terrace (Welsh et al., 2005).¹⁴⁹ Like the mountain pine beetle, the dothistroma blight has a basis in natural processes, but is expanding into new

¹⁴⁸ This refers to the most recent MPB infestation, which originated in Strathcona Park in the mid 1990s. This infestation is much larger in scale than previous infestations in the Quesnel and East Kootenay regions. The mountain pine beetle is a naturally occurring phenomenon, but as explained here, the current infestation is a product of human interference.

¹⁴⁹ Only a small amount of timber has been affected by the mountain pine beetle in the areas around Terrace, with more serious impacts located in the communities to the east (including Smithers, Houston, and Burns Lake).

areas at an unprecedented scale as a result of changes in the climate and forest practices (ibid, p.762). The changes that are occurring indicate that the forests may be too big and too complex to manage, and the forces affecting the forests may be too vast to control. The mountain pine beetle and dothistroma have also been accompanied by other new threats to forest resources that are linked to a changing climate, including increased risks of forest fires, extreme weather events, and concerns about the ability of historically viable tree species to thrive in a changing environment (Davidson et al, 2003, p.2254).

The sustained yield forestry policy regime that fuelled the rise of BC forestry communities through the Fordist era while providing the illusion of stable futures for forestry workers have given way to an era in which neither the health of resource base nor the ability to profit from it are certain. While the industry has endured numerous cycles of boom and bust, the current economic and environmental problems are different. The annual harvest of trees has declined steadily since the turning point of the early 1990s, and there is little hope of this trend reversing for many decades to come. The mill closures that have swept through the industry are more widespread than ever before and signal a more permanent shift as their causation lies in a fundamental repositioning of the BC industry on a global level, rather than a temporary change in the demand for forest products from BC's key trading partners. The collapse of the BC forest industry signals a crisis in the relationship between forestry communities and the ability of the established order of forestry management and scientific institutions to provide a solution to the decline of the forest resource base and the collapse of the forest economy.

The impact that forestry decline has had upon northwest communities goes beyond statistics related to jobs and cubic metres of harvest, and belies a reordering of the socio-economic structure that had characterized northwest communities for the past century. In response to the decline of BC forestry in the global market, the industry underwent extensive restructuring of processing and employment arrangements in an effort to adapt to changing demands for forest products. Hayter (2000) described this shift as a move to an industry based on flexibility, in which human and industrial resources were re-deployed in more economically efficient manners. This shift entailed the creation of larger processing plants in centralized locations, with increased levels of

technology and fewer employees (ibid). The organizing principal of this restructuring process was to provide a wider range of more highly specialized products, while utilizing fewer resources. Examples of adaptation to a flexibility-oriented industry include production of a variety of pre-drilled and custom-cut timber rather than basic beams, or specific blends of pulp for different product purposes rather than mass amounts of generic pulp (Markey et al, 2012, p.118). Adaptation was hindered in the northwest, however, by the over-exhaustion of mature timber resources, lack of technological capacity in local mills to effectively utilize second-growth resources, and the prohibitive costs of updating the aging processing facilities in Kitimat and Prince Rupert (Rajala, 2006). Although many smaller independent operations remained in the northwest, all of the large processing plants had shut down by 2009. Instead of restructuring, the forest industry in the northwest simply became a ghost of its former self, lacking either the resource riches or proximity to markets to attract foreign investment back to the region.

Another feature of the restructured BC forest industry was an increase in the exports of raw materials and unprocessed raw logs (Hayter, 2000, p.73). Raw log exports increased by approximately 1000 percent between 1996 and 2007, reaching 4.7 million cubic metres (BC Federation of Labour, 2006, p.5). The ability to ship logs outside of their area of origin for processing in other regions was facilitated by the repealing of the appurtenancy policies that had structured the relationship between forestry corporations and rural communities for nearly half a century. The Forest Revitalization Plan (released in 2004) officially removed appurtenancy clauses from government administered forest tenures (Hayter and Barnes, 2012, p.12). The plan also removed penalties against forestry companies for closing mills, and relaxed restrictions on the ability of forestry companies to sell, transfer, and consolidate forestry tenures without government (or community) approval (British Columbia, 2004). With the closure of the major mills in Kitimat, Terrace, and Prince Rupert, the remaining components of the forest industry in the northwest became even more dependent upon

¹⁵⁰ The rationale for removing appurtenancy policies included freeing forestry companies from making business decisions that damaged their ability to compete, and forcing companies to utilize outdated facilities that remain active by virtue of appurtenancy instead of efficiency (Markey et al, 2012, p.129).

providing logs to other areas of the province and other parts of the world. These policy changes directly facilitated the ongoing restructuring of the industry, and allowed logging to continue in areas such as the northwest, without supporting local processing facilities.

Despite labour opposition, appurtenancy clauses were initially dismantled under the NDP and then formally repealed by the Liberal government, resulting in the separation of forestry from the social development of rural BC communities (ibid). The movement away from appurtenancy is thus more indicative of an overall shift in the role of the state in managing the relationship between rural communities and forest resources than of ideological differences between the two dominant political parties in the province. With the removal of appurtenancy, the state effectively surrendered its role in determining the location of wood processing to market conditions, and forestry companies gained increased freedom in determining where the economic benefits extracted from forest resources will be distributed. Forestry companies were able to restructure their operations, centralizing their processing operations in more costeffective central areas, leaving stripped down harvesting operations behind in the regions where they continued to hold tenure (Hayter, 2000). The version of forestry that was left behind in this restructuring process was not only smaller in scale than the version seen during the Fordist era, but was also different in terms of the characteristics of the workforce.

As forestry shutdowns occurred and the industry restructured, union membership declined and shape of the forestry workforce changed. Contract labour increased at the expense of union labour in BC forestry, with contractors increasing their share of logging revenue from 37% in 2004 to 51% by 2011 (Statistics Canada 2012a). Marchak explained that contracting out forestry labour is a strategy used by forestry companies to free themselves from the obligations associated with reliance upon a union workforce (1995, p.99). This strategy also allows corporations to download the risk of capital investment onto local business owners. Union coverage in BC forestry declined sharply in the period following 1990. While union density declined throughout BC and Canada during this period, the decline in forestry was particularly dramatic. Union coverage for all employees in BC declined from 37 percent in 1997 to 32 percent in 2010. Over the

same period, union coverage for workers in all primary industries (including forestry, fishing, mining, quarrying, oil and gas) fell from 49 percent to 32 percent (Statistics Canada, 2010b, 2010c). Among forestry workers (not including those in manufacturing), union density plummeted from a high of 82 percent in 1990 to only 47 percent in 1994 (Statistics Canada, 2000c). While census district data is lacking on these changes over the two decades following 1990, the contracting out of logging operations and the closures of the three largest milling and manufacturing facilities the northwest provide indicators of a major decline in unionized forestry workers in the region.

Along with the loss of unionized high-wage earners, forestry closures have produced burdens of unpaid municipal taxes, depression among workers and residents, and increased social problems in affected communities (Barnes et al, 1999; Hanlon and Halseth, 2005; Prudham, 2008). The shift towards contracted labour and the decline of unions intensified the precarious nature of life in forestry towns, as shutdowns caused by market declines can leave contractors holding huge debts in capital investment, thus damaging local entrepreneurial development and eroding local industrial capacity (Markey et al, 2012, p.118-9). In the northwest, these problems followed the closure of the Skeena Cellulose pulp mill, leaving unpaid debts to contractors and suppliers totaling more than \$70 million, and back taxes owed to Terrace, Prince Rupert, and the Regional District estimated at \$30 million (Ritchie, 2009). In the resulting sale of the mill and its assets, local creditors received less than five percent of what they were owed, resulting in numerous bankruptcies in the small business community of the northwest (Rayner, 2001; 259-260). Unlike past economic downturns, the loss of Skeena Cellulose represented a more profound loss that struck deeply at the core of the northwest business community, its residents and workers, and the local institutional structures that organize life in these towns.

Without appurtenancy policies in place, forest resources have continued to flow out of the northwest, leaving communities like Prince Rupert and Terrace struggling to provide basic services without the municipal tax revenue they once derived from the

¹⁵¹ This sudden decline in union density among forestry employees is an unexplained anomaly that is not explained in any of the literature reviewed in this work. Statistics Canada does not provide any explanation to indicate changes in classifications of workers or industry during this timeframe that would account for this particularly sizeable decline.

locally based mills. Over the past 20 years, the forest industry that once formed the primary pillar in northwest BC has been reduced to a shadow of its former self, and left the region in precarious economic conditions. Communities that had been promised prolonged prosperity under the illusion of sustained yield for so many decades have entered an era in which their futures are entirely uncertain. Forestry workers, who once represented the alphas in the occupational hierarchy of the northwest, have become an endangered species. Loggers and mill workers are now more representative of the past foundations of rural communities than of the current economic reality. These changes represent the decline of a key player in the structure of capital, state, and labour that had dominated northwest development over the past half-century, and a waning in the forces that had provided opposition to environmentalism and Aboriginal rights during this time.

Out of the Woods and Into the Boardrooms: Shifts in Environmentalism

The protests of Clayoquot Sound drew international attention to the environmental movement in BC, and provided the momentum for a long series of protests through the course of the 1990s. The movement had achieved limited success in slowing the liquidation of old growth forests through the peak era of timber cutting in the late 1980s and early 1990s. However, following the defeat of the Social Credit government in 1991, the new NDP government introduced a number of new policy measures, aimed at quelling the disruption brought about by the environmental movement's activities. Hayter explains that this policy turn revolved around three key changes: expansion of the parks system, release of a more stringent Forest Practices Code, and an increase in the "stumpage" rates used to calculate royalties paid by forestry companies for harvesting timber (2005, p.29). Wilson explains that the new Forest Practices Code included a wide array of measures to prevent environmentally damaging forestry practices, including protection of riparian zones, limits on cutblock sizes, and linking of regulations to new guidebooks on topics such as protection of biodiversity and visual impact assessments (1998, p. 306-308).

¹⁵² The expansion of parks originally aimed at doubling the areas of provincial parks from 6% to 12% of the land base, eventually surpassing 14% by 2007 (BC Parks, 2014).

Environmentalists reactions to the sweeping changes in forestry were mixed, with some responding favorably to the new policies, but others expressing concern regarding limitations in the enforceability of the regulations (ibid). Hayter (2005) contends that the general response from the environmental movement was negative, and that ENGO campaigns continued to escalate towards a total "remapping" of the province, and efforts to protect wider areas of land from logging activities. This included a coordinated campaigns by various local and international ENGOs to protect the remainder of old growth forests on Vancouver Island and the coastal region (Hayter, 2005). A central target of this swelling campaign was a large section of the mid and north coast region, which environmentalists sought to rename as the Great Bear Rainforest. Just as the protests in Clayoquot Sound and the Carmanah Valley formed the defining moments of the environmental movement in the late 1980s and early 1990s, the Great Bear Rainforest formed the crucible in which the shape of the environmental movement would be forged in the decades that followed.

The new wave of environmentalist action was characterized by a new set of strategies that shifted the confrontation from the clearcuts to the marketplace. New campaigns led by Greenpeace, ForestEthics, the Sierra Club, Rainforest Action Network, and the Natural Resources Defense Council sought to provoke consumer and corporate boycotts against timber products produced in what were seen as unsustainable methods (Stanbury, 2000). These campaigns targeted phonebook and catalogue producers, major department stores, and hardware stores such as Home Depot (ibid). Campaigners refined their strategies to effectively target key consumer groups and corporate personnel, hanging banners in prominent public gathering locations and purchasing adverting space along commuter routes used by corporate executives. The new approach was based on focusing ENGO actions at various locations in the chain that bound consumers to the forest, and translating the moral positions of the environmental movement into more potent economic and political terms (Page, 2010, p.189). This strategy provided the environmental movement with a new scale of influence, as targeting locations farther up the chain (i.e. suppliers or investing groups) provided them with access to a much larger and more globalized sphere of influence than traditional "chained-to-the-gate" types of activism.

The forestry industry responded to environmental market pressures with the hiring of the Burson-Marsteller public relations corporation to assist them in shaping the image of the forest industry. One of Burson-Marsteller's first steps was the creation of the BC Forest Alliance (BCFA) in 1991 to generate flak against industry critics and improve the image of industrial forestry against environmental critiques (Doyle et al., 1997; Wilson, 1998). The BCFA took the place of the Council of Forest Industries as the primary voice for the industry, and utilized its recruitment of working class support to craft a moderate position intended to frame environmentalists as extremists (Wilson, 1998; Doyle et al, 1997). The battle between industry and environmentalism in BC, which had spread from local settings to the international spotlight during Clayoquot, became firmly embedded in the marketing of BC forest products in the global marketplace.

Battles between environmentalists and forestry companies continued in the clearcuts, the courtroom, and the boardroom through the 1990s. By 2000, conflict over the remaining old growth on the BC coast had reached a stalemate, and the opposing sides of industry and ENGOs began to look for a new way of overcoming their differences (Hoberg et al., 2004). An alliance between the two groups was developed that began with a Letter of Intent that detailed a list of sensitive areas that industry would set aside from harvesting, and the involved ENGOs ceasing their economic attacks on the forestry companies (Page, 2010, p.223). This agreement, known as the Joint Solutions Project, eventually became linked with a group of coastal First Nations working under a project called The Turning Point Initiative. The original signatories of the Joint Solutions Project apologized to First Nations for failing to include them from the outset. Once appropriate working relationships were established, these groups eventually cooperated with the government to produce the Great Bear Rainforest Agreement in 2006, which provided a plan for the management of nearly 60,000 square kilometres of forestlands on the central coast.

Since 2006, the agreement has undergone numerous revisions, and remains a point of contention between environmentalists and industry, with the former remaining critical of the latter's commitment to meeting the original intentions of the plan (Hamilton, 2013). However, the agreement represents a significant shift in the role of

ENGOs, and their relationship with groups involved in resource development activities. The environmental movement has added a new arsenal of economic weapons and market strategies for assailing corporate actors that engage in what is viewed as environmentally harmful activities. This dimension of the movement has a double edge to it, as companies that develop cooperative relationships with ENGOs can gain access to their endorsements, including market-based recognition such as the Forest Stewardship Council certification for wood produced in an environmentally responsible manner. ¹⁵³ The environmental movement has also taken on a distinct research orientation, drawing scientific expertise into its ranks and creating new organizations to focus on target issues. ¹⁵⁴ Their capacity for research provides support for moral claims made in campaign activities, and positions ENGOs as resources to government and the public, and in some cases industry, when seeking solutions to environmental issues.

Forestry has declined significantly throughout the province, and now faces increasing competition for selling its products on the global market. As a result of the industry's weakened condition, the prospect of environmentalist support or resistance carries a greater weight than ever before. Moreover, without forestry providing the compass point for community development, environmentalists are able to enter resource-dependent communities without facing the unified resistance of industry, the state, and rural labour. The environmental movement has gained legitimation in its presence as an influential participant in setting environmental policy and as force that is embedded in economic and political processes.

The image of the BC environmental movement will forever be linked to the images of colourful protestors locking themselves to machinery in Clayoquot Sound, and the cultural gap between ENGOs and forestry-dependent communities will likely take some time to close completely. However, the image of the movement has begun to shift from that of counter-culture protests, to mainstream marketing, scientific research, and resource management planning. This alters the cultural context through which rural

¹⁵³ FSC certification can be viewed at the agency website: https://ca.fsc.org/certification-standards.176.htm

¹⁵⁴ Examples include the Raincoast Conservation Foundation, which conducts studies of wolves and other animals on the central coast. Similarly, the Spirit Bear Foundation conducts DNA analysis on bears in the Great Bear Rainforest, with assistance from the University of British Columbia.

communities engage with the environmental movement, and occurs at a time when many rural communities are contemplating shifts in their own identities as their bond to the forest industry weakens. The inclusion of ENGOs among the primary signatories of major resource use agreements positions them as groups involved in the production of solutions, and demonstrates their capacity for engaging with industry in a civil and cooperative manner. With the days of open public conflict between industry and environmentalism seemingly left in the past, local leaders and decision-makers in resource-dependent communities can now develop relationships with ENGOs based on learning outcomes and co-management objectives, rather than solely for the purpose of settling disputes.

The increased power and standing that environmentalism possesses offers new sources of influence through which resource-dependent communities can seek to affect the management of the environment around them. However, it also continues to hold the potential for posing significant obstacles to the expansion of resource development activities upon which they rely. Many studies have been completed in relation to the internationalization of the environmental movement and its impacts on corporate and state behaviour in BC forests (Stanbury, 2000; Page 2010; Bernstein and Cashore, 2000). However, little is known about the movement's expansion into the actual community locales that were once primarily the domain of forestry unions and pulp mills, and how the interaction between resource-dependent communities and environmentalism unfolds in light of the movement's new image and the fall of forestry from the centre of community development processes.

Beyond the battles occurring between internationally mobilized ENGOs and the forces of global industrial capital, there has been a new process of interaction between forces of environmental protection and the resource-dependent communities that now seek to adapt to an era in which forestry no longer provides an answer to their subsistence needs. In the analytical body of this study, I provide insight to the role that the environmental movement is playing in three northwest communities as they seek to rebuild their economies and respond to environmental problems in the wake of forest industry decline.

The Rise of Aboriginal Rights

If the changes occurring in the environmental movement over the past three decades represent a significant shift in the negotiation of resource management decision-making in BC, the changes occurring in Aboriginal rights must be considered monumental. As explained in *Chapter Three*, First Nations have long been held to the margins of resource decision-making processes, and derived limited benefits from the expansion of industrial forestry in BC. While First Nations have engaged in continuous efforts to assert their rights and title, it is only in the past 25 years that they have achieved the legal and moral victories to support their driver towards self-determination. Northwest First Nations have continued to play a key role in advancing Aboriginal rights and title in the courtrooms of the province and the country, and have been leaders among First Nations in the creation of new relationships with the state, industry, and environmentalists.

There are many legal precedents that have given shape to the modern body of Aboriginal rights, and it is not possible to adequately discuss them all in this study. A fulsome analysis of such cases, and their roots in constitutional law, goes beyond both the scope of this paper and expertise of the author. Instead I briefly identify several influential rulings affecting Aboriginal rights and title, outline their ties to resource development activities, and outline three sets of key issues that have contributed to a landscape of change in the way that First Nations influence the management of lands and resources in the northwest region.

First is the question of Aboriginal title and exactly what claim of ownership First Nations hold to the lands, how this claim is to be established, and what the assertion of this title means to the management of lands and natural resources. Determination of Aboriginal title has important bearings on the ability of the Crown to authorize resource development activities outside of private lands, and holds important implications for the settlement of treaties. The second set of issues entails the progression of the ability of First Nations to assert their rights within the territories they have traditionally occupied and utilized, in absence of treaties. Most important among these rights is the duty imposed on the state to engage in meaningful consultation with First Nations prior to approving any activities affecting lands subject to territorial claims of First Nations. The

third set of issues includes the adaptation of the state and private parties to changes in Aboriginal rights, and the new relationships that are developing between First Nations and these parties. Collectively, these three sets of issues help define the empowerment of First Nations, and demonstrate a sharp contrast between current circumstances in the northwest, and those of the past era in which First Nations were limited in their ability to influence resource development activities.

During the past era, development of natural resources proceeded on the assumption that the state held virtually unchallenged reign over the land, and could thus function as the primary arbitrator of which resource development activities were to occur on the land, and who was to benefit from these activities. However, the shift in judicial perspectives on Aboriginal rights and title that was foreshadowed in the *Calder* decision posed potent new challenges to this assumption in the decades that followed. In *R. v Van der Peet*, Chief Justice Lamer explained:

"The doctrine of aboriginal rights exists, and is recognized and affirmed by s. 35(1), because of one simple fact: when Europeans arrived in North America, aboriginal peoples were already here, living in communities on the land, and participating in distinctive cultures, as they had done for centuries. It is this fact, and this fact above all others, which separates aboriginal peoples from all other minority groups in Canadian society and which mandates their special legal, and now constitutional, status. (*R. v. Van der Peet*, [1996] 2 S.C.R. 507 (S.C.C.), para 30)

Within Aboriginal rights, Aboriginal title comprises a special type of right that entails the ability of First Nations to maintain exclusive use of and control over a piece of land. The existence of Aboriginal title was affirmed as existing in the *Deglamuukw* v. *British Columbia* ruling in 1997, which was based on a claim by the Gitxsan and Wet'suwet'en First Nations to 58,0000 square kilometres of Crown land in northwest BC. ¹⁵⁵

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In the Supreme Court of Canada ruling, the title to the land was not affirmed. However, the court ruled that title did in fact exist. *Deglamuukw* v. *British Columbia*, [1997] 3 S.C.R. 1010 (S.C.C.)

Although confirming the existence of Aboriginal title, the decision did not clearly define what it entails. The ambiguity surrounding Aboriginal title resulted in a lack of progress in land claim and treaty settlements (Dacks, 2002). Over the course of the 17 years following *Delgamuukw*, several more influential cases were heard that helped define when Aboriginal title applies, and how it can be proven, but limited progress was made in actually settling treaties. 156 As of 2013, only three First Nations had completed treaties since the *Delgamuukw* ruling in 1997. This includes the Nisga'a treaty, which was settled outside of the official treaty process in August 1998. Three additional treaties have been completed and await ratification, and five more have achieved agreements in principle. Thirty additional First Nations are listed as part way through the treaty stage, and the remaining 20 have either refrained from participation or have not yet begun the process (BC Treaty Commission, 2013). ¹⁵⁷ The ongoing ambiguity in defining Aboriginal title, the potential expense of satisfying First Nations entitlements, and the lack of legal precedents compelling the government to improve their offers, has contributed to the lack of progress in achieving settlements (Dacks, 2002).

In July 2014, the Supreme Court of Canada's ruling in *Tsilhqot'in*Nation v. British Columbia affirmed of the ability of First Nations to assert title over much larger swaths of territory, even without proving continual occupation. At this point, experts remain undecided as to what impact the ruling will have on defining title and settling treaties. First Nations have celebrated the ruling as an affirmation of their right to govern their own lands and resources, while industrial representatives have vacillated between seeing the ruling as a blow to their ability to engage in economic development and as a way of bringing increased certainty to the settlement of land claims (Fine, 2014). At first glance the ruling appears to enable First Nations to cast a wider net in the assertion of title, and affirmation of their rights places may increase pressure on the Crown to follow through in their duties to uphold Aboriginal rights and

¹⁵⁶ For example, *R. v. Marshall* and *R. v. Bernard* affirmed the rights of nomadic and semi-nomadic First Nations to assert title to lands, despite not maintaining continual occupation.

¹⁵⁷ There are 203 individual First Nations identified in BC. However, many of them negotiate treaties or are represented in Crown matters by a single association representing multiple nations.

¹⁵⁸ The case involved a First Nation seeking to prevent logging activities from occurring in an area claimed as their traditional territories.

protect their interests in the management of lands and resources. However, the ruling also raises the stakes in terms of what settlements may entail, and introduces increased potential for overlap between territorial claims, thus posing additional complications to the settlement process.

The prospect of treaty settlements poses significant issues to the advance of industry in the northwest. The Nisga'a treaty, which is the only treaty thus far settled in the northwest region, included the allocation of 2,019 square kilometres of land, \$196 million dollars, and special allocations of salmon and wildlife and other resources (AANDC, 2010). While the BC Treaty Commission stated that one treaty should not be viewed as a template for others, the precedent set in the Nisga'a case, and the increased scope supported by the recent *Tsilhqot'in* decision indicates that significant sections of the northwest region will eventually end up under the exclusive control of First Nations. In absence of settlements, the approval of new resource development activities will remain subject to legal challenges, or remain restricted by interim measures by government to preserve lands potentially affected by future treaties. For regions in the midst of a transition between industrial bases, such as the northwest, First Nations have now become an increasingly influential factor in determining which developments will or will not move forward.

The assertion of Aboriginal rights in absence of the settlement of title claims provides First Nations with many forms of protection with respect to their ability to utilize land and natural resources, and imposes several important duties upon the Crown in ensuring the protection of these rights. Through the 1990s, several rulings were passed that helped define Aboriginal rights and the circumstances under which they can be asserted. This included the influential *R. v. Sparrow* ruling, which asserted First Nations' rights to fish for food, societal, and ceremonial purposes. More importantly, the ruling in *Sparrow* created a set of standards that cast limits on the state's ability to infringe on Aboriginal rights, stipulating that such infringements can only occur for the purpose of supporting a substantially compelling legislative objective, such as conservation of natural resources (McNeil, 2001). In some cases, the assertion of Aboriginal rights and subsequent legal actions have affirmed First Nations ability to use

¹⁵⁹ The Nisga'a treaty was completed outside of the current treaty process.

natural resources. For example, in *R. v. Sappier* and *R. v. Grey*, the Supreme Court of Canada affirmed the right of First Nations to harvest timber on Crown lands for personal uses such as fuel and building. However, the courts have also recognized limits on Aboriginal, such as the 2011 case of *Lax Kw'alaams Indian Band v. Canada*, in which the courts ruled that First Nations do not hold an inherent right to commercial harvesting in fisheries.

Among the most significant rulings with respect to resource development activities were a set of cases that helped define the duty of the Crown to engage in consultations with First Nations prior to approving any land or resource development activities within the their traditional territories. Engaging in consultations assists in determining if any Aboriginal rights are infringed upon by the activity, and can prompt remedial action to correct the situation. The decline of the forest industry was directly implicated in the emergence of conditions that would lead to legal precedents that established protocols for First Nations involvement in resource development activities, and elevated First Nations as influential actors in the northwest and throughout the province. As the state and its corporate partners sought to reorganize the industry in a manner as to sustain ongoing logging activities, opportunities arose for First Nations to assert their interests in the decision-making processes related to the management of the forestry assets in question.

Following the shutdown of the Skeena Cellulose pulp mill in Prince Rupert, the Crown attempted to sell the attached tenure rights to a private corporation (N.W. Pulp and Paper Ltd.). ¹⁶⁰ A group of First Nations, led by the Gitxsan, went to the Supreme Court of Canada in an effort to force the Crown to engage in consultations prior to allowing the transfer of the forestry tenure attached to the Skeena Cellulose pulp mill in Prince Rupert (a license now owned by the Lax Kw'alaams First Nation). ¹⁶¹ The ruling

¹⁶⁰ At this time, the government had become part owner of the mill and the attached forest licenses, after intervening to keep the mill running through economic difficulties.

¹⁶¹ The groups represented included Gitxsan First Nation, Lax Kw'alaams Indian Band, Metlakatla Indian Band, Allied Tsimshian Tribes Association, Gitanyow hereditary chiefs, and the Gitanyow First Nation.

in affirmed the requirement of the Crown to consult with First Nations in such circumstances. 162

The Crown's responsibility for ensuring adequate consultation was reinforced in another northwest forestry case, when the Haida First Nation protested the transfer of timber tenures between two large forestry corporations. The Supreme Court of Canada upheld the requirement that the Crown is unable to avoid its responsibility to consult with First Nations by delegating responsibilities to private parties. ¹⁶³ A similar ruling was passed in yet another northwest case, involving the Taku River Tlingit's effort to secure consultation in relation to the construction of a road to reach an already

Table 3: Government Decisions Requiring Consultation with First Nations

- Environmental Assessments under the Canadian Environmental Assessment Act
- *Mines Act* permits
- Oil and Gas Commission permits for oil and gas facilities
- National Energy Board certificates
- BC Utilities Commission certificates
- Water licenses under the Water Act
- Environmental Management Act waste discharge permits
- Leases or dispositions of Crown land
- Permits for clearing of Crown land for creation of roads
- Fisheries Act authorizations for actions affecting fish habitat

(Armstrong, 2013a)

established mining project.¹⁶⁴ In both the *Haida* and the *Taku River Tlingit* cases, the courts recognized that the duty to consult does not bestow First Nations with veto powers over resource development activities (Armstrong, 2013a). However, these precedents played an important role in empowering First Nations and providing them with a seat at the table in nearly all resource development activities in the province (see Table 3).

While the lack of an effective veto deprived First Nations of the ability to exercise their rights in a more forceful manner, the increased recognition of Aboriginal rights and the corresponding duties to consult led to a new approach by the state and industry when it comes to resource development activities. As a direct result of the

¹⁶² Gitxsan and other First Nations v. British Columbia (Minister of Forests) 2002 BCSC 170).

¹⁶³ The Crown ultimately retains responsibility for ensuring the duty is fulfilled, and may only delegate responsibility as part of their measures to ensure that proper consultations occur. Haida Nation v. British Columbia (Minister of Forests), [2004] 3 S.C.R. 511 (S.C.C.)

¹⁶⁴ Taku River Tlingit First Nation *v*. British Columbia (Project Assessment Director), [2004] 3 S.C.R. 550, 2004 SCC 74

Haida case and other forestry-related cases that preceded it, the government now automatically requires identification of First Nation interests during the award of or significant changes to forest tenures and calculation of annual allowable cuts. Even prior to the Haida decision, the province had taken steps to manage the demands placed on it by the growing body of Aboriginal rights, and included special provisions in the 2003 Forest Revitalization Plan (FRP) to reclaim approximately eight percent of the total annual allowable cut in order to enable First Nations involvement in forestry.

The stated purpose for these provisions was move was to help correct the historic exclusion of First Nations from forestry, and to help avoid costly legal battled as a result of disagreements over forestry and land use decisions (BC, 2004). The FRP was seen as falling woefully short of satisfying the Crown's commitment to First Nations on a number of accounts, including the obvious failure to consult First Nations in the drafting of the plan itself (Clogg, 2003), and a series of further legal appeals were filed by First Nations that were dissatisfied with the implementation of the FRP in their territories. Despite the obvious shortcomings of the FRP, the formal recognition of First Nations' entitlement to significant portions of forestry resources nonetheless represented a major departure from the resource management regime that had dominated the province in the previous era.

Further advances have been made with regard to the inclusion of First Nations in state-administered resource management processes over the past decade. These include the inclusion of First Nations as governments, rather than merely stakeholders, in the Great Bear Rainforest Agreement (Smith and Sterritt, 2007). This initiative resulted in the banding together of several First Nations to form a group called the Coastal First Nations, demonstrating the potential for First Nations to work together as influential coalitions in order to address issues of mutual concern. Success in forming comanagement arrangements has led to further collaboration between First Nations and the state, including the creation of nature conservancies. These areas fall under the BC Parks Act, and incorporate special recognition of First Nations traditional uses and planning

¹⁶⁵ The Coastal First Nations includes the Wuikinuxv Nation, Heiltsuk, Kitasoo/Xaixais, Nuxalk Nation, Gitga'at, Metlakatla, Old Massett, Skidegate, and Council of the Haida Nation. The group also includes several associate members, including the Lax Kw'alaams First Nation.

input, while restricting large scale industrial development that may otherwise interfere with First Nations interests (Stronghill, 2013, p.33-36).

Adjustments have also been made by industry and private parties in response to the advances occurring in Aboriginal rights and title. Corporations and businesses have recognized the changing legal context of development, and are increasingly seeking the creation of joint ventures and impact-benefits agreements (IBAs) with First Nations as part of their initial development process. IBAs are agreements between businesses and First Nations that are formed to accommodate First Nations interests in resource development activities through the sharing of benefits, and to identify and address social impacts of the activities (Fidler and Hitch, 2007, p.50). IBAs are generally confidential and non-compulsory, and the benefits shared can include cash payments, profit sharing, impact monitoring, information sharing, employment, contracting opportunities, and education and training.

The most obvious benefit that the private sector accrues from IBAs is the ability to avoid potential First Nations challenges to their activities; assuming of course that they have effectively consulted with all First Nations affected by their activities. However, companies can also benefit from IBAs through gaining knowledge of the local area, forming relationships with the local labour force, and potential streamlining of government approval processes (Gailus and Theilman, 2009). The exact number of IBAs completed in the province is unclear due to their confidential nature. However, numerous IBAs have been completed with northwest First Nations, including the Tahltan, Heiltsuk, Tak River Tlingit, and Lax Kw'alaams First Nation in relation to various mining and energy projects. Direct sharing of benefits has also involved the state, with the BC government signing numerous revenue-sharing agreements with First Nations in forestry, and making a commitment to the sharing of mineral tax revenues (Coates and Crowley 2013, p.17).

An Altogether Different Landscape

As the northwest takes steps to rebuild its economy, the negotiation of resource development activities is unfolding over a very different social and political landscape than in the past era. The myths of Fordist prosperity have been laid bare by the collapse

of the forest industry and the inability of the province to safeguard the health of the resources base. The attachment that northwest communities have long held to the historical structure has been unsettled, and there is no longer one dominant industrial interest that holds sway over the land, or over the identities and economic interests of the communities in the region. The forestry-dominated landscape has given way to a more open and contested field of activity in which groups that were formerly held to the margins now exert greater influence over the course of development.

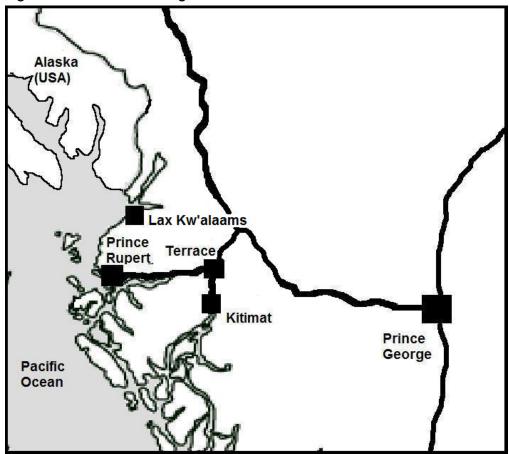
The model of industrial and political-economic organization that will define the future of the region remains uncertain. The negotiation of resource development projects and their relationships with local communities are now subject to challenges from both environmental organizations and the First Nations who assert their rights to traditional territories in the region.

The descriptions of social organization provided in past studies of forestrydependent communities no longer provide an adequate means of understanding the complex web of activities unfolding in the northwest region. Past studies of these communities focused on the challenges they faced in ensuring a continued yield of forestry and fisheries resources to support a sustained flow of local benefits, while wresting with the globalization of forestry markets (Marchak, 1983, 1995; Rajala 2006; Hayter, 2006). The challenges they face today involve wholesale transformation, not only of their economic base, but also of their relationship with the new forms of governance coming to bear on their resource base. Moreover, there are significant problems with the conditions of the forests and fisheries, and the region faces additional uncertainties over the future of these resources with the growing influence of global climate change. They ways in which northwest communities are responding to these environmental issues is a story of both continuity and change. The era of forestry made deep imprints in the both the political and economic structures that tie the region to the rest of the province, and in the cultural relationships between these communities and the external forces that come to bear upon the local resource base. The revitalization of these communities involves both overcoming the lingering influence of past structural arrangements, and coming to terms with the social and environmental challenges taking form in the region.

Chapter Five: The Northwest Region Today

In this Chapter, I examine the general characteristics of the region and a brief introduction to each community, before providing my analysis of the general structural conditions in the northwest region and in each of my study communities.

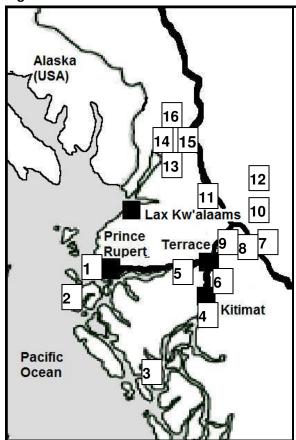




This study examines three particular communities, but it also has a regional dimension that is brought forth by the relationships among communities in the region, by the general proximity of these communities relative to sites of resource development, and by overlapping boundaries of political control and resource management. The map (see Figure 5) shows the primary study communities of Terrace, Prince Rupert, and Lax Kw'alaams in relation to the town of Kitimat and the main northern urban centre of Prince George is typical of the most commonly found representations of the northwest region. However, this map provides only a partial picture of northwest communities, as it omits many smaller communities, particularly the First Nations communities that are

commonly excluded from visual representations of the region.¹⁶⁶ Acknowledging that overlapping traditional territories are not represented, the original map of the northwest region can be shown with the addition of the most commonly identified First Nations communities in the region in addition to Lax Kw'alaams. The communities shown in Figure 6 include representation of the Tsimshian, Gitxsan, Nisga'a, and Haisla First Nations. ¹⁶⁷

Figure 6: First Nations of the Northwest



Northwest First Nations Communities (in addition to Lax Kw'Alaams)

- 1. Metlakatla (Tsimshian)
- 2. Kitkatla (Tsimshian, Gitxaala Band)
- 3. Gitiga'at "Hartley Bay" (Tsimshian)
- 4. Kitimaat (Haisla)
- 5. Kitsumkalum (Tsimshian)
- 6. Kitselas (Tsimshian)
- 7. Gitsegulka (Gitxsan)
- 8. Gitwangak (Gitxsan)
- 9. Gitanmaax (Gitxsan)
- 10. Kispiox (Gitxsan)
- 11. Gitanyow (Gitxsan)
- 12. Sik-e-dakh (Gitxsan, Glen Vowell Band)
- 13. Gingolx (Nisga'a)
- 14. Laxgalts'ap (Nisga'a)
- 15. Gitlakdamix "New Ayinish" (Nisga'a)
- 16. Gitwinksihlkw (Nisga'a)

Locations: (Northwest Community College, 2013).

¹⁶⁶ Assigning First Nations specific point on a map is an exercise in approximation, and one that must be approached with caution. First Nations have historically moved between seasonal locations, and specific groups may occupy or attach importance to multiple locations. Second, centring specific nations in particular locations does not reflect the complex lines of traditionally recognized territories that not only overlap, but also vary between groups. Third, there are many different nations either occupying or utilizing the northwest region, and any given list may not necessarily reflect all of the groups that hold a connection with the land.

¹⁶⁷ Not shown on the map is the village of Klemtu, home of the Gitdidzu tribe of the Tsimshian First Nation. Klemtu is located at the very bottom (south) of the map, on Swindle Island. Locations of the identified communities are approximations limited by the scale and detail of this basic representation.

Even then, this map only identifies major communities, and does not include individual reserve lands, which are far more numerous. Furthermore, the map does not show the many complex and overlapping boundaries of traditional territories claimed by the identified First Nations, and by the nations neighbouring this region. Bordering the areas to the west and north are the Haida and Tahltan First Nations, respectively. To the south and east of the region, are the Wet'suwet'en, Sekani, Dakelh, and Heiltsuk nations. All of these nations claim traditional territories that overlap some parts of the region shown on this map. Thus, the settler communities, resource development activities, and ENGOs examined in this thesis operate within a territory that is subject to the influence of many different First Nations in addition to Lax Kw'alaams, and who possess overlapping and sometimes conflicting visions regarding the management of resources in the region.

In addition to the wide distribution of the many diverse nations through the northwest and the overlapping lines of traditional territories, the region includes the Nisga'a Treaty territories that lie to the north and that encompass the communities of Gingolx, Laxgalts'ap, Gitlakdamix, and Gitwinksihlkw. While the Nisga'a represent the only signed treaty in the northwest region, it is possible that additional territories will be designated as treaty lands in future years.

A second set of reference points for the northwest region includes the expansive boundaries of the various timber licenses and forest management areas. The most important of these is Tree Farm Licence 1 (TFL1), which encompasses four distinct parcels of land surrounding the community of Terrace, amounting to a total of almost 5,200 square kilometres of forested land. TFL1 is important because it represents a new sphere of industrial influence for Lax Kw'alaams which purchased the licence in the early 1990s from the bankruptcy receiver of the Skeena Cellulose mill in Prince Rupert. TFL1 reflects the complexity of First Nations politics, as it overlaps with the traditional

¹⁶⁸ The treaty area encompasses over 2,000 square km. and includes exclusive allocations of additional resources in the region.

¹⁶⁹ At the current time, the Gitxsan First Nations (represented by the Gitxsan Treaty Society) and four of the five Tsimshian First Nations outside of the Allied Tribes based in Lax Kw'alaams (represented by the Tsimshian First Nations) are at stage four of the six-step treaty process, negotiating an agreement in principle. The Nine Allied Tribes of Lax Kw'alaams are at stage two, indicating a readiness to negotiate. The Gitxaala (Kitkatla) First Nation is currently refraining from participation in the treaty process (BC Treaty Commission, 2013).

territories of multiple First Nations, including the Lax Kw'alaams, Kitselas, Kitsumkalum, Metlakatla, Gitanyow, and Gitxsan First Nations. ¹⁷⁰

The three communities included in this study provide three contrasting perspectives on the way that the negotiation of environmental protection is unfolding in the northwest region. This includes Lax Kw'alaams, which represents a First Nations community of significant cultural and historical importance that is taking an ascendant role in the northwest political economy. While First Nations endured economic marginalization within the forestry-driven economy of the past, Lax Kw'alaams occupies an influential position in the growth of new resource development activities in the northwest.

Terrace provides the perspective of a community that once played a central role in the forestry engine that drove the northwest economy as a centre for the harvesting and milling of timber, but which is now undergoing a fundamental reconfiguration of its role in the region after decades of economic decline. With the various efforts that have been made to diversify the economy during the recession of the past two decades, Terrace illustrates a broad set of economic and cultural dynamics that demonstrate the acute economic and cultural shift between the age of forestry and the uncertainty of the future.

Prince Rupert provides the perspective of a town that grew upon foundations of fishing, pulp-milling, and transportation industries. Unlike Terrace, the role of Prince Rupert in the new resource economy is more clearly defined, as it stands as a gateway between the northwest region and the global markets which now reach through the community to access the resource base of the northwest region and the rest of Canada. These three study communities each play important roles in the region, and are linked to each other through the environment they share, and the various structures of governance that mediate their respective capacities to control the resource base around them. I provide a brief introduction to each of the communities, before examining the structure of the new northwest economy.

¹⁷⁰ Nisga'a traditional territories were removed from TFL1 upon the signing of the Nisga'a Treaty (BC, 2010, p.2)

Introducing the Study Communities

Terrace

Terrace is situated centrally in the northwest region, close to the junction of the main highways and rail lines that connect the study communities with the rest of the province. The town is located at the southern terminus of the Nisga'a Highway, which provides access to the Nass River Valley and the homes of the Nisga'a and Tahltan First Nations, as well as outlying communities occupied by the Gitxsan and Tsimshian First Nations. Terrace is also located immediately adjacent to the Tsimshian communities of Kitsumkalum and Kitselas, and functions as the primary service and shopping centre for numerous northwest First Nations communities. ¹⁷¹ First Nations comprise a rising influence on Terrace, both as residents and as co-managers of the surrounding resource base. The importance of Terrace to First Nations has recently extended beyond its roles as a service centre, and assumed a greater function as a place of living. ¹⁷² Between 2001 and 2011, the self-identified Aboriginal population in the municipality of Terrace increased from 15 percent to 21 percent of the town population, against the trend of a declining general population (see Table 4).

Table 4: Terrace Community Profile

	2001	2011
Population Aboriginal identity population	12,109 1,775 (15%)	11,320 2,380 (23%)

(Statistics Canada, 2013)

The town played a central role in northwest forestry through to the 1990s, as the home to several sawmills and a workforce that supported regional harvesting operations as well as pulp mills in Kitimat and Prince Rupert. Terrace possessed a population of approximately 11,500 as of the last census. The population had been decreasing in recent decades, until stabilizing over the past five years. Dramatic swings in population

¹⁷¹ According to 2011 census statistics, Kitsumkalum holds a population of 302 and Kitselas held a population of 220 (Statistics Canada, 2012a)

As mentioned earlier, Terrace functions as a service centre for the Nisga'a and Tahltan First Nations to the North, and the Gitxsan First Nation to the east. The town is immediately adjacent to the Tsimshian communities of Kitsumkalum and Kitselas.

have been a historic feature of Terrace, with the town's fortunes and the size of the resident workforce rising and falling with the prosperity of the forest industry (Marchak, 1983). The town's website describes it as "The Heart of the Northwest". While in the past it served as a nexus in the harvesting and processing of timber, it now serves as a central point for a different array of northwest activities.

Terrace is surrounded by a diverse array of natural resources, including the forests that have defined its industrial history, the rich fish-bearing rivers of the Skeena River and its many tributaries, and the energy and mineral rich lands that lay to the north. The community is internationally known for its world-class sports fisheries, and for its distinct recreational resources that include back-country skiing, white water rafting, and other pursuits.

Prince Rupert

Prince Rupert is located on the Pacific Ocean, at the western terminus of Highway 16 and the CN rail lines that run across B.C., through Terrace to Prince George and onwards to the continental interior. Prince Rupert is an important port city that is adjoined by the smaller community of Port Edward (District of Port Edward). Prince Rupert and Port Edward collectively play host to various port activities, including the shipment of timber, coal, and wheat. It also is host to a cruise ship terminal and intersects with connecting coastal ferry routes to Alaska as well as numerous coastal communities on the BC northern coast.

Like Terrace, Prince Rupert has witnessed a significant decline in its population as forestry dwindled and the last of the region's pulp mills shut down. The final closure of the Skeena Cellulose pulp mill in 2001 inflicted losses on Prince Rupert that were compounded by ongoing declines in the commercial fishing industry. These changes resulted in the population falling from over 16,000 in 1991 to approximately 12,500 in 2011, placing Prince Rupert among the fastest shrinking communities in Canada. Nevertheless, the town continues to serve as an important marine terminal and as a supply centre for numerous smaller coastal communities and for Haida Gwaii. Prince Rupert is located within the traditional territories of the Tsimshian First Nations, and is located close to the First Nation communities of Metlakatla, Lax Kw'alaams, Kitkatla

(home of the Gitxaala), and Gitga'at (also known as Hartley Bay). ¹⁷³ Like Terrace, Prince Rupert has also seen a substantial rise in its First Nations population in the recent past against a declining general population (see Table 5), and is seeing First Nations emerge as increasingly important actors in economic development, and in the composition of their population.

Table 5: Prince Rupert Community Profile

	2001	2011
Population	14,643	12,815
Aboriginal identity population	4,330 (30%)	4,475 (35%)

(Statistics Canada, 2013)

Lax Kw'alaams

The third community in this study is the First Nations village of Lax Kw'alaams, which is located approximately 35 km north of Prince Rupert. The local resident population of Lax Kw'alaams shrank by 13.5 percent between 2001 and 2006, but has stabilized in recent years, with no change registered between 2006 and 2011 (Statistics Canada, 2012b). The community is accessible only by small plane or boat. A small car ferry runs 5 times per week from Prince Rupert, connecting with a gravel road that runs approximately 20 km north to the community. The community has limited small business development, possessing only small convenience stores, with residents obtaining most of their purchased supplies in Prince Rupert. Lax Kw'alaams residents are highly dependent upon the ocean for food, including the gathering of shellfish and seaweed, and fishing for various species of fish including salmon, eulachon, and herring. The community possesses limited services, and doctors fly in on a weekly basis to provide service to local residents.

Lax Kw'alaams represents a centre of historical importance, political power, and economic progress among First Nations in the northwest region. The local leaders from this community provide insight to the way that environmental protection and economic development are being negotiated from the perspective of an ascendant community, and from a culture returning to a position of economic and political prominence in the

¹⁷³ According to 2011 census data, Metlakatla held a population of 118 (Statistics Canada, 2012c). 2011 data for Hartley Bay and Metlakatla are incomplete, and 2006 data indicated a population of 157 and 185 respectively. Lax Kw'alaams is discussed in detail in the following pages.

region. All three communities in this study are located on the territorial and ancestral lands of the Tsimshian people, which is composed of 14 distinct tribes. Lax Kw'alaams is considered the home of nine of these allied tribes, with the other five distributed in different communities in the region. The name of Lax Kw'alaams is derived from the traditional Tsimshian language of Sm'alayax, and means the place of the wild roses. The areas surrounding the community served as a seasonal village for the Gispaxlo'ot tribe, until the Hudson's Bay Company built a trading post in the current site in 1834 and called it Port Simpson. During the following century, and through the relocation of First Nations that occurred during the colonization and industrialization process, the descendants of various indigenous groups became members of the Lax Kw'alaams band and permanent residents of the community (ibid). 174

The Lax Kw'alaams band includes 3,676 members (AANDC, 2014), with the majority living outside of the community. Many of the members have moved to live in the nearby communities of Terrace and Prince Rupert. However, many have also moved to live outside the northwest region entirely. ¹⁷⁵ Lax Kw'alaams is distinct from Terrace and Prince Rupert in that the community is defined not only by place, but also by culture. The cultural community of Lax Kw'alaams extends beyond the bounds of the reserve lands, and includes not only the traditional territories claimed by the nation (see Figure 7), but also the social space occupied by their members in the various locations in which they live. When a settler resident departs Terrace or Prince Rupert, their interests cease to be represented by the community. However, the Lax Kw'alaams First Nation continues to represent their Members regardless of their location. Moreover, the scope of this representation extends across a wider range than that of the other two study communities, and carries with it the legally recognized influence of their Aboriginal rights and title. However, it must be acknowledged that the sample did not include any Lax Kw'alaams members living outside of the northwest region, and the responses analyzed in this study can only be viewed as representative of the leaders and resourcemanagers that remain stationed in the northwest.

¹⁷⁴ The band observes that approximately 80% of the Tsimshian people died during the smallpox epidemic of the 1800s (Lax Kw'alaams, 2013).

¹⁷⁵ Exact figures for the number of Members remaining in the northwest region were not available for this study.

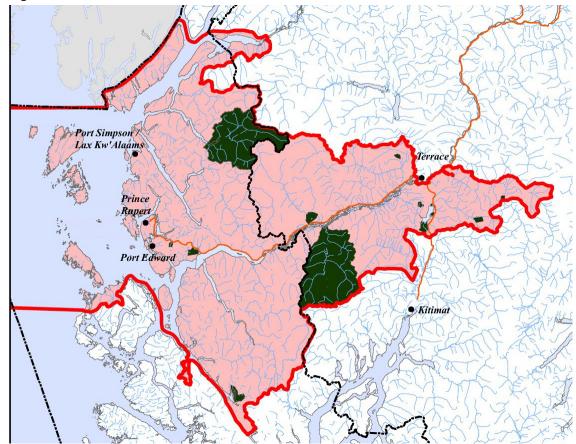


Figure 7: Traditional Territories of the Lax Kw'alaams First Nation

(Lax Kw'alaams, 2008, p.8)

Staples and Beyond

In previous chapters, I argued that the forestry economy played a central role in relegating environmental protection to the margins of resource development decision-making. In this section, I argue that the current northwest political economy is characterized by a more diverse and balkanized landscape of industry than in the past, and new ways of using the resource base have gained a footing in the region in the absence of a single dominant economic engine. My analysis of the regional employment and economic structure provides the fundamental context within which I examine my study communities' development strategies and relationships with environmental protection.

The northwest is caught at the intersection of three contrasting, and sometimes competing, modes of economic development, producing a complex network of

relationships between the regional economy and environmental protection. First is the recovery of the primary industry drivers in forestry and in fishing. Growth in these industries is hindered by depletion of resources and the continuing influence of the global economic conditions that undermined the vitality of these industries over the past three decades. Forestry and fishing industries face pressure to develop new products and new methods of production that will allow these sectors to compete in the global marketplace. However, the task of rebuilding traditional industries faces challenges posed by environmental protection in the post-staples era.

"The problem of a resource industry suited to historical social, political, and economic conditions that are no longer present, can only be overcome if the industry coheres with the new contexts it seeks to inhabit. Consequently, if the industry is to cohere with BC's post staples trajectory, it must actively respond to the political, environmental, and economic challenges it faces." (Carroll et al., 2012, p.169)

The second line of development in the northwest economy is growth (and in some cases, the lack thereof) in the sectors that characterize the leading edge of the post-staples economy. Employment data indicates that the northwest region has lagged behind the rest of the province in knowledge, technology, finance, and service industries, and faces significant obstacles in catching up in these sectors due to geographic isolation from major urban areas and centres of commerce. However, the region does possess many unique natural and cultural resources that hold potential for recreation and tourism, and other non-extractive uses of the resource base.

The third line of development is the emergence of potential replacements for the central economic role previously fulfilled by the forestry industry, including the rising mining and energy sectors. The northwest has witnessed a small amount of growth in mining and energy industries over the past decade. However, the capacity of a new staples engine to revitalize the northwest region is made difficult by the continued development of labour-reducing technologies that limit employment returns on resource development activities (Hutton, 2007), and the lack of appurtenancy policies to tie resource development to local enrichment. The expansion of resource development for energy and mining also provokes scrutiny from the local region due to the potential

impacts new industry may have on valued resources, and attracts environmental critiques from wider society.

In the following pages, I evaluate each of these three lines of development by examining employment data, and key natural resource sectors in the northwest. This provides a picture of how the region is adapting to the post-staples economy, and identifies the structure of opportunity that are offered by the three identified modes of development. This analysis also reveals implications for environmental protection based on the way that these various modes of development affect the local resource base, and the way in which they affect the relationship between the northwest region and the environmental movement.

Table 6 shows the distribution of employment according to industry in the northwest over the ten-year period between 2001 and 2011, according to the National Industrial Classification System (NAICS). The number of people employed in the northwest declined over this period, with a reported loss of 4,690 jobs. ¹⁷⁶ Industrial sectors are ordered in Table 6 in accordance with the difference between the percent of employment in the sector in the northwest versus the percent of employment in the same sector throughout all of BC. Professional, scientific, and technical services are listed at the top of the table, accounting for 3 percent of northwest employment versus 7.8 percent throughout BC. This gap comprises the largest difference in any sector in which the percentage of employment in the northwest is less than the percentage of employment throughout the province for that sector. ¹⁷⁷

Among the industries under-represented in the northwest are many of the service and knowledge-based sectors that are identified as leading growth industries in the post-staples economy (Hutton, 1994, 2007, Wellstead, 2007). This includes real estate and rental and leasing, wholesale trade, finance and insurance, administrative services, information and cultural industries, and accommodation and food services. Industries associated with staples production and export activities are over-represented in the

¹⁷⁶ The majority of these losses occurred in the manufacturing (3,200) and retail (690) industries, which were affected by the final closure of the Prince Rupert (Skeena) pulp mill at the end of 2001 and the closure of the Kitimat (Eurocan) pulp mill in 2009.

¹⁷⁷Industries with the largest difference in that percentage of employment in BC versus employment in the northwest are listed at the top, and follow in descending order of these differences.

northwest economy in comparison with the rest of BC, and are thus located in the lower section of the table. This indicates that the northwest relies upon a higher percentage of employment based in forestry and fishing, despite declines in these industries on both a provincial and regional basis. There have been few areas of growth in the northwest economy, with increases of more than 100 jobs only evident in public administration, and mining and energy industries.¹⁷⁸

Table 6: Northwest Employment (NAICS)

	2001		2011	
All industries(North American Industry	Total		Total	
Classification System)	31,695	% of total (BC)	27,005	% of total (BC)
Professional, scientific and technical services	825	2.6 (6.8)	810	3.0 (7.8)
Wholesale trade	525	1.7 (4.1)	505	1.9 (3.9)
Finance and insurance	645	2.0 (4.0)	600	2.2 (4.0)
Administrative and waste services	820	2.6 (4.0)	825	*3.1 (4.3)
Real estate and rental and leasing	305	0.96 (2.1)	310	1.2 (2.4)
Other services (except public administration)	1,230	3.9 (4.9)	1,030	3.8 (4.9)
Information and cultural industries	380	1.2 (3.1)	430	*1.6 (2.7)
Construction	1,840	5.8 (5.9)	1,860	*6.9 (7.9)
Accommodation and food services	2,215	7.0 (8.3)	1,915	7.1 (7.8)
Arts, entertainment and recreation	470	1.5 (2.3)	520	1.9 (2.5)
Retail trade	3,760	11.9 (11.6)	3,075	11.4 (11.6)
Management of companies and enterprises	10	0.03 (0.07)	25	0.09 (0.11)
Utilities	180	0.6 (0.6)	150	0.6 (0.6)
Mining, quarrying, and oil and gas extraction	150	0.5 (0.7)	435	1.6 (1.6)
Health care and social assistance	3,055	9.6 (9.9)	2,985	11.0 (10.8)
Manufacturing	5,380	17.0 (9.6)	2,180	8.1 (6.5)
Educational services	2,460	7.8 (6.9)	2,460	9.1 (7.3)
Transportation and warehousing	2,100	6.6 (5.7)	2,160	8.0 (5.1)
Agriculture, forestry, fishing, and hunting	1,565	4.9 (3.9)	1,645	6.1 (2.7)
Public administration	2,780	8.8 (5.6)	3,065	11.3 (6.2)

^{*}Indicates sectors in which there was an increases in both the number of jobs, and in the percentage of regional employment contained within the sector.

(Statistics Canada, 2010c, 2013)

The general pattern of employment in the northwest, relative to BC, indicates that the region has fallen behind in the sectors expected to lead development in the post-staples economy, and there has been continued decline in the primary industries that

¹⁷⁸ These increases reflect wider shifts in the provincial employment structure, with the mining and energy sectors representing new participants in regional resource industries. Some sectors increased as a percentage of the workforces, but actually decreased in terms of the number of actual jobs.

have historically driven the regional economy. Similar conclusions can be found based on National Occupational Classification System (NOCS) data (Table 7), which show knowledge and information-based occupations playing a lesser role in the northwest than in the rest of the province. The northwest has lost jobs in natural and applied sciences, business and finance and administration, and in sales and services occupations. These three categories represent occupations with the largest differential between the province and the region in terms of their share of employment.

Table 7: Northwest Employment (NOCS)

Profile of Census Divisions / Labour force activity/ Kitimat Stikine and Skeena Queen Charlottes/ Compared to British Columbia/ 1996 –2011 (National Occupation Classification System)								
Compared to British Columb					·			
All occupations	1996 Total 35,485	% total (BC)	2001 Total 31,695	% total (BC)	2006 Total 28,955	% total (BC)	2011 Total 27,005	% total (BC)
Business, finance and administration	4,430	12.6 (18.5)	4,210	13.3 (17.6)	3,585	12.4 (17.1)	3,320	12.3 (16.0)
Management occupations	2,525	7.2 (9.6)	2,730	8.6 (10.8)	2,245	7.8 (10.5)	2,550	9.4 (11.4)
Sales and service occupations	8,915	25.4 (27.8)	7,620	24.0 (25.6)	7,295	25.2 (25.4)	5,980	22.1 (24.0)
Natural and applied sciences	1,625	4.6 (4.8)	1,435	4.5 (6.1)	1,495	5.2 (6.3)	1,420	5.3 (6.7)
Occupations in art, culture, recreation & sport	645	1.8 (2.9)	555	1.8 (3.3)	720	2.5 (3.5)	540	2.0 (3.4)
Health occupations	1,240	3.5 (4.7)	1,295	4.1 (5.2)	1,385	4.8 (5.5)	1,415	5.2 (6.4)
Processing, manufacturing and utilities	3,770	10.7 (5.7)	2,665	8.4 (4.8)	2,120	7.3 (4.2)	1,275	4.7 (3.2)
Social science, education, gov't service, religion	2,245	6.4 (6.7)	2,820	8.9 (8.0)	2,845	9.8 (8.1)	3,970	14.7 (11.5)
Occupations unique to primary industry	3,165	9.0 (4.7)	2,245	7.1 (4.2)	2,020	7.0 (3.9)	1,450	5.4 (2.6)
Trades, transport & equipment operators	6,520	18.6 (15.0)	6,125	19.3 (14.3)	5,425	18.7 (15.5)	5,095	18.9 (14.6)

(Statistics Canada, 2010b, 2010c, 2010d, 2013)

¹⁷⁹ Data is examined for both North American Industry Classification System (NAICS) and National Occupational Classification System (NOCS). The former allow separation of new mining and energy sectors from fishing and forestry, and provides a range of relevant industry classifications related to knowledge and science-based industries. The latter provides access (in years with complete data) to subclassifications of occupations, enabling analysis of structural shifts within distinct industries.

Data on specific sub-occupations is not available for 2011. However, examination of 1996 to 2006 data reveals a pattern of change within the categories listed in Table 7 that indicates further erosion of managerial, technical, and professional positions in the northwest. During this period, employment in non-labourer positions, including supervisors and technical positions, declined by 43 percent. However, employment of labourers in occupations unique to primary industry declined by only 19 percent. Supervisor positions within processing, manufacturing, and utilities declined by 61 percent, compared to only 22 percent for operators, assemblers, and labourers. Contractor and supervisor positions in trades, transport, and equipment operation declined by 38 percent, compared to a drop of only 17 percent for the entire sector. There was also greater employment losses in professional positions within knowledge, services, and health industries. Employment in health care increased between 1996 and 2006, but was accompanied by a 38 percent decline of professional positions in the sector. A 26 percent rise occurred in social science, education, government service, and religion. However, this increase was based on a rise in jobs in education, social work, and paralegals, with a 15 percent decrease among professionals, including lawyers, psychologists, social workers, religion, and program officers.

Against the overall pattern of decline and the reduction in professional, technical, and management occupations, the northwest has witnessed new opportunities in tourism and recreation. This has included expansion of sport fishing, development of a cruise ship terminal, and creation of new tourism offices in several communities. While the wider regional economy has been in decline, job losses in art, culture, recreation, and sport have been less than losses within other industries. Between 1996 and 2006, supervisor positions in sales and service increased by 69%, even though the sector experienced an overall decline along with the rest of the economy. However, increased jobs in service, tourism, and recreation industries have neither replaced the jobs lost during the forestry decline, nor allowed the northwest to keep pace with the rest of society in the post-staples economy. Nevertheless, these adaptations have allowed new ways of using the resource. This has led to their increased importance in the region *relative* to the declining forest industry, and emerging primary industries such as mining

¹⁸⁰ This represents the only sector in which supervisor positions increased over this period.

and energy. More importantly, these adaptations in nature tourism have created new openings for the propagation of environmental values that are seen as characteristic of the broader post-staples economy (Hutton, 2007, p.21). Examination of specific resource industries provides deeper insight to the changes that have occurred, and the implications the new pattern of opportunity holds for environmental protection.

Forestry

The state of forestry provides an important indicator of the northwest region's progression into the post-staples economy. Continued decline in the northwest forest industry was the primary contributor to the reduction of primary industry and manufacturing jobs between 2001 and 2011 and a significant source of overall employment losses in the northwest. Over this period, the number of mill jobs declined from 2700 to 370, and the amount of timber processed in the area declined from 4.3 million to 1.3 million cubic metres (SNCIRE, 2013, p. 4-5).¹⁸²

The largest tree farm license in the region (once tied to the Skeena pulp mill in Prince Rupert) has been purchased by the Lax Kw'alaams First Nation, with smaller portions of the license divided among other First Nations in the area. However, not all changes in the ownership of northwest forestry licenses have involved local ownership as the primary license holder in the Nass TSA (north of Terrace) is Canada Resurgence Developments Ltd (CRD), a subsidiary of the Zaozhuang Xin Zhongxing industrial Co., Ltd in China. Indeed, the North Coast Timber Supply Area (TSA), covering the coastal region of the northwest, is divided among four different licensees, none of which

¹⁸¹ Hutton argues that environmental values take root not only through new ways of using the resource base, but also through the way in which society imagines its relationship with the environment (2007, p.21).

¹⁸² This decline included the aforementioned closures of the Skeena pulp mill in Prince Rupert and the Eurocan pulp mill in Kitimat, along with additional closures of woodchip and saw mills in Prince Rupert, Terrace, and the nearby town of Hazelton. The cited figures include a slightly wider area than my study region, with inclusion of the neighbouring Bulkley Nechako census district. The reasons for the decline of forestry are outlined in Chapter Two. For the current analysis, the main focus is the current state of forestry, the challenges the industry faces in recovery, and implications for environmental protection.
¹⁸³ While Lax Kw'alaams was successful in securing the rights to the largest license attached to the closure (TFL 1), Kitsumkalum and Kitselas were awarded smaller portions of the licenses held by Skeena Cellulose within the nearby Kalum TSA (Timber Supply Area).

¹⁸⁴ The company holds the rights to an annual cut of 291,712 cubic metres (the bulk of the Nass TSA), and focuses primarily on export of logs to China and other countries.

locate their head office or operate processing facilities in the region.¹⁸⁵ The lands formerly occupied by the Skeena Cellulose pulp mill, which once formed the centrepiece of the regional forest economy, are now being converted into use as an export terminal.

There are modest signs of recovery in the industry, with the 2012 start-up of the reopened Skeena Sawmill, which once provided the primary source of employment for the town (Terrace Standard, 2012). Since re-opening in 2012, it has grown to employing up to 100 unionized workers in the mill itself, providing a lingering reminder of the forestry workforce that once occupied the top of the occupational hierarchy in the region. However, the current industry remains largely confined to a mass export model with low grades of timber and global competition inhibiting the expansion of higher-value operations.

A key problem facing northwest forestry is poor quality of wood, with the majority of timber stands consisting of a high proportion of low-quality timber that cannot be used for high-value applications such as custom wood products and high-end dimensional lumber (SNCIRE, 2013). Forestry managers recognize the challenge this poses to reviving their manufacturing sector, and are aware that the region lacks the resources to support past models of industry.

"On the Coast, the quality of the wood is not very good and that's a reality. It's very punky. It's really only good for pulp, much of it." (P021).

"Our forest is decadent, so logging here isn't economical without a viable pulp mill to take the pulp logs." (T047)

Some small independent milling operations focusing on custom timber products remain active in the northwest, providing an estimated 78 jobs when last studied in 2005

¹⁸⁵ The North Coast TSA is divided among International Forest Products, Triumph Timber Ltd, Sonora Logging Ltd., and British Columbia Timber Sales.

¹⁸⁶ The mill holds rights to TFL 41 (including an allowable cut of 128,000 cubic metres for 2013) and for an additional 162,484 in the Nass TSA and 26,112 in the Kalum TSA north of Terrace. However, it also relies upon purchasing wood from other licence holders in the region, in order to maintain its operations.

(Brouwer and Jobb, 2005). ¹⁸⁷ However, with the majority of timber is held by large license holders, the small mill industry is hindered by the challenge of bidding against large operations and foreign markets to obtain the dwindling amount of high-quality timber that remains available in the region (ibid). The greatest source of northwest forestry activity currently involves the shipment of raw logs out of the area to mills in other regions, and to overseas markets (SNCIRE, 2013). The increase in log exports has occurred due to the persistence of economic conditions limiting the viability of new manufacturing and milling operations. A forest industry respondent in Terrace summed up these obstacles succinctly:

"The Asia-Pacific [countries] can process the logs cheaply, and sell them back to us for cheaper than we can process them ourselves. It just doesn't make any sense to have processing facilities in Terrace, as much as we'd love to have jobs in the area, and especially with our high cost of harvesting timber. We've got coastal mountainous terrain to harvest them from." (T022)

Timber continues to flow out of the northwest region, but with a much smaller return to the local community in terms of employment opportunities. Nonetheless, log exports provide a modicum of economic activity in a forestry sector, in a region that is otherwise starved for opportunity.

"There's a lot of trees being exported through the harbour, which provides economic opportunity." (P009)

"We've adapted with raw log exports to keep expertise in the area. It keeps truckers and loggers employed and the only thing it doesn't do is provide sawmill jobs and municipal tax dollars." (T022)"

"We've been really fortunate that the government has allowed us to do raw log exports, which has sustained a minimum forest industry in the area. Without that, we would have been completely dead." (T028)

Analysis of the past two decades of forestry indicates that, because of overharvesting of select high-value timber such as cedar, forest companies will be forced

¹⁸⁷ These operations are non-unionized, and generally rely on bidding for timber against outside parties in order to obtain wood for their operations. The report assumed the custom mill industry in the area has a potential to supply up to 162 jobs, assuming a viable supply of timber is available to their operations.

into harvesting in more difficult to access areas and relying upon lower-value timber such as hemlock (Harrison, 2004). In an effort to make use of the low-quality wood in the area, a regional forestry think-tank SNCIRE (Skeena-Nass Centre for Innovation in Resource Economics) has been focusing on developing opportunities in forestry biomass industries that would utilize mill waste along with low-quality timber to produce fuel pellets for other industries.

"There's a lot of potential development around bio-coal and bioenergy because there is a large market being created in Europe and other places around the world to try to burn cleaner sources of energy. The development of carbon credits makes things like bio-coal profitable, so we're now seeing it starting to take off in the area." (T005)

Development of such new technologies remains dependent on attracting outside investment and no operations have yet begun production in this new field. However, in 2013, agreements were reached to establish a pellet plant in Terrace, as a complement to an existing export facility in Prince Rupert. (Killen, 2013; Thomas, 2013). ¹⁸⁸ Increasing log exports and the emerging biofuel market bring hopes of renewal to northwest forestry. However, these changes also provoke concerns about the environmental impacts that are associated with industrial forestry, and the way that new models of industry benefit local communities.

"There's still a significant impact from using things like wood waste to develop electricity, and they still do add CO2 to the atmosphere." (T012).

"When you look at the forestry in this town, look at it as forestry mining. It's not forest stewardship. It's forest mining. They mine the forest, they throw a sock towards the environment, but essentially when you clearcut a big chunk of land, you're doing a bad thing. Environmentally, there's no other way to slice it." (T020)

"I keep wondering why we're shipping some finished lumber in containers without making something out of them. If we want to keep people here and attract them for jobs and stuff, it just doesn't make sense to me to keep shipping out raw stuff." (P031)

¹⁸⁸ The proposal involves an agreement between Coast Tsimshian Resources based in Lax Kw'alaams, and Pinnacle Renewable Energy, which is owned by the Toronto-based Onex Corporation.

"I would rather they did not log, or if they log, they did selective logging or helicopter logging. I don't like it when they do and they totally mow down all the trees and you have a scarred landscape." (L001)

However, forestry does hold some potential advantages over other resource industries in forming alignments with the rising environmental values that Hutton identifies as being characteristic of the post-staples era (2007). Forestry is seen as representing a renewable resource that, if managed properly, can provide prolonged returns to the local region.

"Mining is not sustainable and it's a boom-and-bust industry. Forestry is sustainable and it can be a steady industry. It's renewable." (T042)

"Understanding and use of the forests in terms of the opportunities and the multitude of opportunities those represent. In that, I'm not just talking only economic opportunity, there's a whole bunch of ecological services that could be provided through the forests." (T013)

With effective management regimes in place, forestry is capable of co-existing with alternative forest usages, including recreation and tourism, and the harvesting of non-timber forest products (NFTPs) such as berries, mushrooms, and medicinal products. ¹⁸⁹ It is difficult to isolate and quantify the economic value of the many different alternative uses that intersect with forestry, as many of them are subsumed within other sectors (such as tourism), are small in scale (arts and culture), or remain subject to debate in regard to their economic viability and environmental impacts (carbon sequestration). ¹⁹⁰

Although alternative forest uses can also pose challenges to industry, new initiatives in the northwest indicate an interest to nurture co-existence between user groups. In 2012, SNCIRE hosted a conference to showcase art produced from local forest products, and in 2013 hosted a seminar titled "Slice of the Green Pie" to explore

making it difficult to track economic values and community benefits.

190 Carbon sequestration in forestry involves removal of lands from harvesting consideration, for the

¹⁸⁹ Little data is available in regard to the economic value of NFTPs, due to the subsistence basis of much NFTP harvesting, and the cash-based nature of many NFTP activities. Mushroom picking, for example, has occurred for many decades in the northwest, but has been conducted on almost entirely a cash basis, making it difficult to track economic values and community benefits.

purpose of receiving economic benefit (carbon credits) that can be traded, or used to offset taxes applied to companies based on their impacts on the environment.

opportunities in marketing new biological products on the global market. ¹⁹¹ Meanwhile the largest license-holder in the region, Coast Tsimshian Resources, has begun exploring opportunities for carbon sequestration and received a Tech Green Company award in 2011 for its efforts to support diversification and sustainability in the lands it manages (Terrace Standard, 2011a). These movements do not necessarily indicate the emergence of a greener forest industry. However, they do reflect the dynamic nature of the northwest forest industry and illustrate some of the steps being taken to adjust the industry to the social contours of the post-staples economy.

The question facing the northwest is what form the forest industry will assume in the future, given that the resource supply and economic conditions no longer to support a return to multiple pulp mills and a booming sawmill industry. Thus far, the industry has adapted by intensifying export activities, and is moving towards technological adaptations in biofuel development that would increase harvesting, thus stimulating potential debates about the environmental impacts versus local benefits. Development of economies based on alternative forest uses remains speculative, but current initiatives at the least provide the industry with a means to connect with the environmental values of the post-staples economy. Forestry is not about to disappear from the northwest or the province, and it continues to play an important role in the economy and culture of the region

"Logging's definitely a part of society. As much as people don't want it to happen, it's going to happen. People are going to cut down trees wherever you are in the world, but to manage it properly is the key." (P048)

"I believe the health of the forest industry is the most important aspect of the businesses and the residents of the country here." (T049)

"We need the forests, that's our livelihood. Not only that, from the trees and the pine, that's how we get our medicine...That's our livelihood for our tradition of medicine. "(L012)

¹⁹¹ Other examples of cooperation between the forest industry and cooperating (or competing) user groups are examined later in this study.

These three diverse quotes from three different communities reflect the strong ties between the region and the forest resource base. The different way in which northwest communities integrate forestry into their economy and culture affects the balance of environmental versus economic opportunities that they face as the industry adapts to changing conditions.

Fishing

One of the most important features of the northwest region is the Skeena River, which runs from the Pacific Ocean (just south of Prince Rupert) east to Terrace, before veering north. The Skeena River is the main artery of the north coast salmon fishery, and remains among the largest un-dammed rivers in the world, playing host to one of the richest and most popular sports and commercial salmon fisheries on earth. Economic analysis from 2008 estimated the direct value (based on expenditures within the sector) of the sport and commercial fisheries based on Skeena fish stocks at approximately \$34 million, with indirect economic impacts and \$14 million (Counterpoint Consulting, 2008). However, the

Table 8: Wild Salmon Fisheries

Wild Salmon Fisheries Capture for North Coast Region, 1996-2012						
	Number of fish	Value of catch				
1996	28,206,624	78,067,285				
1997	15,784,401	32,513,889				
1998	13,407,510	19,429,482				
1999	14,873,118	19,937,905				
2000	13,177,158	34,861,525				
2001	19,799,469	29,485,985				
2002	18,648,148	23,818,241				
2003	26,065,881	23,248,873				
2004	15,219,209	26,648,060				
2005	18,893,186	20,770,725				
2006	9,032,397	23,672,780				
2007	16,092,713	21,610,088				
2008	3,024,533	13,803,621				
2009	14,001,073	14,965,714				
2010	2,644,985	10,116,587				
2011	6,588,974	19,495,225				
2012	5,788,486	16,252,787				
DFO, 20)12					

northwest commercial fishing industry, like the forest industry, has experienced major declines over the past two decades. Although region-specific data are not available for all types of fisheries, the deteriorating condition of wild salmon fisheries in the north coastal region (see Table 8) is part of a broader pattern of decline in the commercial fishing and fish processing sectors that have traditionally played in important role in the northwest economy, particularly in Prince Rupert and Lax Kw'alaams. Declines in wild

fisheries are linked to shrinking fish stocks, licence limits, and economic competition from the emerging fish farming industry (Timberline, 2006). 192

While commercial (capture) fisheries have been in decline in the northwest and throughout BC, aquaculture has steadily increased over the past decade. Finfish (including salmon) aquaculture has risen to become BC's most valuable agricultural export, accounting for nearly \$500 million of value in 2010 (BC, 2011; Wagner, 2010). Shellfish aquaculture has also increased greatly over the past decade, reaching \$21.7 million of value in 2010. Rayner and Howlett describe aquaculture as "an archetypal case of a new "post-staples" resource industry: combining high capital intensity and sophisticated technology to produce a new, post-staples, version of a classic staple resource – food fish." (2007, p.49). 193 However, only a small amount of aquaculture development has occurred in the northwest region. 194 Unlike wild fisheries, the aquaculture industry is not dependent upon being located close to naturally occurring fish runs or shellfish beds. The northwest faces obstacles in competing with southern locations due to its remoteness to markets and potential sources of labour. The second factor limiting growth of aquaculture in the northwest is a moratorium on finfish aquaculture on the north coast that was implemented in 2008 out of concern for potential impacts of farming activities on wild fisheries. 195 The moratorium serves as an important reminder that adaptation to post-staples industries are not embraced uncritically as pathways to progress, and the developmental path that is seen as ideal for the metropolitan core does not necessarily reflect the interests of resource-dependent communities in the heartland. The roles of fishing and forestry in northwest communities have important bonds to both the economy and culture of the people living

¹⁹² It is acknowledged that recent years have witnessed historically poor salmon returns closely followed by historically high levels of returns. However, the fisheries, as defined by the landed catch of salmon, have experienced a clear decline.

¹⁹³ Although Rayner and Howlett focus primarily on finfish aquaculture, their analogy also provides an apt description of shellfish aquaculture.

¹⁹⁴ Only seven of the 461 shellfish aquaculture licenses in the province are located in the northwest region, with two of them located on Haida Gwaii (DFO, 2013). Of the seven, five are run by or run jointly by First Nations development corporations.

¹⁹⁵ The moratorium was established after pressure from commercial fishers and First Nations. A Prince Rupert based ENGO and commercial fisheries organization (T Buck Suzuki Foundation) played a leading role in establishing the moratorium.

in these communities, and changes that threaten these industries are met with stiff resistance.

Northwest commercial fisheries are thus caught in a difficult position in the post-staples economy. Growth of the higher technology and lower-employment intensive aquaculture industry has occurred elsewhere in the province (and the globe). The northwest faces geographic barriers in gaining access to the lucrative shellfish aquaculture industry, and is not participating in the growing finfish aquaculture industry. The latter is not only viewed as economic competition for wild (capture) fisheries, but is also viewed as an environmental threat to wild fisheries. ¹⁹⁶

While commercial fisheries have been in decline throughout BC, sport fisheries have continued to grow. In 2011, sport fishing was estimated to account for 43% of all fisheries revenues in the province, accounting for 60% of all fisheries jobs and outstripping its counterparts in aquaculture, fish processing, and commercial (capture) fisheries (BC Stats, 2012). PRecent studies found that sport fisheries based on Skeena-based fish stocks are valued at \$10 million of direct economic impact, and \$4 million of indirect economic impacts (Counterpoint Consulting, 2008). PRe northwest has thus been able to adapt to some of the shifts affecting the structure of fisheries in the post-staples economy with growth of their sport fisheries, which holds strong linkages to tourism markets, but the region has not embraced other developments in new fisheries economies such as aquaculture.

Fisheries play a complex and important role in the northwest economy as it adapts to the post-staples era and confronts new issues involving environmental protection. In one sense, the challenges faced by of the commercial sector reflect a battle of traditional industries against both declines in the environment and the rise of competing post-staples industries in sport fishing and aquaculture.

¹⁹⁶ Concerns regarding fish farm impacts on wild fisheries focus on transfer of disease and parasites, and contamination of the marine environment.

¹⁹⁷ Sport fisheries accounted for \$325.7 million in GDP and 8400 jobs. In comparison, fish processing accounted for \$177.5 million in GDP and 2400 jobs, aquaculture accounted for \$61.9 million and 2400 jobs, and commercial (capture) fisheries accounted for \$102.3 million and 2800 jobs. (BC Stats, 2012, p.1-3)

¹⁹⁸ This does not include additional sport fisheries based on groundfish such as halibut, or sport fisheries based on salmon and steelhead runs in other northwest rivers not linked to the Skeena watershed.

"We're pitted against the sport industry, not just out here, but in the river systems themselves. And it's very clear to us at the tables that we sit with the government that they don't care about what we access on the Coast. Their emphasis is, especially the steelhead in the Skeena system, that all they care about is the fat cat—the people from across Canada, North America, around the world, coming in, having a good time catching steelhead in Smithers or wherever." (L007)

"We were very concerned about the fish farms. And we worked very hard to make them aware, make the government aware, make people aware, of the threats to our wild fish and environment. And we were successful in getting a moratorium for the North." (P017)

At the same time, because of the sensitivity of the industry to environmental impacts, northwest fisheries form an important site for the growth of relationships between traditional resource users and the urban-led environmental movement (Rayner and Howlett, 2007). ¹⁹⁹

"There's nothing that doesn't affect the commercial fishery from an environmental perspective. Whether it's mining, whether it's logging, whether it's harbour pollution, whether it's pipelines, whether it's offshore oil drilling, whether it's tankers, it doesn't matter what it is. (P019)

"I think, if you think about just environmentalists in the region, the focus is often fishing and protection of wild salmon." (P040)

"The mining further north of us...all the waste that goes into our rivers, into our streams, it's going to have a domino effect. And not only up in that region, but those creeks run down into our rivers, and it affects our salmon." (L039)

"There are some things that are sacred. So if you do something that affects our sockeye salmon in the Skeena River you're evil. "(T041)

More so than in forestry, the study communities vary in terms of their relationships with fisheries and the environmental issues affecting the industry. Each community holds a very different set of cultural and economic attachments to the various components that comprise fisheries in the new economy, and these linkages

¹⁹⁹ As demonstrated by the fish farm moratorium on the north coast, which was supported by both local commercial fishers and numerous ENGOs.

have an important influence on the way in which these communities engage with the environmental movement. As I explore each community, I examine the ways in which they have adapted their economies to changing structural conditions (in fisheries and other industries), and the implications this holds for the role of environmental protection in each location.

Tourism

There is a large overlap between fisheries and the tourism and recreation sector in northwest BC. Central attractions in the northwest include sport fishing for steelhead, trout, and salmon on the Skeena River, and the chartered sport fishing industry based in Prince Rupert.²⁰⁰ The northwest also hosts tourism activities based on wildlife viewing, game hunting, sightseeing, and adventure sports (such as whitewater paddling, skiing), snowmobiling, and hiking. Both Prince Rupert and Terrace established new tourism offices, in 1998 and 2003, respectively.²⁰¹

The development of tourism and recreation industries in the northwest represents an important nexus of activity because growth in this sector poses challenges to industrial resource uses. Hutton (2007, p.22-3) contends that the development of environmentalism in post-staples society involves not only changes in the way resources are utilized, but also changes in the "imagined connections" between the public and the environment. In this respect, tourism and recreation hold additional importance as these industries create avenues for the social transmission of post-material environmental values. The industry also enables the physical passage of outsiders through the region, increasing awareness of northwest environmental issues throughout the rest of the province and the world.

Development of northwest tourism and recreation has stimulated discussion of the compatibility of industrial activities with non-extractive uses of the environment among those that view tourism and recreation as a key part of the economy.

²⁰⁰ Steelhead are ocean-running trout that can spawn up to four times (unlike most species that only spawn once). Steelhead can live as long as eight years, and are considered to be among the most prized game fish in the world.

²⁰¹ Terrace Tourism Society opened in 2003, and was later replaced by the city sponsored Kermodei Tourism in 2007.

"Tourism is the biggest generator of economic wealth in this area, and the whole damn area. It could be enhanced, it could be exploited in a good sense, and it's totally sustainable. But for it to happen, we can't be logging our forest, digging up open-pit mines, and having no environmental stewardship over the resource." T020

However, there is debate regarding the economic strength of the sector and its ability to provide an avenue out of the "staples trap" that ensnared the northwest during the forestry era. A study of the north coast economy in 2004 highlighted wilderness tourism as a promising area of growth, citing an existing \$900 million of consumer spending and 14,000 jobs in the sector, with an anticipated growth at a rate of nearly 4 percent year for the coming 20 years (Harrison, 2004, p.vii). However, employment data provides mixed indications of growth in this area, depending on which industry classification system is utilized (NOCS or NAICS). Overall, employment in art, culture, recreation, and sport industries remains limited, with jobs in the region numbering between approximately 500 and 700 positions between 1996 and 2001. However, the impact of tourism and recreation on the northwest economy extends beyond employment in its own sector, and intersects with retail sales, transportation, accommodation and services, and other industries that benefit from activity in the sector.

Between 2001 and 2011, the associated accommodation and food services occupations recorded a decline of approximately 300 jobs, and fell from 8.3 percent to 7.8 percent of all jobs in the region, reflecting the continuing general recession in the regional economy (see Table 6). However, both Terrace and Prince Rupert have conducted studies that indicate tourism and recreation are making significant contributions to the local economy. A visitor survey reported that in 2007, 189,000 visitors injected over \$52 million to the economy, with sport fishing forming the primary area of activity (Tourism BC, 2008).²⁰³ The cruise ship industry has also played a significant role in bringing visitors to the northwest following the construction of the

²⁰² NAICS data shows a small amount of growth occurred in arts, entertainment, and recreation between 2001 and 2011, with a net increase of 50 jobs, and a rise from 2.3 percent to 2.5 percent of regional employment. NOCS data, which is available for direct comparison over a longer period, shows fluctuations in employment in arts, culture, recreation, and sport, with employment losses between 1996 and 2001 and between 2006 and 2011, but gains between 2001 and 2006.

²⁰³ Although Terrace has not conducted similar visitor surveys, economic studies of the Skeena River sport fisheries of reported that over \$8.2 million of revenue was collected by lodges and guides between 2004 and 2007 (Counterpoint, 2008).

Northlands Cruise Terminal in 2004, and cruise ship visitations increased in 2013 following a temporary slowdown in the industry.²⁰⁴

Despite signs of growth in tourism industries, the northwest lags behind the rest of BC in this sector.²⁰⁵ As with other growth areas in the post-staples economy, the northwest is hindered by its isolation from major markets, and relies upon a shortened tourism season due to their northern location. As a result, some northwest observers view tourism and recreation as an unreliable supplement to the northwest economy, and not as a core element.

"Tourism may be again one of those problems with access to markets because we're so far away from the bulk of the population" (T008)

"Tourism is a great industry and I love tourism. But tourism on the north coast is only for a few months of the year. So you need a strong economy to support that infrastructure the rest of the year" (P049)

"We have put a big push into tourism, which is great. But tourists have to have an income in order to travel." (P026)

"Many people are aware that the north cruise line had decided not to put Prince Rupert on its 2012 itinerary. And so Prince Rupert is in a bit of a crisis around that." (P002)

The rise and fall of northwest cruise activity, and the lack of clear support in employment figures, demonstrates that tourism does not necessarily deliver a promise of reliable sustained growth. Schmallegger and Carson (2010) argue that adaptations to tourism industries in resource-dependent regions has a tendency to follow previous paths of staples development (and associated boom-bust patterns) when the new industry remains dependent upon state-led initiatives, when the market focuses on natural iconic attractions, and when the viability of the industry remains susceptible to fluctuations in external markets.

²⁰⁵ Employment in arts, culture, and recreation increased from 1.5 percent of all jobs in the northwest in 2001 to 1.9 percent in 2011. However, this remains behind 2.5 percent throughout the rest of BC.

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²⁰⁴ Prince Rupert experienced early success in attracting cruise ships following the expansion of their terminal in 2004, but was dropped from the schedule of two large cruise lines (Norwegian and Royal Caribbean) in 2012 in favour of Alaskan destinations. Prince Rupert was successful in attracting SilverSea for 2013 stops, but faces continued competition in attracting traffic.

The way in which the northwest tourism and recreation sector adapts to the contours of the post-staples economy may have important implications for environmental protection. Successful adaptation in tourism and recreation has been linked to entrepreneurial initiatives at the community level, locally-based ownership, and investment in locally-relevant knowledge (Hayter and Barnes, 1994; Schmallegger and Carson, 2010). The growth of sport fishing charters and river guiding, and the emergence of numerous small wilderness tour operations is an example of development that embodies these qualities, while providing ways for local entrepreneurs to develop connections with the environment that do not rely upon resource-extraction. The intersection between economic opportunities and environmental values in the post-staples economy is reflected in the close relationships between the northwest sport fishing and adventure tourism industry and ENGOs on several campaigns. ²⁰⁶

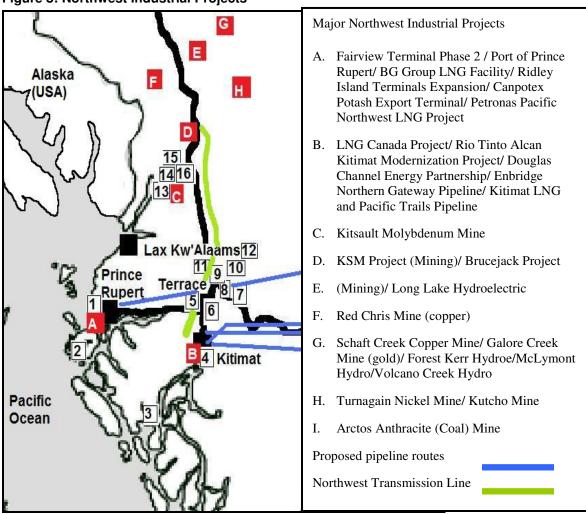
The development of new initiatives in tourism and the recreation industry since the mid-1990s occurred during a period in which the northwest economy was in decline on nearly all fronts. The industry has not faced competition from growth in other resource sectors until the recent rise of activity in the mining and energy industries, which I examine next. However, the timing of these growth periods is significant. The emergence of tourism and recreation has provided the northwest with economic reasons to reconsider the use of natural resources, while extractive industries have been in decline. Reliance upon external markets and failure to assure sustained growth in the industry poses a threat to the viability of the tourism and recreation sector. However, successful adaptation to post-staples markets in tourism and recreation provides a way for communities to step away from extractive resource industry dependence, and reimagine both their connections to the environment and the role of environmental protection in preserving local opportunities and values.

²⁰⁶ For example, the front page of the website for the Friends of Wild Salmon (a Terrace based ENGO) states "Anglers are our Friends". More than 20 independent northwest guiding, touring, and recreation companies participated in a recent ad in several national newspapers, along with a similar number of locally and globally based ENGOs, to protest pipeline development in the region (CBC News, 2010).

Mining and Energy

As mentioned previously, the northwest is facing a massive wave of industrial expansion that is already well underway. The Kitimat Terrace Industrial Development Society (KTIDS) estimates that current and proposed development projects for the region will bring more than \$64 billion to the region over the next five to ten years (KTIDS, 2013). When these projects are overlaid on the existing map of larger population centres and First Nations communities, the position of the study communities comes into focus within the centre of an impending crescendo of development.²⁰⁷





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²⁰⁷ The locations of the projects are approximations, and based on 2013 projections.

A list of these projects, and their projected completion dates is provided in Table 34 in Appendix 4.²⁰⁸ One of the most important projects on the map is the ongoing construction of the Northwest Transmission Line, which will run north from Terrace, providing essential connecting infrastructure between the various hydroelectric and mineral operations, and the major support centres of Terrace, Prince Rupert, and Kitimat. The map also shows the proposed routes of several natural gas and oil pipeline projects, including the controversial Enbridge Northern Gateway Project.

Jobs in mining, quarrying, and oil and gas extraction nearly tripled between 2001 and 2011, but still only accounted for 435 total jobs and 1.6 percent of all jobs in the region (Statistics Canada, 2010c, 2013). As with other sectors such as forestry, fishing, and tourism, employment in the mining and energy sector has an influence on associated industries in services, retail, and transportation. Regional economic development agencies claim that the permanent jobs that will be created by these projects number in the thousands, with thousands of additional temporary jobs being created during the construction phases (KTIDS, 2013). New work has begun on several projects during the three years since the last census, including construction of the Northwest Transmission Line, which is positioned to play a central role in tying new energy and mining developments together in a regional grid of development activity. Of the 30 projects represented in Figure 8, twelve projects are under current or preliminary construction.

The impending boom of energy and mining activity has generated significant optimism over the economic future of the region.

"If we could just get this big development going. That will kick start the economy, and bring it back to the way it used to be." (P034)

"Well, it will be a lot of industrial jobs. We got one at Galore Creek, Red Mountain and another one called the Red Fox at Shaft Creek. They will be huge mines. And this is affecting us today because we got a lot of people working up there and diamond drilling and so on." (T043)

"If only every project that is projected to happen, which is upwards of \$15 billion, goes ahead. It'll be a fabulous opportunity for all of the region: Terrace, Kitimat, the North, all the Nass Valley and everybody...It's very exciting times, very exciting times for us." (T045)

²⁰⁸ The numbers on the map represent First Nations communities, as identified in Figure 6.

The study communities vary in terms of how they are positioned to take advantage of the economic opportunities in mining and energy industries, and hold contrasting views in regard to the anticipated impacts of these developments. They also vary in terms of their concerns about potential environmental impacts of these industries, based on the different types of values they place upon various natural resources. I explore these differences in more depth in my examination of the individual communities.

Despite the growth in tourism and recreation and the perseverance of forestry and fishing as significant contributors to the region, overall employment in the northwest has continued to decline over the past decade, and many leaders and managers in the region see the new wave of industrialization as a necessary and beneficial adaptation.

"I think that they should try to promote industry and I think that they should stay away from spending a lot of money trying to attract people by having it be a pretty town, because I don't believe that having it pretty, is going to keep people here." (T027)

"Forestry, mining, it's still a resource-based economy" (T025)

"Go to Fort St. John, go to the tar sands. Look at the employment. They don't have employment problems there. The problems we have are because of employment." (P049)

The impending economic boom portended by the growth in the energy and mining sectors is offset by concerns regarding the linkage between the proposed industries and local benefits, and by the potential impacts of these developments on the environment.

The Enbridge pipeline project forms an important nexus of concern in the region, and raises concerns over both local and global impacts of the oil industry. The project is opposed by the Town Councils of both Terrace, and Prince Rupert, along with the Regional District of Skeena Queen Charlottes, numerous First Nations, and a wide array of local and global ENGOs. This particular development has formed a focal point in the

region due to its perceived risks to the environment, and provided an important site for environmentalists to connect with local residents.

> "Thank God for Enbridge because this town has moved that way. Enbridge has come in and is such a huge ugly thing, that we've actually got people, all kinds of people, from all walks of life, who are opposed to this. Their first taste of being an environmentalist." (T007)

> "A lot of people are scared of destroying our fishing industry and a bad oil spill into these rivers." (T043)

> "The Enbridge Pipeline idea certainly feeds into the consumption of oil and climate change problems." (P040)

While opposition to Enbridge has received ample attention in the press, a significant level of public support persists for the project based on its potential economic impacts. ²⁰⁹ The Town Council of Kitimat, which would form the western terminal for the project, has thus far refrained from adopting an official position on the project. However, in a plebiscite on the project in April of 2014, 58% of polled residents in Kitimat voted to reject the federal government's decision to approve the Enbridge project (Lewis, 2014).²¹⁰ Along with Enbridge, there are divisions throughout the region and the population on many projects, including those in the mining industry.

> "Mining has real potential to impact water quality and fisheries resources and so there's a concern...There's a real potential that a whole bunch of them will go ahead at the same time, be developed at the same time, which could have serious impacts. We could be overrun by mining development in the next 10 or 20 years, which would have serious environmental implications on water quality and fish resources, and also wildlife resources". (T012)

Doubts over the environmental impact of mining and energy development are coupled with additional concerns regarding industry stability and the benefits for local communities. Several analysts of post-staples development argue that modern mining industries offer limited benefits to modern resource-dependent communities due to

²⁰⁹ A recent NDP poll in Terrace found that 37 percent of local residents supported the construction of the pipeline, compared to 46 percent opposed (Baxter, 2012). A previous poll by a private agency indicated 48 percent supporting and 31 percent opposing the pipeline (ibid). ²¹⁰ The vote covered 3,071 of the town's (approximately) 9,000 residents.

increased automation of production (producing a decline in employment), and a shift towards temporary on-site worker housing over the use of locally-based labour (McAllister, 2007, p.81). The finite lifespan of mineral and gas deposits also poses questions regarding the future of the community following exhaustion of the resource (ibid). The current wave of activity in the northwest is already expected to bring a temporary boom in the construction phase, followed by a reduction of employment once facilities are operational. These industry features, and the past experience of the northwest with large industry, provoke concerns regarding the overall benefit of the mining and energy, and other resource export industries to the region.

"We've seen a complete collapse of what were once termed adjacency and appurtenancy clauses with industry, that ensured that a portion of the resource extracted from the region would be processed within the region, ensuring work for the local communities. That's gone, which means our trees now leave in containers for China, either for sawing or for pulp. Our fish go into containers and travel elsewhere to be processed, or they're caught by others here and processed elsewhere. There's very little actual involvement by the community anymore in the actual resource extraction process." (P011)

"If you depend on mining it'll be boom and bust. Stewart is a ghost town for a while and then it's busy, and then it's a ghost town again. "(T042)

The northwest is already experiencing difficulties in taking advantage of the opportunities that are unfolding in the mining and energy sector, due to shortages of skilled workers that occurred as a result of the economic declines in other industries. Local leaders and managers are aware of the challenges they face in adapting to new industries, and limits this poses to local enrichment.

"A lot of skilled workers left...That whole generation in their early 20s and 30s, basically went elsewhere and they took their kids with them." (T041)

"The best qualified people are going to come from out of town anyway. So we're bringing in an industry that increases our tax base, but it really doesn't do much for the people in the community." (P021)

"We see tons and tons of workers coming from outside the region, that's why the planes are mostly full with people who are coming in. There's

not enough local people trained." (Skeena MLA, Robin Austin, in Bench, 2014)

The stagnancy of the northwest employment structure, and the limited growth in knowledge and science occupations reflects Wellstead's (2007) observation that traditional staples-dependence, and the associated patterns of instability and dependence on the urban core, remains an appropriate characterization of development in isolated regions of Canada. The continued decline of economic conditions in the northwest increases the pressure to develop new economic drivers. Hutton warns that resource-providing regions that are unable to successfully adapt to new industrial models are likely to experience increased subservience and disadvantage to the metropolitan core (2007). The northwest may thus fall even further behind the rest of society if it is unable to capitalize on the wave of industry moving through the region by creating opportunities for local citizens that transcend entry-level positions in resource export operations. This includes growth of entrepreneurship, and employment opportunities in positions associated with the ascendant segment of the post-staples occupational hierarchy, with an emphasis on management, technical and professional positions, and knowledge-based industries.

Community Resources and the New Economy

The ability of northwest communities to adapt to the new economy has important implications for environmental protection, and for the way in which environmental protection fits in with other social priorities and building blocks of community development. The collapse of forestry and commercial fishing has produced a landscape in which different industries and competing modes of development are jockeying for position in the northwest. The period of industrial stagnancy between the decline of forestry and fishing and the impending rise of mining and energy has had two key impacts. First, it created an opportunity for new types of non-extractive industries to gain increased economic importance in the region, and created a window for the germination of environmental values. Second, it caused an exodus of skill and knowledge workers from the region, thus creating challenges in the ability of the region to capitalize on new resource development activities. Mining and energy industries appear to be trending towards increased prominence. However, inability to secure

benefits and opportunities for local residents may reduce support for new industry, and lead to increasing alliances between groups focused on job benefits and groups focused on environmental issues.²¹¹

The importance of securing benefits for local communities and protecting the environment is reflected in the prioritization of community resources and developmental building blocks across the study communities. In a survey of local leaders in the three communities, access to education and skills training, and small business development received the highest average rankings out of ten community-level resources, based on their respective importance to community well-being (see Table 9). Environmental protection was ranked third among community-level resources.

The forest industry was ranked two positions behind natural resource trade, indicating the rising profile of mining and energy sectors in comparison to historical economic drivers. Despite the development of recreation and tourism in the region, local leaders ranked these industries lower than forestry and natural resource trade and all other community building blocks. These rankings indicate an expectation that the region's future will continue to be tied to adaptation to new staples-producing industries. Although tourism and recreation provide a valued source of diversification, they are not widely viewed as a viable

Table 9: Regional Rankings for Community Resources

11000011000		
Resource	Average	Median
	rank	
Access to education and	4.71	3
skills training	N=147	
Small business	4.74	4
development	N=147	
Environmental protection	5.17	5
	N=148	
Natural resource trade and	5.53	5.50
exporting	N=146	
Local government	5.56	5
	N=147	
Forest industry	5.96	6
	N=148	
Local infrastructure and	5.97	6
city administration	N=148	
Heritage and local culture	6.81	7
_	N=147	
Tourism	6.99	7
	N=144	
Outdoor recreation	7.31	8
	N=147	

replacement for either new resource development, or traditional forms of industry.

²¹¹ Such patterns of resistance have developed in recent years in the coastal logging industry, as environmentalists and forestry worker unions have joined forces to protest against forest practices that both groups view as unsustainable and damaging to the economies of forestry-dependent communities. The Ancient Forest Alliance has received support from forestry unions and workers in coastal communities in their campaigns and protests against practices that include the export of raw logs, harvested from old growth forests (Lavoie, 2013).

However, these resources are more highly valued by some respondents and some communities than others, and nonetheless represent a challenge to the industrialization of the landscape. The level of importance attached to different community-level resources varied considerably among the study communities, except for the importance placed on environmental protection, which was ranked third in Terrace, fourth in Prince Rupert and Lax Kw'alaams, and third on average across all three study communities. The ordering of the resources, according to each community, is provided in Table 10.

²¹² All items on the list are believed to hold significant importance for the well-being of northwest communities, and were selected based on discussions with resource managers and academics working in the region. The rankings thus represent the importance of the items relative to each other, and not in terms of their absolute levels of importance to the well-being of the northwest.

Table 10: Rankings of Community Resources for Study Communities

Terrace			Prince Rupert			Lax Kw'alaams			
	Mean	Median		Mean	Median		Mean	Median	
Small business development	4.43 N=49	4	Small business development	4.08 N=50	3.5	Access to education and skills training	3.35 N=49	2	
Forest industry N=49	4.88 N=49	4	Natural resource trade and exporting	4.36 N=50	4	Heritage and local culture	4.18 N=49	4	
Environmental protection	5.18 N=49	5	Local infrastructure	5.08 N=50	5	Local government and city administration	4.67 N=49	4	
Access to education and skills training	5.10 N=49	5	Environmental protection	5.28 N=50	5	Environmental protection	5.04 N=49	5	
Natural resource trade and exporting	5.63 N=49	6	Local government and city administration	5.49 N=50	5	Small business development	5.75 N=48	6	
Outdoor recreation	6.31 N=49	7	Access to education and skills training	5.67 N=49	5	Local infrastructure	6.14 N=49	7	
Local government and city administration	6.53 N=49	6	Forest industry	6.64 N=50	7	Forest industry	6.35 N=49	7	
Local infrastructure	6.69 N=49	7	Tourism	6.43 N=49	7	Natural resource trade and exporting	6.66 N=47	7	
Tourism	7.14 N=49	8	Heritage and local culture	7.92 N=49	8	Outdoor recreation	7.33 N=49	8	
Heritage and local culture	8.33 n=49	9	Outdoor recreation	8.31 N=49	9	Tourism	7.43 N=46	7.5	
Resources are listed in descending order of importance to community well-being, with most important									

Resources are listed in descending order of importance to community well-being, with most important resource listed at the top.

In the current study, an examination of the ranking data provided a mixture of results for the distribution of responses for the various resources. The key resource ranking for this study is the importance of environmental protection. Response frequencies for the ranking of environmental protection approximated a normal distribution in Prince Rupert and Lax Kw'alaams, but exhibited a (positive) skew in the Terrace due to the large number of respondents that had ranked it as the first or second

most important resource (see Figures 9, 10, and 11).²¹³ The skew in the data presented a challenge to conducting parametric tests for the individual communities, using the importance of environmental protection as a dependent variable. Because of this finding, the measurements for environmental protection were utilized as interval level data

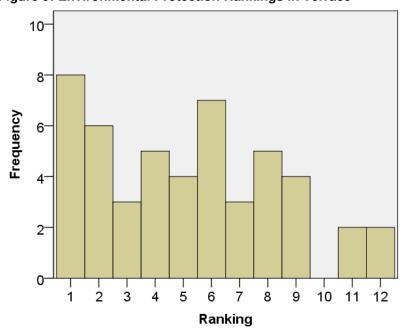


Figure 9: Environmental Protection Rankings in Terrace

²¹³ Although only 10 community resources were originally listed, respondents were permitted to add additional resources to the list. Therefore, rankings are on a scale of 'one' to 'twelve', rather than 'one' to 'ten'.



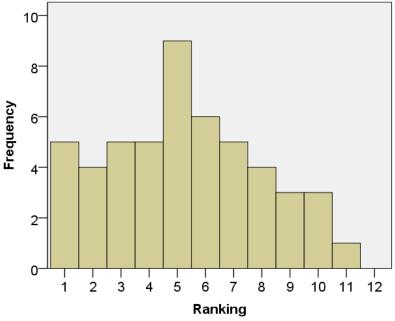
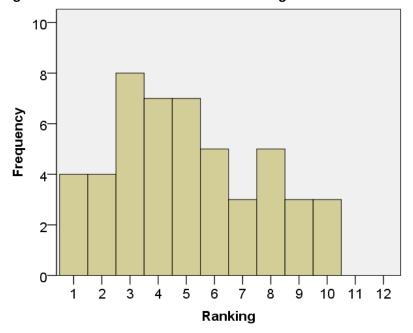


Figure 11: Environmental Protection Rankings in Lax Kw'alaams



Although environmental protection received the most consistent rankings among community-level resources, the concept of environmental protection and how it should be achieved varied greatly among the study communities. In the next chapter, I explore each community in detail, and explain how their respective development strategies affect

their views on environmental protection.²¹⁴ Prior to proceeding to my individual community analyses, however, I provide a cursory look at my study communities' respective rankings of valued resources. Within this, I focus on small business development and access to education and training, given their rankings as the two most important building blocks of development among the three study communities (see Table 10). Examining the basis of the importance attached to these two particular community resources helps explain the way in which the study communities are engaging with various forces of change, including the new economy as I explain in this chapter, and the environmental movement as I explain in those that follow.

Terrace and Prince Rupert hold prominent status as important centres of regional development due to their respective size and established business functions, and both experienced a high number of business closures and job losses as a result of the past two decades of economic decline.²¹⁵ In their study of northern development, Markey et al. argued that the loss of businesses and entrepreneurial capacity poses an obstacle to economic revival (2012, p.180). In turn, communities are forced to open themselves up to new industrial opportunities, and to seek new ways of using the resource base (Hayter, 2000, p.316-320).

Local leaders in both communities thus emphasize the importance of attracting a diverse array of new industries and entrepreneurial opportunities as the keys to economic development, and ranked small business development as the most important community resource. For Terrace, business development revolves around revitalization of forestry, and diversification into other industries, including energy and mining in the surrounding area and outdoor recreation. These priorities are reflected by the importance that local leaders and resource manager place on the forest industry and outdoor recreation in their community resource rankings (see Table 10).

"If only we had a thriving forestry industry again, combined with the mining that's got the potential further up north. If you combine those two then Terrace will flourish once again." (T013)

²¹⁴ I believe a detailed discussion of development strategies is best conducted by examining each community individually, within the context of their own unique cultures and identities.

²¹⁵ Terrace and Prince Rupert are the two largest communities in the northwest region.

"There's a lot of environmental draws to the area which include fishing, recreation, hiking, camping, a local ski hill, you name it. So maybe it's just a matter of rethinking what it is, and then recruiting folks to make it happen or encouraging businesses to make it happen" (T031)

For Prince Rupert, economic revival and small business growth revolves around development of port facilities and industrial lands to support their role as a centre for shipping and processing of raw resources. These priorities are reflected by the importance that local leaders place on natural resource trade and exports, and on local infrastructure in their community resource rankings.

"I think the number one task moving forward is to create and foster employment initiatives which are resource as well as port related." (P006)

"The growth of the commercial port will mean the sustainability and the growth of the City of Prince Rupert. So they're linked at the hip. It's quite exciting for the city to get a bit of a boost from the hard knocks over the last 20 years. This will provide some growth opportunities for the City of Prince Rupert, more jobs for the City of Prince Rupert, a more vibrant community." (P007)

Access to education and skills training is considered important in Terrace and Prince Rupert, and is assigned moderate levels of importance in respect to other community resources, but is assigned less importance than in Lax Kw'alaams. Terrace and Prince Rupert view education and skills training as important for helping local residents secure access to jobs, and in increasing the availability of skilled labour in order to enable new industry.

"Just having a high school education is not going to get you employment at Alcan in the future. You're going to have to be a technologist." (T007)

"When those projects come along, there's a void because there aren't skilled people here to fill any jobs that do come up. So it's tough for employers. That's one of the things that they'll be looking at. Who's going to work here?" (P034)

For both Terrace and Prince Rupert, the growth of new businesses and industries is viewed as being synonymous with community revival, and education of a skilled

workforce is viewed as but one contributing component to this process. For these communities, there are still uncertainties regarding the specific mix of industry that will best suit the communities' needs. ²¹⁶ Nonetheless, Terrace and Prince Rupert move forward as established centres of industry, looking to reclaim their positions of prominence in the resource economy of British Columbia. They need only an appropriate mix of capital, labour, and natural resources, balanced against an appropriate level of environmental protection to propel them towards renewed prosperity. In this sense, their approach may be summarized as "business first, based on the growth of local opportunities, balanced with an appropriate level of environmental protection".

In contrast, Lax Kw'alaams engages with the new economy from a more isolated location, with limited capacity for local business development, and as a community entering into a new role as a prominent player in the management of the regional resource base. Lax Kw'alaams thus places lower emphasis on small business development than Terrace and Prince Rupert, ranking it fifth out of ten community-level resources (see Table 10). Economic development in Lax Kw'alaams focuses on revival of the fish cannery (re-opened in 2012), preservation of existing jobs (including protection of opportunities for local fishers), and engagement with resource development activities located elsewhere in the region.

"There's not too many jobs around here other than fishing. That's about all we do." (L014)

"People need jobs, and the only place you get a job here, if you're not working for the Band Council, and it's seasonal, is when the cannery operates." (L001)

The emphasis on education in Lax Kw'alaams (ranked first among community resources) revolves around the interrelated objectives of improving the ability of Band Members to obtain jobs, and to help prevent Members from leaving the community. The local leaders of Lax Kw'alaams are aware of the attraction that larger communities have for their Members, and see education and training as way to synergistically improve

²¹⁶ I discuss these differences in the next Chapter, with reference to their relationship to the role of environmental protection.

opportunities for individual Members, while also improving their community's capacity for self-sufficiency and their ability to capitalize on the growth occurring in the region.

"All the other people that are 18 and 20, they're now in Vancouver. They're now in Prince George. They are now in places were they can get their education furthered through colleges." (L028)

"Level of education and capacity building to suit jobs that are going to be required to move our community forward. I think it's really important that the community focuses on high end education." (L049)

"We need to have a Chief and Council that are educated. We need further education for community members here in the village, or even those that live off reserve. But we need them to come to the reserve and to run our community." (L048)

Whereas Terrace and Prince Rupert place small business development first, the three most important community resources in Lax Kw'alaams centre around the enhancement of their capacity to engage with the resource development activities occurring in the broader region, and protection of the bonds that hold their Members together. Local leaders from Lax Kw'alaams ranked access to education and skills training, heritage and local culture, and local government and city administration as their three most important community-level resources (see Table 10). Without a history as a centre of regional industry and resource control, Lax Kw'alaams moves forward into the new economy recognizing that they need to first strengthen their community in order to assert their interests and benefit from the growth that is occurring around them. For Lax Kw'alaams, the loss of skilled workers is not a trend that can easily be reversed through in-migration of new opportunity-seekers. Whereas Terrace and Prince Rupert have experienced dramatic population shifts, Lax Kw'alaams has experienced diaspora. Lax Kw'alaams faces a much different challenge than the settler communities, in that their ability to thrive in the new economy pivots on their ability to retain, enrich, and strengthen their connections with, their people. This involves attending to both the bond between individuals and the economy, as well as the bond between individuals and community and culture.

"Our leadership, administration, elected officials, need to be educated on all levels. I guess it would called capacity building." (L046)

"It comes down to budgets and human capacity...if we had the budget and human capacity, I'm telling you, man, we'd fly into this." (L018)

"Critical in trying to make a healthy community is, of course, creating jobs. Along with that, we're sitting in a building where we have our history. What part does your culture and your history play in trying to make your community whole or healthy again?" (L007)

The central objectives of Lax Kw'alaams and the settler communities exhibit a contrast between rebuilding economies versus rebuilding communities. All three study communities place importance on both objectives, but order them differently. As they encounter environmental issues and new forms of governance, they engage with these issues relative to their central priorities, and place them within the context of different strategies for adaptation and growth. As Lax Kw'alaams reaches out into the northwest from their isolated location, they are also moving beyond the confines of a history in which the role of First Nations in controlling resource development activities was very limited. Environmental protection, as represented by government agencies, ENGOs, and the broader social movement, is thus encountered as a force that is based largely outside their community. Lax Kw'alaams faces the challenge of developing their own internal capacity for engaging with these forces, and of asserting their own ideals about appropriate ways of managing and protecting natural resources.

"Yeah, white man's laws. Every move that you make now, the white man laws are in front of you, made without any consultation with us...But we tell them it's our traditional territory, that they don't have a say in it, they're environmentalists." (L002)

"We've been very open in regards to the environmental issues being brought forward. We like to be a driving force in that, and one of our aggressive moves is to be involved in anything that happens within our territories or around our community." (L024)

As Terrace and Prince Rupert seek to establish their roles in the new economy, their struggle with environmental protection is one of achieving an internal balance between two forces that originate within their own culture and society. Moreover, their

encounter with the forces of development versus environmental protection represents a familiar negotiation that they have been involved in for a long time.

"I think Prince Rupert needs to encourage more industry. And I guess a challenge with that is doing it in a way that I don't want to see large sections for forest cut away for a pipeline or potential pollution. So there's got to be balance." (P035)

"It's a very depressed economy here, so [an important issue is] finding ways of bringing opportunities into the area while protecting our environment." (TE032)

The analysis in this chapter focuses primarily upon the economic dimension of the changes that are occurring in northwest BC, and the broad trends belie the differences between different communities in terms of the way that they are positioning themselves on the chessboard of development in the region. In the following chapter, I expand upon the differences identified in this chapter, and examine the contrasting and competing visions of development within each study community. These visions, and the resources that are most valued within them, give shape to the environmental issues that are viewed as risks to the communities, which in turn produce targets for protection. In the final chapter, I explain how these differences in vision also affect the way in which the study communities interact with new forms of governance as they respond to environmental issues and seek to assert their respective interests in the protection and control of the resource base.

Chapter Six: Pursuing Renewal in Three Communities

In northwest communities, economic renewal and environmental risks go hand in hand. The prolonged recession that has afflicted their forestry and fishing industries was produced by a combination of economic and environmental forces that placed the future of these communities in jeopardy. As these communities adapt their economies to the new structure of opportunity around them, they engage with industrial forces that introduce new pressures to the environment, thus creating new uncertainties for their futures. In this chapter I examine the three study communities in detail. I identify their respective strategies for renewal in the new economy, and assess these strategies in relation to efforts to protect the environment, including the new environmental movement that is emerging in the region. I analyze their course of development as a process of push and pull between forces of resource development and environmental protection. This analysis provides the basis upon which to evaluate their responses to environmental risks in the final section of this study.

Terrace

The history of Terrace is rooted in a forest industry that imposed a specific order on the use of the surrounding lands and on the positions assigned to different groups within the local economy. Marchak described Terrace as an "old logging town", with a reputation for boom and bust (1983, p.28, 327). Terrace was among the clear beneficiaries of the post-war Fordist forest industry, with the employment riches gained from large mills in the region and harvesting in the surrounding woodlands. In turn, the community has been one of the biggest losers in the collapse of forestry and the decline of their most important economic driver.

At the beginning of this study, I argued that the decline of historic structures has created space into which new forms of social influence and governance have emerged. As debates over environmental issues occur in the northwest, the landscape is no longer one upon which industrial forestry stands supreme. Terrace no longer holds alpha status as the hub of northwest forestry and as the home to a robust and high-earning workforce, and no longer fits the profile of a single-industry (logging) town. There are now multiple

interests jockeying for control of the resource base, the shape of the economy, and the identity of the community.

Over the past two decades, the dominance of forestry in the local economy has been challenged by mining and energy industries, a growing service sector, and niche markets in outdoor recreation. During the same period, several environmental groups have emerged in the community, including the Friends of Wild Salmon, the Skeena Watershed Conservation Coalition, and the Lakelse Lake Watershed Society. Each of these influences contributes to the new identity that is taking root in Terrace, and each affects the role that environmental protection plays in the town's strategy for economic recovery.

The town is situated along transportation corridors between the continental interior and three deepwater ocean ports and sites of major development proposals, including Kitimat, Prince Rupert, and Stewart. Key infrastructure includes an airport, and the industrial and rail yard properties around the downtown core that provide expansive building and staging areas for various industries. This includes sorting areas for forestry operations where logs are organized prior to transport, machinery service and storage for energy and mining industries, and the newly reopened Skeena Sawmill, which once provided the primary source of employment for the town. These resources, along with the town's central location, position Terrace to play an important role in the new wave of industry moving through the region. However, employment data indicate that Terrace is experiencing a shift in

regard to the specific role that it is to play in the new economy.

The top twelve employers in Terrace in 2011 reflect a heavy education, service and retail emphasis, indicating a shift in the town's economy away from large industry and forestry dependence (see Table 11). The largest industrial employer in 2011 was a construction

Table 11: Largest Employers in Terrace

Twelve Largest Terrace Employers in	Number of
2011	employees
School District #82	721
Northern Health Authority	650
Northwest Community College	218
City of Terrace	140
Walmart (Retail)	230
Safeway (Retail)	145
Canadian Tire (Retail)	91
Save-On-Foods (Retail)	90
McDonalds (Restaurant)	89
Terrace Totem Ford Auto Dealership	70
Tim Horton's (Restaurant)	67
Northern Motor Inn	60

company, which was ranked 24th with 24 employees (City of Terrace, 2011).²¹⁷ The reopening of the Skeena sawmill in 2012 reclaimed one of the top eight spots for the forestry industry, but the overall profile of the economy remains markedly service-oriented.

The shift away from large industry is most evident in the decline of forestry and manufacturing jobs. Between 1981 and 2011, employment in these occupational groupings declined from 10.7 percent (primary industries) and 14.1 percent (manufacturing) to 3.1 percent and 2.8 percent, respectively (Statistics Canada, 2010a, 2013).²¹⁸ This included a loss of 1,015 jobs across the two categories combined.

Between 1996 and 2011, NOCS data indicate that Terrace took on a more prominent role in the information and service-related sectors in the northwest region. The role of Terrace as a service centre began in the 1980s, as the government responded to the leading edge of declining forest employment with an effort to locate increased government services jobs in the community (Halseth et al., 2005, p.8). This role has taken on increased importance for the region in the wake of changes in the delivery of government services that have accompanied the neoliberalization of British Columbia. Over the past 20 years, there have been reductions in funding for public services such as education and health care, resulting in an increased level of responsibility being taken on by municipal governments and the private sector (Mills and McCreary, 2013).

In the previous chapter, I explained that the northwest region has lagged behind the rest of the province in development of industries associated with the leading edge of the post-staples economy, including information, services, and technology based industries. In the face of this trend, over the past two decades Terrace has taken on a greater role in the region as a stronghold for information and service related occupations. For example, between 1996 and 2011, Terrace has increased its share of northwest jobs in natural and applied sciences from 23.7 percent to 27.5 percent, in sales and service from 19.8 percent to 25.3 percent (see Table 12). Terrace has also increased its regional

²¹⁸ Comparisons of all occupational categories between 1981 and 2011 is not possible due to changes in occupational classifications. However, descriptions for these two categories remained consistent.

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²¹⁷ These data do not account for employers outside of the municipal boundaries, and industrial employers such as the Kemano hydroelectric project in Kitimat. However, by 2011, the two largest industrial employers in the region, including the Eurocan pulp mill in Kitimat and Skeena Cellulose in Prince Rupert, had shut down.

share of jobs in occupational services that include social science and education, government service and religion, health occupations, and art, culture, recreation and sport. Terrace's overall share of employment in the region increased from 18.6 to 21.3 percent.²¹⁹

Table 12: Terrace Employment Profile (NOCS)

	1996			2011		
Industries are listed in order of the proportion of regional employment contained within Terrace, in descending order.	Total	% Terrace	% of total in Region in Terrace	Total	% Terrace	% of total in Region in Terrace
Total experienced labour force ²²⁰	6610		18.6	5750		21.3
Natural and applied sciences and related occupations	385	5.8	23.7	390	6.8	27.5
Social science, education, government service and religion	535	8.1	23.8	1060	18.4	26.7
Sales and service occupations	1765	26.7	19.8	1510	26.3	25.3
Health occupations	265	4.0	21.3	330	5.7	23.3
Art, culture, recreation and sport	135	2.0	20.9	120	2.1	22.2
Business, finance and administration occupations	1090	16.5	24.6	735	12.8	22.1
Management occupations	565	8.5	22.4	545	9.5	21.3
Trades, transport & equipment operators and related occupations	1170	17.8	17.9	720	12.5	14.1
Processing, manufacturing and utilities	320	4.8	8.5	160	2.8	12.5
Occupations unique to primary industry	380	5.7	12.0	180	3.1	12.4

(Statistics Canada, 2010b, 2013)

This trend does not reflect a wider pattern of northwest jobs collapsing into larger communities, as both Kitimat and Prince Rupert experienced declines in their share of

²¹⁹ Although Terrace increased its share of employment in manufacturing and primary industry occupations, overall employment in these industries declined by roughly 50 percent during this period.

Total includes all respondents over age 15, with occupations identified. Total population for NOCS different than total for NAICS due to difference in number of people reporting data for this category.

regional employment.²²¹ Instead, this pattern indicates that within the broader context of the post staples economy, at least it terms of occupations based in knowledge and service sectors, Terrace has fared better than other northwest communities and has begun to take on a distinct new role in the region.

The growth of Terrace as a service centre is recognized by many local leaders. As noted in the previous chapter, small business development is ranked as the most important community-level resource for supporting the well-being of the community. Many local leaders see the growth of the service sector as a positive change in the community, and as the most viable way to take advantage of the town's existing resources.

"I think they need to focus on the fortunate location of Terrace, vis-à-vis the Northwest region, and foster commercial and social services, more so than industrial. If we can get some industrial activity, that's icing on the cake. Realism today, watching people walk by, it's a commercial centre and it's a service centre." (T030)

"They should be providing opportunities around the service sector more than anything else. I think part of that is around the commercial tax base. Part of it is around accessibility, rail, and air. Part of it is around providing a positive environment for interaction with those companies." (T037)

NAICS data provides a similar picture of shifts in the Terrace economy, with the town taking on an increased share of northwest employment in health, retail, utility, accommodation, education, and administration service industries between 2001 and 2011 (see Table 13). These industries account for the only significant sources of employment growth in Terrace, further emphasizing the community's comparable success in adapting to the contours of the post-staples economy.

Despite its growth as a service centre, Terrace has not given up on its ties to resource industries. Indeed, the future of the community as a centre for service and

²²¹ Between 1996 and 2011, Prince Rupert declined from 25.2 percent to 23.5 percent of regional employment, and Kitimat declined from 16.3 percent to 15.8 percent of regional employment (Statistics Canada, 2010a, 2013).

²²² As shown in Table 10.

knowledge industries remains tied to the viability of other types of growth in the region, including expansion of resource development activities.

Table 13: Terrace Employment Profile (NAICS)

	2001			2011			
All industries(North American Industry	Total	working		Total working			
Classification System)	population 6,225			population 5,750			
,	(19.6%	of region	1)	(21.3% of region)			
	Total			Total			
		ce	% of total in Region		e	% of total in Region	
		ırra	tot on		Terrace	tot on	
		% Terrace	of egi		Te	of egi	
***	150		<u> % & </u>	40.5%	%	% % R %	
Wholesale trade	170	2.7	32.4	195*	3.4	38.6	
Information and cultural industries	160	2.6	42.1	150	2.6	34.9	
Professional, scientific, technical services	220	3.5	26.7	275*	4.8	33.9	
Utilities	45	0.7	25.0	45	2.6	30.0	
Retail trade	935	15.0	24.9	895	15.6	29.1	
Accommodation and food services	535	8.6	24.1	515	9.0	26.9	
Health care and social assistance	750	12.0	24.6	775*	13.5	26.0	
Educational services	565	9.1	23.0	630*	11.0	25.7	
Other services (except public administration)	265	4.3	21.5	245	4.3	23.8	
Real estate and rental and leasing	80	1.3	26.3	70	1.2	22.6	
Finance and insurance	200	3.2	31.0	135	2.3	22.5	
Administrative and waste services	160	2.6	19.5	165*	2.9	20.0	
Public administration	350	5.6	12.6	560*	9.7	18.3	
Mining, quarrying, oil & gas extraction	10	0.2	6.7	60*	7.6	13.8	
Construction	335	5.4	18.2	255	4.4	13.7	
Transportation and warehousing	405	6.5	19.3	270	4.7	12.5	
Arts, entertainment and recreation	140	2.2	29.8	65	1.1	12.5	
Manufacturing	570	9.2	10.6	250	4.3	11.5	
Agriculture, forestry, fishing, hunting	340	5.5	21.8	185	3.2	11.2	
Management of companies	0	0	0	0	0	0	
*indicates industry with increase in number of jobs 2001-2011							

(Statistics Canada, 2010c, 2013)

Several economic and industrial development agencies have sprung up in the region since the forestry declines of the 1990s. An early response to the decline of northern forestry communities was the creation of Community Futures 16/37 in 1988. The organization is a Terrace-based, federally funded initiative intended to assist northwest communities with general economic and small business development. A semi-regionally based organization was established in 2005, under the name of the Kitimat Terrace Industrial Development Society (KTIDS). The stated mission of KTIDS was

"To assist and promote the development of a diversified, sustainable economy in NW BC" (KTIDS, 2013). 223

The primary local economic development group has been the Terrace Economic Development Association (TEDA). TEDA was established in 1999 to assist in elevating the profile of the community as a place for outside capital to invest. TEDA provides various business services, including toolkits for developing agreements between business and First Nations, and hosting conferences such as the 2013 Minerals North Conference.

With government playing less of a role in establishing relationship between industry and rural communities, the development of community economic development groups play an important role in allowing the community to market itself to potential industrial partners. TEDA works in cooperation with many other groups and is advertised as a general economic development agency, but focuses primarily on promotion of opportunities in mining and energy industries.²²⁴

The local community college has also developed new programs to assist Terrace in adapting to new opportunities in energy and mining industries, including the creation of mining training programs at the local community college (Markey et al, 2012, p. 120). These accompany existing programs in forestry, health care, and other occupations.²²⁵

The centrepiece of the rising northwest energy and mining industry is the Northwest Transmission Line (NTL). The project is expected to create 840 direct jobs, and play a central role in connecting various new and existing developments to regional hydroelectric resources, thus providing a pivot point for up to 12,000 additional direct and indirect jobs over the next decade (Partnerships 2020, p. 2012). The NTL project began construction in 2012, following the completion of benefits agreements with several regional First Nations, including Kitsumkalum and Kitselas in Terrace, and the Tahltan, Gitanyow, and Lax Kw'alaams. The NTL and the numerous existing and

²²⁵ The goal of this program is to assist the local population in taking advantage of employment opportunities connected with developments north of the community.

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²²³ KTIDS ceased operations in 2013, having completed its primary objective of conducting industry studies to demonstrate the positive attributes of the northwest region as a destination for industry. ²²⁴ The TEDA website and list of projects does not include any reference to forestry activities, or other industries outside the mining and energy sectors.

proposed energy and mining projects that it ties together have stimulated new optimism about the future of the economy in Terrace.

"Terrace will continue to be a supply centre for the Northwest. So we're affected by developments outside. Whether it's transmission line or Rio Tinto's development, the investment in the Northwest will benefit Terrace." (T005)

"I think they need to focus on the fortunate location of Terrace, vis-à-vis the Northwest region, and foster commercial and social services, more so than industrial. If we can get some industrial activity, that's icing on the cake." (T028)

"They should be open to let these bigger companies put in their lines and make Terrace the hub of the North, and encourage mining up north. People are presenting bioenergy, biocoal, there's talk of waterpower. If all these all came together, I think we would be a very successful community." (T040)

While mining and energy industries have brought a new source of economic optimism to Terrace, the sector has also provoked concerns over potential impacts on the environment. The primary focus of concern is the potential effect of upstream mining projects on the Skeena River.

"How many mines can the Skeena watershed accommodate before we change it into an industrialized river? It's the last unindustrialized river in North America. It's not dammed. There's no industry on it sucking water from it or putting water into it." (T007)

"Mining has real potential to impact water quality and fisheries resources and so there's a concern. There's a large amount of proposals right now that are going through the environmental assessment process, others are in the exploratory process. But there's a real potential that a whole bunch of them will go ahead at the same time, and be developed at the same time, which could have serious impacts." (T012)

As I explain later in this chapter, these concerns form focal points for both local ENGOs, and ENGOs based outside Terrace and the northwest region. Concerns about mining and energy sectors go beyond environmental impacts however, and include doubts about the actual economic value of such industries to Terrace. Despite the anticipation of significant growth, employment in mining, quarrying, oil and gas

extraction only increased by 50 jobs between 2001 and 2011 (see Table 13). The limited growth is partially due to the fact that the majority of large projects remained in the stages of development and proposal at the time of the last census. However, it also warns of the potentially limited benefits that Terrace stands to accrue as a result of direct employment in energy and mining industries. As explained in the previous chapter, direct employment in these industries is likely to be hindered due to the shrinkage of the local workforce that occurred during the forestry recession, and by the mining and energy industries' shift towards temporary transient workers over local labour. These concerns are echoed by local leaders and research managers in their comments about the energy and mining sector and its impact on Terrace as a centre of service rather than a centre of industry.

"My concern about the mines not bringing long-term work directly to the community...They don't use necessarily local professional people all the time, which is a frustration." (T024)

"We bring in Walmart and Canadian Tire and it's gone from being an industrial town, to a service industry town. It means going from largely family earning wages, because the forestry industry did pay high wages and was unionized, to a service industry where we're now a retail hub for the whole Northwest. But what that means, of course, is that retail doesn't pay what sawmilling does." (T018)

"With the major projects for mining and energy, we're not ready for them as far as labour skills."(T044)

These comments also communicate the difficulty of economic transitions for single-industry towns, and the realization that simply replacing one industry with another, whether it's based in service or based in resource development, will not necessarily result in a return to the prosperity of the past. Terrace is therefore reluctant to put all of its eggs in any one economic basket, and tends to view all industrial shifts as a way to broaden their opportunities, rather than to stack them vertically on a single foundation.

The collapse of the economy in Terrace was the product of over-dependence on a large-employer dominated industry model that relied almost exclusively on bulk export of raw materials to foreign markets. Marchak (1983, 1995) argued that the best hope for

communities such as Terrace to recover from this decline is to pursue diversification of their economic base in order to insulate themselves from similar future problems. Local leaders emphasized the importance of economic diversification when asked to identify key issues facing the community, with 34 percent placing diversification among the three most important issues. In contrast, only six percent identified growth of mining and energy as a key issue for the community. In this respect, energy and mining is viewed as a new industry that can potentially support the diversification process along with new initiatives in forestry, rather than functioning as a replacement for the role that forestry played in the past.

"We have to diversify. This has been solely a forest industry supported town since I've been here. We have to diversify" (T046)

"With our natural resources, with the Northwest Transmission Line, the mining, it would be nice to have the forestry diversified instead of only being able to export logs. It would be nice to have some better manufacturing, diversified manufacturing. Diversity is so key." (T004)

Diversification forms a central theme in the strategies Terrace is using to engage with new resource development activities, and represents a departure from their past reliance upon a singular economic driver. Instead of sacrificing all other resource values to support one dimension of the economy, local leaders express support for a wider range of resource development activities. As I explain later in this chapter, this holds important implications for the role of environmental protection in the community. It also shapes the way that the town is seeking to redevelop its forest industry, which continues to play a significant (albeit diminished) economic and cultural role in the community.

Re-Imagining Forestry and Forest Uses in Terrace Today

The emphasis on mining within locally based economic development agencies (KTIDS and TEDA) has been matched by efforts in Terrace to re-assert the importance of forestry to the community. Despite the troubles experienced in the industry, forestry was ranked as the second most important community-level resources by local leaders and resource managers in Terrace.²²⁶ In 2009, the Skeena Nass Centre for Innovations in

²²⁶ See Table 10.

Resource Economics (SNCIRE) opened in Terrace, and in 2010 a regional group called the Northwest BC Forest Coalition (NBCFC) emerged to represent the interests of northwest-based forestry companies. The NBCFC represents a coalition of regional license holders interested in increasing investment in the region, while SNCIRE comprises a think-tank with paid staff that seek to attract investment and stimulate innovation. Although SNCIRE is who in various types of development activities, the agency is focused primarily on forestry, with a goal of obtaining increased value from the regional forests and other local natural resources. This particular objective stands as a departure from the mass export and low-value model that characterized the forest industry of the past era.

Another contrast from the big-industry model of the past is the survival of numerous small-scale independent mills amidst the shutdown of nearly all large processing operations in the Terrace area. This includes many small independent and family-run operations that focus on providing customized timber products for targeted buyers. The Northwest Truck Loggers association estimated that the custom sawmill industry in the areas surrounding Terrace and the nearby community of Hazelton provide 78 jobs (Brouwer and Jobb, 2005). However, their operations remain greatly constrained by the lack of access to quality wood, creating problems in expanding, and in some cases maintaining production (Brouwer and Jobb, 2005).

The majority of wood in the region is held within TFL 1 and TFL 41, and the Kalum and Nass TSAs (Timber Supply Areas). The TFLs are owned by the Lax Kw'alaams First Nation and Skeena Sawmills, respectively. ²²⁹ The former sells the majority of their wood at market value and ships most of it out of the region for processing in other towns or other countries, while the latter uses its higher quality wood

²²⁷ An example is the custom milling of Sitka spruce, Lutz spruce, and red cedar for musical instrument makers.

²²⁸ These operations are non-unionized, and generally rely on bidding for timber against outside parties in order to obtain wood for their operations. The report assumed the custom mill industry in the area has a potential to supply up to 162 jobs, assuming a viable supply of timber is available to their operations. However, access to timber remains a challenge.

²²⁹ TFL 41, owned by, Skeena Sawmills Ltd., covers 2000 square kilometres in two areas to the south of Terrace. The majority of the remaining areas of active forestry land in the northwest are encompassed within designated T.S.A.s or Timber Supply Areas (including the Kalum, Morice, Bulkley, North Coast, Nass, and Kispiox), within which the government awards various volume-based licences to various parties.

for its own needs and exports the rest. Although these TFLs cover a vast portion of the landscape, the only significant active timber processing facilities located in the region is the newly re-opened Skeena Sawmill near Terrace.

While local control over forest resources has been a central part of economic success in Lax Kw'alaams with the acquisition of TFL 1, Terrace has enjoyed only mixed success in this. The local Skeena Sawmill is owned by Roc Holdings Ltd., a Chinese-owned company with a Canadian base of operations in Vancouver. However, Terrace was awarded a community forest agreement (CFA) in 2007, and recently had the agreement renewed for another 25 year term. The program involves the City of Terrace administering a for-profit forestry license, while using the profits to support community functions and local organizations. Although limited in size to approximately 30,000 cubic metres of allocated wood per year, the project is estimated to have generated approximately \$3.5 million of activity (Terrace Standard, 2013). The cut wood has been utilized for both raw log exports, with much of the old growth sold to the newly revived Skeena sawmill.

The nearby First Nations of Kitsumkalum and Kitselas obtained short-term forest licenses (32,000 and 42,000 cubic metres respectively) in TFL 1, along with smaller portions of the licenses held by Skeena Cellulose within the nearby Kalum TSA as part of the reallocation of tenure that occurred in the closure of Skeena Cellulose (the Prince Rupert pulp mill). Although not operating on a scale equal to their neighbours in Lax Kw'alaams, Kitsumkalum and Kitselas have been able to generate economic activity for themselves and Terrace through partnering with regional forestry companies. These operations have enabled additional local harvesting activities that the head of the North West Truck Loggers Association described as a "very synergistic arrangement, providing local employment for both contractors and First Nations peoples." (Sauer, 2011). Both SNCIRE and the NBCFC enjoy membership and support from Kalum

 $^{^{230}}$ Lax K'Alaams was successful in securing the rights to the largest license attached to the closure of TFL 1.

²³¹ Kitsumkalum formed Kalum Ventures Ltd. to administrate their business operations, and has worked in cooperation with Northwest Timberlands Ltd. (based in Terrace) to market their wood. Kitselas formed Kitselas Forest Products, and has worked in cooperation with A&A Trading (a division of Coast Forest Products based in Vancouver).

Ventures and Kitselas Forest Products, as well as from other local industry organizations and First Nations.

Not all changes in the ownership of northwest forestry licenses have involved local ownership, however, as the primary license holder in the Nass TSA (north of Terrace) is Canada Resurgence Developments Ltd (CRD), a subsidiary of the Zaozhuang Xin Zhongxing industrial Co., Ltd in China. The company holds the rights to an annual cut of 291,712 cubic metres (the bulk of the Nass TSA), and focuses primarily on export of logs to China and other countries.²³²

Forestry remains important to the community with the limited milling and the harvesting activities that occur in the surrounding areas. However, the new Walmart retail store alone employs a greater number of people than currently accommodated in the entire wood processing industry based in Terrace, highlighting the rising prominence of the service sector against the decline of forestry. With the challenges faced in rebuilding a strong locally-based forest industry, Terrace's relationship with forestry remains somewhat ambivalent. Forestry still provides a measure of valued economic activity, but ongoing reliance on raw log exports is viewed as an obstacle to rebuilding the local employment base, and large scale harvesting is seen as a strain on an environment that hosts other economic values. Forestry criticism in Terrace thus revolve around export practices, and the impact of large volume industry models on recreation and fishing industries.

"We are just exporting our raw logs obviously. And we're losing a lot of the potential value in the process. Other than that, you don't have to look far to see that we're not engaging in selective harvesting. There's still a lot of clear-cut that's going on." (T010)

"I don't like the fact that we're exporting our raw logs. I think that is an economic issue and if we're going to allow logging, we should make sure that the entire process is completed in Canada and we have that benefit." (T026)

²³² Skeena Sawmills has been able to obtain a small amount of wood from CRD.

²³³ This comparison is based on the 100 workers at Skeena Cellulose, and the portion of the 78 independent small mill jobs based close to the community, compared to the 230 employees at the Walmart.

"There's a lack of enforcement in what's happening. If you look at the current practices, in a heavy rainfall environment, the damage to the landscape is really quite worrisome and damaging to the streams." (T029)

"My buddy brings in guys at \$5,000 to \$6,000 a week from England, and that's not including their airfare and everything. That's what they pay him: \$1,000 a day to fish. Well that's a huge part of our economy. That money comes back here in droves. And there's all kinds of little lodges around...So forestry can change that economy too, because that's where you get all the fishermen worried about the silt, the clearcuts." (T007)

Forestry is now one industry among many that face environmental criticism. The shift towards the post-staples economy fuels this criticism with the increased value placed on recreation and tourism industries. Like many other BC towns, Terrace strives to advertise its amenities and the benefits of living in a town that is surrounded by such a richness of natural resources. This includes the creation of a local tourism association, Kermodei Tourism, which focuses on outdoor recreation and wildlife-based activities.

Terrace enjoys an advantageous location as a staging area and arrival point for those travelling to the northern BC parks system, including the Spatsizi Wilderness Plateau, Mt Edziza, and Swan Lake/Kispiox River Provincial Parks, and for visitors seeking the famous white Kermodei bears of the Great Bear Rainforest that lies to the southwest. Terrace is surrounded by extensive backcountry resources that attracts skiers, white water paddlers, mountain bikers and hikers. The importance of sport fishing and the sensitivity of fishing habitat to industrial impacts were mentioned by 39 percent of local leaders and resource managers when asked to identify the most important issues facing their community. Many respondents also made note of the unique nature of the Skeena River as an unobstructed watershed, and explained that the river provides Terrace with a special appeal to both local residents and tourists. These attractions are viewed by local leaders as important foundations for both the tourism economy, and the image of Terrace as a place to live and work.

"The people who live here, the people who are moving to this town, are coming here for the amenities. They want the kayaking, they want the water. They want that flow. They're here for fishing, and they want that clear water because most of them are here for fly fishing. They're here

for the extreme fly fishing which we have. Best in the world. We have the best paddling in the world." (T006)

"I would say, look at these young people coming in here. We have something to offer. They're adrenaline junkies, outdoors people who need a house." (T029)

"Sport fishing is our number one tourism economy, by a long shot. It supports the hoteliers, the restaurants, the sporting good shops, the boats, the fuel." (T005)

The Terrace Environmental Movement

The Skeena River's importance in the Terrace sport fishing and recreation industries is mirrored by the central role of fish and water in the emergence of a strong Terrace-based environmental movement.

"Terrace has become an environmental hotbed because this is where these fights are going to happen. We're not even talking about the mining fight that's going to happen because as the mines start opening up around here, that's impacting our watersheds, too." (T007)

Since 2000, several ENGOs have sprung up in Terrace, with nearly every one of them involved with protection of fish habitat and local bodies of water. These include the Terrace Green Belt Society, which sponsors river and creek clean-ups, and the Lakelse Lake Watershed Society (LLWS, established in 2001). The LLWS is a volunteer-based group that focuses on all manner of human impacts (particularly forestry) on the Lakelse Lake watershed, which forms a popular local recreation area and important

Table 14: Terrace ENGOs

Key ENGOs in Terrace Friends of Wild Salmon

Lakelse Watershed Society North West Watch Skeena Watershed Conservation Coalition Skeena Wild Conservation Trust Terrace Green Belt Society Headwaters Initiative Externally-based ENGOs active in Terrace area North Coast Steelhead Alliance (Smithers) World Wildlife Fund (Prince Rupert Office, Internationally based) Sierra Club of Canada, (Victoria) Dogwood Initiative (Victoria) Watershed Watch Salmon Society (Coquitlam). David Suzuki Foundation (Vancouver) Forest Ethics (Vancouver) West Coast Environmental Law, (Vancouver) Greenpeace (International) Natural Resources Defence Council (International)

salmon habitat that drains into the Skeena River.²³⁴

North West Watch (NWW), another new ENGO, is a volunteer-based group that holds a broad focus on sustainability, with a focus on water habitat impacts. NWW has been active in voicing opposition to pipeline construction, hydroelectric development, and the coal bed methane industry. NWW members were active in public hearings for the Enbridge Gateway Project, and lobby both local and provincial government for environmental protection.

Other Terrace-based initiatives that focus on salmon and fish habitat include the Friends of Wild Salmon (FOWS). FOWS is a coalition of local organizations, fishers, First Nations, and local citizens. ²³⁵ The group conducts a variety of public campaigns while working with government and industry to address pipelines, gas drilling, and fish farms. Like the LLWS, FOWS engages in community outreach by participating in community events to recognize the importance of the river and fisheries to local culture and the local economy. Also focusing on protection of fish habitat is the North Coast Steelhead Alliance (NCSA, established in 2002), a group committed to the protection of sport fisheries throughout the northwest and on opposing the potential impacts associated with oil and gas development, mining, forestry, and marine traffic. Although based in the nearby town of Smithers, the NCSA has a strong Terrace membership contingent and is actively involved in protection of the Skeena steelhead fisheries. ²³⁶ The NCSA has been raising funds to commission an economic impacts study on steelhead fisheries to the northwest, and has been active in expressing resistance to oil pipeline development and other threats to river and ocean habitat.

²³⁴ LLWS has established a public presence through projects such as the construction of a viewing platform, where the public can view wildlife, and by participating in habitat renewal and clean-up projects in local streams and lakeshores.

²³⁵ FOWS operates as a non-profit organization with a small paid staff, and is provided with a mandate by a board of trustees

²³⁶ Steelhead form a special focus of conservation concern due to the high value of the fish to sports fisheries. Steelhead are salmon-like fish that begin their lives in freshwater, and travel back and forth to ocean. They are often referred to as 'ocean-going trout". Unlike salmon that have an approximate 3-4 year lifecycle before spawning and dying, steelhead can live up to 10 years and pass through 3 to 4 spawning cycles. They are among the most highly prized sports fish (sometimes referred to as "silver bullets") due to their elusive nature and extreme fighting potential.

Terrace has also become home to several ENGOs with a broader focus, including the Skeena Watershed Conservation Coalition (SWCC, established in 2004).²³⁷ The SWCC attends to the social, economic, and environmental impacts of industrial development on the Skeena Watershed and the communities within it. SWCC projects include the Skeena Watershed Ecosystem Valuation, which examines the value of resources in their non-extracted forms, such as the value of trees to prevent erosion and attract tourism, and the value of clean water to humans and animals and fish.

SWCC has a strong outreach program that intersects with the region's growing emphasis on outdoor recreation. In 2009, the SWCC supported The Spirit of the Skeena Swim. This event involved a local endurance athlete named Ali Howard, who swam the entire 610 km length of the Skeena River from the headwaters to Prince Rupert. The swim was completed to attract attention to the vulnerability of the Skeena watershed to industrial development, and was accompanied by slideshows and lectures in the many towns it passed through. The SWCC has also organized rafting expeditions in the headwaters of the Skeena and Stikine rivers to draw attention to threats posed by mining and gas exploration in the region. The synergy between outdoor recreation and the environmental movement is based on shared interests in protecting key resources from industrial impacts, and on protecting the economic values of an outdoor recreation industry that has taken on new importance during the decline of other industries.

"I'm not a radical environmentalist, but certain aspects of the environment that are important to a lot of community people are things like the ability to recreate, to hunt, fish, to hike, to utilize the outdoor resources that we have. And for those resources not to be compromised significantly by industrial development." (T023)

"We have arguably the best backcountry and most consistent backcountry in the world....So this is what people come here for is basically to play. So they come here to live to play. We need to protect that because that's our new economy." (T006)

Education and research also form focal points for several ENGOs and environmental initiatives. The Skeena Watershed Initiative, funded by the US-base

²³⁷ SWCC maintains a small paid staff, and receives direction from a locally based board of directors from the Skeena and Bulkley watershed areas

Gordon and Betty Moore Foundation and several fisheries foundations, completed a series of studies on fish stocks, hatcheries, and habitat between 2008 and 2011. Similar funding sources continue to support the Skeena Wild Conservation Trust (SWCT, established in 2007). SWCT focuses on increasing the benefits that local residents receive from the use of the environment, and maintains a paid staff as well as additional research contractors.

"Skeena Wild Conservation Trust brings together all interests, governments and members of the public to help sustain the long-term viability of fish populations and the health and resilience of the wild salmon ecosystem, while optimizing economic returns to local communities." (SWCT, 2013)

SWCT's innovative outreach campaigns included giving away \$2,100 in cash, that was taped to a placard that revealed a message concerning the value of fisheries as members of the public removed the cash from the placard. The SWCT also hosts a film festival to highlight the sporting and lifestyle values associated with the natural resource base in the region, and helps host events such as River Days and Riverboat Days in various communities along the Skeena River. SWCT is currently working with UVIC Environmental Law Program to lobby the provincial government for a study of the cumulative impact of multiple LNG facilities on the northwest economy and environment.

The mobilization of environmental activism occurring in Terrace, and the activities of these groups has also attracted support from various externally-based ENGOs and national agencies focused on environmental protection. For example, the Tides Canada Initiative Society acts as sponsor to the Headwaters Initiative in Terrace. The Headwaters Initiative is a conservation group focused on lakes and rivers, with particular attention to the headwaters of the Skeena and Stikine watersheds to the north of Terrace, in the same area as many current development proposals.

"The Headwaters Initiative Project works to create a more informed and connected community engaged in the conservation of some of British Columbia's great rivers. Its goal is to expand and empower the network of individuals and organizations concerned about the impacts of

proposed developments – particularly in relation to energy and salmon ecosystems." (Tides Canada, 2013).

Terrace, and the northwest region in general, has also become a target community for ENGOs based in the south of the province including the Sierra Club of Canada, which has been active in Terrace and directly involved in protests against pipeline development. Other southern ENGOs active in Terrace include the Dogwood Initiative (Victoria) and the Watershed Watch Salmon Society (Coquitlam). Larger groups monitoring northwest activities includes some of the most prominent ENGOs in North America, including Greenpeace (involved in campaigns regarding the Enbridge pipeline and drilling in the Klappan region), and the David Suzuki Foundation, which attends to a variety of northwest wildlife issues and has expressed critical views of the various oil and gas projects proposed in the region.

Other environmentally oriented groups involved in monitoring or seeking to influence northwest development include the Natural Resources Defence Council, West Coast Environmental Law, and Forest Ethics. These groups have been prominent in securing major environmental victories such as the moratorium on coal bed methane exploration in the 'Sacred Headwaters' region located north of Terrace, and play a leading role in opposition to high-profile projects such as the Mt. Klappan coal mine (now called Arctos Anthracite) and the Enbridge pipeline.

The growth of ENGO activity is clearly traceable to the increase of energy and mining activities in the region that has occurred since the decline of forestry.

Consideration of an oil pipeline to Kitimat occurred in the 1970s, and although meeting mixed opposition from the local population (Marchak, 1983), did not prompt the widespread formation of community-based ENGOs. LNG operations have also been under consideration in the northwest since the 1980s, and molybdenum mining has occurred in Kitsault since 1979. However, the current wave of locally-based ENGO growth did not emerge until shortly after the turn of the new century, as the community witnessed the decline of its major forestry employers and witnessed the rise of a new energy and mining economic order.

The growth of environmentalism in Terrace also corresponds with the rise of the post-staples economy. While the emergence of these groups is clearly tied to specific

natural resource concerns in the local area, local leaders and resource managers also express a perceptions that Terrace has taken on a higher degree of environmental consciousness that reflects core values that extend beyond purely industrial and utilitarian uses of the environment.

"Whether it's direct or indirect, everybody in this community is very tied to our wild salmon economy and our wild salmon ecosystems whether we directly make money from it or whether we like to go fishing with our families on the weekend. Or we camp along the banks of the Skeena River. We're all pretty connected to that and tied to it. And so creating a pride and a sense of ownership and knowledge over the resources." (T019)

"There is certainly an environmental ethic, I suppose. There are some things that are sacred. So if you do something that affects our sockeye salmon in the Skeena River, you're evil." (T041)

The spread of environmentalist ideals and the value of the resource base for alternative uses has penetrated core facets of the community, including the forest industry. Terrace has been exploring a variety of new ideas about what forestry could be or should be, and how it can interact with recreation and tourism, and other uses of the landscape. For example, funding provided by the Terrace Community Forest has been one of the key sources for maintaining the local ski hill, and the local mountain bike club (TORCA).²³⁸

More so than the mining and energy fields, forests appears to be fertile ground for the growth of symbiotic relationships between industry and environmental values. In some cases, the forestry industry in Terrace has sought to directly engage new ideas about multiple forest uses and the green economy. For example, SNCIRE has hosted conferences to showcase artwork made from timber salvage and expansion of non-timber forest product harvesting (Benoit, 2011). In 2013, SNCIRE also hosted the "Slice of the Green Pie" seminar in Terrace to explore Northwest BC's role in the global bio-economy. This seminar brought together experts to explore ways of using the regions timber supply in the development of bio--energy to compete with coal and other sources

²³⁸ The local ski hill, Mt. Shames, has been close to closing down on repeated occasions over the past ten years, and funding from the community forest has been critical in keeping the operation alive in past years.

viewed as being more harmful to the environment. Local leaders recognize the importance of moving from the forestry models of the past to models of industry that are compatible with shifting environmental values. In this respect, embracing environmental protection is also viewed as a way of helping the economy adapt to new opportunities through aligning itself with changing values and creating linkages with the global green economy.

"And do we want to be just hewers of timber and miners sending everything to export? Or, do we want to be developing more within the long-term sustainable industries within the community? It seems like everybody just jumps on the next best big project, and mines are like that. They're boom or bust....The forest industry and tourism and ecosystem health, and our surroundings, how we manage within the district and the region in terms of ecosystem management and sustainable industries is really key to long-term benefits." (T042)

"Well, we grow trees. We grow trees fast. We're influenced by the Coast and the Interior, and I think I could get into the carbon neutral thing, because we grow trees so fast here I think we've got some of the freshest air. We've got some of the freshest air in the country as far as I'm concerned, and it's because of the growth of our trees." (T015)

"I want the wood from British Columbia and that's a huge step. And if it's not British Columbia from the Skeena region, I want to be able to brand it "Skeena wood, Skeena fiber," something so that what it says is that we've done it right, and that we're doing it in a sustainable way. I want that stewardship to be there and that's one of the things that I'll be fighting for. If you ask me where we're going with this, it's not to stop forestry, it's to make forestry change to be something that we can be proud of."(T007)

Competing Visions of Development and Environmental Protection

"Well, I think the first thing that needs to happen is to define a clear path forward, a clear vision. Something that encompasses values that we all share. I think once we have a clear vision of what we want our future to look like then we can start making decisions about how to get there." (T019)

Despite the shift towards the service economy, the way forward for Terrace remains unclear. There are many uncertainties related to the resource development activities

occurring around the community, and the types of development that are going to occur within the community. Local leaders ranked small business and forestry as the two most important community-level resources (or building blocks) in the community, but both of these resources are perceived to be in worse condition today than they were 20 years ago (See Figure 12).²³⁹ In contrast, environmental protection comprises a community resource of competing importance that is seen as having improved in condition over the past two decades.

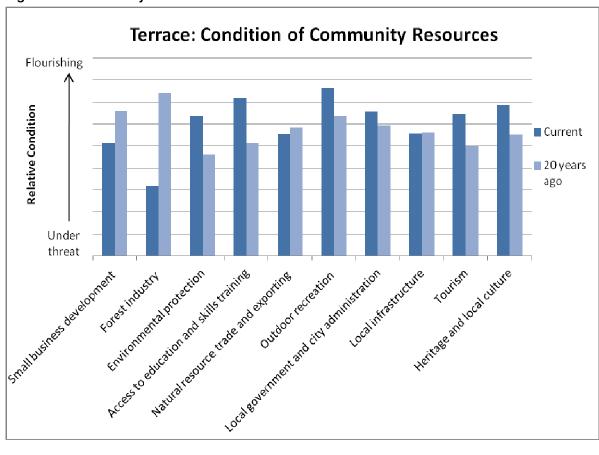


Figure 12: Community Resources in Terrace

Natural resource trade and export, ranked fifth among community resources, is also viewed as being in less favorable condition than in the past. Forestry, along with

²³⁹ Respondents in the study were asked to rate the community resources based on their condition at the time of the study, and their condition 20 years ago. Small business development (identified as the most important community resource) showed a decline in respondents' assessments of its condition, falling from an average rating of 6.6 in the past, to only 5.2 today. The foresty industry (identified as the second most important community resource), fell even more dramatically from 7.4 to only 3.2.

small business development and natural resource trade and export, hold strong links to the economy, and are at the core of visions of industrial renewal in the region. For many local leaders, the best way forward for Terrace is to emphasize industrial development and remove impediments to the revival of forestry and other resource development activities. This viewpoint conforms to an "industry first" approach, in which the key to ensuring a bright future for the community is to enable the development of natural resources.

"I think that they should try to promote industry and I think that they should stay away from spending a lot of money trying to attract people by having it be a pretty town, because I don't believe that having it pretty, is going to keep people here. They might say it's nice as they drive by, but if they can't make a living here, it's not going to matter how much money we spend on making the town pretty." (T027)

"In the short term, it's a boom. You can expect a boom and so the concern there is, do our businesses have enough strength to be able to expand to take maximum advantage?" (T005)

"Continue to promote the opportunities that we have here, to highlight our strengths and be welcoming to new industry to come in here to help provide the resources for the future." (T003)

For some respondents, the industrial building blocks that drove the growth of Terrace in the past, despite their current problems, continue to hold the answers to the future. In this sense, a strong movement persists in Terrace to hold onto its historic identity as a community built upon resource extraction. As a result of these ties, environmentalism is viewed by some local leaders as an impediment to growth, and environmental protection as something that needs to follow development rather than lead it.

"They're [ENGOs] in opposition to projects. I mean, I'm not saying that they're wrong, but I'd like to see some of that energy transferred into promoting, figuring out what we can get here." (T005)

"I see the Skeena Wild and those ones as basically being an antieconomy kind of drive. They're saying, 'just don't do anything and the world will be better'. I realize I'm probably generalizing, but they're more of a 'just nobody moves, nobody gets hurt' kind of mentality. Where we're much more interested in actually moving things forward, understanding that people have to have lives and livelihoods and get a lot farther by generating stuff through economic activity than by turning economic activity off." (T013)

However, other local leaders express different ideas about how Terrace should build its future, and emphasize a different set of priorities. Outdoor recreation, tourism, heritage and culture, and education and skills training are viewed as community resources that are improving in Terrace (see Table 15).

Table 15: Community Resources in Terrace 1991-2011

Community Resources	Condition 1991	Condition 2011
Small business development	6.60	5.14**
Forest industry	7.41	3.20**
Environmental protection	4.60	6.35**
Access to education and skills training	5.13	7.18**
Natural resource trade and exporting	5.83	5.55
Outdoor recreation	6.37	7.65**
Local government and city administration	5.93	6.56*
Local infrastructure	5.60	5.57
Tourism	5.00	6.45**
Heritage and local culture	5.51	6.85**

Scores are represented as mean of all responses from respondents in Terrace. Respondents rated resources based on their conditions at the time of the survey, and perception of conditions 20 years ago.

Tourism and outdoor recreation were assigned lower average ranking than other drivers of industry (such as forestry and natural resource exports) in terms of their importance to the well-being of Terrace. However, these resources intersect with a prominent competing vision of how to revitalize the community. Some local leaders see the best path to the future for Terrace being through the enhancement of amenities that make the community an attractive place to live, with work coming as a secondary priority. This "live-ability first" approach embraces both the shift to the service economy, and the emphasis on environmental values in the post-staples era.

"It might be an issue of livability, right. If the president of the company likes your area and he likes fishing and, that might be a deciding factor

^{**} difference between past and current ranking significant at .01 level of probability

^{*} difference significant at .05 level of probability (paired sample t-tests)

in terms of where he puts his plant. Whether it's in Terrace or whether it's in Kelowna." (T036)

"Set up the community so you provide what they want. So have good education, have good healthcare, have good services, have amenities in the community that attract not only them, but say early retirees." (T029)

"What does the Skeena region mean? Skeena region means fishing. It means hunting. It means the outdoors as important...So then when a major industrial comes in here, they're going to have to stomp all over that persona that we've created and they're going to have a hard time doing that. The one way to protect ourselves against an external force is to create an internal force that is regionally strong. And that's about understanding the lifestyle issues." (T007)

Many local leaders perceive the differences in competing visions of development as a manifestation of conflict between those that seek only to protect the environment regardless of the cost to industry, and those that seek to develop the environment regardless of the consequences. When asked to discuss divisions in the community, 62% of local leaders and resource managers expressed a perception that divisions exist in the community between pro-environment and pro-industrial forces.

"I think there's, you know, there's a strong environmental protectionist group that does not want to see any kind of development. No mining, no forestry, nothing. No resource extraction at all, sustainable or unsustainable. And then you have the polar opposite where if it's going to bring in money then it's automatically good for the community." (T032)

Analysis of quantitative data from the surveys indicates that there is an influential relationship between views favouring environmental protection and evaluation of certain types of resource development activities. Examination of ranked correlations from leaders and resource manager's rankings of community resources shows a moderately powerful negative relationship between environmental protection and natural resource trade (Pearson's R = -.532, p<.001, N=49), and a weak negative relationship between environmental protection and small business development (Pearson's R = -.321, p<.05, N=49). A table of correlations between environmental protection and the other community-level resources is provided for all three study communities in Appendix 5.

The relationship between natural resource trade and environmental protection provides an indicator of the ongoing debate over the energy and mining industries, and the sensitivity of the environmental issues associated with this area of development. The shift of the economy towards service and information related industries, and the exploration of new forestry initiatives both provoke concern in Terrace about how such paths of development will impact the community. There are also environmental concerns attached to the specific forest practices, and differing ideas regarding its importance to the well-being of the community. However, neither forestry nor the post-staples shift in the economy is viewed as a point of division within the community in the same manner as the energy and mining industries. Also No specific project exemplifies this division better than the Enbridge Gateway Project, which would potentially transport diluted bitumen from Alberta, through the region, to the port at Kitimat for tanker transport to foreign refineries.

"Well, you've probably heard about the Enbridge Pipeline and I think this is probably the project that's a noticeable division in the community today. I happen to think that we need to have that pipeline so that Canada has another marketplace for its oil that's not tied to the United States." (T022)

"I've been kind of listening for a long time trying to sort of stay neutral, but I'm probably one of the people that have come out on the side of the 'No Enbridge'. And so that pleases some people, but I'll tell you, it really upsets some people, too." (T001)

While the Enbridge project has captured a significant amount of attention in the media and formed a focal point for the environmental movement, other energy and mining projects have also stimulated conflict around Terrace, including several of the mining projects north of town, as discussed earlier in this chapter. Energy and mining projects are not necessarily perceived as either "all bad" or "all good". Instead, the local leaders in Terrace express the position that some projects are better or worse than others,

 $^{^{240}}$ There are no measurements to represent the service and knowledge economy. However, there was no significant relationship between the importance of the forest industry and environmental protection, as community resources (Pearson's R = -.229, p<.05, N=49)

and that there is a certain balance that needs to be reached between resource development and environmental protection.

"As far as the challenges goes it's balancing the economy because the town needs money, balancing the economy with protecting and protecting the environment. So some of the activities that are being proposed in mining, they're not sustainable." (T032)

Ultimately, it is possible that some of the proposed projects in the region will not come to fruition as a result of economic circumstances.²⁴¹ Others may encounter obstacles if they are unable to achieve agreements with First Nations.²⁴² For others, there are significant challenges involved in meeting requirements placed upon them by regulatory agencies, and in securing social license from both local communities and society at large. In this respect, environmental protection has a potentially important role to play in shaping the balance of industrial versus non-extractive industries that will eventually take root in the areas surrounding Terrace. A balance that includes active pursuit of environmental protection is seen as desirable even among local leaders that see industry as being the driving force in the community.

"I think that there's a role to be played by the environmentalists, but we still have to be able to have jobs. So perhaps between me on one hand, saying we've got to have jobs, and the environmentalists on the other, saying no development. In the middle, we've got to come up with something, a compromise. Human beings are a compromise on the environment." (T028)

At the same time, some local leaders that see preservation of lifestyles as the key to Terrace's future accept industrial development of the resource base as an important part of the process of balancing the exploitation and protection of natural resources.

"It's just a balance. Most of us folks that live here live here because we like the outdoors and we're quite content with an industrial base

examination of Lax Kw'alaams and in my final analysis of Aboriginal versus settler viewpoints.

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²⁴¹ For example, LNG facilities have been proposed in the region for over 30 years, but have not been accompanied by economic conditions suitable to support their construction. Mining projects are highly susceptible to fluctuations in the market. The molybdenum mine in Kitsault, north of Terrace, has been in and out of operation over the past decade, based on changes in the prices of molybdenum.

²⁴² Within this there is an element of satisfying demands of environmental protection. However, the matter involves other complex issues regarding the use of land and resources that I explore in more detail in my

provided that industrial base doesn't completely compromise what we live here for." (T023)

The focus on balance with relation to the role of environmental protection is tied to the community's drive towards achieving diversification in their economy. The community is still attempting to recover from the consequences of their over-reliance upon a singular economic driver, and the desire to achieve a balance of industrial and environmental values is linked to preserving a wider range of economic opportunities.

"Economics, jobs, employment is probably the biggest single challenge [for Terrace]. And beyond that it's diversification of types of industries that provide employment, and it's the sustainability of the resources to support those industries. (T042)

Environmental protection as a tool that helps achieve balance between resource extraction and resource conservation (and in some cases preservation), provides a means to safeguard the new forms of economic activity that have been nurtured during the economic recession, including the growth of sport fishing and other outdoor recreation industries. At the same time, environmental protection is recognized as a valuable element to incorporate into forestry to assist it in adapting to the post-staples era, and maintaining its place as a contributor to the local economy. Success in protecting these segments of the economy reduces the pressure on Terrace to throw itself at the feet of every new industrial suitor from the energy and mining industry.

With the realization that the town's function in the region is shifting from one of industrial core to service nexus, Terrace now faces a new level of freedom in engaging with the environmental movement as a potential ally to its economic revival. In some cases, the new post-staples space created in the wake of the forestry decline has produced opportunities for mobilization of opinions against projects that are seen as being incompatible with the town's ideals.

"Thank God for Enbridge because this town has moved that way. Enbridge has come in and is such a huge ugly thing, that we've actually got people, all kinds of people, from all walks of life, who are opposed to this. So they're getting their first taste of being an environmentalist." (T007)

However, the relationship between Terrace and the environmental movement remains a complex negotiation, and many leaders and managers remain sensitive to the power that the environmental movement wields and its potential capacity for inhibiting economic growth. Nonetheless, the environmental movement can no longer be viewed as a force that is relegated to the margins of resource development, as it was in the past era of development. It would also be inaccurate to characterize the relationship between the environmental movement and the community as one based on antagonism, or a product of urban middle-class values clashing with those of the utility-minded rural workforce. These two conceptualizations, although apt descriptions of the environmental movement's position in forestry towns of the past, must be set aside, so that new understandings can be developed of the way that such communities relate to the movement and the broader objective of environmental protection.

The transition to the post-staples era, and the space that the forestry decline created for economic diversification and non-extractive resource uses, has helped produce an atmosphere in which environmentalism has developed from within the community. Terrace still faces challenges in achieving an appropriate mixture of resource protection and resource development amidst a rapidly changing economy. This involves not only coping with the specific economic, social, and environmental issues that define this balance, but also coming to terms with the cultural shifts that are occurring in the community.

"And so I guess the problem is that there's this old paradigm in the business community and in some of the leadership which is coming up against the changing values of people in the community. But I think the vast majority of people in the community care or are concerned about environmental issues and things like climate change impacts from these different industries." (T012)

Despite the struggle between different ideas about how to build Terrace's future, and despite the persistence of conflict between different groups over the appropriate use of particular resources, there is a widespread acknowledgment of the importance that environmental protection holds for the community, and a shared interest dependence upon the natural resource base that surrounds them. Similar challenges are being encountered in the other study communities, albeit amidst a different set of economic

and social conditions. In the remainder of this chapter, I examine the way that Prince Rupert and Lax Kw'alaams are adapting to the new economy, and the role that environmental protection is playing in their development strategies.

Prince Rupert

While Terrace is situated at a regional nexus of railways, highways, rivers, and industrial corridors, Prince Rupert is positioned at the westernmost end of these features, and acts as a gateway between the northwest region and the rest of the world. The town serves as an important marine terminal, and as a supply centre for numerous smaller coastal communities and Haida Gwaii. It is also the centre of the north coast fishing industry, acting as a base for commercial fishing and sport fishing operations, and as a home to the north coast's largest remaining fish processing plant. Prince Rupert's location "at the end of the line" played a key role in its rise to prominence in the fishing, logging, and pulp-milling industries that defined its past. The geographic and political isolation of the community also figures prominently in Prince Rupert's relationships with the changing economy, and influences the role of environmental protection in its development strategies. Attitudes toward environmental protection are tied to the community's struggle to assert control over the local resource base, and are shaped by the challenges the community faces in defending its position as a staples-dependent outpost in a post-staples society.

Prince Rupert suffered doubly in the economic recession of the past two decades, with major impacts in both fishing and forestry manufacturing industries. The closure of the Skeena Cellulose pulp mill deprived the town of its largest employer and its largest source of municipal tax revenue. While forestry declines had a definitive economic impact, the decline in fisheries perhaps cut deeper for Prince Rupert, where the ocean and fish stocks hold significant economic and profound cultural values. Local journalists and various historical websites refer to Prince Rupert as being the "Halibut Capital of the World", but indicate this moniker only lasted until the 1980s.²⁴³ With the decline of the town's fisheries, this title has been passed to the Alaskan town of Homer. Fishing declines have affected independent commercial fishers, sport fishing charters, and the

²⁴³ For example, (Wishart, 2013) and (City of Prince Rupert, 2013).

commercial fish processing industry. More significantly for this study, declines in the fisheries have sensitized Prince Rupert to potential threats to the marine environment, and created a focal point for the environmental movement in the community. Threats to the marine environment comprise an important bridge between ENGOs and the various fishing sectors based in Prince Rupert, and create entry points for external agencies to establish relationships with the local economy.

Following the recession, Prince Rupert has increased its role as a shipping port. The port of Prince Rupert provides a shorter shipping distance between Asia and North America than for Vancouver and other competing west coast cities.²⁴⁴ As a result, Prince Rupert (and the adjoining community of Port Edward) has become a target for numerous port and transhipment developments based on mineral exports and shipment of various natural resources. In recent years, it has been the primary route for the export of timber out of the region.

The downtown core of Prince Rupert was decimated by business closures during the recession, and many hotels and restaurants remain shuttered with the dramatic reduction of the population following declines in fishing and forestry. However, the downtown core still features a tourism-oriented business area called Atlin Terminal and Cow Bay, providing attractions to travellers from docking cruise ships, and those travelling to Alaska or the Queen Charlotte Islands via marine routes.

Key industrial infrastructure in Prince Rupert includes its growing container shipping terminal, as well as coal and grain terminals on Ridley Island adjoining Prince Rupert and Port Edward. Ridley Island, Watson Island, and Lelu Island include industrial lands that are home to shipping facilities for potash and wood pellets, and that hold potential for various developments, including proposed LNG plants.²⁴⁵

While Terrace provides the perspective of a community undergoing a fundamental transformation of identity and purpose, Prince Rupert provides the perspective of a community experiencing more of a *horizontal* change. Prince Rupert has experienced similar economic declines as Terrace. However, the way in which it has

²⁴⁴ Cargo arriving in Prince Rupert for shipment to the continental interior or heading to Asian markets from the interior does not need to traverse the Rocky Mountains, which function as a costly and time-consuming barrier to truck and rail transport to Vancouver.

²⁴⁵ Figure 8 on page 173 includes a list of the projects slated for development on these lands.

responded to these changes has involved adapting its industrial capacity to new purposes and re-configuring its traditional function in the region, rather than shifting towards an altogether new position in the economic order of the post-staples era. Prince Rupert has not followed Terrace's transition into service and information sectors, but has remained focused on the re-purposing of its industrial infrastructure and expansion of its international and interregional shipping capacity. These shifts have helped shape the role of environmental protection in Prince Rupert's development strategy, and have corresponded with the emergence of a less radical, but nonetheless important and influential environmental movement in the community.

The main employment drivers in the region (based on 2011 data) are based in the single major remaining seafood processor, the administration and service core of the city, and the various port services that deal with the shipping of timber, grain, minerals, and other commodities (see Table 16). Unlike Terrace, the traditional industrial bases of fishing and shipping remain prominent among the 12 largest employers in Prince Rupert, with only forestry now missing from the list.

Table 16: Largest Employers in Prince Rupert

Twelve Largest Employers in 2011	Number of employees
Canadian Fishing Company Seafood	650
Processor	
School District 52	450
Northern Health Authority	420
City of Prince Rupert	232
International Longshoremen &	110
Warehousemen's Union Local 505	
Container Port	
Prince Rupert Grain, Ltd. Grain Terminal	105
Northern Savings Credit Union	85
Ridley Terminals, Inc. Bulk Terminal	85
Department of Fisheries and Oceans	80
Aero Trading Company, Ltd. Seafood	80
Processor	
Crest Prince Rupert Hotel	79
Royal Canadian Mounted Police	71

NOCS data on labour force activity from 1996 to 2011 show Prince Rupert declined from 25.1 percent to 23.5 percent of the regional employment base between 1996 and 2011 (see Table 17). This included heavy losses in sales and service occupations, and in business, finance, and administration occupations; two sectors that form important growth areas in the broader post-staples economy.²⁴⁶

²⁴⁶ Small changes were evident in information and service related industries. However, positive changes were mostly limited to an increase in one category (Social science, education, government services, and religion). A similar shift for this category was seen in Terrace, and throughout the entire province.

Table 17: Prince Rupert Employment Profile (NOCS)

	1996			2011			
	Total working population			Total working			
	8905			population 6,350			
	(25.1% of region)			(23.5of region) ²⁴⁷			
	Total			Total			
		% of Prince Rupert	% of total in Region		% of Prince Rupert	% of total in Region	
Management occupations	590	6.6	23.4	675	10.6	26.5	
Business, finance and administration occupations	1270	14.3	28.7	860	13.5	25.9	
Sales and service occupations	2285	25.7	25.6	1480	23.3	24.8	
Natural and applied sciences and related occupations	360	4.0	22.1	345	5.4	24.3	
Social science, education, government service and religion	435	4.9	19.4	900	14.3	22.7	
Trades, transport & equipment operators and related occupations	1535	17.2	23.5	1150	18.1	22.6	
Processing, manufacturing and utilities	1250	14.0	33.1	275	4.3	21.6	
Art, culture, recreation and sport	145	1.6	22.5	110	1.7	20.3	
Occupations unique to primary industry	605	6.8	19.1	285	4.5	19.7	
Health occupations	410 4.6 33.0		275	4.3	19.4		

(Statistics Canada, 2010b, 2013)

Examination of NAICS employment data on labour force activity shows that Prince Rupert has not been altogether unsuccessful in adapting to service and knowledge-based industries, as shown by increases in its regional share of jobs in finance and insurance, and information and cultural industries (see Table 18). However, a broader analysis of the data indicates that Prince Rupert has taken a much different trajectory than Terrace into the post-staples economy, and has experienced declines in its share of employment in numerous knowledge and information based industries, including administration, education, and service-related industries.²⁴⁸

²⁴⁷ Total includes all respondents over age 15, with occupations identified. Total population for NOCS different than total for NAICS (6350 versus 6355) due to difference in number of people reporting data for this part of the census.

²⁴⁸ This includes declines in Professional and technical services; arts, entertainment and recreation; public administration; educational services; retail trade, and; accommodation and food services.

Table 18: Prince Rupert Employment Profile (NAICS)

	2001			2011			
Prince Rupert: Employment by North	Total working			Total working population			
American Industry Classification System	population 7,890		6,355				
	(24.9% of region)		(23.5of region)				
	Total		u	Total		n	
		o.	% of total in Region		e)	% of total in Region	
		inc	tot on		inc	tot	
		% Prince Rupert	o of egi		% Prince Rupert	6 of egi	
Transportation and warehousing	720	9.1	34.3	985	15.5	45.6	
Finance and insurance	180	2.3	27.9	260	4.1	43.3	
Information and cultural industries	85	1.0	22.4	125	2.0	29.1	
Retail trade	1060	13.4	28.2	840	13.2	27.3	
Accommodation and food services	635	8.4	28.7	515	8.1	26.9	
Agriculture, forestry, fishing, hunting	460	5.8	29.4	430	15.7	26.1	
Health care and social assistance	770	12.7	25.2	775	12.2	26.0	
Wholesale trade	75	0.95	14.3	120	1.9	23.8	
Other services (except public administration)	300	3.8	24.4	245	3.9	23.8	
Utilities	15	.02	8.3	35	0.6	23.3	
Administrative and waste services	170	2.2	20.7	180	2.8	21.9	
Educational services	540	6.8	22.0	525	3.9	21.3	
Real estate and rental and leasing	90	1.1	29.5	65	1.0	21.0	
Public administration	680	8.6	24.5	560	8.8	18.3	
Professional, scientific, technical services	220	2.8	26.7	135	2.1	16.7	
Construction	305	3.9	16.6	270	4.2	14.5	
Arts, entertainment and recreation	115	1.5	24.5	65	1.0	12.6	
Manufacturing	1455	18.4	27.0	250	3.9	11.5	
Mining, quarrying, oil & gas extraction	10	.01	6.7	0	0	0	
Management of companies	10	.01	100	0	0	0	

(Statistics Canada, 2010c, 2013)

Prince Rupert continues to provide a variety of government services to various surrounding coastal communities, and hosts offices for both the regional MLA and MP, along with an office for the Skeena Queen Charlottes Regional District. Key government agencies include federal offices for Fisheries and Oceans Canada, and Transport Canada, which reflect their involvement in fishing and shipping industries. However, the community's share of public administration employment within the region has declined as offices reduced staff or relocated to other communities, as the provincial Ministry of Forests and Range office did in its move to Terrace in 2011.²⁴⁹

²⁴⁹ The Prince Rupert office for the Ministry of Forest and Range closed in 2010, as part of a set of province wide cuts (Parfitt, 2010), with administration for the region now based in Terrace.

Growth industries in Prince Rupert include transportation and warehousing,

wholesale trade, and finance and insurance. Some of this growth can be attributed to expansion of activity at their container port operations at Fairview

Terminal, which increased its shipping volume by 227 percent between 2008 and 2011 (see Table 19).

The port reached 75 percent of its maximum volume in 2012, and is expected to continue adding volume over the coming years. In anticipation of continued growth, the terminal is being expanded with a second

Table 19: Fairview Terminal Volume

Terminal Volume 2008- 2011			
2008	181,000 TEUs		
2009	263,000 TEUs		
2010	343,000 TEUs		
2011	410,000 TEUs		
2012	564,000 TEUs		

TEU = twenty foot equivalent unit, a standard sized container in international shipping (Kolenko, 2013)

phase that will increase its maximum volume to nearly double its current capacity. Additional growth is expected at the other port facilities in Prince Rupert and Port Edward, including the terminals for grain, coal, and potash on Ridley Island, the Pinnacle Wood Pellet Terminal near downtown Prince Rupert, and potential development of LNG facilities in Port Edward (ibid). Despite the ongoing economic challenges in Prince Rupert, the expansion of port and shipping services has created a focal point for optimism about the future of the community.

"The fact that we've got the port here and we have that connection between the port and the rail and that whole corridor opens up huge opportunities for us. Because we have major advantages in terms of the time it takes to get things, not only to China but into the Midwest, compared to the other ports." (P039)

"We are in transition to a community which will not only be resource based but will also be a transportation centre on the Pacific Rim. A lot of Prince Rupert's future will be in the enhancement and expansion of port and port-related facilities." (P006)

We're kind of linked at the hip with the Prince Rupert Port Authority, because the growth of the commercial port will mean the sustainability and the growth of the City of Prince Rupert. So they're linked at the hip. And so frankly, with where we're going, it's quite exciting for the city, to give the city a bit of a boost, from the hard knocks over the last 20 years." (P007)

Optimism, Exports, and Environmentalism

Unlike Terrace, where local leaders spoke about the future of their economy with a degree of uncertainty about its specific industrial basis, local leaders in Prince Rupert view the expansion of port activity and economic revival with a sense of certainty. Prince Rupert stands to see increased shipping activity as a result of virtually every resource development activity that occurs in the northwest, and will receive direct benefits of employment and potential municipal taxes from the increased activity in its ports. Doubts remain about the speed of economic recovery, and the exact degree of prosperity that will accompany their role as a port city. However, local leaders accept this change in the community's role within the region as a process that is already underway, and generally see it as having a positive impact on the economy. Furthermore, the port expansion is seen as holding advantage over rebuilding their former industrial base, and a way of escaping the precarious position Prince Rupert occupied during its dependency upon pulp milling as the primary employer and taxpayer for the community.

"The expansion at the port and the future potential for that industry seems a lot more viable and realistic for the community, than the forestry industry." (P020)

"I think [the port] is viable and sustainable, even through the worst of times. It's not commodity based, not single-commodity, and for every one job it supplies, it supplies three or four spin-off jobs." (P012)

With the guidance of the federal government, Prince Rupert has focused its major economic development initiatives on development of its port. This has included the creation of the Prince Rupert Port Authority (PRPA) in 1995, under the National Marine Policy. This federal program was designed to facilitate development of trade and economic infrastructure in order to strengthen Canada's position in global resource markets. The policy empowered the PRPA to operate as an independent business, and to take steps to develop the port and support its industrial stakeholders, while taking responsibility for port security and environmental sustainability.

A key partner in the development of the Prince Rupert port and the city economy is the Prince Rupert-Prince Edward Economic Development Corporation (PREDC), a

not-for-profit organization operating under the City of Prince Rupert and the District of Port Edward. Linking many regional groups and facilities together is the Northwest Corridor Development Corporation (NCDC, established in 1996), which holds a mandate to establish linkages between trade and transportation systems in the northwest.

The increasing involvement of First Nations in resource management decision-making has also played a key role in the development of Prince Rupert's shipping and transportation infrastructure. Multiple groups have laid claim to industrial lands in Prince Rupert and the adjoining District of Port Edward. The expansion of the container port and recent agreements on the re-purposing of the site of the former Skeena Cellulose pulp mill on Watson Island only proceeded after agreements with the Metlakatla and Lax Kw'alaams First Nations, and was still subject to court challenges from the Gitxaala, who also claimed rights and title in the area. ²⁵⁰ The Metlakatla and Lax Kw'alaams First Nations are also central players in the ongoing operation and expansion of the Ridley Coal Terminals, and have signed a mutual benefit agreement that will allow the facility to continue in its role in the export and shipping industries based in Prince Rupert and the District of Port Edward.

Local leaders ranked small business development, resource trade and export, and local infrastructure as the three most important community-level resources for supporting well-being in Prince Rupert (see Figure 13). Each of these resources, particularly small business and local infrastructure, are viewed as having declined in condition over the past 20 years (see Table 20). However, with the expansion of port activity, natural resource trade and export is viewed as having only declined slightly over this period. The forest industry is ranked seventh among ten community-resources, and is seen as being in far worse condition today than 20 years ago when the Skeena Cellulose pulp mill provided the largest source of employment and municipal taxes for the community. Environmental protection is ranked fourth, and is viewed as having

²⁵⁰ The Gitxaala's claim was not supported by the courts in this particular case. However, future development of LNG terminals in Port Edward and expansion of other facilities in the area will likely involve similar processes, and require direct participation of the various nations claiming traditional use of the lands surrounding Prince Rupert.

improved over the past 20 years, with a greater improvement than any of the other community-level resources.

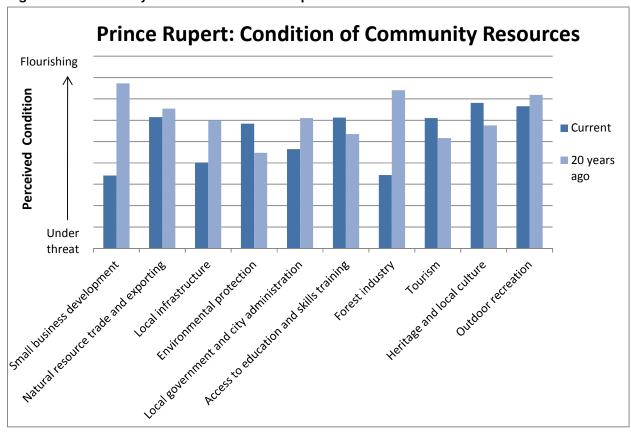


Figure 13: Community Resources in Prince Rupert

Table 20: Community Resources in Prince Rupert 1991-2011

Community Resources	Condition 1991	Condition 2011		
Small business development	7.73	3.41**		
Natural resource trade and exporting	6.54	6.14		
Local infrastructure	6.00	4.02**		
Environmental protection	4.47	5.84**		
Local government and city administration	6.10	4.65**		
Access to education and skills training	5.35	6.12		
Forest industry	7.41	3.43**		
Tourism	5.16	6.06**		
Heritage and local culture	5.76	6.81**		
Outdoor recreation	7.19	6.66		
** difference between past and current ranking significant at .01 level of				

^{**} difference between past and current ranking significant at .01 level of probability

^{*} difference significant at .05 level of probability (paired sample t-tests)

The level of importance that local leaders attached to the community level resources was tested to determine if there are any significant relationships between environmental protection and the other resources. No significant correlations were detected between environmental protection and any of the other resources, including natural resource trade and exporting (Pearson's R = -.016, p>.05).²⁵¹ In Terrace, local leaders that attached more importance to environmental protection tended to attach lower levels of importance to natural resource trade and exports.²⁵² This relationship was accompanied by debate within the community regarding the best way to grow the economy, and uncertainties related to the role that resource development activities are to play in the future of the community. Terrace is also home to an environmental movement that is actively involved in organizing opposition to various resource development projects that are viewed as potential threats to the community, and to the various resource uses that support diversity in the economy. The role of natural resource trade and export in the growth of Terrace is a point of division in the community, and thus forms a focal point for the environmental movement.

In Prince Rupert, however, the community's future development trajectory is more clearly laid out in front of the local leaders. As I will explain, local leaders in Prince Rupert face various uncertainties regarding the future of their community, but the makeup of the economy and the role of natural resource trade and export in their development strategy are not significant points of debate. Although Prince Rupert attaches a similar level of importance to environmental protection as Terrace does, local leaders view the environmental movement as playing a different role in their development process. I have argued that in Terrace, the environmental movement is viewed as a means of protecting economic diversification based on multiple resource uses, and as way of mitigating the potential environmental impacts and economic instability that may arise if energy and mining sectors are allowed to achieve dominance over the landscape. In Prince Rupert however, the ascendance of resource trades and exports is viewed as the core of the community's future economy, and environmental

²⁵¹ Pearson's R ranged from -.202 to .230. All p-values exceeded .05. See Appendix 5 for a table of all correlations between environmental protection and other community level resources.

 $^{^{252}}$ As noted in my examination of Terrace, environmental protection and natural resource exports exhibited a moderate negative relationship (Pearson's R = -.532, p<.01)

protection is seen as a resource that can support this development process, rather than inhibit it.

Local leaders in Prince Rupert refer to economic revival as an imminent process, and ground has already been broken on several major projects. However, the community still remains on the runway of prosperity and awaiting take-off. Employment remains depressed, and the size of the population and the vitality of businesses remain a shadow of the heydays of forestry, when pulp milling and fisheries drove the economy forward. Prince Rupert faces competition from other communities in the development of port facilities. In the north, Kitimat has become one of the fastest growing port cities, with an agreement to build an LNG export plant, and the potential to serve as the western terminal for the proposed Enbridge Gateway Pipeline Project. In the south, the port of Vancouver provides an established source of competition for export trade and container traffic, and new proposals have arisen for creation of an LNG terminal in the port of Squamish. With these and other sources of competition in trade and export industries, Prince Rupert faces pressure to satisfy the demands placed on its port development by First Nations and by various agencies involved in environmental protection, including the provincial and federal agencies that regulate this area of activity.

Locally-based ENGOs have played an important role in helping industry meet

these demands. These include the internationally active World Wildlife Fund (WWF) and Ecotrust, which opened local offices in Prince Rupert in 2001 and 2010, respectively.

As a globally connected ENGO, WWF brings Prince Rupert into contact with a wider sphere of information and influence. They have coordinated conferences both locally, and outside the region to bring government,

Table 21: Prince Rupert ENGOs

Key ENGOs in Prince Rupert

T. Buck Suzuki Environmental Foundation World Wildlife Fund (WWF) Canada Ecotrust (Vancouver)

Prince Rupert Environmental Society

Externally-based ENGOs active in Prince Rupert area

Greenpeace (International)

David Suzuki Foundation (Vancouver)

Forest Ethics (Vancouver)

Sierra Club of Canada, (Victoria)

West Coast Environmental Law, (Vancouver)

Dogwood Initiative (Victoria)

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²⁵³ The LNG proposal is for a site known as Woodfiber, a former pulp mill site located approximately 40km from Squamish.

industry, First Nations and other stakeholders together to discuss environmental challenges. ²⁵⁴ WWF brings a potent scientific resource capacity with it, and sees its northwest development activities as part of its efforts to sensitize public, state, and industry to the risks associated with various projects. ²⁵⁵ The group has collected data on shoreline habitat and examined impacts of port development, while working with local authorities to create development plans with effective environmental management. This work has included responding to requests from DFO to assist in updating shoreline mapping to assist in environmental assessments of the port, and a study on noise produced by shipping activity (Ambach and Casey, 2011).

WWF has also worked with other agencies to produce technical reports for industry, such as a UBC-WWF report on the potential impact of tanker spill on marine habitat (Hotte and Sumaila, 2012). WWF, and other ENGOs that I examine later in this chapter, provide industry in Prince Rupert with a means of adapting to the environmentalist pressures that staples industries face in the modern era.

"It's not like these projects go ahead blindly and they just say yeah, go ahead and clear everything that you need. There's mitigation measures put in place and there's monitoring and follow-up that you got to do to stay on top of it to make sure you're doing everything you can to minimize that impact." (P034)

"I think WWF is a good example because we find them a very professional, organized, efficient organization that we like working with...We've established those relationships with, you know, the City and WWF and, you know, Environment Canada and whatnot. And so the stated purpose of the Port of Prince Rupert is that we grow the port in an environmentally friendly and sustainable manner (P007)

ENGOs provide an important source of technical capacity in light of the decline in professional, scientific, and technical services in Prince Rupert (outlined in tables 17 and 18), and the broader reduction of government services that has accompanied the rise of the neoliberal state. The ability to respond to environmental pressures holds particular

²⁵⁴ This included a 2008 conference in Prince Rupert on marine habitat protection, and a 2013 Energy Forum in Vancouver to debate LNG development (WWF, 2013).

²⁵⁵ WWF is among worlds largest independent conservation organizations, working in over 100 countries, and holding membership exceeding 5 million worldwide with more than 150,000 active supporters in Canada (WWF, 2013).

importance for Prince Rupert, given that the revival of their economy is heavily dependent upon construction and expansion of new projects within their own municipal bounds. Local leaders emphasized the ability of industry to improve on past practices as part of the community's capacity for achieving growth in an environmentally friendly manner.

"We killed the crab, killed the trees, killed the fish in the creeks. So we said oh, my goodness, there's a mistake here. What can we do to rectify this? So they put in settling ponds and scrubbers and did things. And by the time that mill was torn down, the crab were back, the fish were back." (P049)

"The technology has completely gone leaps and bounds. Five or six years ago anything green didn't work. Now it does. So even cleaning fluids and stuff like that, like you would use for home base. Nothing worked, but now it's slowly starting to work." (P046)

"We're very involved with greening our ports and that could be everything from any waters that fall on the terminals that actually run off are filtered, to recycling programs. So that's on an environmental side." (P028)

As with the port development, ENGOs have been actively involved with the forestry industry, lending their support and expertise in the *greening* of what remains of the industry on the North Coast. The remnants of the forest industry that once provided the largest industrial driver for Prince Rupert now consist primarily of the transport of lumber and chips through the port, a small number of small-scale independent mills, and dwindling harvesting operations in the North Coast TSA. Forestry topics, in general, were rarely mentioned among the most important issues facing the community. Only 22 percent of local leaders in Prince Rupert mentioned forestry when asked to identify the most important issues facing their community, compared to 64 percent of local leaders in Terrace.

"We still have lots of forests that can still be managed and harvested properly but it's non-existent in my mind from where it was when I was a kid growing up here". (P048)

As in Terrace, First Nations have taken on a more prominent role in forest tenures around Prince Rupert, with both the Metlakatla and Gitxaala First Nations holding significant portions of the annual allowable cut in the area (32,000 and 70,342 cubic metres, respectively) (Ministry of Forests and Range, 2013). The remaining AAC is divided among licenses for International Forest Products, Sonora Logging Ltd., and Triumph Timber Ltd. All three of these companies base their head offices in the lower mainland region near Vancouver, and do not operate processing facilities in the northwest region, resulting in the bulk of their harvest being shipped out by tugboat or through the Prince Rupert port.²⁵⁶

Nearly half of local leaders (46 percent) in Prince Rupert expressed concerns about the export of logs out of the region.

"I keep wondering why we're shipping raw logs instead of finished lumber. I keep wondering why we're shipping some finished lumber in containers without making something out of them." (P031)

However, with the former pulp mill lands being sold for development of new industries, few leaders identified log exports as a practice that inhibits revival of local processing and the growth of the economy. Instead, local leaders expressed an ambivalent attitude towards forestry. With the closure of the pulp mill, the domination of local resources by Vancouver-based firms, and the lack of local processing facilities, forestry is no longer viewed as central feature of the community.

"I know people scream about log exports, but log exports are good for this region, specifically Prince Rupert." (P012)

"It's a good thing [log exports], it's definitely a good thing. I think with the situation that's happened in Japan in the past couple of days [earthquake], they were a big user of our product and lumber and all that stuff and you're going to see that increase huge because it's just literally wiped out cities. They're going to need product and it's all coming from here." (P015)

²⁵⁶ The largest share of the local harvest is allocated to Triumph Timber Ltd (106,472 cbm). Triumph markets its logs through the New Minster based Probyn Log Ltd., which specializes in custom milled products and log exports. The owner of Probyn sits on the provincial Timber Export Advisory Committee, an industry headed group that helps guide the process of exporting logs (Matas, 2012).

"Some [people] sort of long for the days of the thriving lumber and forestry and pulp mill industry. So there's kind of a pro-logging kind of thing. But at the same time, people are sort of anti-logging in the sense that the perception of logging is it's something that we don't benefit from, so why should we support it?" (P040)

None of the local leaders interviewed for this study spoke of a need for innovation within forestry in order to adapt to new market conditions, or the need to develop new technologies to enable revival of forestry manufacturing. Instead, forestry was generally discussed in terms of its value based on conventional harvesting and export activities. Local leaders seem to have simply moved forward into dealing with their future as a shipping port, rather than focusing on the re-imagining and recovery of the forest industry of old.

"I've heard in the last couple of weeks, a couple of people who are still waiting for the pulp mill to open up. I couldn't believe that was actually a comment coming out of people. It hasn't operated in ten years...We need to be moving forward." (P027)

Unlike Terrace, where forestry still figures to play a role in the locally-based industry, Prince Rupert has moved beyond their past as a mill-town, and its leaders are banking almost exclusively on their role as a shipping and transport centre. Instead of pursuing diversification in new ways of using the local resource base, Prince Rupert's development strategy is based on diversifying the products passing through their ports from other places. When forestry was identified among important issues in the community, it was usually mentioned in the context of its relationship with port shipping activities, or its potential environmental impacts on fisheries.

"Any time you talk about forestry issues, you'll start hearing about the stream management and a lot of people seem very aware of how logging can damage salmon habitat. That seems to be more of a concern than whether or not logging is damaging general habitat or the issue of clear-cutting." (P040)

"Deforestation over in the Charlottes [Haida Gwaii] has also led to many landslides which has created huge problems with sedimentation and increased or changed the whole course of creeks which has impacted on salmon habitat." (P013)

However, with the small amount for forestry occurring on the North Coast, local leaders identified marine oil transport as their primary environmental concern in relation to fisheries. Forestry is merely one among several industries providing inputs to Prince Rupert's port expansion, and local leaders expressed confidence that forestry practices can be made compatible with Prince Rupert's over-arching strategy of building a green port.

"There are forestry issues here, and I think they pertain to minimal impact on the environment. We have harvested trees in this area using helicopters as opposed to high-lead logging and building roads, the traditional stump-to-dump logging methods." (P006)

"I mean, the loggers are-- but I mean, there's been some huge strides made in logging practices. I mean, things have gotten a lot better and a lot cleaner but a lot more complicated, too." (P010)

As with other local activities, ENGOs have been involved in helping local forestry operations improve their practices. Ecotrust has taken a leading role in helping local forestry improve on the North coast by providing assistance to corporations in developing industry models that are both environmentally sound and economically viable. This work has included supporting Triumph Timber in developing harvesting systems that take logs from the cutting site directly to a barge, thus sparing the marine environment from the impacts associated with bark and debris deposits (Gill and Vitt, 2007; Hamilton, 2007). Triumph's close relationship with Ecotrust provided the company with a competitive advantage that was instrumental in them obtaining a role in the resumption of harvesting in Clayoquot Sound (Hamilton, 2006).

Ecotrust has also been involved with the implementation of Forestry Stewardship Council certification, which includes stringent requirements for environmental management, and which comprises the first major forestry certification to include a component of First Nations consultation as part of its mandate (Armstrong, 2013b). Numerous other externally-based ENGOs, including Greenpeace and Forest Ethics, have been involved in forestry in the broader coastal region, as participants in the development of the Great Bear Rainforest Agreement, which helped shape logging plans on a large and contentious area of the central coast. WWF has worked closely with

Brinkman Reforestation and Coast Tsimshian Resources on the CCAPNSC project that focused on future forest ecosystems, and which provided data for this study.

The ability of staples-producing and export-related industries to adopt more environmentally friendly practices assists Prince Rupert in competing with other ports, and helps it carve out its niche in the post-staples economy. Such adaptations are particularly important seeing that Prince Rupert has not adapted to the post-staples economy in the same way as Terrace has with increases in service and knowledge-based industries.

Prince Rupert has experienced only limited success in adapting to non-extractive industries such as tourism. It has developed a limited outdoor recreation and tourism industry, but this is based on a significantly different model than in Terrace. These two sectors have revolved primarily around cruise ship visitations and sport-fishing, with the former displaying characteristics of staples-industry instability based on rapid fluctuations in activity and a high-level of dependence upon a singular source of income.

The cruise industry provided a source of optimism following the opening of the cruise ship terminal in 2003, but was dropped from the schedule of two large cruise lines (Norwegian and Royal Caribbean) in 2012 in favour of Alaskan destinations. Prince Rupert was successful in attracting SilverSea Cruises for 2013 stops, but remains challenged to attract traffic in a highly competitive market. Prince Rupert's reputation as one of the rainiest and darkest cities in the temperate zone has also hampered its tourism expansion. Nine ships were scheduled to visit Prince Rupert in 2013, reflecting an increase from previous years' cruise activity, but this represents a significant reduction from their former peak of activity (Prince Rupert Port Authority, 2013).

As indicated in the previous chapter, Schmallegger and Carson (2010) contend that such models of tourism reproduce the weakness of staples economies, particularly when they rely upon state support, such as the construction of a cruise terminal, and when reliant upon iconic attractions, such as majestic scenery. Smaller adventure tourism operations are estimated to only account for a small segment of tourism and

²⁵⁷ In one well-known case, a South African family went to the Supreme Court to obtain refugee status to remain in Prince Rupert on compassionate grounds, due to a rare hereditary condition (porphyria) that rendered their children allergic to sunlight (CBC News, 2009).

outdoor recreation activity in Prince Rupert.²⁵⁸ The pattern of development in tourism and outdoor recreation thus appears to follow the pattern of development in the industrial sector, with Prince Rupert investing more heavily in large staples-based partnerships, rather than diversification of industries and shifting of roles in the economy.

Protection and Control and Prince Rupert Fisheries

A 2007 visitor study, conducted prior to the cruise ship decline, indicated that tourism visitors contribute as much as \$200 million to the Prince Rupert economy (Tourism BC, 2008). Sport fishing is estimated to account for less than 10 percent of the visitors, but account for approximately 30 percent of total expenditures (ibid). Despite, the economic boost provided by these sectors, tourism and outdoor recreation are ranked among the lowest of community-level resources by local leaders, with the former ranked eighth and the latter ranked tenth among ten listed resources (see Table 10, *Chapter Five*). The town has a particularly ambivalent relationship with sport fishing, as the economic stimulus is provides is offset by the competition between commercial and sport fishing sectors, and many local leaders hold the perception sport fishing as being controlled by people and agencies from outside of the community.

"There's no regulation. There's no licensing. Anyone can be a charter operator. I saw guys last year in town from Oregon, lots of Albertans, running charters out of Prince Rupert because there's no regulation in B.C. As long as you have your boater's operator-- your license to operate a boat, then you're fine." (P048)

"The sport fishing industry is controlled by a handful of people down in Victoria." (P021)

"There is a tendency to want to restrict the commercial fishing which provides all this food and wages for people in order to promote the sport fishing." (P017)

As with its industrial development and tourism development, Prince Rupert remains more heavily invested in staples-based fishing activities that hold connections to

²⁵⁸ Examples include independent whale-watching tours, and eco-tours to the Khutzeymateen Grizzly Bear Sanctuary. Wages and salaries for this section are estimated to amount to \$2.5 million. (Pacific Analytics, 2003).

the working history of the community, than the post-staples entrepreneurial basis of the new economy. The friction between commercial and sport fishing industries is a joint product of Prince Rupert's geopolitical isolation and mistrust of outside groups and agencies that seek to exert control over the local resource base, and attachment to an industry that that has a long history in the community.

"Commercial fishing provides work and food for a lot of people and it provides a lot of work locally and all along the coast, between the canning and everything. And it provides a lot of food in a world that is running short of good food." (P017)

Commercial fishing's strong ties to the history and working culture of Prince Rupert, and the community's desire to protect this industry from outside forces, creates an important entry point for ENGOs. Along with responding to perceived threats to commercial fisheries, ENGOs have also had success in aligning themselves with economic development in this sector. Ecotrust has been active in building relationships with fisheries in the development of multi-stakeholder sustainable fisheries models, and to support monitoring of local environmental conditions. This has included partnering with First Nations, including Lax Kw'alaams, to conduct catch monitoring and biosampling through the Pacific Fisheries Observer Training Program (Ecotrust, 2011). Ecotrust has also lent their marketing expertise to the commercial fishers and in developing tools for the industry to provide product information to consumers to help support selection of fish caught through environmentally friendly methods (Ecotrust, 2011a). This demonstrates an additional form of capacity offered by ENGOs, in their ability to affect public opinion and help shape relationships with international markets. Referring to Ecotrust's marketing program, one leader explained:

"We got to sell our fish differently. Sell our fish by species and by river. You don't go buy red wine at the store. You buy wine from Chile or wine from France or wine from Canada or from the Okanagan or from Ontario. You don't buy just red wine. You buy a merlot or a cab or a Shiraz. Well, we got five different species of salmon. Most people don't know that. They don't know that a Skeena River sockeye to an

²⁵⁹ This project has resulted in 15 First Nations community members receiving work as Certified Fishery Observers.

educated person has a different taste than a Fraser River sockeye. So teach them the differences. Sell it by species. Sell it by river, and then people will pay more for a product that's handled properly and marketed properly."(P049)

Prince Rupert's protective stance towards commercial fisheries led to the rejection of finfish aquaculture on the North Coast based on the perceived threats it poses to wild fisheries. This protectiveness is also the basis of local opposition to the Enbridge Gateway Project. Several local leaders mentioned the fish farm campaign and the ongoing opposition to the Enbridge pipeline together as examples of environmentalism making a positive contribution on the community.

"The two main issues are offshore oil and gas and open-net fish farming. The whole north coast is fish-farm free. So no fish farm licenses, opennet licenses will be granted in our region. Huge victory because we can forget about that now and move on...The Friends of wild Salmon, you know, we worked very closely with them on fish farms, open-net fish farms, and the Enbridge file." (P005)

"The fish farm issue was huge with the Environmental Society and they actually changed the outcome of an election over it.... And I think when push comes to shove with Enbridge, they will be on the front lines of that one as well. And I mean we haven't won that one by any means. That's going to be a very long ongoing fight." (PR031)

However, some local leaders express the belief that Prince Rupert is falling behind as a result of their failure to align local fishing industries with new opportunities in aquaculture, and view commercial fishing as an industry that is failing to adapt by protecting one sector at the cost of development in another.

"Fish farming would have been a huge job creator in the North Coast and it's something that First Nations people could have done in their villages extremely successfully...People that live on Digby Island, I call them hippies, ex-fishermen, and a small core of commercial fishermen, basically stopped the whole process because it affects their livelihood." (P010)

"People eat millions of farmed fish every day. You're not going to change it. It doesn't mean you have to like McDonalds hamburgers, but millions of people eat them every day. Do farmed fish, same kind of thing. You have employment here year round with fish farms, and it

doesn't mean we have to give up our wild salmon. It's not either/or. I don't buy into that." (P049)

Despite the conflict of opinions on aquaculture, the protection of commercial fisheries remains a powerful influence on the role of the environmental movement in Prince Rupert. Efforts to preserve commercial fisheries are tied into the broader struggle to assert control over the local resource base, and the community's fundamental struggle for survival as a staples-dependent periphery to the rest of the province and country. Fisheries comprise an especially sensitive milieu in this regard because of the difficulties local fishers face in surviving within a regulatory environment that subjects their culture and livelihoods to systems of external control.

"DFO policy to create individual transferable quotas. You've now created a commodity out of a license, not the fish you catch with the license. So now you have people with large amounts of money, buying up licenses, even though they're not fishermen, throwing them into their portfolios and extracting a significant amount of resource generation from that, having no vested in the resource, other than the fact that they hold the piece of paper. I quit fishing because of quotas. Got to the point where I was paying half of my wages to some asshole sitting in Toronto, and DFO, with their management fees." (P011)

"Quotas are expensive. There's absolutely no 25-year-old young, upand-coming apprentice fisherman that can afford \$6.5 million to buy a boat and license to go fishing. So what the quota system really has done is made the quota holders really rich, but there's an end, basically once they retire or die out, the commercial industry is not grooming any new guys right now, because they can't afford it." (P026)

Perhaps the most influential ENGO in Prince Rupert is the T Buck Suzuki Environmental Foundation (TBSEF), which has played a central role in responding to environmental issues, and in representing commercial fishers' interests in negotiations with federal and provincial governments. The TBSEF, which was founded in Prince Rupert in 1981 by the United Fishermen and Allied Workers Union (TBSEF). The organization is named in honour of the late T Buck Suzuki, who was a fisherman and salmon conservationist, a founding member of the Society Promoting Environmental Cooperation (SPEC), and father to the famous environmentalist David Suzuki. The TBSEF has no ties with the David Suzuki Foundation, and has historically focused

almost exclusively on the protection of fish and fish habitat, and on representing the interests of local citizens that rely on the fisheries for food and income. As an organization that is grounded in the cycle of resource usage and renewal, the mission statement of the TBSEF reflects an acknowledgment of the need for resource industries, coupled with a drive towards better practices and management.

"History has shown that when action is taken to restore and protect habitat, fish can thrive and even declining populations can rebound. Preserving our fish stocks means working hard to protect habitat." (TBSEF, 2013).

The foundation focuses their efforts on promoting sustainable marine transport, preventing pollution, fighting the development of salmon aquaculture, and monitoring and scrutinizing existing and potential impacts from oil and gas development, pipelines, tanker traffic, and other energy projects. The TBSEF has been heavily involved in opposition to the Enbridge Gateway Project along with other locally based ENGOs such as the Prince Rupert Environmental Society (PRES) and externally based ENGOs such as Greenpeace and the Sierra Club.²⁶⁰

The TBSEF provides local source of representation for fisheries workers and coastal residents in the PNCIMA initiative. PNCIMA (Pacific North Coast Integrated Management Area) was a multi-stakeholder initiative that brought local fishers and First Nations together with federal and provincial agencies, sport fishers, and environmental groups to develop a resource-use plan for northwest fisheries.

Federal funding for PNCIMA was withdrawn in 2011, amid accusations that the move was made to protect federal interests in development of marine oil shipping, particularly the Enbridge Gateway Project (Northern View, 2011; Gage, 2012). The withdrawal of funding was accompanied by changes to the structure of PNCIMA that reduced the role of local communities in the formulation of management plans, while granting seats in key steering committees to Enbridge and the Prince Rupert Port Authority, (David Suzuki Foundation, 2011). The withdrawal of funding and changes to

²⁶⁰ The PRES was established as the Prince Rupert Recycling Society in 1989. The organization has expanded it focus from recycling and sustainable community development, to addressing fish farms, pipelines, and chemical pollution.

the program disappointed local fishers and the TBSEF, who reported a sense of being abandoned by the federal government when discussing the changes in the media (CBC, 2011).

Environmental Protection and Industry at the "End of the Line"

The fight by local fisheries to remain relevant amidst a powerful but distant federal state and the increased influence of corporate industry reflect the broader struggle of Prince Rupert as a staples-dependent community in a post-staples economy, where development revolves around maximization of global trade opportunities and centralization of control in the metropolitan core (Hutton, 2007, p.25). Some local leaders embrace the resource export economy and view the influence of the state and partnerships with large industrial partners as the key to the revival of the community. Others see this course of development as a further step in the community's subordination to the heartland. Regardless of differences in opinion about the positive or negative impact of these circumstances, most local leaders concede that the future of the community is likely to be determined by outside forces.

"If the Government of Canada says, 'You know what, this is in the interest of Canadians to build this Prince Rupert gateway to get our commodities and start our trade and build our trade with Asia.' the community will just grow and grow and grow." (P007)

"This pertains primarily to the whole impetus around globalization and the move to disconnect communities from resources. And I don't believe that's an accident, I believe that's a strategy." (P011)

"We need development here for employment opportunities...The approvals come from out of town. The larger decisions that are made come from out of town. We're just the location where these larger businesses will carry out a certain function of their overall scope of operation." (P034)

²⁶¹ Hutton explained that staples-dependent regions would be subjected to increase subservience to a centralized government and metropolitan core, resulting in alienation from the dominant society. ²⁶² Sixty-two percent of local leaders believe that the future of Prince Rupert will be determined by external forces, while only 24 percent believe that local leadership will play a stronger role in shaping their future.

Prince Rupert's position on the periphery of development and the margins of control has narrowed the function of the community in the regional economy, thus narrowing the ways in which the environmental movement can enter into local development plans. ENGOs are welcomed for their ability to assist industries related to port expansion and staples-production elevate their practices to meet environmental standards, and for their efforts in protecting the fishing industry. With its proposed route ending in Kitimat, the Enbridge pipeline promises little in terms of benefit to Prince Rupert, and thus attracts little support among local leaders.

"So there's a very strong anti-fish farm, a very strong anti-tanker kind of feeling. If you consider the region as a large region, you think about Kitimat and Terrace, you might find a very different story. But at least when it comes to fish farms and potential of oil tankers, it's pretty much universally against." (P040)

"Well, what it [Enbridge] does is it locks us into the whole tar sands project, which is, like, to me, is the totally wrong direction to go. Plus it's obviously really risky for the Coast because of the possibility of oil spills." (P025)

"I'm not so concerned about that pipeline because if the pipeline breaks you can get it fixed in a short time. But if a tanker goes down it's going to just be like Exxon Valdez only worse." (P017)

While ENGOs have built positive relationship in Prince Rupert on touchstone issues of oil tanker and fish farms, there are limits to which the broader movement is accepted in the community. In Terrace, where a new sense of purpose and identity is developing, its transition into the post-staples economy has been accompanied by environmental challenges against any industry that threatens their ability to diversify the economy and attract new life to the community. In contrast, Prince Rupert remains grounded in its direct relationship with staples-industries, and local leaders express limited tolerance for ENGOs that directly challenge the basis of this relationship.

"I don't agree at all with preservationism, but I agree with conservationism and there's two totally different trains of thoughts there...David Suzuki will say you can't cut a tree, you can't kill an

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²⁶³ WWF is currently involved in a nation-wide campaign against Enbridge.

animal, you can't do this. But if it's a renewable resource. If it's sustainable, then it's common sense. Everything I do in my life, everything that probably you do in your life, consumes something else whether it's another animal or plant or whatever. That's how we exist." (P026)

"The T. Buck Suzuki Environmental Foundation outdates the David Suzuki Foundation. The Johnny-come-latelies in the environmental movement tend to be very protectionist in their views and very seldom see the human component that exists within the ecosystem." (P011)

"I think stewarding our environment is number one with me but at the same time you have to balance the use of the resources to be able to generate business opportunities to make things go. It's fine when you get people from back east or the south coast or whatever saying, oh, that whole area from north of Port Hardy to Alaska should be a park. It should be pristine. Well, okay, sure. It is pristine, it is beautiful up here. We love it very much. But we have to live here and we have to survive, you know." (P041)

"Skeena Wild is one of the inland groups that really doesn't do much but find its way to attack the commercial fishery. Although, we will work with Skeena Wild on Enbridge." (P013)

Prince Rupert also remains farther behind in its economic revival than Terrace, according to its declining share in regional employment and continued job losses over the past decade. The continuation of depressed employment conditions, and the pressure to establish their port facilities within the new economic order leaves environmental protection positioned clearly behind these leading priorities.

"I think in this area, there's so many people who are just concerned with getting by that they can't go out and worry about saving the world in terms of environment. Because, all their energy goes to just getting by." (P050)

"The main issue around here is how do I make a living? Environment comes totally secondary...Because the economy has still gone down and down and down, people see anything environmental as a pure luxury, which comes last in line after, 'How do I earn my living?'." (P018)

Local leaders in Prince Rupert are not unaware of the environmental impacts of their economic development plans, or of the impacts associated with the industries fuelling the community's expansion into resource trade and export activities. However, with the community's limited success in adapting to non-extractive industries, and the lack of local control over the use of natural resources, local leaders seem reconciled with the fact that their position in the economy is attached to an unavoidable level of environmental impacts.

"I like to think of the environment...The environment has to be protected, but so does the right for people to be able to work. It has to be protected as well. And sometimes that right to work treads on the premises of the environment...It's unfortunate. I don't know, what do we do? Go build steel cages and everybody live in one?" (P043)

The decline of forestry and the fisheries in Prince Rupert created a pause in the economy in which the subsistence of the community fell into serious doubt. During this lull, ENGOs have been able to build working relationships with the community by assisting local groups in developing new practices, and finding ways to reconcile their activities with First Nations interests and new environmental pressures. This has helped establish ENGOs as allies in helping local industries compete in the new economy, thus providing environmental protection with an important role in the community development process. In the final chapter of this study, I introduce environmental factors to my analysis. I examine the perceptions of change in the environment to determine how responses to environmental risks shape attitudes towards environmental protection and the environmental movement in Prince Rupert.

Lax Kw'alaams

Like their neighbours in Terrace and Prince Rupert, Lax Kw'alaams faces a mix of opportunities and uncertainties with the impending wave of industry in the northwest, but is entering the new era with their power and influence trending in a positive direction. Along with other coastal communities, Lax Kw'alaams has been hit hard by declines in the fishing industry, and experienced losses in local employment and incomes (DiFrancesco, 2010, p.28). Declining economic conditions caused problems for both individual opportunities and for the well-being of the community, and the band was facing bankruptcy as recently as 1999. However, by 2012 the band had revenues of approximately \$200 million, had gained a large state-of-the-art recreation centre and new water treatment plan, and had begun planning for construction of a new school that

will accommodate grades one to twelve (ibid). In recent year, improvements have also been made in streets, lighting, and housing. More importantly, Lax Kw'alaams is now viewed as a regional leader in forestry, has created new local employment opportunities in fish processing, and has received national recognition from the Prime Minister for improvements in delivery of education (Perry, 2013; AANDC, 2013). In this section, I explain how Lax Kw'alaams has used Aboriginal rights and title in combination with innovation in resource development activities to achieve these changes, and how environmental protection fits into their strategy for growth and renewal.

Because of inconsistencies in the collection of census data for First Nations communities in Canada, there are fewer data available for examining the changes occurring in Lax Kw'alaams than there is for Prince Rupert and Terrace. A single set of occupational data is provided for 2001, which provides a picture of the general scope of the community's employment structure. Information on more recent changes in the community and in the band's involvement in local and regional resource development activities is based on media, industry reports, and interviews. Reliance upon this wider net of information is appropriate given that the scope of activity relevant to Lax Kw'alaams' development extends beyond their immediate surroundings and reserve boundaries, and includes their wider traditional territories. Lax Kw'alaams remains an important signifier of place, and a home to nine allied tribes of the Tsimshian First Nations. Moreover, Lax Kw'alaams is also a fundamental basis of identity and membership for almost all the band members, many of who live in the other communities included in this study. Therefore, economic activities in surrounding communities, and the changes that are occurring within and around them, are directly relevant to the interests of Lax Kw'alaams both in terms of their relation with their traditional territories, and in terms of the structure of opportunity for band members living outside of the community.

The Ascendance of Lax Kw'alaams

Employment data from 2001, based on NOCS categories, shows a narrow range of opportunities within the community of Lax Kw'alaams, with three of ten employment categories registering no employment activity (see Table 22). Although comparable data are unavailable for following years, several developments have occurred that have

improved employment in Lax Kw'alaams. The largest local employer is a new fish processing plant that reopened in 2012 (after being renovated in 2005), initially providing jobs for 60 members (Hamilton, 2012).

Table 22: Lax Kw'alaams Employment Profile (NOCS)

	2001	2011
Population	785	678
Aboriginal identity population	760	X
Total experienced labour force	320	X
Management occupations	15 (4.7%)	X
Business, finance and administration occupations	20 (6.3%)	X
Natural and applied sciences and related occupations	0	X
Health occupations	0	X
Social science, education, government service and religion	50 (15.6%)	X
Art, culture, recreation and sport	0	X
Sales and service occupations	60 (18.8%)	X
Trades, transport & equipment operators and related occupations	35 (10.9%)	X
Occupations unique to primary industry	80 (25.0%)	X
Occupations unique to processing, manufacturing and utilities	50 (15.6%)	X
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X= Comparable labour force survey data not collected for on-reserve Aboriginal people in Canada in 2006 or 2011

(Statistics Canada, 2010b, 2013)

These numbers rose swiftly to 225 employees in 2013 and an annual payroll of \$1.5 million, accompanied by supporting employment and training for an additional 150 commercial fishing employees (Perry, 2013). For many local leaders, the re-opening of the cannery represented the revival of a critical cog in their local economy, and their community.

"When they have this cannery operating, my husband would go down there and talk to the workers and he said that the environment was so positive and the people were happy when they were working." (L001)

"They need something going. They need the cannery going. They need to learn how to have a job, how to live, be employed, so they can retire when they get older." (L012)

Additional employment has been created in forestry with the continued growth of Coastal Tsimshian Resources, which provides employment for 225 band members, with the majority of activity occurring off reserve (BCABIC, 2013). These two areas of growth emphasize the central role of primary resource industries in the economy of Lax Kw'alaams and in the structure of opportunity for the band members. New opportunities

on reserve lands are also being created in education as a result of the construction of the new grade school, and in management and administration positions that are associated with the band's involvement in various projects throughout the region.

For Lax Kw'alaams, the broader changes occurring in society's transition to a post-staples economies has less of a direct impact on their community's recovery than their own transition from the margins to the center of resource-development activities. The primary force driving the rebirth of Lax Kw'alaams is their expanded involvement in regional resource-development, and the ability of their leaders to successfully build new relationships with changing markets. In Terrace and Prince Rupert, the most highly valued community resources are comprised of economic resources that include small business, forestry, and natural resource trade and export. In contrast, the most highly valued community resources in Lax Kw'alaams consist of the *means* by which the band is seeking to achieve control over economic resources.

Local leaders in Lax Kw'alaams rank education and skills training, heritage and local culture, and local government as their three most important community resources for supporting the well-being of the community (see Figure 14). Each of these resources is viewed as having improved in condition over the past two decades (see Table 23), contrasting with Prince Rupert and Terrace where leaders perceive declines in their most valued resources. 265

As in the settler communities, I examined correlations between the level of importance that local leader in Lax Kw'alaams attach to environmental protection, and the level of importance attached to other community-level resources (see Appendix 5). No significant relationships were noted with forestry or natural resource trade and exports. The only significant relationship was a moderately weak negative correlation between environmental protection and local government and city administration

²⁶⁴ The importance of education and skills training, as discussed in the previous chapter, is linked to the belief of local leaders in the need to enrich the capacity of their members to enable them to take a more active role in the growing economy, and in the management of their resources and the community they are building.

²⁶⁵ Terrace ranked small business development as the most important resource, and viewed it as declining in condition from 6.60 to 5.14 (on a scale of one to ten) from 1991 to 2011. Forestry, the second ranked resource, was viewed as declining from 7.41 to 3.20. Prince Rupert ranked small business development as the most important resource, and viewed it as declining in condition from 7.73 to 3.41 (on a scale of one to ten) from 1991 to 2011. Natural resources trade and export, the second ranked resource, was viewed as declining from 6.54 to 6.14.

(Pearson R = -.395 p<.01). Local leaders that attach more importance to local government tend to attach less importance to environmental protection.

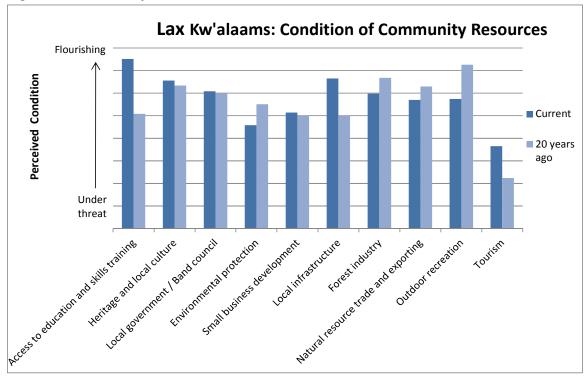


Figure 14: Community Resources in Lax Kw'alaams

Table 23: Lax Kw'alaams Community Resources 1991-2011

Community Resources	Condition 1991	Condition 2011
Access to education and skills training	5.08	7.52**
Heritage and local culture	6.34	6.56
Local government and city administration	5.87	5.92
Environmental protection	5.51	4.58*
Small business development	5.00	5.15
Local infrastructure	5.00	6.65**
Forest industry	6.68	5.98
Natural resource trade and exporting	6.29	5.70
Outdoor recreation	7.27	5.74**
Tourism	2.24	3.65**

^{**} difference between past and current ranking significant at .01 level of probability

The ratings and rankings of community-level resources reflect both the ascendance of Lax Kw'alaams as a community, and the central role of heritage and culture in their community development strategy. For First Nations, the assertion of

^{*} difference significant at .05 level of probability (paired sample t-tests)

Aboriginal rights and title and their ability to influence resource development is directly related to issues of heritage and culture. As explained by Chief Justice Lamer in *R. v Van der Peet*, the assertion of Aboriginal rights is dependent upon demonstration of a practice, custom, or tradition that has a central role in a First Nation's culture ([1996] 2 S.C.R. 507, para 55). Local leaders in Lax Kw'alaams are very much aware of the role that their heritage and culture plays in the assertion of their territorial rights, and its relationship with their ability to influence resource development activities. ²⁶⁶

"We're identifying every site within our territories, especially the conservancies that have cultural significance to us, historical significance to us, harvesting sites, burial sites, archaeological sites. And we plan to identify all those areas and make an interactive map that we share with the province so that they are aware that if they're any developments going into any of those areas, that we have an interest." (L001)

Rather than simply seeing themselves as being affected by resource development activities occurring in the region, local leaders in Lax Kw'alaams see themselves as having a direct role in all decisions being made in their territories. This provides their local leaders with a vast area of concern that extends far beyond the confines of the reserve lands where the community is located.

"The Skeena is in our traditional territory. We own all the way up to Terrace and all along there." (L018)

"We just have to fight for our rights as the First Nation people of Lax Kw'alaams, of all of our territory that we have out there. And if we don't fight for it, we're going to lose it all." (L026)

Lax Kw'alaams has been a regional leader not only in asserting their Aboriginal rights as representatives for nine allied tribes, but also in blazing a path for relationships between industry and First Nations in BC. Their activity in this field began in 1981 when they conducted negotiations with Dome Petroleum for a proposed LNG terminal on nearby Grassy Point. At the time, INAC (Indian and Native Affairs Canada) required

²⁶⁶ There are also important social linkages between heritage and local culture and community well-being, but these go beyond the scope of this study, which is focused primarily on interactions with the economy and resource development at this juncture.

Dome to engage in consultation with the Lax Kw'alaams due to the impact of the proposal on their reserve lands, and allowed Dome to negotiate directly with Lax Kw'alaams leadership (Cassidy and Dale, 1988). ²⁶⁷ The two parties reached an agreement that involved cash payments, mitigation of impact promises, and contributions to local infrastructure including a road to link the community to the rest of the mainland (ibid).

The project was eventually abandoned due to unfavourable shifts in the market for LNG products. However, the negotiation created an important template for consultation and mutual benefit agreements between First Nations and industry, and represents one of the first cases of a First Nation negotiating directly with industry without interference by either provincial or federal governments (ibid). Also, the financial support and experience obtained during the process provided the band with important capital with which to start their own independent log export business through the establishment of the Lax Kw'alaams Development Corporation, which led to the development of Coast Tsimshian Resources (CTR) (ibid, p.153).

Matthews and Young (2005, p. 105) attribute Lax Kw'alaams' success in expanding their influence in the region to the leveraging of Aboriginal rights and title combined with the effective utilization of outside business expertise and the linking of their corporate bodies with the band's political power structure. This included the hiring of a band manager in 1999, to provide them with a new source of business expertise to help guide their negotiations with government, other First Nations, neighbouring communities, and corporate actors.

Lax Kw'alaams has pursued economic development through a number of business organizations that their band manager has helped them establish in order to engage in resource development activities and form partnerships with other developers in the region. The most prominent of these organizations is Coast Tsimshian Resources Ltd. (CTR), which was established in 2005 when the band gained control of TFL 1 along with a separate forest licence near Terrace. CTR activities are coordinated by its

²⁶⁷ It is important to note that this obligation to consult was based on impacts on reserve lands, and not on traditional territories. Obligations to consult based on impacts to the latter did not arise until precedents that followed the influential case R. vs. Sparrow [1990, S.C.R., 1075].

CEO and CAO (also serving as Band Manager), who works in cooperation with the Chief and Council. The band manager also works with Lax Kw'alaams on other economic initiatives. These include the Coast Tsimshian Fish Plant Ltd, Coast Tsimshian Enterprises Limited Partnership (construction), Coast Quarry Ltd, Lax Kw'alaams Holdings (real estate), Lax Kw'alaams Ferry Corporation, and Lax Kw'alaams Development Group (LNG and business development). Lax Kw'alaams is also involved with the Metlakatla First Nation and two industry parties as partners in a company called Watson Island Development Corporation (WatCo), which is focused on the re-development of the industrial site formerly occupied by the Skeena Cellulose pulp mill in Prince Rupert. The band's activities have also expanded into engineering, with the creation of Embark Engineering in 2012.

The increase in Lax Kw'alaams' capacity for engaging with new economic opportunities has also been buoyed by changes in their own governance structures that have empowered their elected leaders as a force of development for the community. This includes changes instituted through the *First Nations Elections Act* to implement four-year terms for Mayor (formerly Chief) and Council (as opposed to the previous two-year terms), providing the elected band representatives a longer window in which to develop and implement their economic and social planning. Secondly, Lax Kw'alaams revised their own band election regulations to allow candidates to run only for Mayor or Council, but not for both. This change prevents a defeated Mayoral candidate from subsequently gaining a seat on Council, and acting as opposition to community planning and economic development initiatives. Lax Kw'alaams thus steps into the era of northwest development equipped with new economic tools, an empowered group of elected leaders, and the compelling power of their Aboriginal rights.

As I will show, Lax Kw'alaams' focus on strengthening their ability to act as leaders in resource management, and the central role of their Aboriginal rights and title in this process has shaped the way that environmental protection fits into their community development strategies. Prior to explaining this, however, I shall examine the way that Lax Kw'alaams has engaged with the new northwest economy.

²⁶⁸ The Metlakatla conduct business through the Metlakatla Development Corporation (established 1989), which acts as the independent business arm for the Metlakatla First Nation.

Changing Directions and Roles in Resource Development

The decline of forestry that occurred throughout the region came earlier for Lax Kw'alaams than for the other study communities. The closest mill to the community, the Georgetown Mill, closed down permanently in 1969 (Pain and Shakespeare, 1981), and the consolidation of timber rights in the hands of large corporations through the mid-20th Century left few opportunities for the development of local-based forest operations in Lax Kw'alaams (Butler and Menzies, 2001). However, as the conditions of the regional forestry industry went into decline, Lax Kw'alaams was able to step into the void created by the retreat of large corporations from northwest forestry, and assume a position of significant importance.

Local leaders in Prince Rupert and Terrace view the forest industry as a community-level resource that is in serious decline, with the state of the industry plummeting dramatically over the past 20 years. In contrast, local leaders in Lax Kw'alaams feel that forestry has declined only slightly, and hold a more favourable perspective on the overall condition of the industry (see Figure 15). ²⁷⁰ This difference in opinion corresponds with a shift in fortune between the communities, with Lax Kw'alaams taking control of the region's largest forestry assets, and finding ways of maintaining economic activity while other communities have struggled to retain their linkages with the industry.

²⁶⁹ The Georgetown Mill was located approximately 20km south of Lax Kw'alaams, or about halfway between the Lax Kw'alaams and Prince Rupert.

Local leaders in Terrace perceive an average decline from 7.41 to 3.20 on a scale of one to ten, and leaders in Prince Rupert perceive an average decline from 7.41 to 3.43. Local leaders in Lax Kw'alaams perceive only a slight overall decline from an average rating of 6.68 to 5.98 out of 10 over the past 20 years.

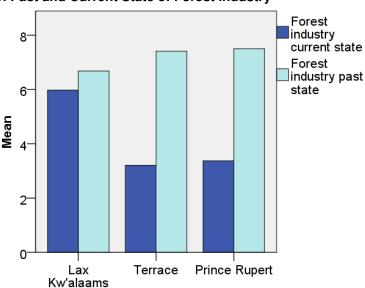


Figure 15: Past and Current State of Forest Industry

Forestry has played a key role in the rise of Lax Kw'alaams, and their success in the industry demonstrates not only a different approach to resource management, but also a different approach to economic development. For example, the band has been successful in engaging in low-impact logging in sensitive areas where other companies have been unable to operate in a profitable manner (Matthews and Young, 2005, p.102). This includes the use of helicopters and selective logging methods to target specific species of wood that held increased value on the export market.²⁷¹

"We're into selective logging, into certain species of wood that is high in the market. We have prepared ourselves to come up with an industry that would help our exports. We're the only ones who have an export license in B.C." (L028)

Their success with these methods allowed the Lax Kw'alaams to reduce their allowable cut (harvesting volume) and bring their forestry operations into closer alignment with the Band's demands for environmentally friendly practices and the accrual of benefits to future generations (BCABIC, 2013). One Member explained, "Our objective is a little bit different. We were given the mandate to manage for a 250-year time horizon." (L050).

²⁷¹ Helicopter logging allows specific targeted trees to be removed without the expenses and environmental impacts associated with road building.

In addition to adjusting their forestry management approach to traditional values, Lax Kw'alaams has found success in forestry through fostering international trade relationships and finding new ways of using forest resources. In 2008, the Band opened an export office in Beijing China, and began exporting raw hemlock and balsam logs that were unmarketable to BC mills (Sauer, 2013; Vancouver Sun, 2010).²⁷² These operations were enabled by the use of a band owned de-barking facility in Prince Rupert that assists in preparing the raw logs for export, making them more marketable to their export destinations. The Band is also in the midst of establishing a biofuel plant in Terrace to make use of the wood waste and logs deemed either unusable or unmarketable for milling destinations.

"We purchased the tree-farm license when it was non-productive and we've taken it and we've turned it into a moneymaking venture." (L042)

CTR now provides employment to 225 band members, despite having no operations located in the actual community (BCABIC, 2013). The Band's current forestry assets include TFL 1 with an annual allowable cut (harvesting volume) of 320,077 cubic metres of wood, an allocation of 244,037 cubic metres in the Kalum TSA (based on 2013 allocations), and an additional 12,000 hectares of reserve land that include numerous forest assets. In addition to their Beijing office, Lax Kw'alaams has established offices in Los Angeles, New York, and Boston, and has plans for expansion into other new Asian markets (ABCI, 2013).

Lax Kw'alaams has been able to develop a new model of staples-based exports while the broader BC (and Canadian) forest industry has declined amidst intensified global capitalism. Their success in adapting to the post-staples economy stands as a remarkable departure from prevailing trends in staples-dependent regions, and demonstrates how their path of development differs from that of the settler communities.

²⁷³ CTR's main office is located in Terrace, and its forest licenses are located in the Kalum Forest District surrounding Terrace. CTR also holds a comparably smaller license in the North Coast Forest District, totalling 22,000 cubic metres per year, comprising a very small portion of their forest assets.

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²⁷² Hemlock and balsam tend to be less-desirable species that lack the desirable texture and strength qualities of species such as fir, cedar, and spruce. Hemlock and balsam are also relatively abundant species in northwest forests, as fir, cedar, and spruce were over-harvested in previous decades, allowing the less valued species to become more dominant.

In order to locate Lax Kw'alaams' distinct trajectory amidst the northwest economy, and to explain how it contrasts with that of Terrace and Prince Rupert, it is necessary to provide further clarification of the conditions that surround these communities.

Hutton (2007) explains that increasing competition from rival staples-producing countries and the depletion of high quality resources created downward pressure on the profitability of Canadian staples industries, including forestry.²⁷⁴ Porter claimed that staples-dependent regions could adjust to these conditions by adopting new technology to provide them with productive advantages in the market (1990). Some segments of the BC forest industry were able to achieve this objective and remain competitive by investing in highly advanced pulp and timber mills (Hutton, 2007). Hayter (2000) explains that these adjustments occurred as part of the restructuring of BC's industrial forestry capacity, resulting in the shuttering of facilities in more remote and peripheral areas, and the concentration of capital and technological investment in central processing locations (2000). Amidst these shifts, processing facilities in Terrace, Prince Rupert, and Kitimat shut down, and hope of large capital returning to invest in the region's forest industry faded with each successive year of recession.

Matthews and Young (2007) explain that the government responded to the decline in resource sectors by implementing policies designed to liberate corporate actors from the restrictions that ostensibly inhibited their ability to engage in resource development activities in BC.²⁷⁵ As a result, staples-dependent communities, including those traditionally reliant upon forestry, became confronted with the task of competing with other communities to attract investment from mobilized global capital. Economic development strategies thus shifted towards programs designed to assist resource-dependent communities in improving their infrastructure and encouraging

²⁷⁴ These shifts placed staples-producing regions in an increasingly subservient position in relation to urban centers, which are insulated from staples market declines by their diversified economic bases, and able to utilize their connections with international markets to advance their own roles within the post-staples economy (Hutton, 2007, p.20).

²⁷⁵ These restrictions included environmental regulations, appurtenancy ties, and relationships with labour unions (Matthews and Young, 2007, p.180).

entrepreneurial growth, in order to enhance their status as centers for investment in new resource development activities (Matthews and Young, 2007, p.104-5).²⁷⁶

Matthews and Young (2005) contend that Lax Kw'alaams' development strategies take an altogether different path in adapting to the new economy. Instead of seeking to establish Lax Kw'alaams as a destination for investment, they have used their corporate body (CTR and the Band's other development companies) in combination with their traditional rights and title, to deploy themselves both locally and globally as a key player in northwest resource development (ibid). Prince Rupert and Terrace remain rooted in their locations, as they seek to attract new industrial investment. In contrast, Lax Kw'alaams has not only mobilized themselves as a regional force over a broad expanse of traditional territories, but has gone abroad to seek out new trading partners in China, the US, and other countries.²⁷⁷

Lax Kw'alaams' success in forestry represents more than an example of First Nations stepping into a gap created by industrial decline, or an adaptation to changing economic conditions. Instead, it represents a step in their development as selfdetermining entities and part of their unique process of industrialization and their changing relationship with the forces of globalization; a process which must be viewed as distinct from, yet interrelated with, that of settler society. As with industrialization, the role that environmental protection plays within Lax Kw'alaams' strategy for growth must also be viewed relative to their distinct process of development on both a local and extra-local level, and not merely relative to their position in the regional economic structure.

First Nation Building and the New Economy

Lax Kw'alaams emergence as a centre of forestry activity is part of their attempt to engage with external forces of global capitalism on their own terms as a sovereign

²⁷⁶ This included initiatives such as the federal Canada Marine Act, which enabled the development of port authorities in communities such as Prince Rupert. This program created a locally-based agency that could direct commercial decisions, while supporting the broader objective of facilitating development of international trade. Another example is the Northern Development Initiative, which has supported groups such as TEDA (Terrace Economic Development Authority) in promoting the community as a centre for

resource development activities. Young and Matthew explain, "In this sense, the globalization of Lax Kw'alaams has been

simultaneously a local and corporatist endeavour." (2005, p.105).

nation. Their local leaders have based their development strategies on the expansion of their capacity to engage in self-determination through the assertion of their Aboriginal rights and title, and the protection of their culture.

"We're a sovereign country. We've made no treaties with anyone. Neither have we surrendered in a fight. And we haven't given the land to anybody or given permission for them to use it." (L016)

"I think with where the community is going and it's broadening its economic base, it's strengthening its economic base. Somebody told me and I believe this, that if you don't have a strong economic base, you can't protect your culture." (L050)

Although they remain subject to *de facto* limitations in their ability to act in such a capacity, Lax Kw'alaams has engaged in resource development activities based on the objective of establishing direct relationships with the global forces affecting their territories, without the guidance of federal or provincial state bodies.²⁷⁸ For example, when BC Premier Gordon Campbell travelled to Shanghai in 2010 to market BC timber, he did so after Lax Kw'alaams had already established a growing export trade with China (Hein, 2010), and the Band has since parlayed this activity into an expanded international presence.

The way in which Lax Kw'alaams engages with new opportunities goes beyond an effort to merely reconfigure their past relationships with the economy or reposition themselves within a regional, provincial, or national structure. Indeed, their relationships with theses respective bodies of governance still form important considerations as they negotiate over resource rights and participate in state programs related to social and economic development. However, their central objective remains the assertion of their status as an independent First Nation, and their interactions with other groups revolve around forming alliances that can support them in this objective.

Lax Kw'alaams activities in this regard have expanded beyond forestry, as indicated by their development of several different corporate bodies to assist their

²⁷⁸ They established this path of development when they conducted negotiations with Dome Petroleum in 1981, without the mediation of state agencies.

expansion into various dimensions of resource development.²⁷⁹ The Band's economic conditions and their status as active players in the northwest economy has been strengthened by the development of partnerships with various companies operating in their traditional territories, and through signing benefit agreements on various developments in the region.

"They're starting to work with us now. Not before, they never used to. That's the difference now is the consultation and accommodation. Like, the Port of Prince Rupert, the territory that we own, took us six years to get an agreement." (L002)

Lax Kw'alaams has engaged in negotiations with companies for the construction of wind farms in the Hecate Strait, which would provide a clean source of power to their communities, and generate income from power sold to the provincial grid (Naikun, 2008). In 2011, Lax Kw'alaams signed an agreement with BC Hydro to indicate their support in exchange for direct benefits and guarantees of job awards associated with the construction of the project (Terrace Standard, 2011b). In the same year, Lax Kw'alaams completed an agreement with Transport Canada and the Prince Rupert Port Authority in the expansion of the local container port. He Band has also been in negotiations to locate an LNG plant near Lax Kw'alaams, with the hope of establishing a road to connect them with Prince Rupert, thereby providing residents with increased access to services and other communities (Thomas, 2013). There are currently multiple proposals for LNG projects within the traditional territories of Lax Kw'alaams, and the community has not yet signed an agreement with any specific group. Instead they have sought to acquire additional economic and scientific expertise to assist them in determining the

²⁷⁹ As noted earlier, this includes Coast Tsimshian Enterprises Limited Partnership (construction), Coast Quarry Ltd, Lax Kw'alaams Holdings (real estate), Lax Kw'alaams Ferry Corporation, and the Lax Kw'alaams Development Group (LNG and business development).

²⁸⁰ Nai Kun Energy indicated that it received Federal approval under the Canadian Environmental Assessment Act, but the project remains in early stages of development and no news of further progress has been announced since 2011.

²⁸¹ Recognition of Lax Kw'alaams as partners in development has occurred in parallel with other First Nations asserting their rights to traditional territories in the northwest. The Metlakatla, Kitselas, and Kitsumkalum First Nations also secured agreement in the port expansion. Similarly, multiple First Nations have been involved in most of the projects upon which Lax Kw'alaams has secured agreements, including the Northwest Transmission Line and Watson Island.

balance of risks and benefits that each project poses to their community (BC Shipping News, 2014).

Lax Kw'alaams band has been selective in their business partnerships, and like the cities of Prince Rupert and Terrace, has formally stated their opposition to the Enbridge Gateway pipeline project (The Northern View, 2012c). Their opposition to the project has been influenced by their concerns about the impact of a potential spill on the marine environment they rely upon, and the centrality of the environment to their culture.

"It [Enbridge] is frightening, because that's exactly what will completely destroy us as a people. And it will actually affect all nationalities in British Columbia, not just Aboriginal people, but we'll feel it the most. It'll completely destroy us." (L006)

"I'm so worried about that...you see what they've done to the places where they did have those oil accidents. ...Just the effects it would have on our seafood. We'd die of hunger if anything happened to our fish, our seaweed, our clams, or cockles and our crabs. We'd die. I don't care if you're rich, you could be the richest person in the world, but if you're brought up in our way, those things are our staples." (L003)

Similar concerns have been directed towards energy and mining operations that are viewed as posing a threat to the resource base.

"That mining further north of us, which nobody really seems to be dealing with up in Dease Lake... those creeks run down into our rivers, and it affects our salmon. And I believe it's going to make an impact in our next generation if we don't stop it." (L039)

Lax Kw'alaams' ability to assert their rights across a broad territory, and their departure from settler models of development liberates them from relying upon attracting new industry to their community. In this sense, Lax Kw'alaams possess a greater degree of freedom than settler communities in deciding which activities to oppose and which to support. As explained in *Chapter Three*, First Nations have followed a different path than settler communities in their engagement with forces of industrialization. Although First Nations have acted as key contributors to the industrialization of the northwest, they have not shared equally in this venture and have

retained strong ties to their own distinct cultures and traditional practices, including their direct use of the environment. Lax Kw'alaams' ambivalence to industry is thus based in a commitment to their own culture, and a willingness to walk away from projects that are deemed to be incompatible with their values and their objectives as a nation.

"And we've been saying no all along to Enbridge. We haven't taken any money from them even though they've been trying to throw us money to even come and have meetings. We wouldn't do it, because we would be seen as accepting money from a company that we don't agree with." (L007)

"We're not bound by that mighty dollar. We're in a low-income community, and if you were to take the money from us, we would still survive. Our dad's dads never had money. They relied on our resources." (L039)

While protection of their culture and enhancement of their capacity for self-direction provides seemingly clear guidance in the way Lax Kw'alaams responds to some resource development activities, such clarity does not necessarily apply to all of their endeavours. Forestry activities, for example, including operations conducted by CTR, stimulates concern among some local leaders, not only because of environmental impacts, but also due to the way the industry is seen as matching the needs and values of the community. Environmental concerns with forestry, as with other resource development activities, tend to revolve around impacts on salmon, ocean food sources, and other culturally valued aspects of the surrounding environment.

"The logging here years ago up the bay here, this place was full of pinks [salmon]. They logged that area all out and now the fish don't go back into those creeks." (L041)

Ocean health is a major concern. If you're going to harvest trees in a certain area you have to have a dump site. And with a dump site, they drop these logs into the water, the bark falls off and kills the bottom." (L017)

"You notice all our berries are gone, our Indian medicine, pretty soon that'll be gone too. We'll be lucky if we get that, especially with all the trees and everything that's disappearing from cutting all the trees down." (L012)

Despite the Band's success in forestry and their use of progressive forestry management approaches, forestry is ranked only seventh among community-level resources. Some local leaders express concerns about the impact that logging has on their cultural uses of the forests and the preservation of their heritage. These, and the environmental impacts, have created doubt among some local leaders about the ability of CRTs management principles to achieve their goals of protecting traditional values.

"I'd say 95 to 97 percent of the identified CMT's [culturally modified trees], have been harvested and that's not just our company, it's all the other logging companies. So those are the types of things that I get all upset about." (L001)

"I keep saying we're supposed to be stewards of our land and a lot of the stuff that we do doesn't support what we say all the time." (L007)

Lax Kw'alaams does not host any forestry or energy and mining activities in their actual home community, as the isolated location of Lax Kw'alaams makes the community unsuitable as a base of operations for companies in these industries.²⁸³ While the CTR's pioneering forays into the log export industry has fuelled the Band's business development, some local leaders express the same concerns as found in the settler communities regarding the conflict between exports and developing local processing opportunities. The Band manager and CEO of CTR has publicly stated the intent to pursue construction of a sawmill to help optimize the use of their forestry assets (Terrace Standard, 2011a). However, for some local leaders forestry remains viewed as something distant to the community, and disconnected from the community's traditional focus on fisheries.

"But we do have a forest license or actually two, a TFL and an FL, and it's the sixth biggest license in the province. And right now all we're doing is cutting trees and exporting them. It's not creating any local employment or as much as I'd like to see anyway." (L007)

²⁸² CMT's are Culturally Modified Trees. These are very old trees, usually red cedar that in the past were hollowed out by First Nations people for the purpose of making a canoe, or altered in other ways for the creation of traditional timber products.

²⁸³ CTR's main office is located in Terrace.

"Logging is always like that with us, it's never in our hands, and we never have any control over it, so I think we'll be better off without it. Give us something we know how to do like put some closed containment fish tanks in behind the village here. Get that cannery booming up, you know." (L036)

The pattern evident in local leaders' appraisals of the Band's involvement in forestry is also evident in their response to new segments of the economy, such as recreation and tourism. Lax Kw'alaams is surrounded by popular tourist amenities, including the Khutzemateen Grizzly Bear Sanctuary, and sport fishing and whale-watching areas. Lax Kw'alaams possesses a small number of rustic accommodations, but does not host a significant tourism sector, apart from a single nature tour operation and a small number of charter fishing operations owned and operated by a Band Members. Local leaders ranked outdoor recreation and tourism as the two lowest-ranked community resources, and viewed tourism as being in a poorer state of condition than any other resource (see Table 23 and Figure 14). Some local leaders view the tourism and recreation sector as a segment of the economy that merits deeper consideration, while others express reluctance to engage with an industry that has historically been dominated by settlers, and which does not (yet) have a clear relationship with their culture.

"I believe they [Band Council] need to embrace and find ways to get into tourism" (L039)

"We've got a grizzly bear sanctuary to the north of us. We've got fish. We've got everything right here, but we're not tapping into any of that stuff." (L007)

"Oh, that's a bad word for me. I don't like tourists." (L016)

"Some people say tourism is pimping our culture. Depends if your cup is half full or half empty. I say we're proud and we're showing our culture, who we are." (L022)

Lax Kw'alaams involvement in log exports provides an example of how steps taken toward economic growth in one community may be viewed as having a negative impact on other communities. While Lax Kw'alaams indeed derives importance economic benefits from their growing log export operations, members of the forest

industry in Terrace see such activities as undermining the support of local economic development by depriving local mills of secondary processing opportunities. In the same vein, the log export and shipping operations based in Prince Rupert may be viewed in a similar manner. In a similar manner, resource use ambitions that focus on non-staples models can conflict with the economic development plans in other communities. For example, the focus on the emphasis of sport fishing in Terrace runs counter to the interests of commercial fishers in Prince Rupert, and the efforts to protect forestry lands for recreation opportunities runs counter to the logging investments held in Lax Kw'alaams. These dynamics demonstrate the competitive nature of the new resource economy, in which communities must compete with each other to develop new opportunities and to form new relationships with the market.

Environmental Protection and the Aboriginal Path

The way that Lax Kw'alaams integrates new economic opportunities into their development plans is not merely a matter of a traditional culture taking on features of the modern economy. Nor is their assertion of Aboriginal rights in advancing their economic interests simply an effort to correct inequalities in the political economic structure. In *Chapter Three*, I argued that the assertion of Aboriginal rights should be viewed as a social movement seeking to ameliorate the incongruence between the dominant model of rural development and a (sometimes) parallel, but distinct, path of development followed by First Nations. In this sense, the impact of Canadian society's broader transition into the post-staples era, and the relationship of this shift with changes occurring in the northwest region, does not necessarily reflect the economic and social changes occurring in Lax Kw'alaams. Therefore, explaining the way that changes in the economy have shaped the role of environmental protection in Lax Kw'alaams requires a different frame of analysis than utilized in the settler communities.

In his examination of post-staples society, Hutton (2007) argues that the ascent of globalized metropolitan culture in the Canadian urban core has affected a rise in tourism and outdoor recreation, and fuelled the social inculcation of environmental values. Hutton explains that the number of urbanites directly dependent on staples production has declined. In turn, relationships between the Canadian heartland and the environment became increasingly based upon non-extractive experiences and the

"selective experience of recreational visitations, rather than an appreciation of the quotidian realities of making a living from the land and the resource base." (2007, p.21). In turn, these changes in the broader social structure affect communities such as Terrace and Prince Rupert, as post-staples metropolitan values are imposed on social and economic structure by the comparatively more economically powerful, globally mobile, and politically influential urban core.

I have argued that the integration of non-extractive resource values into local economic development strategies has advanced more noticeably in Terrace, where the desire to break away from former models of staples dependency (via economic diversification) has been accompanied by the rise of a locally-based environmental movement that emphasizes recreation-based resource usage while drawing support from urban-based ENGOs. Prince Rupert has followed a development trajectory that more closely conforms to its past economic and industrial functions. In turn, Prince Rupert has embraced the environmental movement only to the degree that it supports the continued viability of the community as a staples-exporting centre, and the movement's assistance in defending historically rooted attachments to fisheries. ²⁸⁴

In both Terrace and Prince Rupert, adjustments have been made within their respective development strategies in order to assist in their adaptation to the contours of the post staples economy, and to respond to the increasing influence of environmentalism as a social movement produced from changes occurring within the broader society within which they are enmeshed. In this sense, the way that environmentalism fits into their respective development strategies represents part of a broader course correction that is occurring as Canada's moves (via processes of globalization) from one era of political and economic organization to the next.

First Nations share neither the same path of political and economic development, nor the same linkages with the broader society from within which environmentalism has arisen. As Lax Kw'alaams develops their own form of industrial capacity,

tourism and outdoor recreation have revolved around niche markets in sport fishing and adventure sports, and the sector is welcomed as way of broadening the economic base of the community and providing protection against the structural instability of reliance upon a single industry and a single way of utilizing

the local resource base.

²⁸⁴ Tourism and outdoor recreation sectors have adhered to staples-based models of development, and are viewed as holding limited importance to the community's overall vision of growth. Whereas in Terrace,

environmentalism merely represents one of many different forces with which the community interacts as they seek to further their capacity for self-determination. I have drawn upon interviews with local leaders in arguing that Lax Kw'alaams' interaction with new resource development activities are shaped by the way that the activities support their central goal of protecting their culture and increasing their capacity for self-determination.

However, I remain mindful that their culture represents a 'moving subject', and is neither fixed in time nor situated in naturalized opposition to industrial uses of natural resources. In this respect, I recognize Nadasdy's (2005) assertion that First Nations relationships with natural resources do not comprise a set of static relationships that can be directly related to western conceptualizations of preservation or conservation. Therefore, I make no assumption that the goals of the environmental movement are consistent with the goals of First Nations in protecting their resource base.

Instead, I contend that Lax Kw'alaams engages with the environmental movement in a similar way as they engage with forces of industrial development. ENGO activities are welcomed in Lax Kw'alaams traditional territories to the extent to which they further the Band's assertion of Aboriginal rights and help develop their capacity for self-determination, including the growth of their own capacity for industrial development. In this respect, I examine circumstances in which ENGOs have acted as collaborators with Lax Kw'alaams in addressing resource development issues, as well as circumstances in which ENGO activities are in conflict with Lax Kw'alaams' development strategy.

Of the ENGOs active in the northwest, WWF has established the closest working relationships with Lax Kw'alaams through various research initiatives on marine habitat and climate change. This has included providing assistance on the development of the forest management plans for TFL 1, and a study of land and water management practices as part of the Skeena River Watershed Conservation Project.

"The World Wildlife Fund out of Prince Rupert...They've been very practical and very supportive and very knowledgeable and they've also wanted to get engaged in debates. They're not like the pulpit preacher that says the world's going to fall apart. I've found them quite engaging." (L050)

As indicated earlier, WWF also participated along with CTR in the CCAPNSC project, which provided data for this study. WWF is one of the few ENGOs that local leaders identified during their interviews, although it is not the only group that has worked in cooperation with the Band. Ecotrust has worked with Lax Kw'alaams Members on a training program in partnership with DFO. The program, which was designed to assist First Nations in developing their capacity to engage with DFO, focused on salmon catch sampling and bio-sampling for the purpose of assessing the health of local fisheries. The program resulted in the creation of some short-term work on data collection for several Members of the Band (Ecotrust, 2011).

Ecotrust and the T Buck Suzuki Environmental Foundation have also worked closely with fishers from Lax Kw'alaams in conducting a study of the value of commercial fisheries to northwest communities, in order to provide local input to the Pacific North Coast Integrated Management Area (PNCIMA). The study included interviews with fishers from various north coast communities, with 9 of the 23 respondents based out of Lax Kw'alaams (O'Donnell et al., 2011). The analysis went beyond economic values and attended to the cultural and social values of fisheries, with attention to issues such as sharing of catch within communities and the role of fishing in the intergenerational transfer of knowledge. This approach reflected a high level of awareness and sensitivity towards First Nations among the participating ENGOs, and demonstrated recognition of their distinct values in local resource management plans. The Sierra Club has also worked in cooperation with Lax Kw'alaams through their support of the Coastal Guardians. This group is comprised of First Nations, including representatives from Lax Kw'alaams that monitor the health of natural and cultural resources throughout the central coast area (Sierra Club, 2011).

Lax Kw'alaams is still at an early stage in terms of their role as a force of resource development and economic growth in the northwest region. ENGOs provide a potential source of scientific and technical capacity to Lax Kw'alaams during this important period in their development.

"But we need biologists and some scientists...If we had the finances and the human capacity to make all these dreams come true. Yeah. That would be good." (L018)

As indicated earlier in this study, ENGOs have also aligned themselves with Coastal First Nations including Lax Kw'alaams in opposition of key projects; most notably the Enbridge Gateway Project. Numerous local leaders and Band Members have participated in ENGO led initiatives to state their opposition to the project, including letter-writing campaigns led by the Friends of Wild Salmon (FOWS), and marches organized by the Sierra Club. In 2006, the Band sent representatives, along with representatives of the ENGO-led Pure Salmon Campaign, to meet political leaders in Norway in order to protest against salmon farming in northwest waters (FOWS, 2006).

The Band's opposition to Enbridge and other resource development projects formed a popular topic in the interviews. Leaders were asked to discuss their working relationships with other groups, including ENGOs, and to identify other groups working on environmental issues in the region. However, local leaders seldom mentioned ENGO activities related to opposing Enbridge or other projects, despite the numerous examples of ENGOs cooperating with the Band on such matters. The only local leader that commented directly on ENGO action against industry expressed little confidence in their ability to act as an effective counterpoint to the forces at play in the region.

"I know people at Greenpeace and they're all fighting, but they're just small little people fighting against giants, giant industry." (L036)

Local leaders in Lax Kw'alaams instead emphasized the assertion of their territorial rights and their status as a self-governing people as the primary means through which to mount opposition to unwanted resource development projects.

"As a government of the village, they do work like keeping the tankers from coming in our area. And when they wanted to do fish farming, we fought against that." (L003)

Although ENGOs have found common ground with Lax Kw'alaams in several campaigns against development activities, there are also circumstances in which ENGO campaigns run counter to the development interests of the Band. For example, the

Ancient Forest Alliance AFA), based in Victoria, lobbied the BC government to put an end to exports of old-growth logs in BC. The AFA focused specifically on the Minister of Forests' 2009 decision to permit CTR to export logs to China (Lavoie, 2010). Local leaders did not respond directly to the AFA's actions in the media, and did not directly address the issue during the interviews. However, they did express the opinion that efforts to deny them the right to use the resource base in a manner they see fit represents a double standard in light of way that resources have been utilized by settler industries.

"Well, look at the NDP complaining now that we're shipping raw logs out. And they didn't complain away when they [industry] were shipping the logs out. And if it wasn't for Simpson [Port Simpson/La Kw'Alaams] putting that office in Japan or China, those raw logs would be still sitting in the waters or not cut." (L034)

The increase of ENGO activity throughout Lax Kw'alaams' traditional territories provides a source of potential allies in resisting development activities that threaten the resources valued by Lax Kw'alaams, but the movement has also expanded their range during a time when the community is establishing their own brand of industrialization. Even as Lax Kw'alaams engages with international corporations in the potential development of LNG facilities in their territories, ENGOs have been rallying resistance to LNG production based on both local and global impacts. The David Suzuki Foundation and the Sierra Club have been lobbying for tighter regulation of the LNG industry in northern BC based on both local impacts at the extraction sites, and the impact of LNG usage on the climate. Meanwhile, the Pembina Institute has asserted that the expansion of LNG development in BC will prevent the province from achieving reductions in greenhouse gas emissions that were set forth in the BC Climate Action Plan (Horne & Goerner, 2014).

While assistance in increasing their technical capacity and support in expressing opposition to undesirable development activities is welcome, local leaders in Lax Kw'alaams have also made it clear that ENGOs are viewed as guests in their traditional

²⁸⁵ These criticisms were echoed by union representatives for the provincial forestry workers, who joined the AFA in protesting log exports (United Steelworkers, 2009; Ancient Forest Alliance, 2010).

territories, and are not considered as equal parties in addressing resource development issues. ENGO efforts to interfere with the industrialization of Lax Kw'alaams is not only unwelcome, but is in some cases viewed as a form of hypocrisy flowing from settler society.

"Well, we've met with them quite a few times and we've met with them in the land use plan and they're tough guys to deal with. But we tell them it's our traditional territory, that they don't have a say in it, they're environmentalists. They're not from Canada, most of them. And then that's the sad part. They throw big money to get what they want." (L002)

"All of a sudden now what's the David Suzuki Foundation looking for? What's Greenpeace looking for? They're looking for another cause now, because it's all about getting money. What do the environmentalists show? They show a logger standing up there with an eagle in one hand and a piece of wood in the other saying, "All I want is clean air and water and be able to cut wood." As they drive along in the Mercedes Benz on paved highways." (L050)

Both Aboriginal rights and the environmental movement have emerged as important new influences in the governance of natural resources in the northwest. These forces are often tied together when controversial projects such as the Enbridge Gateway pipeline are examined in the media. However, in the actual field of resource development, they are competing forces that seek to exert their own distinct forms of control over the resource base.

The legal precedents supporting Aboriginal rights and the obligation for agents of development to engage in meaningful consultation with First Nations, puts Lax Kw'alaams in an increasingly pivotal position in relation to the expansion of industry in the northwest region. In my examinations of Prince Rupert and Terrace, I based my analysis of the role of the environmental movement upon identifying what services or advantages ENGOs could offer, or what obstacles they pose, to the communities within the context of the changes occurring in the economy. In the case of Lax Kw'alaams, ENGOs appear to offer valued forms of technical support, and offer alliances in opposing certain activities. However, the more significant issue may actually be what services are offered by Lax Kw'alaams to the environmental movement, and what

potential obstacles does the Band's involvement in the economy pose to ENGO objectives.

Local leaders in Lax Kw'alaams have a high level of confidence in their ability to shape the future of the region. Their corporate activities have provided them with a conduit to international markets, and their territorial claims provide them with a wide sphere of influence within the region. Local leaders in Lax Kw'alaams expressed more confidence in their ability to determine the shape of their future than leaders in the settler communities. When asked whether the future of the region would be decided by the actions of local leaders or by external forces from outside the region, 74 percent of local leaders in Lax Kw'alaams endorsed the efficacy of local influence. In comparison, only 18 percent of leaders in Terrace and 24 percent in Prince Rupert believed that the actions of local leaders would play a greater role. ²⁸⁶

Major resource projects will still be driven forward based on national development plans and the pressure of global resource markets. However, the United Nations recently advised the Canadian government to cease development of the Enbridge Gateway project until First Nations approval has been obtained (McCarthy and Jones, 2014). Lax Kw'alaams represents only one of many First Nations opposed to the project, but the UN announcement demonstrates the reach that is provided through the Band's assertion of their rights. Although the environmental movement offers valued forms of assistance in some cases, Lax Kw'alaams has shown through their own actions that they are capable of acting as an influential force on both a local and global level.

As with their interactions with the forces they encounter in their own territories, the new international role taken on by Lax Kw'alaams exposes the community to a variety of new social, political, and economic influences. Globalization inevitably entails processes of transformation, including both changes to the way that local economies interact with broader economic structures, and changes in the way that local cultures come to view themselves and their relationship with the rest of the world. In the final chapter of this study, I examine a specific facet of this process. Up to this point, I have laid out the relationship between my study communities, the broader economic structure, and the role of the environmental movement in their strategies for growth and

²⁸⁶ Difference between groups was significant (p<.001).

revitalization. In the next section, I examine how environmental problems on both a local and global level affect the relationship between northwest communities and environmental protection.

Chapter Seven: Environmental Change in the Northwest

The changes occurring in northwest BC go beyond shifts in the employment structure and the emergence of new social movements. The region occupies a critical juncture in its passage through modernization and globalization. Northwest communities are experiencing a fundamental transformation in their economic development, and in their relationship with the province and the rest of the world. They confront the growth of energy and mining amidst concerns about the potential impact of these industries on the environment, while continuing to struggle with the failure of past resource management regimes to guarantee a future in which there is wood to cut and fish to catch. Traditional livelihoods are disappearing in the face of economic and environmental pressures, and the cyclical insecurities of forestry and fishery economies are being swallowed up by a broader sense of uncertainty regarding the identities of these communities and the health of the resource base they rely upon.

In the previous chapter, I examined my study communities' adaptations to economic change. In this chapter, I examine their response to environmental change. I evaluate the argument that the importance placed on environmental protection and the growth of the environmental movement in the northwest represents more than the importation of post-staples values from the metropolitan core. I ask if these developments are merely a utilitarian effort of resource-producing regions to appease changing values in the heartland? Or, are they part of a reaction to conditions of globalized risk and the loss of traditional order as northwest communities confront the interrelated declines of their resource base and their historic economic drivers? Is support for environmental protection part of a deeper response to industrial society? Is it part of a localized retort against the scientific resource management regimes and political economic models that undermined the forestry and fishing bases of these communities, setting them adrift to renegotiate their identities and their relationships with the rest of society?

Valued Resources and Environmental Change

Understanding the way that northwest communities perceive threats to the environment requires an understanding of which aspects of the environment are valued the most. Although the economy of the northwest has been largely based on the riches of forestry, the study communities place more importance upon the value of salmon and marine resources than on the value of timber and forest resources. When asked to rank the importance of various environmental resources for the well-being of their community, local leaders identify salmon as the most important resource, followed by drinking water and rivers and waterways (see Table 24). While there is slight variation between the communities in terms of the ordering of the most valued environmental resources, all three communities placed salmon and drinking water among their three most valued

resources, and rivers and waterways among their top four. The main difference between the three communities in terms of the way they rank environmental resources was the higher ranking ascribed to oolichan in Lax Kw'alaams, and the lower ranking ascribed to timber supply (see Table 25).

Table 24: Regional Rankings for Environmental Resources

Resource	Average	Median
	rank	rank
Salmon	2.53	2
Drinking Water	3.54	3
Rivers and Waterways	3.75	3
Forest Health and Diversity	4.60	4
Timber Supply	5.94	6
Animals and Wild Game	5.95	6
Oolichan	6.14	6.5
Berries	7.39	8
Mushrooms	8.59	9

The greater importance of

oolichan is based in the use of the fish for cultural and food purposes by the Tsimshian First Nations. ²⁸⁷ The lower ranking ascribed to the timber supply in Lax Kw'alaams is notable given the control that the Band holds over TFL1, and the linkage between timber harvesting and the enrichment of the Band's economic situation. As explained in the previous chapter, this ranking is reflective of a community that identifies more closely with fishing industries than with forestry, despite the state of their current investments in forest industry.

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²⁸⁷ There have been no commercial fisheries for oolichan in the northwest since the 1900s, and recreational fishing remains closed due to conservation concerns (DFO, 2000; DFO2014). This effectively leaves First Nations as the only fishers of oolichan in the northwest region.

Table 25: Rankings of Environmental Resources for Study Communities

Terrace		Prince Rupert			Lax Kw'alaams			
	Mean	Median		Mean	Median		Mean	Median
Rivers and waterways	2.82 N=49	3	Salmon	2.60 N=50	2.5	Salmon	1.70 N=50	1
Drinking water	3.29 N=49	3	Rivers and waterways	3.02 N=49	3	Drinking Water	3.66 N=50	3
Salmon	3.31 N=49	3	Drinking water	3.68 N=50	3	Oolichan	4.56 N=50	4
Forest health and diversity	3.51 N=49	4	Forest health and diversity	3.88 N=50	4	Rivers and waterways	5.38 N=50	5
Timber supply	5.22 N=49	5	Timber supply	4.94 N=50	5	Animals and wild game	5.86 N=50	6
Animals and wild game	5.53 N=49	6	Animals and wild game	6.49 N=47	6	Forest health and diversity	6.38 N=50	6.5
Oolichan	7.14 N=49	7	Oolichan	6.77 N=47	7	Berries	6.56 N=50	6.5
Berries	7.85 N=48	8	Berries	7.80 N=46	8	Timber supply	7.64 N=50	8
Mushrooms	8.08 N=48	8	Mushrooms	8.65 N=34	9	Mushrooms	9.54 N=24	10

Resources are listed in descending order of importance to community well-being, with most important resource listed at the top.

The differences in the ranking of oolichan and the timber supply highlight an important issue in the rankings of environmental resources. These resources are not only valued solely for their economic impact on the well-being of the study communities, but are also valued for reasons related to culture, health, and historical use. Moreover, different communities emphasize different values with the same resource. This is most evident with salmon, which is highly valued by all three communities, but utilized in quite different ways.

While local leaders in Prince Rupert emphasized the importance of commercial fisheries, local leaders in Terrace emphasized the value of sport fishing on the Skeena River for their local economy. Local leaders in Lax Kw'alaams also emphasized commercial fishing, but placed the greater emphasis on salmon as a source of subsistence and household food than either of the settler communities. The isolation of the Lax Kw'alaams produces a more direct relationship with the environment, and the use of salmon and other ocean harvests is far more important for residents in Lax

Kw'alaams. Similar percentages of local leaders reported participating in fishing activities in each community, with 60 percent in Terrace, 41 percent in Prince Rupert, and 56 percent in Terrace. However, local leaders in Lax Kw'alaams are nearly twice as likely to rely on fishing for a significant portion of personal income and household food. The more direct reliance upon resources in Lax Kw'alaams highlights the sensitivity of the community to changes in the environment.

My analysis of community responses to environmental problems draws heavily from the assessment of the conditions of various environmental resources. I utilize a scale of localized environmental conditions that is based on the combined perceived conditions of six different environmental resources. This includes all of the environmental resource included in the matrix, except for berries, mushrooms, and oolichan. These three resources were excluded due to the limited response obtained for these items. The six remaining items provide a robust Cronbach's Alpha of .767 in scale reliability analysis, thus indicating that the six items fit together as a valid measurement of respondents' perceptions of the condition of the local resource base (see Table 26).

Table 26: Reliability Analysis for Condition of Environmental Resources

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if item deleted
Salmon	30.30	59.370	.476	.741
Forest health and diversity	29.25	52.031	.624	.700
Rivers and waterways	28.29	56.827	.544	.724
Drinking water	26.89	59.559	.418	.755
Timber supply	29.31	56.646	.429	.756
Animals and wild game	28.43	53.724	.580	.713

Scale Mean: 34.50 Variance: 77.538 Std Deviation: 8.806 Cronbach's Alpha .767

N=127

With the six selected resources showing the characteristics of a cohesive scale, I combined the separate measures into a single measurement that represents respondent's

²⁸⁸ Difference between groups is not statistically significant (p > .05).

²⁸⁹ 56 percent of leaders in Lax Kw'alaams reported relying on fishing for personal income and household food, compared to only 28 percent in Prince Rupert and only 30 percent in Terrace. Difference between groups is statistically significant (p<.01).

assessment of the condition of the local resource base. A frequency distribution for this measure is shown in Figure 16.

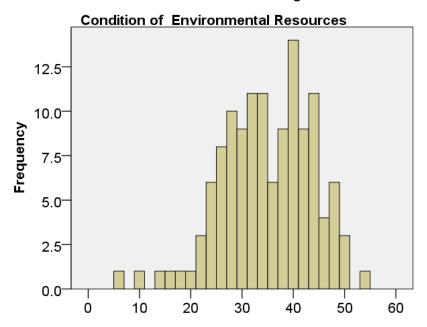


Figure 16: Condition of Environmental Resources: Regional Assessment

Throughout this study, I have made reference to various environmental issues, including depletion of fish stocks, decline of the timber supply, and the broader issue of global climate change. The key issue in this chapter, however, is how local leaders in the study communities perceive the state of the environment.²⁹⁰

As shown in Table 27 and Figure 17, there is a widespread perception of environmental decline,

Table 27: Changes in Environmental Resources: Regional View

_		
Resource	Current	Past
	state	state
Salmon	4.24**	7.82
Drinking Water	7.51	7.76
Rivers and Waterways	6.26**	7.34
Forest Health and Diversity	5.32**	6.99
Timber Supply	5.22**	7.42
Animals and Wild Game	6.11**	7.60
Oolichan	5.35**	7.70
Berries	7.08**	8.09
Mushrooms	5.30**	7.27

^{**}Indicates change in condition between current state and past state is significant at .01 level of probability (paired sample t-test).

^{*} Indicates change in condition between current state and past state is significant at .05 level of probability (paired sample t-test).

²⁹⁰Providing a definitive scientific assessment of the condition of the most important environmental resources in the region is neither possible within the scope of this study, nor central to my analysis. My focus is on assessing the relationship between environmental protection and environmental issues, as they are perceived by local leaders, and not as they are assessed within the broader scientific community.

based on the ratings in the condition of various environmental resources. Local leaders rated all ten environmental resources in the matrix as being in worse condition today than they were 20 years ago. The perceived differences are statistically significant for all environmental resources, except for drinking water, which is seen as being in a relatively stable condition compared to 20 years ago. The greatest decline was perceived in the condition of salmon, which is also the most highly ranked environmental resource in the region.

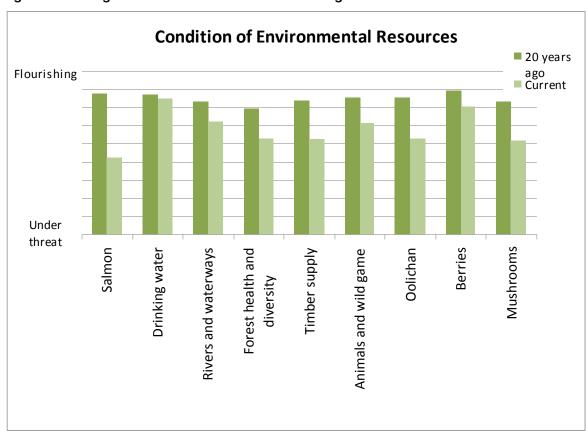


Figure 17: Changes in Environmental Resources: Regional View

Data for perceptions of change in environmental resources for each of the study communities indicates that the perception of decline is universal across all three communities (see Table 28). None of the communities rated any of the ten selected environmental resources as improving in overall condition over the past 20 years.²⁹¹

²⁹¹ There were some respondents that did perceive improvements in individual resources. However, the

average of all responses indicated a mean decline in the assessed condition of all resources.

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Table 28: Changes in Environmental Resources: Study Communities

	Terrace		Prince Rupert		Lax Kw'a	laams
	Current condition	Past condition	Current	Past condition	Current	Past condition
Salmon	5.10**	6.79	4.16**	7.79	3.48**	8.82
Drinking Water	7.06	7.14	7.94	8.02	7.52	8.06
Rivers and Waterways	6.71*	7.13	6.62	6.98	5.42**	7.88
Forest Health and Diversity	5.53**	6.60	5.31**	7.04	5.12**	7.31
Timber Supply	5.19**	6.93	5.29**	7.47	5.20**	7.85
Animals and Wild Game	5.96**	6.80	7.20*	7.53	5.23**	8.40
Oolichan	4.17**	6.55	5.35**	7.45	6.35**	8.73
Berries	6.69	6.89	7.26	7.64	7.22**	9.31
Mushrooms	5.56**	7.08	4.90**	7.16	5.12**	7.82

^{**}Indicates change in condition between current state and past state is significant at .01 level of probability (paired sample t-test).

While leaders in Terrace and Prince Rupert provided slightly different ratings for some resources (e.g. Animals and wild game, Oolichan), they reported very similar declines in the ratings of most resources. Local leaders in Lax Kw'alaams, however, perceived larger declines, and reported significant declines in all resources except for drinking water. The ratings ascribed to these resources indicates that local leaders from the study communities believe that environmental conditions have declined significantly over the past 20 years, with their most valued resource (salmon) being in the most serious state of decline and facing the greatest threat among all of their most valued resources.

Threats to the northwest resource base are confronted amidst what is seen as a declining environment. The sources of danger that concern local leaders are diffuse and many, including the exhaustion of what were once bountiful resources, the cumulative impact of past industry, and the uncertain impact of future industry.

^{*} Indicates change in condition between current state and past state is significant at .05 level of probability (paired sample t-test).

²⁹² The lack of a significant decline is linked to the construction of a new water treatment plant. Several leaders commented on this facility during the interviews, and rated the condition of the drinking water as having improved over the past 20 years. Despite the new facility, many members still rated the current condition of drinking water as worse than in the past.

"Everything is affected. Yeah, I notice everything that's going on. I like to see a lot of changes happening all over the world. People, the animals, everything." (L012)

"There's nothing that does not affect the commercial fishery from an environmental perspective. Whether it's mining, whether it's logging, whether it's harbour pollution, whether it's pipelines, whether it's offshore oil drilling, whether it's tankers, it doesn't matter what it is. It doesn't matter whether it's through pollution or deforestation." (P013)

"There's a lot of big projects in the works and in the planning stages. Massive projects. And there's huge environmental concerns with each one of those projects." (T014)

In addition to the direct impacts of industry, some local leaders expressed concerns about broader threats to their resource base due to global climate change. These concerns included potential impacts on marine resource and salmon stocks, and on forest and general ecosystem health. When

Table 29: Rankings of Drivers of Change: Regional View

	Average rank	Median
First Nations Treaties/Aboriginal rights and Title.	3.55	3
Natural Resource Policies	3.59	3
Global Economy	3.60	3
Availability of Resources	4.03	4
Transportation	4.95	5
Climate Change	5.39	6
In-migration of population	5.80	6
Out-migration of population	6.47	7

asked to rank the importance of eight different drivers of future change in the northwest, local leaders collectively ranked climate change sixth out of eight (see Table 29). The value of the climate change data for my analysis is based in its importance relative to other drivers of change, and the relationship between this level of importance and the emphasis placed on environmental protection as a building block of community development.²⁹³

Leaders in Terrace and Prince Rupert ranked climate change seventh among driver of change, while leaders in Lax Kw'alaams ranked it fourth (see Table 30). Climate change concerns in Lax Kw'alaams focused on impacts to food sources and

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²⁹³ It should be noted again, that the rankings represent relative levels of importance to shaping the future of the region, and not absolute levels of importance. Very few respondents chose to remove climate change from the list of drivers of future change to indicate disagreement with its status as an important item.

fisheries, reflecting the more direct relationship of dependency between the community and the resource base.

"Now you have the little [salmon] fry that are born and they're going to be oxygen starved because the algae is taking it [oxygen] because it's too warm." (L018)

"That's affecting our lives, our seafood, our [sea] cucumbers, everything that we need, what we pick from the ocean, on the rocks...With climate change, everything is changing...That's affecting the ocean, affecting all the animals from the ocean. Everything that lives in the ocean is affected." (L012)

Table 30: Rankings of Drivers of Change for Study Communities

Terrace	Terrace Prince Rupert			Lax Kw'alaams				
	Mean	Median		Mean	Median		Mean	Median 2.5
Natural resource policies	2.86 N=49	2	First Nations treaty settlements	3.06 N=49	3	Aboriginal rights and title	3.18 N=50	2.5
Global economy	3.33 N=49	3	Global economy	3.08 N=49	3	Availability of natural resources	3.98 N=50	3
Availability of resources	3.39 N=49	3	Natural resource policies	3.81 N=48	4	Natural resource policies	4.10 N=50	4
First Nations treaty settlements	4.42 N=49	4	Availability of natural resources	4.75 N=48	5	Climate change	4.14 N=50	4
Transportation	5.35 N=49	5	Transportation	5.08 N=49	6	Transportation	4.42 N=50	5
People moving into the community	5.51 N=49	6	People moving into the community	5.24 N=49	5	Global economy	4.39 N=49	4
Climate change	5.92 N=49	6	Climate change	6.17 N=48	6	People leaving the community	6.04 N=50	7
People leaving the community	6.76 N=49	7	People leaving the community	6.61 N=49	7	People moving into the community	6.64 N=50	7
Drivers of change are listed in descending order of importance to community well-being, with most								

Drivers of change are listed in descending order of importance to community well-being, with most important driver listed at the top.

I examine the relationship of climate change with attitudes towards environmental protection because of the contrast between the specific nature of localized resource challenges and the vaster and more nebulous nature of the risk that climate change represents. I argue that climate change provokes a powerful response specifically

because of society's inability to fully understand the dangers it entails or control its impacts. Assessments of the health of specific resources represent tangible issues for local communities, and comprise a clear set of problems for local leaders. Climate change, on the other hand, escapes localized efforts to exercise control over the environment. As such, I argue it produces a reflexive demand for greater environmental protection in an effort to assuage the uncertainties posed to the future of these communities.

I contend that perceptions of localized natural resource problems provoke protective attitudes towards the environment. However, I argue that this response is mitigated by the respective dependencies of my study communities upon the environment, and by their tenuous relationships with the agencies that mitigate control over the resource base. The historic relationships among my study communities, the state, and the environmental movement are characterized by various cleavages, many of which continue to shape their relationships today. Moreover, these relationships are affected by shifts in the economy and changes in political structures that reshape the systems of governance through which resources are managed. Nonetheless, changes in the resource base, within a localized context, remain challenges that local leaders can remain fixated on capturing through the negotiation of control with these other groups.²⁹⁴ These issues remain amenable to the ability of one resource management regime to triumph over others through the application of appropriate knowledge and management practices. The requirement for increased environmental protection in response to localized environmental impacts is thus negotiated among local leaders' collective ability to secure favourable outcomes in these endeavours.

Climate change on the other hand is a global issue that embodies the full complexity of human relationship with the environment. It is a phenomenon that potentially defies both efforts to mitigate its impacts, and the capacity of scientific

²⁹⁴ For example, the decline in salmon stocks demands a definitive response, and is an issue that must be managed among the various local user groups, state agencies, and ENGOs that are concerned with the problem. The best method of protecting salmon stocks remains subject to debate, and there is a complex battle unfolding between commercial fishers, sport fishers, subsistence fishers, the state agencies that administer control over fisheries, and the scientific institutions that study the matter. However, the problem of declining salmon stocks nonetheless represents an issue that can be negotiated at the local level where the resource exists, and where competing interests must converge to negotiate a way of responding to the problem.

institutions to understand and predict its effects. Regardless of efforts to address climate change locally, provincially, or even at a national level, the issue transcends such spheres of influence, and demands solutions that involve a fundamental transformation of global society. Climate change is a paradigm of what Beck (1994) describes as late modern risk, in that its origin in human interventions reveals the ultimate failure of humanity's trust in industrial progress and scientific management principles to protect us from danger. Simply put, climate change represents an alpha risk; an uncertainty that affects societal well-being at an existential level. Unlike the decline of specific resources, that affect some groups more than others, climate change casts its impact across all aspects of the environment and entails a global scale of risk to which no segment of society is immune.

On the surface, environmental problems pose a threat to calculable material interests, which for resource-dependent communities includes the ability to earn a living and draw sustenance from the resource base. These considerations alone provide a basis upon which to expect environmental threats to prompt demands for greater environmental protection. However, the truly catalytic potential of climate change, and other dangers that characterize *Risk Society*, is found in the uncertainty that they pose to the very patterns of social organization that give direction to our lives. Beyond the rationality of society's reaction to environmental problems is a crisis of identity, and a critical reckoning with the destruction of traditional ways of life and the unsettling experience of being exposed to a world of economic, environmental, and cultural uncertainties. The experience and apprehension of climate change does not occur in a vacuum. It becomes manifest within the context of life in an age of globalization, in which society faces an ever-increasing barrage of new influences and new questions, including those that accompany the transition out of the industrial age.

However, the societal processes that occur in the resource-dependent peripheries of society cannot be assumed to conform to those that occur in the metropolitan core. Like their response to natural resource problems, the way in which northwest communities respond to the threat of widespread environmental change must, be placed within the context of their relationship with the forces that assist in responding to or mitigating this threat. Although the dependence of northwest communities on natural resources makes

them more vulnerable to shifts in the environment, their response to these shifts remains bound by the threads that tie them to the broader fabric of society. In this respect, First Nations provide a different perspective than settler communities as they seek to assert their right to self-determination, and distance themselves from the controls of settler society.

Correlation Findings

In order to understand the way that my study communities are responding to changes in the environment, I conduct a statistical analysis of the relationship between perceptions of environmental problems and the importance attached to environmental protection as a community-level resources. These data reveal the way that environmental changes are affecting development strategies in these communities, and sheds light upon underlying patterns of social organization. In the discussion section that follows, I draw on additional interview data to explore these patterns in more detail, and place them in the context of the challenges that these communities face as they engage with the forms of governance that mitigate control over the resource base.

I use a composite measure based on a Likert-scale for the conditions of natural resources to represent perceptions of localized environmental problems.²⁹⁵ To represent perceptions of broader environmental issues, I utilize the level of importance attached to climate change as a driver of future change in the region²⁹⁶. Using these measures, I evaluate the argument that global environmental problems provoke a stronger response than localized environmental problems in terms of the importance placed on protection of the environment.

²⁹⁵ The characteristics of this scale are discussed earlier in this Chapter, with results contained in Table 26. Appendix 6 contains frequency data for the distribution of values for this measure in each community. ²⁹⁶ Appendix 7 contains frequency data for the distribution of values for this measure in each community.

Table 31: Correlations for Environmental Protection and Environmental Issues

	Terrace	Prince Rupert	Lax Kw'alaams
Current condition of natural resources	.313*	.318*	239
	N=45	N=39	N=42
Importance of Climate Change	.527**	.484**	.037
	N=49	N=48	N=49
Spearman's <i>rho</i> **p<.01, *p<.05			

Bivariate analysis using Spearman's rho reveals a statistically significant relationship between the assessments of the condition of natural resources and the ranking of environmental protection as a community resource that supports well-being in both Terrace and Prince Rupert (Terrace: rs[45] = .313, p < .05, Prince Rupert: rs[39] = .318, p < .05). ²⁹⁷ In both cases, the correlation is positive, meaning that as conditions of natural resources worsen, the importance of environmental protection tends to increase. No significant relationship is apparent for Lax Kw'alaams. The influence of this relationship in both Terrace and Prince Rupert is considered to be moderate (Cohen, 1988). Squaring the correlation coefficients in Terrace indicates that 9.8 percent of the variance in the ranking of environmental protection is explained by the assessment of current environmental conditions. In Prince Rupert, 10.1 percent of the variance is explained. In summary, there is weak support for a relationship between the condition of natural resources and the importance of environmental protection, and this limited relationship is only apparent in the settler communities.

The analysis reveals a stronger relationship between assessments of the importance of climate change as a driver of change in the region and the ranking of environmental protection as a community level resource, with statistically significant relationships existing in both Terrace (rs[49] = .527, p < .001) and Prince Rupert (rs[48] = .484, p<.001). In both cases, the correlation is positive, meaning that higher importance attached to climate change in shaping the future of the region corresponds with higher levels of importance being attached to environmental protection as a community level resource. The magnitude of this relationship is strong in Terrace and

²⁹⁷ Examination of scatter plots for these correlations indicate that the relationship are monotonic, and thus indicate that one variable changes in relation to the other. The scatter plots are contained in Appendix 9.

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moderately strong in Prince Rupert (Cohen, 1988). Squaring the correlation coefficients in Terrace indicates that 27.7 percent of the variance in the ranking of environmental protection is explained by the assessment of current environmental conditions. In Prince Rupert, 23.4 percent of the variance is explained. In summary, there is compelling support for a relationship between assessments of climate change and the importance of environmental protection. Again, this relationship is only apparent in the settler communities, and does not appear in Lax Kw'alaams.

In the discussion section that follows, I address three aspects of these data. First I examine the relationship between local resource conditions and environmental protection. I tie this to the structural analysis provided in *Chapter Six*, and explain how relationships with the state and with the environmental movement mitigate the response to environmental problems. Second, I examine the relationship between climate change and environmental protection, and provide an analysis of how this relationship as a reaction to the uncertainties faced by northwest communities as they engage with forces of globalization and confront new forms of uncertainty and risk. Third, I examine the difference between the way that the settler and First Nation communities in this study are responding to environmental issues.

Responding to Natural Resource Problem: Questions of Balance

I first examine Terrace and Prince Rupert where a weak relationship was observed, and then contrast the findings with Lax Kw'alaams where a different pattern of attitudes and perceptions is apparent. Local leaders in both Terrace and Prince Rupert have expressed concerns about the environmental impact of past industrial activities such as forestry, and the potential impact of the rising energy and mining sector that is advancing around them. Despite clear perceptions of a declining resource base and concerns about mounting threats to the environment, the level of importance placed on environmental protection in these communities holds only a weak relationship with the state of the resource base. Deeper analysis of the interview data provides some insight to this relationship, and reveals the challenges that local leaders face in protecting and regulating the use of their most valued resources in forests and fisheries.

The local leaders interviewed in this study deal with a wide variety of natural resource issues on a day-to-day basis, with forests and fisheries forming two primary centres of activity. Their roles in the community bring them into contact with various groups involved in the administration of control over the resource base, including ENGOs and state agencies. During the interviews, respondents were asked to comment on their working relationships with other groups involved in resource management issues, obstacles encountered in these relationship, and the general efficacy of these organizations in responding to environmental challenges. The interviews thus provide insight to the relationships that exist between the communities and the groups that influence environmental protection in the region, and reveal the challenges that local leaders experience in maintaining these relationships. At the core of these challenges is an approach to resource management that is evident in the settler communities but not in Lax Kw'alaams. Identifying this pattern, and placing it within the context of changing relationships with the state and rest of society, provides a framework for understanding the results obtained in the correlation analysis.

In Terrace, rivers and salmon habitat are highly valued resources that local leaders view as being threatened by the ongoing impacts of forestry. Although perceived threats from energy and mining sectors loom on the horizon, the main industrial activity in the region continues to be based in forestry, and local leaders have remained attentive to the impacts of this activity.

"You start clear-cutting vast chunks of land and there's all this water without recognizing its fisheries potential. And the wetlands, you compromise the fishing resource and that's been happening. They're still doing it, I mean, you can see the logging cuts going on the road to Terrace right now." (T020)

The forest themselves also comprise a valued resource, having provided the basis for the industry that built the town. Nearly three quarters (72 percent) of local leaders in Terrace identified forestry among the most important issues facing the community. Concerns about forest resources are shaped as much by changes in forest policy and the linkage between harvesting and local benefits, as they are by the actual conditions of the resource itself. The shift towards neoliberal styles of resource management has helped

shape the concerns that local leaders in Terrace express about the state of the forest resources that surround them, and the environmental impact of the harvesting activities that are occurring in the region. With declines in regional forest health and the timber supply, local leaders are critical of the failure to ensure that the extraction of forest products is coupled with effective methods of replenishing the resource and protect the environment.

"The whole premise of our forestry industry was that this is Crown land; you get to use it, you get to profit off it, but part of that social contract wasn't just that you hired people, but that you also maintain the forest health. So in terms of the spacing, the brushing, the tree planting. We have fallen backwards as a result of these companies not being enforced properly. We don't have enough people working in the Ministry of Forests to even go out there and inspect what's happening in the forest. What I'm hearing is that we are not maintaining good forest health." (T018)

Such concerns have been sensitized by reductions in state capacity for management of forest resources, based on loss of capacity in the provincial ministries. The rollback aspects of neoliberal reform in the BC forest industry have included substantial cuts to positions in enforcement and timber resource audit positions (Parfitt, 2010). This has included the loss of positions in both Prince Rupert and in Terrace. A report by the Canadian Centre for Policy Alternatives and the Sierra Club of Canada states, "In less than one decade, BC's forest services has lost 1,006 positions, or roughly one quarter of its workforce. With the losses, the ability of public servants to oversee BC's forests has become hopelessly compromised." (ibid, p. 1).

The cuts to forestry staffing have been accompanied by further neoliberal reform to forestry regulations, and the removal of the stricter prescriptive requirements of the Forest Practices Code (FPC) with the Forest and Range Practices Act (FRPA). Under the new approach, forestry companies are required to submit a Forest Stewardship Plan (FSP) that explains how they will meet a set of objectives identified by the Ministry. FSP's are based on a description of plans in a general area over a period of five to ten

years.²⁹⁸ This system effectively shifts the onus for effective forest management from the command-and-control capacity of the Ministry staff, to the capacity of consultants and technicians employed in the private sector.

"There's a lack of enforcement. And if you look at the current practices, in a heavy rainfall environment, the damage to the landscape is really quite worrisome and the damage to the streams. I can take you out to spots, they're setting up the environment, it's going to trigger debris flows. And you don't see any enforcement out there. They've gone to what's called professional reliance. So they've taken away most of the enforcement out of the Ministry of Forests and the Ministry of Environment, and put it on the professionals that are working with the companies, and it's not in very good shape." (T029)

"They [forestry companies] don't have an obligation to plan long term. That's all done by the Ministry of Forests but the Ministry of Forests doesn't do it. So what you're doing is you're removing a forest resource without any long-term planning which means that the potential for that forest resource to recover in a reasonable amount of time is almost completely lost. And if you're not sustainably harvesting, you're mining." (T006)

"We work under legislation. It's a professional alliance where licensees do all the work we just review and approve strategic plans, as so we're really not involved in day-to-day work by the licensee...And the public may not like that, but under the current legislation we don't have any power" (T035)

Another important change in the neoliberalization of BC forest policy was the introduction of volume based harvesting, which allows multiple license holders to simultaneously operate in a shared area. Examples of such arrangements include the allocation of timber from the Kalum Timber Supply Area (TSA) north of Terrace to several parties, including Coast Tsimshian Resources, Kitselas First Nations, Kalum Ventures (Kitsumkalum), and Skeena Sawmills. While the various license holders rely on informal mutual agreements to establish their respective areas for harvesting activities, they essentially compete with each other to identify resources, create plans for harvesting, and secure approval from the Ministry. Overlapping volume-based timber

²⁹⁸ Under FRPA, Ministry personnel's ability to engage in management activities are hindered as they automatically required to approve FSPs, so long as the applying company agrees to meet minimal standards set out in regulation (WCEL, 2004).

licenses combined with consultant-driven forestry management practices places private sector consultants and technicians in the position of weighing the stringency of their planning measures against the need to compete with other operators, while still meeting the demands of their clients. McCarthy argues that this model of resource regulation creates a "race to the bottom" that drives competition for profit over environmental protection (2004, p.340). Local leaders in Terrace acknowledge these arrangements as a point of concern in the management of local forest resources.

"We have an annual cut that we're allowed to harvest, but we're competing with other FRA [First Nations forestry license] holders for that same chunk of ground, essentially. So it becomes kind of a bit of gold rush mentality" (T035)

"If you're a consultant representing logging, you're not going to bite the hand that feeds you. And unfortunately, some folks are better at guiding their clients than others in terms of best management practices and local values. And the ones that are less gifted at it are called prostitutes." (T031)

Changes in the structure of state agencies involved in management of forest resources, have, as mentioned previously, been coupled with the liberalization of harvesting via the removal of appurtenancy. The ability to export raw logs has been linked to further deterioration of an already compromised resource in the northwest. In the wake of the Province granting permission to northwest forestry companies to increase raw log exports, the BC Forest Practices Board reported an increase in the waste of less marketable trees and a rise in selective extraction of high value cedar and spruce (USW, 2009, p.2). The targeting of the most marketable wood not only produces excess waste, but also causes further devaluing of the forest resources, by leaving behind the decadent stands of older and less desirable species.²⁹⁹ Local leaders in Terrace have echoed criticisms of these practices in their own assessments of forestry in the region.

"Because the old growth forests are quite badly depleted, and almost to the point of being uneconomic to work in, the swing is more to starting

²⁹⁹ In the northwest, this includes hemlock and balsam trees. The domination of the timber stands by older hemlock and balsam (decadent wood) inhibits the regeneration of more desirable stands of younger cedar, fir, and spruce.

to harvest and export second growth forests. And there's no plan to use the second growth forests to re-establish milling and manufacturing in this town. And the companies that are exporting appear to have no interest in looking to the future."(T042)

"The current lack of regulation of log export right now, is taking away what used to be deemed as a sustainable forest industry and the rate of harvest and the age of the timber that they're harvesting is not sustainable." (T027)

"Logs are sold and moved elsewhere for processing and raw log exports where they're moved to the other side of the world. And both of those operations are primarily looking for premium grade lumber quality wood. And it seems to me when I'm in the bush now there's a lot more fiber left behind in the blocks than there ever was before." (T017)

Despite holding highly critical views of the environmental impacts of what remains their main industrial activity, local leaders in Terrace expressed the belief that the state of environmental protection, as a community level resource, has actually increased over the past 20years (see Table 32). Similar assessments are provided in Prince Rupert. At the same time, leaders in Lax Kw'alaams hold the contrary view, and believe that the state of environmental protection has declined.

Table 32: Changes in Environmental Protection

	Terrace	Prince Rupert	Lax Kw'alaams
Current condition of environmental protection	6.32**	5.89**	4.65*
Past condition of environmental protection	4.55	4.47	5.51

^{**}Indicates change in condition between current state and past state is significant at .01 level of probability (paired sample t-test).

A paradox is apparent in that local leaders in Terrace expressed critical views of the way that environmental considerations are managed in what remains their primary industry, yet they assess the overall condition of environmental protection as improving. Understanding this apparent paradox and explaining the weak relationship between resource conditions and environmental protection depends on placing these issues within the context of the community's strategy for growth.

^{*} Indicates change in condition between current state and past state is significant at .05 level of probability (paired sample t-test).

Within the context of a drive towards economic diversification and the growth of a service-based economy, environmental protection policies that support a narrow use of resources while insufficiently protecting other values are perceived as having a negative impact on the community. Thus, forestry management regimes that enable expanded harvest and export, while threatening other forest uses and not supporting local employment, are viewed as undesirable. At the same time, other measures aimed at environmental protection are viewed negatively if they are perceived as posing overly stringent barriers to the growth of new economic activity.

"If there's so many regulations and changes to the environment and what we can and can't do that there's no jobs, no ability for people to extract resources and such around the area. It would definitely take a lot of people away from their jobs and have to move on." (T016)

"Between all the regulatory paperwork and bringing the communities along and the environmental and the First Nations, it's about 20 years, average. What this guy said was there is not enough staff in his own ministry to actually process the paperwork. There's thousands of regulations about mining and that's good, but no one to actually even do them. I mean, it would be like you coming here to do an interview with me and me just not being able to give you any time." (T018)

"The Federal Fisheries Act is a very onerous piece of legislation and in many cases, extremely counterproductive and that is seemingly restrictive on anything. On housing development, development of your own piece of property, any kind of industrial act...We're here because we like the area, we like the environment, we like what it has to offer. But it gets a little bit ridiculous, to say the least, with the administration of that Act."(T030)

In addition to the state's role in enforcing environmental protection, ENGOs and the wider environmental movement are viewed as posing significant obstacles to economic revival. As explained in *Chapter Six*, the participation of ENGOs is welcomed in Terrace to the extent that they assist in protecting opportunities for diversification, including the economic adaptations in sport fishing and outdoor recreation that have occurred during the decline of forestry. However, ENGO activity is also seen as inhibiting expansion of new activities, particularly when they oppose activities that are viewed as playing a key role in the overall growth of the local economy.

"They [ENGOs] are in opposition to projects. I mean, I'm not saying that they're wrong, but I'd like to see some of that energy kind of transferred into promoting, figuring out what we can get here." (T005)

"One time we had a group here who was really, really getting-- making great headway on Enbridge. And when the northern transmission line came, they went and said, 'No, we don't want the northern transmission line.' Now all the credibility they had as a group was destroyed on that side." (T007)

"I don't like tree huggers because they got their head up their ass. We need to look after this corner of the world we have environmentally. And we have to do a good job of it. And it's because I logged in the day when loggers were bad guys, right? Loggers aren't bad guys. They're harvesting their garden. They replant it; they look after it. And I think that's been recognized. But we need to be able to harvest some of our other resources as well with that same recognition" (T046)

ENGO intervention is thus welcomed in the capacity that it assists the company in achieving a balance of industry and environmental protection, but rejected at the point at which it is seen as interfering in the community's ability to determine what that optimal balance should be. Indeed, a defining theme throughout the interviews in Terrace is the quest for balance between industry and the environment. Both ENGOs and state agencies are seeing as playing a role in affecting this balance. When dealing with matters related to the development of the local resource base, local leaders see themselves as key players in navigating the line between protection and exploitation.

"At any level, there's that division of the people are really sensitive to the environment and the people who are really for the economy. And I think in good government, you've got to pull them both in and come down the middle there." (T001)

"I think the rub always has been between sort of pro-development and preservation and what is that appropriate balance. So I would say that there is that division and I would expect that division to continue to exist." (T011)

If either side of the industry-environment equation strays out of alignment, local leaders assist in asserting local interests, and engaging with other parties (including ENGOs, state agencies, and industry) in correcting this balance. Extreme views are not

welcomed in this process, and the pursuit of a diversified economy entails a careful effort to preserve the existing economic core, while conscientiously adding new features that are carefully courted and constrained to ensure an acceptable marriage with competing local interests.

"The division is between people that want to see policies, regulations in place and make sure that the industry that does come in doesn't destroy what we already have. But actually, there's a balance there, right." (T026)

The survey data indicates that local leaders do not respond to the decline of their resource base with a dramatic swing towards environmental protection. Instead, they view their role in the community as part of the pursuit of balance in the use of the local resource base. A similar narrative plays out in Prince Rupert, albeit across a different set of resource values and amidst a contrasting approach to community development. Compared to respondents in Terrace, local leaders in Prince Rupert perceive similar declines in valued forest resources and greater declines in salmon, which comprises their most valued natural resource.³⁰⁰

As in Terrace, concerns about deterioration of the resource base focus on the condition of forests and fisheries, with local leaders assessing both types of resources as being in a state of decline. Local leaders in Prince Rupert also linked their concerns about the state of their resource base to the management practices of the state.

"The fishing industry is being mismanaged, hopelessly mismanaged. Specific examples would be we're presently witnessing the decline and perhaps eventual extinction of halibut." (P021)

"The current rate of forest extraction, the current rate of logging...How big is China's appetite? When they stick their straw in the Northwest, how much are they going to suck up? When are we going to stop and say, 'Wait a minute, what do we want to save? What do we want to put aside for the future?' That's not happening." (P036)

³⁰⁰ Mean changes in resources were compared between communities, and evaluated using independent samples t-tests. Perceived differences in timber supply and forest health and diversity were similar between communities (p>.05). However, perceived declines in the condition of salmon were significantly greater in Prince Rupert, with an average change of 3.67 compared to 1.70 in Terrace (p<.001).

Changes in resource management policies attract criticism, particularly when they result in the isolation of the community from its resource base. The contentious relationship between Prince Rupert and the urban core of the province forms a key theme in critiques of the way that the local resource base has been managed, particularly with the fisheries that comprise the most valued natural resource in the community. The continued extraction of fish coupled with the closure of all but one local cannery arouses resentment towards state control of the resource base.

"We live in a land of plenty and we starve because of the way that Government has structured resource access, the whole globalization initiative...Our fish go into containers and travel elsewhere to be processed, or they're caught by others here and processed elsewhere." (P011)

"The fishing industry's gone dead. A lot of the canneries have been shut down. They don't process much fish here now. They'll land it and then put it on reefers [refrigerators] and send it down to Vancouver for processing." (P004)

While leaders in Prince Rupert identify numerous failures in environmental protection and resource management, they believe that environmental protection is stronger now than it was 20 years ago (see Table 20). However, this rise in environmental protection is not necessarily viewed as a positive development for Prince Rupert or for the resource-based aspirations of the people that live and work in the community. In the wake of a declining resource base, measures taken to protect resources are often perceived as being unfairly focused upon local operators. Efforts to preserve forests for non-harvesting uses and measures to ensure compliance with fishing regulations are both identified as imposing hardships on the ability of Prince Rupert residents to earn a living.

"We have to pay a ridiculous fee to have an at-sea observer monitor fish all the time, for over-fishing, that sort of stuff. But all these costs have come up, come up, come up, and then they developed individual quota systems so that you can't go out and harvest and kick the crap out of the ocean and over-fish. And so those individual quotas came at a price to the fishermen who made their livelihood from that" P003

"The Great Bear Rain Forest implemented and in the process that was the end of any small scale logging operations we had on the North Coast, including several small sawmills, all gone. There's one guy left, he's in Oona River and he's got a small wood lot and he's managed three generations. He's the third generation to keep it going, but he's probably going to pack it in here quickly because he just fought for the last five years with Forestry to get a small cut block." P011

Environmental protection is often viewed as a set of restrictions imposed by outside parties that lack a proper understanding of the challenges facing isolated communities such as Prince Rupert. The resentment of restrictions affecting fishing industries and forestry extends to other targets of environmental protection, including the control of pollution.

"Down at Rushbrook Floats, we had to plant some trees in order to make them feel better. But in my mind, I think that's quite funny, because you look around our region, we're full of trees. So the fact that we just put this perimeter drainage in and this catch basin to filter bad pollutants, we shouldn't have had to plant ten trees. It's really quite dumb, in my mind. I could understand it in Vancouver where you need the trees, but I think that the policies need to be more fair." (PR003)

"What they're doing is they're putting in the same regulatory controls for here, for a small little place like this, as they have in Vancouver. And the reason that is important, is that as the port. When we're trying to get our projects approved and we are, this is a competitive industry... So it really affects our competitive rates, okay, because just to keep numbers round, down in the Lower Mainland, they might they might have 100 ships to distribute \$1 million across. We have ten. So it affects our competitive rates." (PR034)

The imposition of environmental protection plans by outsiders forms an especially sensitive topic when it occurs with the exclusion of local representation. Neoliberal models of governance ostensibly designed to bring private actors together in the co-management of resources can also produce winners and losers depending upon who is included in the decision-making processes, and what degree of influence they are allocated within it. Local leaders in Prince Rupert feel isolated from many key resource decision-making processes. This situation has been worsened with the recent loss of

funding for local representation from Prince Rupert in the PNCIMA oceans management initiative.³⁰¹

"What little environmental protection is left, and it's almost none, and even that gets in the way of you, then that's a problem. When the process involves a person from back East and two people from Alberta and no Coastal person and no First Nations person and it's only three people, that's a problem. It's disgraceful. It's not even democracy anymore. When you have the provincial minister who's allowed to say that environmental concerns can be overridden by economic concerns, that's a problem. Again, it's no longer a democracy. It takes away the municipal council's power." (P031)

Resentment towards outsiders imposing their will over local interests also extends to local leaders' misgivings towards the environmental movement. Local ENGOs have formed positive relationships in the aforementioned areas in which they assist industry in coming to terms with environmental protection demands. However, the movement as a whole continues to be associated with post-staples recreation-seeking biases that are out of touch with the reality of resource dependent lifestyles. Local leaders in both Terrace and Prince Rupert expressed disfavour towards environmentalists that fail to respect the dependency of northern communities on the resource base. However, this theme was more pronounced in Prince Rupert, where the commitment to the resource export economy is firmly entrenched, and where post-staples ideals seem more distant both in terms of geography and economic development.

"I was camping over on the Charlottes on time and there was a Volkswagen van there, plastered with all of the stickers, "save the environment" and "say no to clear-cutting" and everything. But, you know, they're driving down a MacMillan Bloedel logging road, to a campground that they put in and maintained." (P034)

"There are those who can separate the way they derive their income, from what is best for the world. I've met many foresters who are first-rate environmentalists. They acknowledge the fact that they cut down trees, but at the same time, they want to preserve that lifestyle...That group of people, the small segment, I classify them as tree huggers, who

³⁰¹ The federally established Prince Rupert Port Authority retains a seat in the PNCIMA steering committee, with involvement of local fishers reduced to consultation. First Nations retain funded seats in the steering committee, but the remaining seats are allocated to provincial and federal ministry staff.

basically have no grasp of the reality of life. We have to make a living in the environment, in our environment, and if it weren't for the natural resources that we exploit, this community would not exist." P021)

The most prominent criticism levelled at the environmental movement is that of extremism, and a lack of understanding of the kind of balance that local leaders see as necessary for revitalizing Prince Rupert.

"What annoys me about environmentalists is that we never talk about the success stories. We talk about the failures all the time, but there are some huge, tremendous success stories. And we've got to quit focusing on the negative and start looking at how can we do things safely and how can we compromise and do the best that we can and learn from our mistakes and move forward?" (P049)

"The environmental faction is the biggest problem, and it's not between our interests and the interests of what we see as the environmental interests on a bigger issue. But it's the environmental interests of those who either don't believe that there should be any resource extraction, so those would be the tree huggers, we call them enviro-Nazis. They're the people who are preservationists, not conservationists." (P013)

"I just wish that I would have kept track of all the projects that were stopped by people that were standing, chanting on the shoreline or whatever, saying no, no, no to everything. What it does is it discourages the spawn of creation. It discourages individuals from actually going out and trying something, because they come up against this massive, massive machine, the 'no' machine." (P010)

In contrast, local leaders see their role as being based in a more reasonable approach to management of the resource base that incorporates both protection and exploitation imperatives

"I think Prince Rupert needs to encourage more industry definitely...I don't want to see large sections of forest cut away for a pipeline or potential pollution. So there's got to be a balance"

"When people talk about the wind farm we want to look at, we know that's a business and we know it's going to be a positive thing in the environment. But, it's going to affect the bird species. So you have to balance things out." (P016)

"It's not just employment, it's coupled with quality of life so when you're looking at a variety of things it's how we can have people make a living, but there's the balance there with the quality of life and being kind to the environment" (P006)

Prince Rupert sees its most valued resources in serious decline, and local leaders express a wide range of concerns about the threats posed to their resource base from ongoing industry and potential future development. However, neither survey responses nor interview feedback from local leaders suggests that an increase in environmental protection is seen as the solution to the community's problems with the local resource base. Despite the challenges they face in gaining access to resource management decision-making processes, local leaders in Prince Rupert continue to emphasize their goal of achieving a balance in the governance of their resource base. Achieving this balance means not only fighting to obtain a degree of control by which to counteract the influence of external parties, but also resisting extreme approaches that pose challenges to the ways in which the resource base is utilized.

Prince Rupert is not undergoing a significant transformation in terms of its linkages to the environment, and remains confined to a peripheral position in the provincial resource economy. The very act of engaging in the battle to achieve balance in resource development activities places local leaders in a position of moderation, in which significant alterations to resource uses are not considered. Efforts to improve environmental practices are welcome, but only if they assist in the revival of economic opportunities. In both Terrace and Prince Rupert, local leaders affirm their belief in the ability to protect the resource base more effectively by tackling the challenge of finding ways to simultaneously support both industrial development and environmental protection.

"I'm working with a group of other individuals in various organizations and within industry as well, to try to achieve the balance that's required to create a sustainable fishery and a sustainable community" (P011)

"There's been a transition over the course of several decades from a very industrial based extraction to a more balanced sense of looking after the other values" (T002)

Environmental decline is viewed as a significant problem in both Terrace and Prince Rupert, and local leaders express many concerns about the health of their most valued resources. Incremental adjustments are viewed as being necessary, and the condition of valued natural resources holds a significant, but limited, relationship with the importance placed on environmental protection. However, the protection of valued resources is seen as a manageable challenge, and as part of an ongoing battle to assert control over the resource base. Local leaders thus see themselves as integral players in achieving equilibrium between industrial development and environmental protection based on a balance that reflects local interests.

In Lax Kw'alaams, concerns about the condition of the environment are more pronounced, and local leaders perceive greater declines in valued forestry and fisheries resources than leaders in the settler communities.

"When we were little boys, we used to go to the creeks and just chase after the fish just to chase after them. And they were all over in the creeks close by the village here. Now there's nothing going on up there anymore. Same way with the herring in the bay." (L037)

"The men are having a hard time getting deer. They're all gone. There's no beavers. Otters, I think are very few now, and I don't know what's happening to them because nobody's trapping anymore." (L035)

The condition of valued ocean and forest-based resources pose threats to the both the livelihoods and subsistence needs of Lax Kw'alaams members. As in the settler communities, the impacts of industry and the mismanagement of the resource base are identified as culprits in the decline of valued forestry and fisheries resources.

"The logging companies, most of them came in and too all the good big cedar out. There's not much cedar left not in our territory, right here in the village. Most of it's logged out" (L020)

"The fish don't go back in those creeks. I know logging did that and the same thing with the Queen Charlottes. We use to fish over there years ago, and when they log it out, the fish don't come back." L041)

"What scares the heck out of me is that we leave the management and monitoring up to the government, and they're not going a very good job." (L007)

"Look at the sockeye salmon. I think they had four days to fish last year. I mean, it's just asinine. And it's not because of First Nations. It's the non-First Nations come in and taking over, tried to manage the resource. And they haven't managed it, but they brutalized it." (L050)

Local leaders in Lax Kw'alaams aim their criticisms of resource management at the total failure of state systems to meet the needs of First Nations. While leaders in Terrace and Prince Rupert perceive the state of environmental protection as having improved over the past 20 years, leaders in Lax Kw'alaams assess environmental protection as having declined over the same period (see Table 23). Leaders from the settler communities describe numerous challenges they face in struggling for an effective balance of industry and environmentalism, and identify numerous examples of ways that state regulation of the environment is necessary to protect the resource base as they pursue equilibrium. In contrast, none of the 50 interviewed leaders in Lax Kw'alaams made reference to specific examples of state actions that benefited the community through effective resource management activities. Lax Kw'alaams critiques of environmental protection included both specific grievances such as methods of handling fish or protecting valued timber, as well as all-encompassing criticisms of the state-centred resource management regimes.

"When you have corporate structures that do their business, such as forestry and the land issue, and then you have the federal-run program such as DFO trying to manage the resources, that's been problematic. Being a First Nation and we're wards of the federal government, they've never show us how they're going to be looking after us on a day-by-day or a year-by-year basis. They just set out a blanket format that really doesn't help us at all." (L024)

"The typical [Government] position is 'it really doesn't matter if you lose Area A for where you've collected medicinal plants for the last thousand years. It really doesn't matter if you lose that because you can move over and use Area B. But then Area B gets logged and then they say 'Okay, you go to Area C.' And then it's just layer upon layer upon layer that impacts on them, but nobody looks at the cumulative effect. And whatever resource issue, whatever environmental issue, whatever social issue relating to the environment, nobody wants to address the cumulative impact. It doesn't matter where it is, what it is, or how it is. Government does not address the cumulative impacts." (L050)

Lax Kw'alaams was also distinct from the settler communities in the way in which local leaders utilized the concept of "balance". Whereas leaders in Prince Rupert and Terrace frequently referred to the need for an even mixture of industrial development and environmental protection, leaders in Lax Kw'alaams seldom made reference to the pursuit of this particular form of symmetry. Only one among 50 interviewed leaders made reference to the concept of balance in relation to management of natural resources, when discussing the Band's new role in the management of their forestry assets.

"With us owning a tree farm license, now, we're extracting too many trees and is there going to be a balance put in place to ensure they're going to replant. There's always that balance but it takes a good 50 years for a tree to get to a substantial size." (L025)

Even in this example, the concept of balance is conceptualized as a natural state of being, and as a cycle of growth and renewal that humans can merely seek to abide by. Even with industry's impacts on the environment, there is a natural balance that holds sway over the state of the environment. The same Member went on to refer to balance as something that will occur regardless of human interventions.

"I think the world is balancing out because there's no clear cuts anymore. If there are, they're very few.... We have the trees back again, so the air's a little bit cleaner, and so it's balancing out again." (L025)

"It'll all disappear, there'll be very few people left. There will be enough to start again. And it's been going on for billions and trillions of years. It's the way they keep the earth in balance" (L016)

The contrasting conceptualizations of balance expressed in Lax Kw'alaams and the settler communities reflects a difference in worldviews, and provides a small indicator of the way that First Nations belief systems differ from those of western society. A fulsome examination of these cultural differences goes far beyond the scope of this study. Moreover, the objective here is not to explore such differences in detail. Instead, I focus on examining these communities' contrasting paths of development amidst processes of globalization, the management of uncertainties, and the role of

environmental protection. For Lax Kw'alaams, the settler forces of environmental protection, including the state and ENGOs, are seen as providing few answers to the problems experienced in the resource base. This is not to suggest that Lax Kw'alaams is prepared to sit idly by, or view natural resource issues as unsolvable problems. Instead, it indicates that they look for a different set of tools within their own society by which to respond to the problems afflicting their resource base.

The idea of a dualistic balance between exploitation and environmental protection proves wholly unsatisfactory for a society that does not identify clearly with either of these forces. Local leaders in Lax Kw'alaams do not identify with the exploitation-protection dichotomy of settler society, and express an unwillingness to simply accept a position that comprises a weight to be moved from one end of the scale to another as settler forces do battle over the resource base.

Lax Kw'alaams is still at a relatively early stage in the development of their own industrial capacity, with their ownership of major timber licenses only beginning a decade ago, and many of their industrial development agencies being established only in the past few years. In their own manner, Lax Kw'alaams has been involved in the development and use of the resource base since time immemorial. However, their recent foray into resource exports, and the formation of agreements with major corporate players and government agencies represents a new stage in the Band's development process. As they increase their influence over regional development matters, it is possible that divisions will emerge within the community with regard to the appropriate use of natural resources. Although the majority of local leaders expressed the belief that the community is united in regard to their resource-development pursuits, a small number hinted at the germination of divisions within the community with respect to the way that the Band is utilizing their power over the resource base.

"If you're for the logging, nothing's wrong. But if you're not in the logging, there are concerns about the creeks, salmon baring. So there is a little division there, and the same with the fishing." (L022)

At this time, there does not appear to be a clear divide between forces in the community that seek to protect and conserve resources, and those that seek to exploit resources for the purpose of economic growth. This is not to say that such divisions will

not emerge as the Band grows into their role as a key player in northwest resource development. For the time being, however, Lax Kw'alaams remains focused on increasing their capacity for engaging with resource development activities, both in terms of obtaining fair shares in new projects within their territories and in terms of increasing their ability to understand the environmental implications of these actions.

Terrace and Prince Rupert continue to struggle with the continuities of their relationships with the economic core of settler society, and are seeking to manage the challenges of a declining resource base while adapting to shifting relationships with the state. The challenges presented by declining resources are accompanied by a limited impulse towards environmental protection while maintaining pursuit of a balance between industry and environment. Lax Kw'alaams has also struggled to assert their interests against the dominance of outside groups, albeit across greater degrees of difference and a wider range of issues. However, the decline of the resource base occurs as their power is in a state of ascension. As Lax Kw'alaams grows into their new role, their reliance upon outside parties (including the state and ENGOs) to assert their interests lessens, and their ability to engage in the management of the resource base as a sovereign First Nation increases. I argue that Lax Kw'alaams' distinct path through modernization, and the conditions in which they have emerged upon the global stage, plays a central role in distinguishing their response to environmental problems from the response that is observed in the settler communities. In the next section, I discuss the relationship between climate change and the importance of environmental protection, and address the underlying issue of how my study communities are responding to environmental crises of a higher level, and the broader uncertainties that accompany life in the late modern era.

Confronting Widespread Change and Impacts of the Unknown

Problems with specific resources have a distinctly local context, and represent challenges that local leaders seek to influence within their respective spheres of activity. Declines in the condition of specific resources comprise localized environmental problems that are directly linked to the negotiation between resource development

activities and efforts aimed at conservation and preservation.³⁰² Climate change, on the other hand, is a global issue that embodies the full complexity of human relationship with the environment. It is a phenomenon that potentially defies both efforts to mitigate its impacts, and the capacity of scientific institutions to understand and predict its effects.

"How are we going to adapt our new forestry industry based on climate change? Same thing goes for fisheries. How are the salmon going to adapt to climate change?" (T019)

Regardless of efforts to address climate change locally, provincially, or even at a national level, the issue transcends such spheres of influence and demands solutions that involve a fundamental transformation of society. It is a paradigm of what Beck (1994) referred to as a late modern risk, in that its origins in human interventions reveals the ultimate failure of humanity's trust in industrial progress and scientific management principles to protect us from danger. Simply put, climate change represents an alpha risk; an uncertainty that affects societal well-being at an existential level, and a manifestation of society's potential for total self-destruction. Unlike the decline of specific resources, that affect some groups more than others, climate change casts its impact across all functions of the environment and entails a global scale of change from which no segment of society can hide.

On the surface, climate changes poses a threat to calculable material interests, which for resource-dependent communities includes the ability to earn a living and draw sustenance from the resource base. These considerations alone provide a basis upon which to expect demands for greater environmental protection.

level where the resource exists, and where competing interests must converge to negotiate a way of responding to the problem.

³⁰² For example, the decline in salmon stocks demands a definitive response, and is an issue that must be managed among the various local user groups, state agencies, and ENGOs that are concerned with the problem. The best method of protecting salmon stocks remains subject to debate, and there is a complex battle unfolding between commercial fishers, sport fishers, subsistence fishers, the state agencies that administer control over fisheries, and the scientific institutions that study the matter. However, the problem of declining salmon stocks nonetheless represents an issue that can be negotiated at the local

³⁰³ I write this in acknowledgment that the vast majority of earth's scientists have in fact accepted the role of human intervention in climate change.

However, the truly catalytic potential of climate change is found in the uncertainty that it poses to the very fabric of society through the transformation of the environment, and the ways in which society organizes its linkages to the resource base. For resource-dependent communities, their very purpose in the economy and their means to subsist falls into doubt under the uncertainty of climate change. Beyond the rationality of society's reaction to environmental problems is a crisis of identity, a critical reckoning with the destruction of traditional ways of life, and the unsettling experience of being exposed to a world of economic, environmental, and cultural uncertainties.

The experience and apprehension of climate change does not occur in a vacuum. It becomes manifest within the context of life in an age of globalization, in which society faces an ever-increasing barrage new influences and new questions, including those that accompany the transition out of the industrial age. Each of these communities has experienced the failure of the industrial age. After initially benefiting from the ascent of the Canadian staples-export model, over-exhaustion of timber and fish stocks and the lack of economic diversification left Terrace and Prince Rupert with dwindling populations, gutted economies, and a compromised resource base. Meanwhile, Lax Kw'alaams suffered the same impacts, without reaping an equal share of the initial benefits. Beck (1994) argues that Risk Society is a response to the failure of the industrial age. It comprises a reaction to both the new forms of risk that threaten societal needs, and to the systems of governance and political economic power that helped produce these risks. Society simultaneously confronts the failure of the industrial age to provide sustained prosperity, the emergence of risks that threaten our very existence, and the uncertainties of negotiating new identities and new economic roles in the age of globalization. Beck contends that these uncertainties provoke a reflexive response that comprises a critique of industrial society, and increasing support for social movements that offer a means of reducing the dangers that we face (1992, p.58-60).

In the passages that follow, I assess this characterization of climate change and society's struggle with the uncertainty of the modern age to determine if it provides a meaningful frame of reference of the way in which my study communities are responding to the changes affecting their region. I argue that climate change does indeed

fit the profile of an alpha-risk for the northwest region, and provokes a stronger reaction than the problems associated with the condition of specific natural resources. However, both First Nations and settler communities engage with the process of modernization, and the crises of uncertainty that it entails, in a different manner than Beck's theory *directly* predicts.

Climate change comprises a serious threat to northwest communities, and is indeed associated with a stronger emphasis on environmental protection, as suggested in the bivariate analysis (Table 31).³⁰⁴ However, the relationship between responses to climate change and a deeper societal response to the uncertainties of the modern age are only comprehensible within the context of the previously described structural relationships between northwest communities and the urban core, the patterns of conflict and dependency between these parties, and the shifts occurring in the governance of natural resources.

Local leaders in all three study communities expressed uncertainty regarding the potential impacts of climate change, and often speculated when discussing the potential threats associated with the phenomenon. Whereas changes in local resources represent specific environmental issues, climate change is viewed as a catalyst to a broad array of changes and of problems. In this sense, while specific resource conditions reflect concrete problems, climate change represents a harbinger of unknown widespread impacts.

"Global warming is now making an effect. So one of the big things is the Humboldt squid, a warm water species, is now invading further north because of waters warming. And with the water warming, sharks. So we're seeing different predators here." (L017)

"With climate change happening, it could affect the whole ecosystem...So who knows what that will bring." (P030)

linkage with environmental protection, than local resources issues.

³⁰⁴ One may note that the availability of resources is ranked as more important than climate change in all three study communities (see Table 31). I have asserted that climate change has a stronger relationship with environmental protection than localized natural resource issues (see Table 33). I also conducted tests of the bivariate relationship between environmental protection and the availability of resources. No significant relationships were found. This further supports my assertion that climate change has a stronger

"There's climate change and the snow caps are coming off faster than they have historically, that was in my estimation the cause of the flood in '07. That changed the river dramatically, the Skeena River here. Many of the fishing places I went to now do not exist." (T021)

"Spruce weevil, it reacts on a degree day type of mechanism. And so a degree upwards in temperature means that there is a higher number of degree days that would occur for that species and that would then increase their numbers, increase the impacts on spruce, maybe broaden their impacts across the landscape." (T002)

Climate change cuts across all other natural resource concerns in the region, as it introduces threats to forests, fisheries, waters, plants, animals, and lands. The viability of virtually every existing natural resource based industry and activity has the potential to be affected by climate change. Additionally, climate change poses threats to local infrastructure and transportation networks, and introduces new uncertainties to the predictability of forest fires, erosion events, extreme weather, and other hazards to human safety. Compared to localized issues and problems with specific resources, climate change represents an incomprehensible, unpredictable, and uncontrollable source of risk for northwest communities.

"There has to be the assessments done basically so see how the region is going to adapt to climate change, and I don't even think that is in the vocabulary of anybody in the region." (P005)

"Is there anything in the future that the scientists see that could be done towards climate change? It's affecting our way of life very fast." (L002)

"I don't think [we] can plan for climate change no matter what information we have, because I don't think we have any control over it." (T037)

The correlation data in Table 31 show that assessments of climate change hold a strong relationship with the importance placed on environmental protection. This suggests that, at least in the settler communities, the scale and scope of climate change provokes a demand for environmental protection that localized natural resource problems do not. However, the demand for greater environmental protection comes in many different forms, and it can include calls for state intervention, scientific innovation, financial aid, ENGO action, and individual social activism. Moreover, the

challenges of climate change entails two levels of response; one aimed at mitigating the impacts of global change on local conditions, and another aimed at mitigating the impacts of local activities on global conditions.

The type of responses that northwest communities see as necessary provides insight to the way in which climate change is affecting them at a deeper social level. In this regard, it provides a means of examining whether or not the experience of globalized risk functions to unsettle these communities' attachment to their historical paths of development, and if it has the potential to stimulate support for more radical social change on the peripheries of western society.

Settler Responses

Local leaders in Terrace and Prince Rupert expressed a similar range of responses regarding the ability of their community to deal with the impact of global climate change on local conditions, and identified similar sets of factors mitigating their ability to respond to this issue. The focus on balance remained central to the specific steps that are seen as necessary for successful climate change adaptation. Climate change is viewed as the introduction of new extremes to which the communities needs to adjust in order to persevere successfully.

"I know we seem to have more severe winters and dryer summer. So I think there's planning for water conservation, infrastructure planning as far as raising dykes, preventing flooding, taking examples from some of the larger centres on how to minimize fossil fuel or decrease it." (T032)

"They're predicting higher tides and higher water levels, so when you do that you don't build to the minimum levels anymore. You know bring it up another three feet or four feet. I mean you can plan for 100 years of development based on it going that way." (P044)

In both communities, there were many optimists among the local leadership that expressed confidence in the ability of their community to make the adjustments necessary to adapt to potential climate change impacts. For local leaders who are optimistic about the ability of their community to successfully adapt to climate change, their confidence rests upon their success in securing resources that can assist them in making large-scale changes to their economic structure and regional infrastructure.

"The people are capable, it's whether the funding is available" (P003)

"I think the community can adapt. We would need the capital to do a lot of infrastructure changes to change what would be required to adapt." (P041)

"I think your ability to adapt to change is possibly linked to your pocketbook as well. If you've got a ton of funding available at your fingertips, you can possibly manipulate it enough to be able to do something constructive." (T031)

In both Terrace and Prince Rupert, the ability to cope with climate change hinged on availability of financial resources more than any other factor. Of course, all local leaders do not hold optimistic views of their ability to deal with climate change, and many cite the same economic factors as limiting their ability to adapt.

"If you're in complete survival mode and every dollar you spend is trying to fill a pothole, how do you expect that they would have any ability to respond to an unknown shift in climate?..Our western civilization is driven by dollars and by tax base." (T013)

"[The City] it's almost bankrupt, so they don't have money to do anything" (P048)

"The concern would be if those changes caused infrastructure, affected our infrastructure, where there might be flooding, affect our sewage treatment plant, where is the money coming from to protect those investments?" (T005)

The influence of material resources and state policy indicates how climate change sensitizes northwest communities to their reliance upon broader society in successfully adapting to widespread change.

"I think it's larger groups of people that are going to have to something about that. We're too small." (P008)

"We do what we can do within our own municipal borders. It feels small when looking at the challenges faced by issues of global warming and climate change. We do what we can" (T021).

"If there's major impacts on those severe weather issues, flooding, I think in particular, I don't think the City-- the City already can't handle those kinds of major things without outside assistance." (T009)

The need for resources was also coupled with a need for additional help from the state and other external agencies to assist the community in responding to the challenge of climate change. The acknowledgement of the need for direct involvement of outside agencies in managing climate change impacts came as a contrast to the resistance shown towards external decision-makers when dealing with specific natural resource issues.

"It [Terrace] is large enough that we have representatives from almost all levels of government here...We have representatives for most provincial ministries and we know these people on a professional and personal level, and many federal ministries as well." (T017)

"We have to rely almost entirely from resources that come from outside. This is not a community that has the resources...You should go speak to the Provincial Emergency Program." (T018)

However, local leaders in both Terrace and Prince Rupert remain critical of the state's commitment to looking out for the best interests of isolated communities. The economic subordination of the region in the provincial economy and the withdrawal of the state during the economic recession have instilled a sense of abandonment in the northwest that extends to their assessment of the state as a source of assistance in responding to climate change.

"If local community does not have the ability to respond on its own to the issues that happen within its region, then they're toast, they're finished. Those communities are gone, whether they wish to be or not, for one reason or another. And in turn, I hate to say it, but both the federal and provincial governments have a totally different agenda and it does not coincide with what communities and people need to exist, unless of course they all lived in Vancouver and Victoria." (P011)

"What happens with senior governments is they establish policies that they feel are one-size-fits-all type of a solutions. Even when you look at something like the carbon tax that the province imposed a couple of years ago. If you look at it in some detail you wonder is that really geared towards the Lower Mainland and how well does it apply to the North? You're really punishing the people that live in the northern part

of the province with some of these policies that are coming out of the Climate Action Plan". (T036)

Despite these criticisms of the state, the need for external intervention is a central theme in the settler assessments of what is needed for dealing with climate change. The emphasis on funding and resources indicates an enduring faith in the ability of society to provide a solution to the problems these communities face. For some local leaders, this faith in society is so great that they adopt the view that the uncertainty of climate change can actually be turned to human advantage with the appropriate manipulations of nature.

"I think it we played our cards right, if we anticipated that the salmon will be moving or changing, I think we could do some hybrid work, or genetic work, and in fact change the salmon to take advantage of global change." (P021)

"Depending on what kind of climate change we have, I think we're able to plan for that. We're innovative planting trees, like trying new species, trying to stay ahead of the curve. We're working with the ministry in a few places. In East Kalum, I think there's 40 different species of trees that we're trying to grow." (T040)

Belief in the ability to adapt to climate change via mobilization of resources and innovative scientific methods can be viewed optimistically as confidence in human ingenuity, or pessimistically as a failure to recognize limits to humanity's mastery over nature. Alternatively, it can be viewed as a reflection of the difficult position northwest communities occupy as they seek to cope with a changing environment, and the dilemma they face in reconciling their resource-dependence with growing environmental pressures.

Local leaders are aware of the impact that local resource development activities have on the planet, and recognize the need for more environmentally friendly models of industry.

"If you're putting it [carbon emissions] out, you're putting it out. I don't care whether it comes from under the ground or not. You have to put out less, that's the whole point." (T006)

"We should be moving away from extracting fossil fuels and more into more renewables." (P025)

They also understand that there may be limits to the extent to which science and technology can assist resource industries in reducing their impact on global climate change. Despite efforts to bring the Prince Rupert shipping port into line with environmental requirements and the development of new bioenergy-based forest opportunities, local leaders are aware that reliance on these forms of development nonetheless contribute to human impacts on the planet.

"If we can continually meet this growing appetite for all these resources, especially energy, then we might be able to provide more sources of clean energy. But they still have an impact, there's still a significant impact from using things like wood waste to develop electricity, and they still do add C02 into the atmosphere." (T012)

"The coal terminal had a record year last year and is looking at doubling its capacity to export by 2015. So they'd be shipping out twice as much coal over to Asia to be burned which obviously isn't going to help the environment." (P037)

Local leaders were open to discussing the challenges of managing the localized impacts of climate change, and of securing the resources necessary for enabling continued economic development amidst shifting environmental conditions. Within these discussions, the objective of balancing environment and industry comprised a central focus. However, they were more reluctant to address broader implications of the impact of local industrial activities on the planet. The global environmental implications of reliance on resource-extraction comprised an "elephant in the room" that local leaders struggled to come to terms with as they discussed their plans for economic renewal.

"Mining is part of the reason that we're dealing with climate change in the first place. We have got to get off this resource-based economy and we have to start living in more of a closed circle system. And I mean, that's tough to say, we all have computers and drive cars and these are all made out of things that we dig out of the ground and I get that. But at the same time, I'm careful about who I say that to, because we also need those jobs." (T019)

"When you look at climate change, you know, it's a real touchy issue if you live in Prince Rupert. We're shipping out coal but it's creating lots of jobs and keeping the community going." (P005)

Leaders in the settler communities describe numerous forms of cooperative relationships with ENGOs when dealing with specific local resource issues. However, ENGOs are not cited as important sources of support in managing the challenges of climate change. Such groups are able to provide technical expertise, and offer potentially useful allies in asserting local interests in the struggle for control over the resource base. However, their utility to northwest communities is more limited if the necessary adaptations to climate change entail a more radical restructuring of industry, and a significant reduction in the overall level of natural resource extraction in the region.

As the settler communities in this study seek new futures, a significant or radical shift away from industrialism is an option that presents potentially greater uncertainty to their ability to persist than the risks of staying their course. Given their continued dependence upon resource industries, any substantial alteration to society's use of natural resources may threaten the ability of these communities to grow and persist if alternative forms of economic development are not found. The future of these communities is not yet written in stone, and it is not yet clear what degree of change will occur in their local economies as society comes to terms the changes needed to protect the environment from a terminal decline. However, if these changes indeed entail a radical reduction in resource-extraction industries, the futures of these communities will face even greater problems than they do today.

Local leaders thus articulate the relationship between climate change and environmental protection as a matter of economic challenges and technical adjustments, instead of a moral judgement against industrialism and science. The need for increased environmental protection is indeed great, as their very ability to persist depends upon society finding a way of achieving a balance between exploitation of natural resources and efforts to mitigate the global impacts of these activities. Rather than driving local leaders towards embracing new social movements such as environmentalism, climate change appears to stimulate an appeal to the very institutions that Beck implicates in bringing about the crises of modernity that exposes our society to risk.

At first glance, these findings suggests that the base premises of *Risk Society* fail to provide a satisfying explanatory framework for the relationship observed in the

quantitative data. However, if *Risk Society* fails, it does so only on a localized basis, as the potential for reflexive change within society cannot be discounted solely on the way that political and economic circumstances shape reactions to environmental problems within these selected settler communities. These reactions must be considered within the context of the structural relationships that characterize life in the northwest region. The reluctance of northwest communities to embrace a more radical brand of environmental protection serves to highlight the precarious position they occupy on the peripheries of western society, and identifies social obstacles for agencies that are tasked with assisting these communities in managing future adaptations.

The way that Terrace and Prince Rupert respond to the threat of climate change affirms that the social impetus for transforming society's relationship with the environment must originate in the metropolitan core, amidst the social milieu that originally inspired Beck's theory of *Risk Society*. I do not base this argument on the failure of these communities to perceive threats to their existence, nor do I base it on these communities being excluded from the failure of the modern age to provide security for their futures and their position within society. In fact, I have argued that both of these conditions are present in my study communities. However, the reflexive response anticipated by Beck is based on an impulse that travels from the core of the body to the extremities. Transformative social movements occur in a society defined by inequalities of power and resources. The peripheries of society lack the ability to engage in purposeful action without the support of the rest of the whole. Even if an appendage were to develop a 'mind of its own', it would be dragged from its objective as the body moved in another direction.

Lax Kw'alaams and Climate Change

The relationship between climate change and environmental protection in the settler communities is not apparent in Lax Kw'alaams. Although climate change represents a greater source of concern in Lax Kw'alaams than in the settler communities, it does not provoke the same response towards the need for external interventions and assistance from wider society.

Local leaders express serious concerns about the health of the environment, and the impacts of climate change on their food sources and resource base. However, the leaders also hold a distinct perspective of change; one that includes a different frame of reference that overlays the impacts of settler society on an environment that they have witnessed in flux over thousands of years. First Nations have already been forced to adapt to devastating changes, of both human and natural origins. These tribulations have threatened their very existence, but in doing so, have imbued their culture with a spirit of resiliency and adaptability.

"Well, if there's one thing our people have proven over the last 150 years is that we're resilient. We can change...Not easily but it can be done." (L042)

"[We have] been here for 10,000 years plus, still here. Just got more TV's and satellites and radio, distractions. But there are historical sites from the time of the deluge here. That's our true tellings." (L046)

The retention of their culture provides them with both a means to defend their immediate interests in the arenas of resource management, while also furnishing them with the confidence that they can endure further changes to their environment.

"We've adapted to this part of the world for over 20,000 years, and we'll adapt to anything that's going to come in the future for another 20,000 years, If we have a world disaster along the North Coast here, everybody's going to have to survive like the way we had when people look at us by not having anything." (L028)

"Take one day at a time and just see what happens today and try and make it better for tomorrow. The things we did in the past is the past. Some of it will still work today, by the knowledge and the expertise of the past. And teach our kids, our main goal in this community is survival" (L015)

This is not to suggest that Lax Kw'alaams remains confined to their traditional practices as a means of engaging with environmental challenges, or that faith in their culture provides the sole means by which they intend to navigate the risks of climate change. In fact, cultural change and adaptability is at the basis of their confidence in being able to persevere amidst environmental transformations. Local leaders in Lax

Kw'alaams look upon settler society as a resource that they can selectively incorporate into their own distinct path of development. The Band has relied upon the acquisition of expert assistance and technical support, combined with the assertion of their rights and title, as a means of strengthening their ability to engage with industry. However, the central goal remains the enrichment of their capacity for self-determination, and projects deemed incompatible with this objective have not been welcomed in their territories. A similar strategy appears to guide their approach to responding to climate change, with their culture forming the core of their ability to adapt, while appropriate resources from settler society provide tools to assist their cause.

"I think Lax Kw' alaams will have to go out to the scientists or whoever comes in to study our climate changes, and they'll work with people on the this reserve. Because technology today is different than 30 or 40 years ago." (L005)

"We have the educated people out there, all we have to do is tap that resource and bring them home. And I have no doubt in mind we can tackle the future." (L036)

Of course, not all local leaders in Lax Kw'alaams are optimistic about their adaptive capabilities. Leaders in Lax Kw'alaams are little different from leaders in the settler communities in assessing their respective ability to deal with climate change. When asked to assess the ability of their community to successfully deal with climate change impacts, 52 percent of leaders in Lax Kw'alaams expressed optimistic assessments, compared to 61 percent in Terrace and 56 percent in Prince Rupert. 305

Local leaders in Lax Kw'alaams that express pessimism about their ability to cope with climate change emphasize the need for education and knowledge as the key challenges to overcome.

"We're not currently doing anything now to educate our people, or preventative measures. I think by the time things come up, it might be too late for our community." (L010)

³⁰⁵ This finding is based on responses provided to Question 58 (shown in Appendix 3). Qualitative coding of the responses as optimistic and pessimistic suggest little difference in overall opinions towards the ability to adapt. Translation of responses in means for each community indicates that the difference between groups is not statistically significant (p>.05, independent samples t-test).

"We need to know more about it [climate change] and be more educated about it to see what we can do." (L032)

Only three respondents identified lack of funding as a barrier to adaptation, and only one respondent discussed the need for outside society to provide solutions. These findings indicate that a different set of priorities guides adaptations to change in Lax Kw'alaams than in the settler communities, with education, knowledge, and enrichment of human resources placed ahead of acquisition of material resources. In this respect, Lax Kw'alaams' approach to climate change adaptation reflects their wider development process and ordering of community level resources, with access to education and training ranked as being more important to the community than small business development and other economic resources. 307

The acquisition of additional resources is nonetheless viewed as an important part of adaptation, but Lax Kw'alaams views their ties to settler society as a double-edged relationship. Relationships with wider society and the creation of partnerships with industry provide resources with which to enhance their ability to adapt. At the same time, these linkages have the potential to engender dependencies that undermine their self-sufficiency. As Lax Kw'alaams ties themselves more closely to global export trade and increases their capacity to acts as an independent agent in resource development industries, their vulnerability to the economic impacts of climate change also increases.

"Speaking from a First Nations perspective, we were taught only to take as much as we needed. And the tree farm contradicts our way of life because it's extracting from the land and we were taught only to take what you need. So that's a really hard one to answer now because of that. At the same time the world is based on economy. You need money to buy things you need, so it's a big revolving door. If we had to shut down the tree farm licenses for a few years, would it sustain a two or three year closure? It's definitely something that has to be thought about." (L025)

Lax Kw'alaams holds an ambivalent relationship with the trappings of industrialized western society with respect to their response to climate change. Although

³⁰⁶ This does not necessarily mean that the Band has the resources necessary to make future changes, and this study does not aim to provide judgments on such matters.

³⁰⁷ This is outlined in Table 10.

leaders in Lax Kw'alaams view settler society as providing important resources in improving their adaptive capacity, they remain reliant upon decisions made within their community to guide their response to change.

"We do have the ability to control our own lives you know. It's up to our elected officials because they're the ones that are going to lead the way, and if they don't, then there is no future." (L036)

Local leaders in Lax Kw'alaams have a higher level of confidence than leaders in the settler communities in their ability to decide their own futures. Only 18 percent of leaders in Terrace and 24 percent of leaders in Prince Rupert believe that the future of the region will be decided by the actions of local leaders and what occurs within their community rather than by external forces outside of local control. In contrast, 74 percent of local leaders in Lax Kw'alaams believe that local action will prevail over outside parties in the shaping of their futures. 308

This study cannot provide an assessment of the actual capabilities of Lax Kw'alaams and other northwest communities to adapt to climate change and other environmental challenges. A thorough assessment of climate change adaptations and initiatives occurring in each community can neither be contained in this study, nor provide an appropriate comparison between communities, given their respective differences in size, economic and administrative capacity, and respective vulnerabilities. Instead, the findings in this study provide a different way of understanding the challenges that Lax Kw'alaams and their neighbouring communities face from within the context of their relationships with the forces of governance that mitigate the relationship between society and the environment.

Traditional institutions are not so easily shaken by globalization and late-modern risks when resilience in the face of change is a defining feature of the culture in which these institutions are based. Northwest First Nations have been defined not only by their ability to adjust to the demanding environment in which they live, but also by their ability to overcome the impacts of colonization and the subsequent attacks upon their resource base and traditional practices. The crisis of modernity that accompanies the

³⁰⁸ This finding is based on responses to Question 56 (shown in Appendix 3)

failure of industrial society for western society arrived 150 years earlier for northwest First Nations in the form of colonization and the advance of commercial industries. As a result, the faith in industrialism and science to provide assurances of safety and stability did not develop for First Nations in the same manner as they did for the majority of western society. There is no deep trust in the institutions of modern age to be broken among First Nations, and instead the realms of science and industrialization are cautiously embraced as means of increasing Lax Kw'alaams' ability to exercise self-determination in the face of an uncertain world.

Rather than destabilizing traditional identities, globalization has played a key role in creating opportunities for Lax Kw'alaams to re-affirm their bonds with their traditional institutions. As Lax Kw'alaams takes on a new role in forestry exports, and enters the arenas of regional resource decision-making and global timber markets, they do so proudly acting on their own accord, instead of under the guidance of the state. The affirmation of their culture and traditions is central to this process as a tool in asserting territorial rights and gaining access to new economic opportunities. When confronted with the threat of climate change, Lax Kw'alaams turns their attention to the enrichment of their own people and the acquisition of knowledge as the primary means to adapt, rather than looking outside their community for more potent forms of environmental protection.

Politically and economically, Lax Kw'alaams encounters environmental threats at a moment in time when their power is in a state of ascent. The environmental uncertainties that undermine the confidence of settler communities strikes at the core of their economies, and threatens their attachments to the societal core as outposts of resource production. In their weakened economic state, and amidst a retreating neoliberal state, the settler communities encounter new dimensions of vulnerability on the resource peripheries where they dwell. As a result of these threats, there is an impulse towards increasing environmental protection, and re-affirming their dependency upon external society. Lax Kw'alaams, on the other hand, does not occupy this space conditionally, or as an extension of a broader society that they rely upon for leadership in altering the course of their social development.

To be sure, Lax Kw'alaams faces a daunting threat in climate change. They are situated in an isolated location, on the edge of the Pacific Ocean, and rely heavily on natural resources that are sensitive to changes in environmental conditions. In the most extreme manifestations of climate change, it may well turn out that the forces of nature overwhelm even Lax Kw'alaams' resiliency and will to persevere in this demanding environment. However, over the past decade, Lax Kw'alaams has found the means to reverse their fortunes while other communities have struggled to cope with the changes sweeping through the region. The specific impacts that climate change will bring to the northwest region remain unclear, and the exact forms of industry that will come to prevail over the landscape have not yet been decided. As they engage with these uncertainties, my study communities share many mutual concerns, but encounter them from distinctly different positions in their respective paths of development.

The Uncertainties of Rights and Title

Aboriginal rights and title figure prominently in the development strategy in Lax Kw'alaams, but play a much different role in the settler communities. I have argued that in the past, First Nations interests were pushed to the margins in northwest resource development, and the suppression of Aboriginal rights played a key role in allowing the forest industry to rise as a dominant force in the region. The progression of Aboriginal rights has not come easily, and First Nations have faced considerable resistance from industry and the state as they have sought to exert control over the land and resource base. In many cases, the assertion of Aboriginal rights and title has presented obstacles to major resource development projects that are situated to bring economic renewal to settler communities. Leaders in Terrace and Prince Rupert are cognizant of the key role that Aboriginal rights and title plays in enabling and inhibiting resource development activities, and view First Nations treaty settlements as an important driver of change in shaping the future of the region. 309 Local leaders realize that First Nations support and

³⁰⁹ First Nations treaty settlements are viewed as the first most important driver of change among eight ranked items in Prince Rupert, and fourth in Terrace. I reiterate that it was not possible to conduct comparisons of quantitative data for settler and First Nations communities in regard to the importance of treaty settlements and rights and title, as different types of terminology were utilized in Lax Kw'alaams than in the settler communities to represent these issues.

approval is a key component of stimulating economic growth, and that there is instrumental value in developing positive relationships with local First Nations.

"Having viable, mutually beneficial partnerships with those individuals, having a real partnership, is absolutely key to moving those initiatives forward. And until that happens in earnest, there's no way for that economic impact to be flooding back into the community." (P020)

"This land up by the airport, it's actually provincial land. We've got our agreements with the province to develop that. We've got cooperative agreements with First Nations, either side. So that relationship is useful." (T005)

However, local leaders also see the process of engaging with First Nations as a complex and sometimes difficult process. Concerns about the challenge of working with First Nations extend to the prospects of attracting new industry to the region.

"We probably spend more than two-thirds of our time on First Nations' related issues because of the unresolved treaties here. And government is very apprehensive about being challenged in court by First Nations." (T023)

"The problem with mining around here is I think a lot of people are scared off 'cause of the First Nations. Like, I got a mining claim right now we're trying to develop, too, right. And dealing with that and the land claims, lots of the land claims are overlapping. And it scares a lot of people away." (T050)

The process of satisfying First Nations demands is seen as major an uncertainty that confounds the creation of new economic opportunities. With the majority of First Nations claims still unresolved, there is a strong desire among leaders in the settler communities to see treaty settlements finalized, so that the questions of Aboriginal title can be laid to rest once and for all.

"If only we could settle all First Nations treaties in British Columbia, that certainty on the land base would hugely improve the economic and social conditions of all of us who live in Terrace." (T018)

"With respect to the First Nations, meetings and consultations and things like that, it's not at all predictable. If there was some sort of way to predict, or to have a process, so that we would know how long this is

going to take or how much this will cost or anything like that. That would be great." (P034)

"The treaties that we're hearing about may impact a huge amount of area around the towns, and Terrace might be more significantly affected than any community in B.C.'s history, by treaties." (T023)

However, the desire for quick settlements is unlikely to be satisfied, given the slow rate of progress on this matter thus far, and the continuing legal ambiguity in regard to the extent of Aboriginal title. Although the Nisga'a were the first BC First Nation to settle a modern treaty, other northwest First Nations have been much slower to respond. At this time, no northwest First Nation has yet advanced to the point of negotiating to finalize a treaty, and the majority are continuing to work on preliminary agreements. Lax Kw'alaams has thus far limited their participation in the treat process to providing a letter of intent, and has refrained from engaging in any negotiations. During the interviews, none of the Lax Kw'alaams respondents made reference to treaty settlements as either a desired objective, or as an important consideration in their plans for dealing with environmental issues.

While the completion of treaties represents an unknown variable for settler communities, it represents a much greater uncertainty to Lax Kw'alaams and other First Nations. For them, the treaty process represents more than merely an obstacle to economic activity; it entails the negotiation of their entire future. As Blackburn (2005) points out, the uncertainty of treaties represents a risk to First Nations, as it is difficult for them to know for certain if what they receive is enough to satisfy their future needs. In this sense, settler and First Nations communities share a desire for obtaining certainty of their futures. However, for First Nations this security is to be obtained by increasing their ability to control their own destinies and affect the land and resources around them, and not by casting limits on that ability.

The assertion of Aboriginal rights and title has resulted in misgivings in some cases with respect to the division of access to resources. The fishing industry in Prince Rupert has a history of conflict between First Nations and settler fishers, and local leaders from both sides continue to perceive unfairness in the application of regulations in this industry. In Terrace, local leaders express concerns about the portion of the forest

tenures that may be "lost" to First Nations through the course of future treaty settlements or through interim measures to protect rights and title. Settler concerns about the division of resources are based in beliefs about what comprises "fairness", and local leaders struggle to reconcile the self-interests of their communities in resource development and the acknowledgment of the legitimacy of First Nations' rightful claims to the land. Continuing gaps in understandings of First Nations and the distinctiveness of their culture inhibits the reconciliation between settler development ambitions and First Nations entitlements. Some local leaders continue to view First Nations only in relation to the dichotomy of exploitation and protection that defines settler culture.

"Within council, within First Nations groups, within environmentalists, within people that just don't want to see business in the area." (T022)

"Natives tend to be more preservationist. They'll claim that they're conservationists, but they ain't, they're preservationists." (T030)

First Nations have made tremendous advances in securing legal recognition of their rights and title. However, the progress they have made in securing social recognition of their rights and their culture within settler society is less clearly defined. There are indications of steps forward in this area with the growing inclusion of First Nations in resource development projects, and the increase of impact-benefits agreements. These partnerships have been accompanied by a new approach to fostering relationships between First Nations and settler communities.

"I think that there is a bit more of a concerted effort from some of the people in the community, both in business and in government, to stay more connected and to build their own personal relationships with First Nations people as well." (P027)

"I see a real opportunity in its future in the cultural connection with our First Nations. So I don't see it as an issue that it's facing, but I see it as an opportunity. It's got potential, huge potential because Terrace and the two specific neighboring First Nations have an excellent relationship that they could actually continue to leverage it as far as I'm concerned." (T013)

These activities remain entangled within the material relationships that settler society holds with First Nations in relation to the negotiation of control over lands and resources. It is difficult to say if changes in settler-First Nations relationships on the frontiers of resource-dependent regions are merely a response to changing legal circumstances surrounding the use of land and resources. Or, do these changes represent a deeper transformation within settler society and a shift in the way they relate to First Nations as one culture to another, and a coming to terms with First Nations' distinct path of development as being independent of, yet intertwined with, settler society? Indeed, there are leaders in Terrace and Prince Rupert that have come to understand and appreciate First Nations based on their own unique ways of relating to the environment, without reference to settler ideals.

"The First Nations are strong in the sense that they're very serious about these issues and they want the land managed in a sustainable, long-term manner. They'll tell you they plan for seven generations. It's their hereditary law that they manage the land sustainably." (T042)

"There's already some friction, which I really see developing between conservation kind of preservationist oriented people and First Nations who see themselves as part of the ecosystem and that they have the right to use the resources. And it's not like just this is pristine nature. They say they've been here for thousands of years, and the ecosystem that the colonizers experienced was an environment that had humans as part of it for a long time." (P038)

Control over the resolution of treaty settlements may lie far from the hands of settler communities in the northwest, and the lack of clarity in these matters compounds the uncertainties they face with the changes occurring in the environment and the economy. The ability of First Nations and settlers to work together in responding to environmental issues will face many tests over the coming decade. These groups have different ways of responding to environmental issues, but they share a mutual interest in protecting the resource base that they both rely upon. Despite the structural barriers they face, the northwest may not be completely at the mercy of the metropolitan core in setting a new direction for the future of their region. Engaging with the environmental movement provides them with access to new sources of knowledge, expertise, and social influence by which to advance their interests in managing environmental and natural

resources issues. However, the most important factor in determining which resources will be protected and which will be left open for industrial use may well be the First Nations path of development, and the ability of leaders in settler communities to recognize Aboriginal leadership and form relationships with their newly empowered neighbours that are based on mutual benefit and respect.

"You have individuals who are aware of the important role that First Nations are going to play in this region for now and for the foreseeable future and probably forever. And that understanding that we're at a really important point in history." (P020)

Conclusion

Throughout the course of this study, I have examined data related to questions concerning shifts in the northwest economic structure, development strategies in three communities, their responses to environmental problems, and their interactions with emerging forms of environmental governance. I also compared First Nation and settler experiences within this milieu. I used the findings to explore a pair of key issues or research foci. The first is the way that the relationship between northwest communities and new forms of environmental governance has been re-shaped by changing structural conditions. These new forms of environmental governance include a growing environmental movement, the rising influence of Aboriginal rights and title, and changes in the structure of the state. The second focus is the way that environmental problems are perceived in northwest communities, and how these communities prioritize environmental protection in relation to other important objectives related to community well-being. I have framed this issue as a response to risk on both a local and global level, and placed it within the context of communities that are experiencing changes in the way that they use their resource base while attempting to revitalize their economies. In concluding this study, I revisit these two focus areas to identify key insights, and future implications of my work.

Environmental Governance in the New Northwest Economy

I have built on previous studies of northwest development by bringing the topic into the context of the new economy, while providing a central role to the new forms of environmental governance that are coming to bear upon the region. This thesis is a study of both continuity and change. One of the most prominent continuities for understanding the development of these communities is the continuing importance of the relationship between the periphery and core of Canadian society.

The history of the northwest has been characterized by relations of dependence upon external forces of capital and political power that have imposed their designs upon the resource base. The collapse of the industrial and economic model that characterized the forestry era left the northwest in precarious economic circumstances. The economic instability of the past era has been amplified with the collapse of the forestry economy

and the withdrawal of the state from its role in the delivery of services and direction of economic development. As the rest of society moved forward to pursue new opportunities, the northwest continued to fall behind, and witnessed declines in population while struggling to keep up with the expansion of information, technology, and service based industries throughout the rest of the province. Amid the realization of serious problems in the health of the resource base, the economic instability of the past gave way to an atmosphere of critical uncertainty, and the recovery of the local economy became a question of "if" and not "when".

The collapse of the forestry-based staples economy has not been total, and the region retains the basic infrastructure for the potential continuation of forestry as a key contributor to the local economy. With the appropriate market conditions, and the development of new forestry opportunities (perhaps in bioenergy, or a revived sawmill sector), forestry could return to play an important role in the region. Fisheries have also endured cyclical storms, but have managed to persevere through the past two decades, buoyed by the remnants of their commercial fleet and the rising value of sport fisheries. Neither fishing nor forestry appears poised for a new boom, and aspirations for economic revival in these sectors appears to revolve around a return to significance, rather than a return to prominence. These traditional economic drivers no longer carry the entire weight of the regional economy, and are now supplemented by a rising energy and mining industry, and by the growth of tourism and recreation.

This study has built on past works of Canadian political-economy by providing an analysis for a dynamic era of overlapping models. I have shown that the former structure of the forestry-staples model continues to exert a powerful influence on BC. However, the new northwest economy resembles neither a new staples-based system, nor a wholly subordinate backwater in a broader national post-staples economy in which resource-dependent regions face decidedly pessimistic economic futures. Instead, I have demonstrated that these communities retain strong attachments to their historical economic bases, and are pursing methods of altering their traditional forms of economic and subsistence production in a manner as to better deal with the challenges of the modern era. Simultaneous processes occurring in which northwest communities are seeking to protect the activities and industries that helped bring them into the modern

age, and to develop new opportunities that will better connect them with the opportunities emerging around them. At times, these two sets of impulses come into conflict with each other, as is the case with recreation and tourism versus forestry and energy industries. However, within the communities themselves, the development strategies are defined more by competition and a quest for balance, than conflict and the inevitable negotiation of surrender between past models of industry and another.

This interplay between the traditional staples industries of the northwest, emerging energy-based staples industries, and the growth of information and service industries is not merely a move towards diversification. Indeed the lack of diversification is identified in the staples literature as key failing in resource-town development, and diversification of the economy is identified as a key goal among local leaders. However, the broader interplay of the aforementioned dimensions of the new economy reflects more than simple economic adaptations and shifts in economic structure. It also reveals the continued passage of these communities into the modern age, and it reflects both the continuity of their past experiences at the peripheries of Canadian society and their position at the leading edge of societal efforts to reconcile productive needs with protection of the resources we rely upon.

In this sense, my study reveals a paradox. I have cited Hutton's (1994, 2007) characterization of the post-staples economy as a model of organization in which staples production no longer comprises the defining imperative in Canadian society. Yet at the same time, the activities occurring in resource dependent regions remain important issues in BC and throughout Canada, and pattern of resource development activities in the northwest and other outlying regions holds important implications for broader society. However, I argue that it is not merely the specific economic changes that accompany these development activities that is most important, and the specific mixture of occupations and environmental impacts that accompany new industry are not the most critical element of the changes that are occurring. Instead, the way in which these activities are governed, and the forms of power that come to bear on our use of natural resources comprise the most important issue for Canadian society and reveal the most important insights to be derived from my examination of northwest development activities. The transformations occurring in northwest BC reflect efforts of our society to

come to terms with new force of governance that are products of our transition into a new era of relationships between society and the environment, and between society and the many cultures that comprise the larger whole.

Within this new milieu, the uncertainty of the future in the northwest no longer hinges upon a peak or valley in one specific market or another. The key challenge for northwest communities in the new economy is that of remaining relevant, and building connections with the development occurring around them. The historic bonds between resource development activities and the enrichment of local economies no longer exert as powerful of an influence in the post-forestry era. The repeal of appurtenancy policies and the withdrawal of the state from mitigating the relationship between corporations and communities has left northwest communities more directly responsible for creating their own opportunities. The challenges inherent in the new era differ greatly from those faced in the past, and these conditions give new meaning to the role that environmentalism plays in the region. Rather than merely functioning as an outside objector to the forestry-based economy, environmentalism now plays both enabling and an inhibiting roles in economic development, and these roles vary with the strategies for growth that are adopted within each community. As an enabling force, environmentalism provides support and assistance to northwest communities in their efforts to assert their interests in regional resource development activities and to build linkages with the opportunities of the post-staples economy. In some cases, this involves assisting industry in coming to terms with environmental demands, in other cases it involves helping protect the diversification of uses of the environment from the advance of industries that threaten this diversification.

The spread of environmental values occurs as both an economic and social process. Within my analysis, economic changes have led social change. However, these processes are neither distinct nor separated in time. Instead, they unfold as simultaneous and mutually reinforcing developments within the broader process of globalization. The spread of the environmental movement from the city to the countryside has been enabled through shifts in the economic structure that altered northwest communities' ways of using their resource base, and by the decline of industrial forestry as the defining feature of the regional economy. In turn the environmental movement has functioned as a

conduit by which the post-staples values of metropolitan culture have been brought to bear upon the interests of northwest communities.

Yet, there is the possibility that the advance of the environmental movement in the northwest merely represents a passing moment of contemplation that is occurring in the lull between different eras of industry. The data I utilized for this study represent the experience of these communities at a specific point in time; in the space following the decline of forestry and fishing, but prior to the full realization of the rising energy and mining industries. Indeed, surveys conducted to gauge local support for the Enbridge Gateway Project may obtain a different outcome following the influx of several thousand workers for the construction of new hydroelectric, mining and energy, and port developments. Moreover, local leaders' assessments of which resources are most important for community well-being may shift as new industries assume increasingly important roles in the regional economy.

However, even if regional growth follows such a trajectory, the landscape of resource management stands indelibly altered from the past era. The development of natural resources no longer moves forward unchallenged, and the political and economic structures that hoisted the industrial oligopolies of the past have given way to an environment of social, legal, and political competition to assert the right to determine the shape of the landscape. Even if local opinions and investments shift towards new industries, the environmental movement stands as a formidable and globally connected force, and the legal precedents supporting Aboriginal rights and title remain standing before the advance of new development.

Each step that industry takes forward is accompanied by an acknowledgment of its impact on the environment, and its effects on local communities. The relationships between ENGOs and northwest communities will face new tests as the new wave of industrialism gathers momentum in the region. The degree to which existing relationships between ENGOs and northwest communities endure these tests will reveal the depth to which each group is invested in the interests of the other.

This work is significant in that it provides direct insight to the acting and directing minds of these communities, and examines their thoughts concerning both their current activities and their plans and expectations for the future. Within the act of

engaging with ENGOs, northwest communities validate the movement as participants in regional development, further distinguishing current conditions from the past in which environmentalism remained relegated to the margins of resource management processes. The assistance of the environmental movement is not cited as a key resource in dealing with the potential impacts of climate change. However, the foundations of cooperative relationships have been established that may enable more important and influential collaborations in the future. The very act of engaging with the environmental movement in the lull before the storm thus comprises an important form of capacity-building in that it provides local leaders with opportunities to familiarize themselves with the demands and nuances of these new relationships, while developing resources that may prove important when adaptation becomes a more pressing matter. Furthermore, these interactions draw local leaders into acting as agents in the development of their own communities, and assist them in developing their ability to participate in shaping their futures, and moving beyond their historic roles as the passive recipients of agreements made among industry, labour, and the state.

As Lax Kw'alaams moves beyond the confines of their own community and territories, and extends their efforts to engage with new forces of development on a global level, they play an important leadership role for both First Nations and settler communities. Lax Kw'alaams deploys themselves simultaneously as a community, a regional body, a distinct cultural group, a self-governing First Nation, and a corporate enterprise. The multi-faceted composition of Lax Kw'alaams' development strategy provides them with means of asserting their interests in regional resource development in ways that settler communities cannot. However, as leaders and innovators, Lax Kw'alaams provides neighbouring settler communities with important opportunities to develop their own capacities for engaging with First Nations as a growing force in the governance of land and resources. Lax Kw'alaams' has been a pioneer through their direct negotiations with industry, beginning with their negotiations with Dome Petroleum in 1981 (examined in *Chapter Six*), and continuing with their partnerships with local communities, such as their agreement with the City of Prince Rupert and the neighbouring Metlakatla First Nation in the development of the Watson Island industrial site. Through these activities, and through the further development of their corporate

bodies, Lax Kw'alaams has established a new mode of practice that other First Nations can follow, and provided examples of agreements that settler communities can refer to as they enter into new forms of relationships with First Nations. In this respect, the new form of governance embodied by Aboriginal rights and title is borne from practice, and is emerging in greater clarity with each new agreement that is reached.

The northwest comprises a hotspot of activity with the intersection of numerous resource development proposals and the overlapping territorial claims of many different First Nations affecting the landscape, and with ENGOs taking increasing interest in the events occurring in the region. The negotiation of treaties and the determination of Aboriginal title may occur in the courtrooms and centres of government in Ottawa and Victoria. However, in absence of new treaty settlements and without total legal clarity regarding the extent of Aboriginal title, relationships between First Nations and settler society continue to evolve. While the implications of the recent Tsilhqot'in decisions are debated and the state and First Nations continue to negotiate on treaty matters, the relationships and interactions between First Nations and local actors takes on a greater degree of importance. Northwest communities occupy a sensitive and dynamic position at the interface between First Nations society and the rest of Canada and the world. To be sure, important interactions between First Nations and settler populations also occur in the cities of the province. However, in the northwest, these interactions occur where the direct utilization of natural resources comprises a central function in society, and where the exercise of Aboriginal rights as a form of environmental governance becomes manifest in action and affect.

On this front there are opportunities to forge new relationships without waiting on the actions of the metropolitan core. While local governments and community leaders remain distant from the political and legal processes that ostensibly function to reach the finalities of treaties, they engage daily in activities that give shape to the governance of the environment. The interactions that occur among First Nations, settler society, and agents of global capital shape the perceptions each group holds of the others, and the land and the water comprise the venues in which the actions and interests of each group are ultimately made manifest.

The emphasis that settler communities place upon their relationships with the metropolitan core in managing environmental problems poses an important question in light of the emerging patterns of development. Have resource-dependent communities come to terms with the post-forestry era, and taken effective steps to seize the tools necessary for succeeding amid the new economic and political circumstances? As the new resource economy takes shape in the northwest, further research will be warranted in order to better understand the way that local leaders are able to parlay their interactions with global capital and new forms of environmental governance into positive outcomes for their communities. This will include monitoring both the social and environmental impacts of new industrial growth, and examining the specific actions that local leaders take to either enable or support new resource-development activities. Studies of these exchanges will provide insight to the ability of local interests to persist in the face of global influences, and the capacity of local leaders to successfully engage with the new forms of environmental governance that are coming to bear on their resource base.

The activities unfolding in the northwest also have important implications for the environmental movement, as it becomes drawn more deeply into a course of development from which it has been historically excluded. In the space created by the retreat of the neoliberal state from the direct management of natural resources and economic development, there are indeed opportunities for ENGOs to form new relationships with northwest communities. As industrial development gains momentum in the region, and as greater understanding is gained regarding the implications of global climate change for the region, the fresh bonds between ENGOs and northwest communities will be tested. ENGOs will face choices in regard to the extent they are willing to support economic growth. As suggested earlier, shifting demographics induced by changes in the occupational structure may alter local perceptions of what balance of economic development and environmental protection best serves the interests of the community. The ability of ENGOs to persist as active and welcome participants in the management of the local resource base will provide a gauge of their success in building durable bridges with resource-dependent communities. The way in which these relationships play out will also provide an indication of the degree to which northwest

communities are willing to engage with new social movements in order to cope with the uncertainties of the late modern age. The findings in this study suggest that dependency on the metropolitan core continues to shape their response to environmental problems. However, this conclusion will command further evaluation if the economic and environmental stakes grow larger, thus altering the nature of the risks faced in these communities.

The Context of Change: First Nation and Settler Perspectives

The current context of development is clearly characterized by a much different set of environmental conditions than in the past, and the current difficulties in forestry and fishing providing reminders of society's previous failures to protect the environment from degradation. However, the risks associated with environmental change are only one of many uncertainties that northwest communities face as they move into the future. This study has examined the way in which northwest communities are responding to environmental change within the context of confronting modernity and globalization. The way in which northwest communities respond to environmental problems serves as a wider proxy to their confrontation with the uncertainties of the late modern age.

The development paths of northwest communities have been indelibly altered by the decline of their key economic drivers, but the process of transformation in the post-forestry era goes beyond mere occupational statistics. Along with their traditional industrial identities, northwest communities have bid goodbye to a frame of reference for understanding their relationships with the rest of the world. This loss can be unsettling, but it can also be liberating, as both settler and First Nations face the opportunity of reinventing themselves and taking on new roles in shaping their own futures. An important dimension of their new identities includes the development of new relationships with the political and economic structures that govern control over the lands and resource base that surrounds them. These relationships play a key role in determining their ability to shape their own futures and their capacity for mitigating the risks inherent in environmental change.

To be sure, both Lax Kw'alaams and the settler communities in this study face a daunting threat in climate change. All three communities face significant economic

problems if the drive towards development becomes stymied by major impacts on their resource base or by environmental imperatives that force society's hand towards a drastic reduction in the extraction of natural resources. For Lax Kw'alaams the challenges may be most acute, due to their isolated location on the edge of the Pacific Ocean, and their direct subsistence upon natural resources that are sensitive to changes in environmental conditions. In the most extreme manifestations of climate change, it may well turn out that the forces of nature overwhelm even Lax Kw'alaams' resiliency and will to persevere in this demanding environment. However, over the past decade, Lax Kw'alaams has found the means to reverse their fortunes while other communities have struggled to cope with the changes sweeping through the region. The specific impacts that climate change will bring to the northwest region remain unclear, and the exact forms of industry that will come to prevail over the landscape have not yet been decided. As they engage with these uncertainties, my study communities share many mutual concerns, but encounter them from distinctly different positions in their respective paths of development.

Politically and economically, Lax Kw'alaams encounters environmental threats at a moment in time when their power is in a state of ascent. In contrast, settler communities confront their vulnerabilities from a weakened economic position, and in the wake of a retreating state. Environmental uncertainties undermine the confidence of settler communities, strike at the core of their economies, and threaten their attachments to the societal core as outposts of resource production. Lax Kw'alaams, on the other hand, does not occupy this space conditionally, or as an extension of a broader society that they rely upon for leadership in altering the course of their social development. These contrasting circumstances shape the respective development trajectories for these communities as they leave the forestry era behind, and venture forth into the new economy to face the next wave of globalization.

Rather than destabilizing traditional identities, globalization has played a key role in creating opportunities for Lax Kw'alaams to re-affirm their bonds with their traditional institutions. As Lax Kw'alaams takes on their new role in forestry exports, and enters the arenas of regional resource decision-making and global timber markets, they do so proudly acting on their own accord and the guidance of their own leaders,

instead of under the guidance of the state. This re-empowerment of their authority over their territories is by no means complete, as even the settlement of treaty represents a potential compromise upon their historic scope of influence. Moreover, their political systems and structures of authority have been significantly impacted by the imposition of western law, the continued administration of their Band Council under the *Indian Act*. However, through the assertion of their rights and title as a means of enabling new economic opportunities, and through their engagement with new global trading partners, Lax Kw'alaams is nonetheless taking on a new degree of autonomy in their relationships with the rest of the world.

Their experience provides an alternative view of the globalization experience outlined in Beck's *Risk Society* thesis. Lax Kw'alaams' entry into international relationships, and their participation in new processes of social and economic exchange, provides a conduit through which to reclaim their identities as an independent people, and as traders in natural resources. Rather than functioning as an unsettling and destructive influence on traditional lives, globalization provides Lax Kw'alaams with a new platform upon which to rebuild and re-affirm their traditions. Asserting their rights as a sovereign First Nation and engaging with international trading partners empowers Lax Kw'alaams to take control of their own destinies, rather than remain subject to the managerial imperatives of western scientific and political institutions.

The re-empowerment of traditional authority for First Nations departs also from Giddens' (1999) depiction of fundamentalism, in which religious and cultural groups respond defensively to the incursion of new social movements by reaffirming their commitment to traditional ideology. Lax Kw'alaams is not retreating from new social influences, but instead stepping forward to greet them on their own terms. The experience of environmental risk also stimulates a re-affirmation of traditional values in Lax Kw'alaams. When confronted with the threat of climate change, Lax Kw'alaams turns their attention to their own historic capacity for enduring change as the primary means to adapt, rather than looking outside their community for more potent forms of environmental protection.

The transition into the late modern age is by no means complete for all northwest communities, and further changes are likely as the new economy takes shape and they

solidify their positions within it. In this transition there remain social and political dimensions of uncertainty as new influences enter the community by way of their engagement with social movements and forces of international capital. While the resiliency of First Nations culture was tested harshly by colonization, they face a different test in their latest voyage through globalization. The fundamental question posed by First Nations' interaction with the forces of international global capital and industrial development is which group will affect the other more deeply?

The way in which northwest communities interact with new forms of environmental governance, and the way in which they respond to environmental problems comprise an important issue for wider society. The Enbridge Gateway Project is quickly becoming the Clayoquot Sound of the post-forestry era, and much of Canada and the world are watching to see how events play out in this once forgotten corner of BC. Assuming that development proceeds according to the proposals currently in place, the activities occurring in the northwest will have widespread impacts on provincial and national scales of economy. As with Clayoquot, social movements also stand to be affected. Both First Nations and environmentalists are already engaged in battles that will ultimately produce winners and losers, and the outcomes of their efforts to influence resource development activities will inform the future actions of fellow Aboriginal people and environmental activists. The role that environmentalism and Aboriginal rights play in assisting northwest communities in managing the uncertainties they face will send a potentially powerful message to the rest of society regarding the capacity of these movements to succeed where traditional institutions of western political and scientific control have failed in the past.

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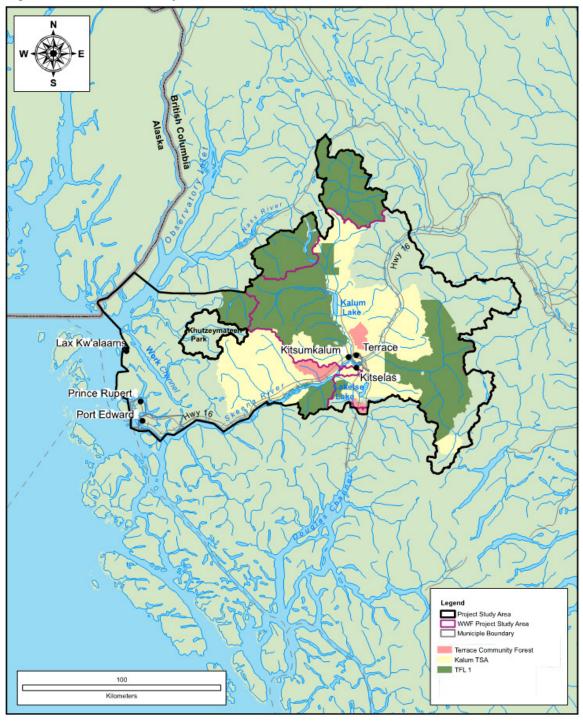
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Appendix 1: CCAPNSC Study Area

Figure 18: CCAPNSC Study Area



(Brinkman et al., 2012:4)

Appendix 2: Respondent Characteristics

Table 33: Respondent Characteristics

Community		Terrace	Prince Rupert	Lax Kw"Alaams
Total		50	50	50
Men		39	36	32
Women		11	14	18
Age	Under 25	1	1	0
	25-40	7	8	6
	41-55	23	19	20
	56-70	14	18	17
	Over 70	5	4	7
Length of time	New to community	0	1	1
living in	Short term resident	3	6	0
community	Medium term resident	6	0	1
	Long term resident	7	6	0
	Very long term resident	34	37	48
General	Private sector	19	15	17
employment	Public Sector	23	23	20
classification	NGO	3	3	0
	Unemployed	0	0	1
	Retired	5	9	12
Civic	None	8	8	16
participation	Low	9	3	7
level	Medium	22	24	19
	High	11	15	8
Level of	Community Leader	2	2	1
responsibility	Town or Band Councillor	6	4	6
	High level manager	2	3	1
	Mid-level manager	11	12	3
	Small operation manager	7	6	0
	Administrator	3	3	7
	Sole proprietor	6	5	2
	Resource worker	5	2	13
	Other worker	2	4	3
	Unemployed	0	0	1
	Retired	6	9	1
	Elder	0	0	12

Appendix 3: Interview Questions

- 1. In what year were you born?
- 2. Where were you born?
- 3. How long have you lived here?
- 4. Have you ever lived elsewhere for an extended period of time (e.g. > 1 year)?
- 5. What is your current job or position?
- 6. Do you have any training or experience that you rely upon or that you would use in dealing with environmental issues?
- 7. Other than your formal employment, are you involved in any clubs, organizations, churches, sports groups, etc?
- 8. Do you have, or have you in the past, any sort of administrative or leadership role in those organizations?
- 9. What is the average number of hours in a week that you now spend on these (non-work / informal) activities?
- 10. Do you participate in any outdoor activities in the local area?
- 11. Do you fish or hunt
- 12. Do you or your family harvest any non-timber forest resources such as berries, mushrooms, or wild greens?
- 13. Do you or your household derive any income or provide food for your household through any of these harvesting activities?
- 14. What percentage of your annual income (or household food) comes from local harvesting, fishing, or hunting?

- 15. What would you say are the 3 main issues or challenges facing your community and its future?
- 16. Are there any key environmental and natural resource issues facing your community?
- 17. Are there any key forestry issues facing your community?
- 18. Do you think that any of these issues are connected in any way to global warming or climate change?
- 19. Where do you get most of your information on the environment and climate change from right now?
- 20. Is the local newspaper a good source for information on the environment and climate change?
- 21. How trustworthy do you think each of these sources is when talking about climate change and global warming?
- 22. There is a lot of scientific information out there that claims fundamental climate change is now taking place. How much do you think you can trust the scientific information about the environment and climate change that is currently available?
- 23. Would you say that overall, the information about environmental change that you now have from the sources that you mentioned is specific enough to be applicable to your community?
- 24. Do you think your community can plan for climate change based on the information it has?
- 25. What sorts of information on the environment or climate change would you like to have that you don't have now?
- 26. Do you think that computer models are useful tools for understanding climate change and environmental issues?

- 27. What would do you think should be included in such models?
- 28. Are there any divisions in the community regarding the way that these issues should be managed?
- 29. Do these divisions ever make it difficult for you or your organization to respond to, or take action on the issues we are talking about?
- 30. How do these divisions affect your own decision-making?
- 31. Does your place of work deal directly or indirectly with any of the issues facing the community that you mentioned earlier
- 32. Is your job or your place of work in any way affected by these issues?
- 33. Can you give me some examples? Seek to determine exactly what their organization is doing in relation to the issues or how they are affected.
- 34. In your own work activities, is it part of your responsibility to work on some of the environment issues that you identified earlier as important to your community?
- 35. What are you personally doing with regard to these environmental issues you have identified?
- 36. What sorts of activities do you typically do when you are deal with these environmental issue?
- 37. How do these issues affect your work?
- 38. In these activities (or dealing with these issues), do you tend to work on these issues by yourself or do you work with other people?
- 39. Are there people, departments, or outside organizations that you consult for knowledge regarding these environmental issues?

- 40. These next few questions focus more on the organization or dept. you work in as a whole. In particular I'm interested in how well you think it operates or responds to the specific resource and environment issues we've been discussing.
- 41. Do you see your organization or department as strong or weak in its ability to deal with issues involved with environmental change?
- 42. Are there any rules or procedures that get in the way of what you're doing, or make it harder for you to carry out your job or respond to these issues as they come along? Can you give me an example?
- 43. What can you tell me about the working relations between your dept. or organization and other dept. or organizations?
- 44. Are there people in other organizations in Prince Rupert working on these same problems or issues?
- 45. Is it generally easy or hard for people in your organization to team up with, or work with people from other organizations on any of the resource and environmental issues you mentioned at the beginning?
- 46. Other groups:
- 47. Other communities:
- 48. Other levels of government:
- 49. Do you deal with any of these issues facing your community outside of where you work either in one of the organizations in your community or on your own?
- 50. What sorts of things do you do?
- 51. Does the organization(s) you are involved with work on things together with other organizations?

- 52. Are there groups working on these environmental issues in your community that you would rather not be involved with?
- 53. Do you work on resource or environmental issues, with people or organizations (businesses, agencies etc.) from outside of your community?
- 54. Are there any other organizations or people that are involved with these issues as they relate to your community that you haven't mentioned that we should talk to about in regard to what is being done?
- 55. What exactly is being done about these issues?
- 56. Do you think that the future of your community is most likely to be determined by what goes on within the community and by the actions of local leaders, OR do you think the future of your community will be determined more by external factors that may be largely outside local control?
- 57. Looking at all of the things we have talked about today, and the values and resources you have considered, what do you think the community leaders in your community should do to provide the best future for this community?
- 58. What do you think of the ability of your community to successfully deal with the effects of global warming and climate change, if these are occurring?
- 59. In closing, I would like to ask you one final question. Considering all of the things we have talked about, could you give me your thoughts about the future of your community by completing the phrase "If only...." Or "What if....".

Appendix 4: Northwest Industrial Projects

Table 34: List of Northwest Industrial Projects

Under Construction: \$5,583,000,000	Projected Cost	Estimated Completion Date
Forrest Kerr Hydroelectric	\$725,000,000	2014
Volcano Creek Hydroelectric	\$40,000,000	2015
McLymont Creek Hydroelectric	\$217,000,000	2015
BC Hydro Northwest Transmission Line	\$561,000,000	2014
Port of Prince Rupert Ridley Island Road/Rail and Utility Corridor	\$90,000,000	2014
Regional Power Long Lake Hydroelectric Project	\$90,000,000	2013
Rio Tinto Alcan Modernization Project	\$3,800,000,000	2014
Veresen Dasque Hydroelectric Cluster	\$60,000,000	2013
Under Preliminary Construction: \$1,428,000,000	_	
Apache Canada/Chevron, Kitimat LNG and Pacific Trail Terminal	TBD	TBD
Apache Canada/Chevron, Pacific Trail Pipeline	\$1,000,000,000	TBD
Imperial Metals Red Chris Mine	\$228,000,000	2014
Ridley Terminals Capacity Realization Project	\$200,000,000	2014
Proposed - In Engineering or Permitting: \$57,119,300,000		
Avanti Kitsault Molybdenum Mine	\$794,000,000	2015
BG Group LNG Facility	TBD	2020
BG Group Spectra Energy Pipeline	\$8,000,000,000	2020
Canpotex Potash Export Terminal	\$400,000,000	2017
Capstone Kutcho Mine	\$190,000,000	2016
Copper Fox Schaft Creek Project	\$3,700,000,000	TBD
Douglas Channel Energy Partnership	TBD	TBD
Enbridge Northern Gateway Pipeline	\$5,290,000,000	2017
Enbridge Northern Gateway Terminal	\$1,281,000,000	2017
Fortune Minerals Arctos Anthracite Project	\$768,000,000	2016
Hard Creek Nickel Turnagain Project	\$1,300,000,000	2016
Petronas Pacific Northwest LNG Project	\$10,000,000,000	TBD
Petronas Pacific Northwest Pipeline	\$5,000,000,000	TBD
Port of Prince Rupert, Fairview Terminal Development - Phase 2	\$650,000,000	2014
Pretium Brucejack Mining Project	\$436,300,000	2015
Seabridge Gold KSM Project	\$5,310,000,000	TBD
Shell Canada Coastal GasLink Pipeline	\$4,000,000,000	TBD
Shell Canada LNG Canada Project	\$10,000,000,000	TBD
Source: KTIDS, 2013		

Appendix 5: Correlation Tables

Table 35: Correlation Tables

Spearman's rho for Environmental Protection an	d other Commun	ity Level Resources	1
	Terrace	Prince Rupert	Lax Kw'alaams
Natural Resource Trade and Export	-571**	011	.055
Forest Industry	225	049	.078
Local Government and City Administration	.118	010	437**
Small Business Development	348*	184	.143
Outdoor Recreation	.203	.077	.148
Tourism	.044	109	066
Local Infrastructure	042	143	022
Access to Education and Skills Training	.004	.217	008
Heritage and Local Culture	.058	.117	006
**p<.01, *p<.05			

Appendix 6: Condition of Environmental Resources

Figure 19: Distribution of Values for Terrace: Environmental Resources

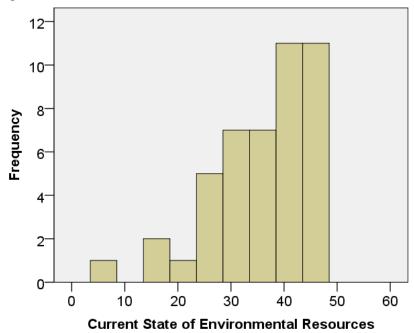
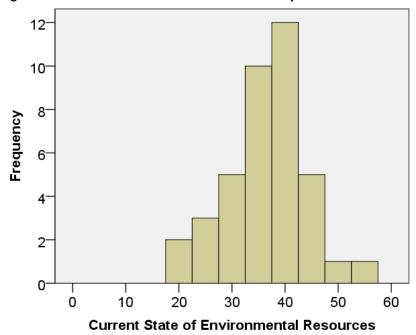
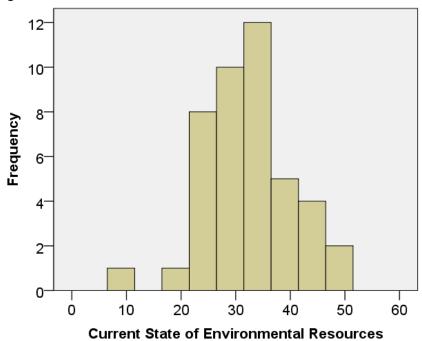


Figure 20: Distribution of Values for Prince Rupert: Environmental Resources







Appendix 7: Importance of Climate Change

Figure 22: Distribution of Values for Terrace: Climate Change

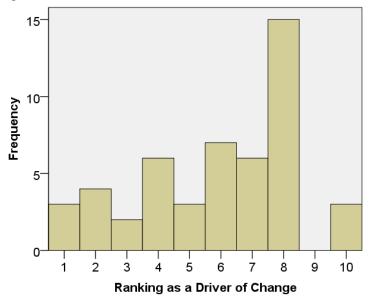
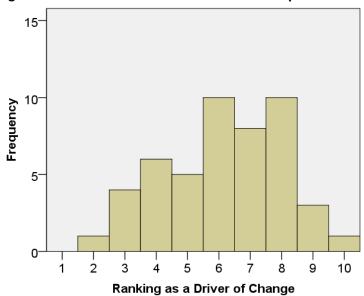
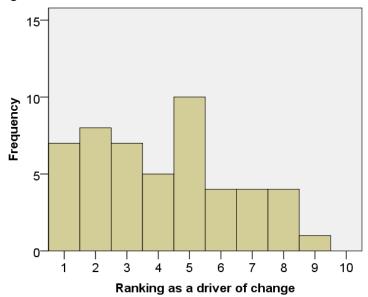


Figure 23: Distribution of Values for Prince Rupert: Climate Change







Appendix 8: Scatterplots for Correlation Data

Figure 25: Terrace: Environmental Protection and Environmental Resources

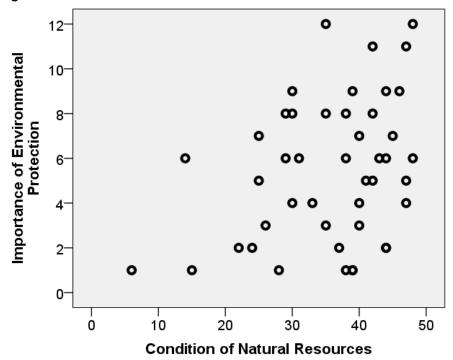


Figure 26: Prince Rupert: Environmental Protection and Environmental Resources

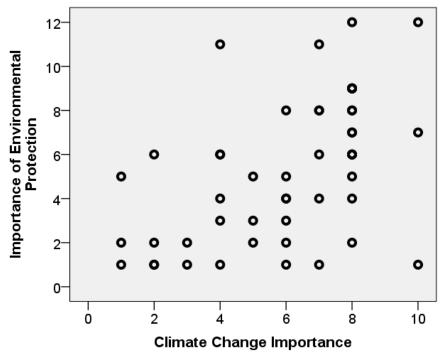


Figure 27: Terrace: Environmental Protection and Climate Change

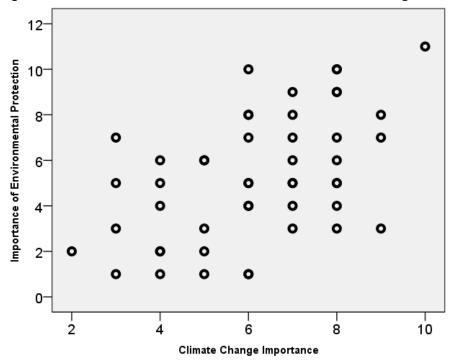


Figure 28: Prince Rupert: Environmental Protection and Climate Change

