Petro-power and progressive permutations: Conservation offsets, oil sands, and the politics of neoliberal conservation. Ryan Hackett A dissertation submitted to the Faculty of Graduate Studies in partial fulfillment of the requirements of the degree of Doctor of Philosophy Graduate program in Geography York University Toronto, Ontario December 2015

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Abstract

Recent years have witnessed a growing international discourse and related rise of conservation paradigms that suggest the only way to make conservation work is to fully incorporate it into economic circuits. The development of a suite of market friendly conservation techniques have been at the forefront of this 'neoliberal turn' in conservation practice, leading to the need for a deeper theorization and understanding of the role that non-extractive uses of nature are playing in relation to contemporary capitalism, and the political implications of these new approaches to conservation. The dissertation explores this global phenomenon through a case study of terrestrial conservation offsets in response to the ecological consequences of oil sands development in Alberta, Canada. The chapters that follow query the social, political and economic processes leading to the development of this particular conservation tool, and the political implications of project implementation in the province, particularly in regard to shifting accesses to land and resources. The findings complicate a number of dominant narratives to be found in the existing literature on market-based conservation practices, particularly in regard to the privatization of governance and their ability to facilitate recursive rounds of enclosure and accumulation. The case study draws attention to a series of contradictions and hybridizations that suggest that market-oriented conservation tools are associated with a more fractured and partial political project than often presented in the critical literature. The implications of the study suggest a need to shift focus from concerns about the use of market-friendly instruments in and of themselves, to the broader social and political context in which any given market is embedded. Doing so may serve to strip the neoliberal project of its assumed power, and open opportunities for novel and unanticipated re-imaginings of human-environment relations.

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List of Acronyms

ACA - Alberta Conservation Association

BHCI - Boreal Habitat conservation Initiative

BBOP - Business and Biodiversity Offsets Programme

BCOAG - Boreal Conservation Offsets Advisory Group

CAPP - Canadian Association of Oil Producers

CSR - Corporate Social Responsibility

DFO - Department of Fisheries and Oceans

IUCN - International Union for the Conservation of Nature

LRRCN - Little Red River Cree Nation

PES - Payment for Ecosystem Services

SEACOP - Southeast Alberta Conservation Offset Pilot

SRD - Sustainable Resource Development

TNC - The Nature conservancy

WCED – World Commission on Environment and Development

1 Conservation and Capitalism: Natural allies?

"There is a crack in everything. That's how the light gets in"

- Leonard Cohen, Anthem 1992

1.1 Introduction

The historical relationship between capitalism and the North American conservation movement has been complex and contradictory. Since their earliest iterations, practices associated with the conservation of nature have acted collaboratively with powerful interests to separate people from resources, assisted in the formation and conditioning of labouring classes (Perelman 2007; Neumann 1998), aided in colonial projects of control and assimilation (Sandlos 2007, 2008), and served as a source of leisurely consumption for privileged societal actors (Loo 2001; Neumann 1996). However, the movement has just as frequently been constructed as a counterpoint to the excesses of capitalism and its inherently destructive consequences for both society and nature. From the sublime romanticism of Muir to the rise of a popular environmental movement in the mid-twentieth century, the conservation movement has often been characterized as a prime example of the Polanyian double movement -- a protective response to the alienation and destruction wrought by capitalist expansion. In fact, popular understandings of the conservation movement are more likely to recognize this later characterization than the former. Scholars in geography and cognate social sciences have noted a marked shift in these ideological tensions over the past several decades and the emergence of what some have described as a neoliberal turn in conservation practice, whereby the expansion of capitalist logics and market principles no longer appear a foe but rather a friend of conservation (Igoe & Brockington, 2007). While collaborative and supportive

relationships between conservation practice and capitalist political projects is nothing new, the explicit and overt reconciliation of tensions between economic growth and conservation practice certainly represents an intensification of these historical relationships. In light of these apparent shifts an emerging body of geographic scholarship has been dedicated to exploring nature conservation as a thoroughly capitalist project (see inter alia Buscher et al. 2014; Igoe et al. 2010; Sullivan 2013b; Buscher & Fletcher 2014; Kelly 2011).

In a rather peculiar twist, an exponential growth in the global establishment of protected areas since the late 1970s (UNEP-WCMC 2009) has occurred during the same historical period that saw the collapse of Keynesian economics and the ascendency of neoliberal economic philosophy on a global scale. Some might suggest, again in a Polanyian fashion, that such an unanticipated co-occurrence is the result of a need for social intervention to ameliorate the perverse and destructive consequences of neoliberal restructuring (Peck & Tickell 2002), or that the conservation movement has found it necessary to compromise its more radical elements in order to operate within a realm of new political and economic constraints (Chapin, 2004). However, as Brockington et al. (2008) suggest, both of these explanations assume an underlying distinction between the values and practices of conservation and those of neoliberal capitalism. A series of recent reports on the annual meetings of the world's largest conservation groups suggests otherwise. Scholarly reporting from meetings of the Society for Biological Conservation (Buscher 2008), the World Conservation Congress (Flecther 2014a), and Ken MacDonald's (2014) "collaborative event ethnography" on the Convention of Biological Diversity COP meetings argue that neoliberal ideology has permeated the very foundations of the mainstream conservation movement. Saving nature is no longer antithetical to economic growth and development, but rather has become a business itself. Economic rationality is seen as the animator of environmental protection and environmental groups are increasingly thinking, organizing and operating like corporations.

Market-oriented approaches to conservation have been a central component of this apparent neoliberal turn in conservation practice. Mechanisms such as conservation easements and land trusts, payment for ecosystem services, biodiversity offsets, and tradable quotas in biological resources have become increasingly popular mechanisms for conserving the natural world. These new approaches are often juxtaposed to the failures of earlier state-centered command and control and demonstrate a firm attachment to the belief that in order to be successful, conservation activities must be brought within the circuits of the economy. Market principles, rational economic actors, and financial incentives are seen as the key to making conservation profitable, and thus possible.

As suggested by Igoe et al. (2010) this particular shift toward neoliberal conservation serves as a unique opportunity to explore the relationships and processes by which capitalism manages to reproduce itself in the face of what might, at first glance, appear to be the insurmountable obstacles posed by the ecological and social consequences of its own functioning. In the face of environmental challenges that an earlier generation of eco-Marxist scholarship had suggested would bring the ultimate crisis leading to an emancipatory moment (Foster 2000; Kovel 2002; O'Connor 1988, 1998), capital appears to have turned road blocks into opportunities for new growth. Such a circumstance provides an opportunity to explore relatively new and unique productions of nature and how these produced natures in turn act to shape social relations. Specifically, such a predicament has led to demands for a deeper theorization and understanding of the recent transformations by which non-extractive uses of nature have become an integral part of the political-economy of contemporary forms of capitalism (Buscher 2014; Buscher et al. 2014).

My dissertation explores a particular instance of this apparent shift in the Canadian context through a study of the development and implementation of conservation offsets in Alberta, Canada. The project queries the social, economic, and political process giving rise to the

adoption and mainstreaming of this apparent market-oriented conservation mechanism and the material implications¹ of project implementation. This project contributes to a nascent body of scholarship seeking to understand contemporary transformations of the role of conserved nature in relation to capitalist growth and expansion. The dissertation seeks to answer the following research questions:

- Why and how have conservation offsets become a leading solution to the environmental consequences of oil sands development and what are the material implications of their implementation?
 - What are the material, institutional and ideological dynamics of Alberta's conservation offset programs and what kinds of benefits accrue to whom?
 - o What has been the historical development and uptake of conservation offsets in the province, and what has been the reasoning of different stakeholders in their support or dissent for such ideas?

In answering the above questions, the dissertation explores one particular aspect of this larger global phenomenon and queries the political-economic dynamics associated with a shift toward the use of market-based conservation mechanisms. The following chapters explore these political aspects through an investigation of the institutional and governance arrangements associated with conservation offsetting in Alberta, exploration of the reconfiguration of property and access to resources that accompany such conservation measures, and analysis of the

income and/or capital; etc. Stability of, or changes to, these 'material' or economic relationships are understood as inherently political.

¹ The term 'material implications' as it is used in this dissertation encompasses a broad range of changes in human-environment relationships resulting from both extractive development and conservation activities. 'Material implications' in this context include, but are not limited to, changes in property ownership; access to natural resources, cultural sites, livelihood practices and/or employment; access to

types of political-economic projects that market-based conservation might be incorporated into. As such, the overarching purpose of the project is to investigate who benefits (politically and economically) from these new forms of conservation activities, and under what conditions. Doing so involves asking questions about the extent to which institutions, property relations, and existing power dynamics predetermine the outcomes of such projects and the extent to which benefits are the result of geographically specific and contingent conditions. The remainder of this chapter provides an overview of the project rationale, and introduces the literature and theoretical frames that inform the dissertation.

1.2 "Corporations gone wild"

"Corporations gone wild", so reads the tag line of an article in the Alberta Conservation
Association's (ACA) spring 2008 quarterly edition, discussing the accomplishments of its
corporate partners program and the role being played by conservation offsets in response to the
environmental consequences of oil sands development in the province. According to the article
the Boreal Habitat Conservation Initiative (BCHI), and associated corporate partners program,
"has the distinction of being a first for Alberta in 'terrestrial conservation offsets' " (Straub 2008
p.14). Indeed the BCHI and associated programs are a novel approach that bring together
major oil and gas industry actors and conservation NGOs in new and productive ways. The
general concept is that is big industry can mitigate or 'offset' disturbances of terrestrial
ecosystems caused by extractive resource development by conserving a roughly equivalent
measure of similar habitat elsewhere. While there is a history of the use of such mitigation or
offset tools globally (Masden et al. 2010), the concept remains relatively underexplored in the
Canadian context, and the Alberta Conservation Associations BCHI program is undoubtedly a
leader in the development and implementation of a system to mitigate for terrestrial impacts of
extractive development in Canada. Since its inception as a partnership between the Alberta

Conservation Association and Canadian oil firm Suncor in 2003, the BCHI and associated corporate partners program which now include firms like Shell and Total, have secured approximately 10,000 acres of land to serve as mitigation offsets for disturbances caused by oil sands development (Alberta Parks 2013). The program has also served as an early model for the use of conservation (or biodiversity) offsets more broadly, with a suite of recent reports and conferences calling for greater exploration of the tool in the Canadian context (BCOAG 2009; Dyer et al. 2008; UOttawa 2014; Good & Haddock 2014).

The following dissertation queries the institutional and governance structures associated with offsets, and the political-economic dynamics behind the growing legitimacy of this model among a diverse range of provincial actors including the provincial government, major conservation NGOs, industry, and some First Nations. The dissertation also explores the material implications of project implementation as a means of theorizing the political dynamics of this new collaboration between conservation actors and the world's largest extractive resource project, and in doing so raises important questions about the assumed political allegiances of ostensibly neoliberal conservation practices.

1.3 Conservation offsets and the neoliberalization of conservation

The past several decades have seen significant scholarly attention from the social sciences to a range of societal, environmental and political processes associated with neoliberalism. While definitions are hotly debated, and distinctions have been called for between theory and practice, a working definition of neoliberalism often includes a strong belief in private property rights and the contention that the operation of free markets and trade -- guided by rational economic actors -- is the most effective and efficient way to produce and allocate a variety of social and environmental goods and services. In tandem with this strong belief in the efficacy of market provisions, is a belief in lean state approaches to economic systems. State interventions into

both the economy and social and environmental conditions are to be limited, with the exception of providing institutional support to the functioning of free markets, for example, through the promotion and protection of rights to private property. As such neoliberal governance approaches are often seen as standing in stark contrast to earlier Keynesian welfare state politics (a well-developed overview can be found in Harvey 2005).

The rise of this new political-economic paradigm over the last 30 plus years has been the subject of much attention among human-environment geographers and political ecologists, who have been concerned with understanding the implications that such an approach has for the biophysical world, including human societies. A theoretically and empirically diverse body of scholarship has sought to understand the manifestations of these changes through the lens of water politics (Swygedouw 2005, Bakker 2007, Prudham 2004), renewable resource management (McCarthy 2005, Mansfield 2007a,b), or agriculture (Dibden et al. 2009, Busch 2010). Others have focused their attention on the implications for nature conservation and the emergence of a suite of market-oriented tools from carbon credits to payment for ecosystem services, which are conceptualized as aligned with broader ideologies and practices of neoliberalism (Bond 2012; Breymer Farris & Bassett 2012; Lyons & Westoby 2014). Indeed many have suggested that neoliberalism is, at its core, essentially an environmental project (McCarthy & Prudham 2004).

In 2008 Noel Castree published a series of papers in *Environment and Planning A* with a call for the development of a more overarching understanding of nature's neoliberalization. Specifically, Castree raises concern with what he sees as "a collection of substantively disparate, theoretically informed case studies unified only in name [by virtue of their common focus on neoliberal policies]" (2008b p.153). Given this concern, he identifies the need to locate "signals in the noise" of this disparate literature as a means of producing a more cohesive and overarching understanding of the causes and effects of nature's neoliberalization, and thus, the

ability to provide normative evaluation of the phenomena. In a related working paper (2007) Castree seeks to fill this void himself, providing a "Marxian-Polaniyian" framework for understanding the disparate literature on neoliberal environments. While concerned with the development of meta-theory for understanding these phenomena, Castree's model works to avoid totalizing or universal accounts, wisely recognizing that we live in a more-than-capitalist (or neoliberal) world, and accounting for "the friction between capitalism and what we might call its 'constitutive outsides'" (p. 28). Notwithstanding this recognition of the limits of meta-theory, Castree outlines seven key practices that are said to characterize neoliberal environments, namely privatization, marketization, deregulation, reregulation, the "use of market proxies in the residual state sector", the "encouragement of flanking mechanisms in civil society", and the creation of self-sufficient and economically rational subjects (p.15-16). The literature on nature's neoliberalization has expanded greatly since the publication of these articles, and studies of the ways in which conservation activities are engaging with neoliberal capitalism have emerged as a strong sub set of this larger literature (See inter alia Dempsey and Robertson 2012; Igoe et al. 2010; Buscher et al. 2014; Cavanaugh & Benjaminsen 2014). While the literature on 'neoliberal conservation' still tends to be highly informed by a series of empirical case studies, much has been done to develop some common frameworks for understanding these seemingly disconnected cases. Specifically, I suggest that in the intervening years a common series of theoretical frames and dominant explanations have come to the fore in the literature on neoliberal conservation, many of which are structured by one or more of the key processes laid out in Castree's typology.

While some scholars have drawn on Foucault to explore the discursive aspects of these new neoliberal conservation tools and the formation of neoliberal environmental subjectivities (Sullivan 2010; Youdelis 2013; Fletcher 2012), and notwithstanding a small group of scholars drawing out the complexities and heterogeneity of neoliberal conservation (Dressler & Roth

2011; Mansfield 2007a; Milne & Adams 2012; Higgins et al. 2012; Fletcher & Breitling 2012), much of the literature remains highly informed by Marxian frameworks, particularly around Harvey's (2003) concept of 'accumulation by dispossession' (Kelly 2011; Corson & MacDonald 2012; Neves & Igoe 2012). A series of key themes and narratives have resulted. First, neoliberal practices are regularly conceptualized as a coherent class-based political project, producing a relatively consistent series of outcomes that channel economic and political benefits to powerful societal actors at the expense of both humanity and non-human nature. One of the key elements of these discussions has revolved around the role of neoliberal conservation mechanisms in overcoming capitalism's inherently self-destructive contradictions and crisis tendencies (Buscher & Fletcher 2014; Robertson 2011; Sullivan 2013b). In this regard the emergence of these new conservation tools are understood as a means to overcome the ecologically induced barriers to capitalist expansion highlighted by an earlier generation of Eco-Marxist scholarship on the second contradiction of capitalism (O'Connor 1998). Rather than presenting limits or crises, environmental problems have been cleverly transformed into new opportunities as a suite of new conservation tools, from payment for ecosystem services to offset credits, generate new avenues for expanded wealth generation and accumulation. The expansion of private property rights as a necessary process in the commodification of new conservation commodities is viewed as facilitating new enclosures of both the natural world and political discourse on issues of environment as part of a process of recursive and contemporary accumulation by dispossession (Fairhead et al. 2012; Kelly 2011; Bucsher & Fletcher 2014). There is also a strong focus on Gramscian notions of hegemony, and the ways in which these new economies of nature become 'common sense' and proliferate through practitioner communities, civil society organizations, government, and the general public to form what Igoe et al (2010), drawing on the work of Debord (1967), have termed a "sustainable development historic bloc". A key feature of much of this work has been a narrative of capitalism's endless

ingenuity to overcome obstacles and to colonize ever greater elements of society and the non-human world. Marx's metaphors of capitalist vampires and lycanthropy live on through new narratives of the parasitic infection of a previously non-capitalist (or more-than-capitalist) world.

While certainly different in some very consequential ways, in a number of respects these critical frames also share much in common with the proponents of neoliberal approaches that they seek to critique and challenge. Although they differ in their explanations of the rationales, motivations, outcomes of these projects and in their normative assessments of the tools, these divergent camps tend to share similar conceptualizations of some processes and reconfigurations. Specifically there are a series of processes and institutional arrangements that are assumed by both proponents and critics. Perhaps the most consistent of these is the assumed centrality of privatization and the role of capitalist market mechanisms to allocate environmental goods and services. Both critics and proponents are strongly attached to these conceptualizations of new neoliberal conservation tools - proponents suggesting that this is the best way to achieve conservation goals, while critics suggesting doom and gloom. There is also a faith in a discernable trajectory to capitalism, again with some suggesting that this is a good thing and critics very focused on its disastrous consequences for both humanity and nature (which, at least for some, may trigger liberation). In a steadfast adherence to these assumptions and narratives, both proponents and critics suggest a clarity of process, coherence and power that may be overstated, or as I will argue, is certainly only partial.

In many respects these dominant frames of analysis are useful. There are many empirical instances where these frames hold strong explanatory power, including much of what is discussed in the following chapters. However, there are a number of instances in which these frames fall short in their explanation of the phenomena under examination in this dissertation. In light of these lapses I argue that aspects of these pervasive approaches will need to be challenged, extended, or reworked in order to more fully understand the processes at play. My

work draws inspiration from a range of neo, post, and anti-essentialist Marxisms that do not shy away from destabilizing key components of more orthodox theoretical positions on epistemological grounds (examples include Laclau & Mouffe 1985; Gibson-Graham 1996, 2006; Bucher 2013). There are also strong political grounds for this approach. Following insights from Gibson-Graham's (1996) critiques of capitalism and globalization, I feel compelled to ask, to what extent does the representation of the neoliberal conservation project as a coherent entity give it a sort of power that it may not have? How do our narratives of a unified, coherent project that produces uniform and predictable outcomes foreclose other discussions, and erect a disciplinary power that constructs neoliberal reforms as being more powerful and straight forward than they might actually be? Where do we look for alternatives or ways to complicate, challenge, or pervert the project to more progressive political ends, or to borrow an apt phrase from Gibson-Graham (1996 p.19), might "a frothy spawn of economic diversity slip out from under the voluminous skirts" of neoliberal capitalism and its environmental transformations? The question is not only theoretical, but is driven by the seriousness of its implications for real world political action and transformation. Over the last several years I have noticed the impact that totalizing and essentialist narratives have on my undergraduate students, particularly when it comes to discussion of recent attempts to 'sell nature to save it', or in discussions of the climate crisis and our proposed solutions. All too often capitalism -- and the neoliberal principles associated with its contemporary form - are presented as impermeable, their power on full display as they devour and infect a whole new range of previously non-capitalist realms. I cannot help but reflect upon the ways in which these central narratives have left many of the young people in my classes feeling a sort of skepticism that anything can be done and a resignation that this is 'just the way the world is'. Such experiences have led me to reflect on the productive performances of academic research and have raised concern that not only proponents, but also highly critical representations of nature's neoliberalization, participate in

the construction of a hegemonic totality that leads to hopelessness and the foreclosure not only of alternate understandings, but importantly, opportunities for creative engagement and transformative politics. Research is inherently political and I would caution that we need to be more cognizant of the ways in which our analyses of neoliberal conservation contribute to political apathy by granting power to a project that at its core might be partial, contradictory, contingent, and even malleable. In an attempt to respond to some of this cynicism, I have often shared with my students the epigraph from Leonard Cohen that opens this chapter as a way of introducing contributions from anti-essentialist political-economy that challenge the completeness and coherence of the neoliberal capitalist project. Insights from Gibson Graham (1996, 2006, 2008), St. Martin (2005 a, b, 2006, 2007), and Rogers et al. (2004) highlight the ongoing existence and proliferation of diverse and alternate economies, and in doing so point to "the potential to disrupt the ontological foundations" (St. Martin 2006 p. 169) of existing power regimes that view other-than-capitalist economies as either peripheral, subordinate, or both. My mission here is not to abandon the very robust insights of Marxian-inspired literature on the expanding proliferation of market-friendly conservation tools, but rather to add to or expand them in ways that address a series of unanticipated empirical outcomes associated with the implementation of these tools, and a series of under-explored questions about political practice. Criticising a project because students are bored with it is not, in and of itself, an adequate justification, but I do believe the apathy and paralysation noted above speaks to a larger issue of great importance. While I do not dispute that approaches focused on enclosure, dispossession, and accumulation often do an exceptional job of explaining a number of the core rationales and material outcomes of ostensibly neoliberal approaches to conservation practice. they are often less effective at investigating the political strategies required to subvert aspects of the project. Robust critical analysis is important and to borrow a passage from Kovel (2002 p. 224) "radical criticism of the given...can be a material force, because it can seize the mind of

the mases of people". This is indeed important, as are the types of ontological challenges recently outlined by Sian Sullivan (2013c) that call for a fundamental reconceptualization of the world and our place in it. These, along with political engagement, collective organizing, and other traditional strategies of the left are important steps in moving us out of our current context. Building on these approaches, I suggest that is also important to recognize the incomplete nature of market-friendly environmentalism, and to take seriously the emerging empirical instances in which specific groups of people have been able to engage what appear to be neoliberal reforms in projects of progressive social change. Rather than reject what has been done, I call on us to be cautious about the possibility that our representations of neoliberal conservation may at times produce or perpetuate narratives of coherence, power, and political allegiances that in many respects are not radically different than its proponents, and which discourage transformative politics in the cracks of the here and now. The political implications are more than simply ennul on the part of a younger generation of students, which are in many respects part and parcel of a larger concern with the inability of the left to develop adequate strategies to push forth engaging alternatives to our present situation (Ferguson 2010, Hall 1987, Gibson-Graham 1996). What I hope to suggest here is a broadening and expansion of a radical political tool kit, not its abandonment and reformulation. What can be done in the interim, as we await the revolution, which might help prepare the ground for radical change?

The project of the following chapters is to query the coherence of the neoliberal environmental project. The purpose is not to negate the often enormously uneven power dynamics at play, the connections of neoliberal conservation to hegemonic political projects, or the potential perils that such interventions may create, but also and importantly to seek out the 'cracks where the light gets in'. Drawing on insights from Gibson-Graham (2003), Bondi & Laurie (2005) and Fletcher (2013), I am open to participation in what Becky Mansfield (2007a p. 496) has described as "a basic deconstructive move, in which the identity of neoliberalism is shown to include much of

that which it defines as its other". Doing so not only chips away at the totalizing narratives that grant power to the neoliberal project, but serves to deepen and enrich our understanding of the processes at play, and, I hope, opens spaces for novel and perhaps counter-intuitive political strategies. In guestioning narratives that make it seem that 'there are no alternatives' to the dire consequences of the extension of neoliberal policy approaches, we become open to the possibility that alternative political visions may not always or necessarily be directly oppositional or radical ones. Neoliberal environmentalism is regularly constituted by processes and relationships that its own ideology would suggest are oppositional (Mansfield 2007a, Shapiro-Garza 2013, Fletcher 2013). Harnessing these fractures and fissures and prying open the cracks may constitute important, if only partial, political strategies for imagining new forms of human-environment interactions. Neoliberal conservation often expands private property relations into new terrain, creates new commodities, dispossesses and accumulates, but this is not all that it does. As I aim to show in the chapters that follow, the neoliberal project is far less unified and politically coherent than often presented. The chapters that follow demonstrate that neoliberal conservation also regularly, and simultaneously, includes a series of processes and characteristics that are commonly understood as antithetical, including the continuing centrality of state intervention, the expansion of public spaces and common property, and providing political strategies to resist dispossession. My hope is that these disjunctures might provide productive starting points for identifying the cracks that could inspire transformative political action and the creation of more just and equitable socio-natural relations. Critics will likely find these tactics reformist, incremental or provisional. Indeed they are, but we have to start somewhere. Moreover, I would argue that pluralistic and contingent alliances working toward incremental change have often proven more successful than revolutionary approaches based on strict either/or divisions.

A number of scholars of neoliberal environmental interventions have begun to challenge the assumed coherence and political allegiances of the neoliberal project, and contributions from a diverse range of empirical case studies have complicated the parameters, implications, and outcomes of actually existing attempts at nature's neoliberalisation, including a new suite of conservation measures (see inter alia Mansfield 2007 a, b; Shapiro-Garza 2013; Milne & Adams 2012; Roth & Dressler 2012). A community of geographers and political ecologists have increasingly revealed the complex and often contradictory nature of apparently neoliberal forms of conservation practice, challenging narratives of privatized governance and a retreat of the state (Fletcher & Breitling 2012; McAfee & Shapiro 2010), neoliberal subjectivities (St. Martin 2007; Higgins et al. 2012), or exploring the ways in which these new conservation tools engage with and often re-inscribe earlier forms of state-centred, coercive, or fortress conservation (Dressler & Roth 2011; Beymer-Farris & Bassett 2012). Much of this work has been identified by Fletcher et al. (2013 p.4-5) as the study of "Nature Inc.- society entanglements" which "explores the ways in which neoliberal principles such as commodification, financialization, and market discipline articulate with earlier conservation strategies, local socio-cultural dynamics, and rural livelihoods, producing novel mechanisms and major landscape changes in situ". This dissertation contributes to these emerging bodies of scholarship and seeks to push them in new theoretical and empirical directions. Certainly, these new tools are regularly engaged in political processes that seek to channel benefits to powerful societal actors, but their intersection with empirical contexts often highlights the contradictory logics, incoherence, and partiality of these projects. Might recognition of these cracks open other political possibilities and ways to pervert the project to radically different ends, or at the very least expose the fault lines that might make alternatives possible?

1.4 Queering neoliberal conservation

One of the things that queer can refer too [is] the open mesh of possibilities, gaps, overlaps, dissonances and resonances, lapses and excesses of meaning when the constituent elements of anyone's gender, of anyone's sexuality aren't made (or can't be made) to signify monolithically (Sedgwick quoted in Gibson-Graham, 1996 p.140).

Queer theory is a diverse and complex body of scholarship with an anti-essentialist interest in the destabilization of often taken-for-granted ideas about gender and sexuality and a concern for the "disciplining effects of privileging and imposing any sexuality or desire to the exclusion or stigmatization of others" (Brown, 2009). While this body of scholarship has roots in humanities and social science approaches to the study of gender and sexuality, the theory has expanded into new academic territory over recent decades as scholars have found useful insights and applications of the destabilization project in a new suite of empirical contexts. While countless examples abound of the expanded application of this line of thinking, J.K. Gibson-Graham have perhaps provided the most notable application of these ideas to the study of political economy. Drawing inspiration from the ways in which queer theorists have sought to destabilize heteronormativity and gender, these scholars have applied these insights to their own project for the destabilization of economic categories, "capitalocentrism", and the promotion of diverse economies (Gibson-Graham 1996).

How might we begin to queer neoliberal conservation? And what good would it do? Is there a way to conceptualize it as (at times) a class oriented project that seeks to generate benefits for powerful societal actors, but also as something that is often more or less than that? While I do not intend to suggest that neoliberal policies and approaches are necessarily a good or desirable thing, I would suggest that they need not be as uniformly 'bad' as some would suggest. Among the friction between models of neoliberal conservation and the empirical contexts of their implementation we see a shifting terrain of political possibilities and processes

that open opportunities for some, while foreclosing opportunities for others. However, this does not mean that the political openings and closings are uniformly directed in one way - to the exclusive benefit of a particular class project. Given the complex, indeterminate outcomes of neoliberal conservation, I would suggest, following James Ferguson (2010, 2011) that we temper our desire to characterize the neoliberal as something inherently 'bad', in part to leave open opportunities for a more complete understanding of the processes and relationships we study and, importantly, so that we do not foreclose political strategies that might be particularly useful in subverting the neoliberal project on its own terms. Ferguson (2010, 2011) provides a series of empirical examples from his field studies in southern Africa where ostensibly neoliberal policy tools have been employed in progressive re-distributive projects that "fight against (rather than capitulating to) the growing inequity that recent 'neoliberal' restructuring has produced" (2011 p.66). Mansfield's (2007a) studies of fisheries privatization in Alaska reveals similar complications and argues that while assignment of property rights to fishing quotas can be read as neoliberal policy, these policies also serve a broad range of social justice and redistributive goals that "provide concrete protections from the market" for groups of historically disadvantaged people (p.486). As such, Mansfield suggests that these sorts of environmental policies can be viewed as "neoliberalism, social justice, both and neither". Shapiro-Garza (2013) and McAfee & Shapiro Garza (2010) have explored similar themes in relation to payment for ecosystem service projects in Mexico and suggest that these new market conservation tools have become an important "surface for engagement" for rural and indigenous political movements in the region, leading to highly reworked PES projects that in many respects resist and pervert the assumed political allegiances of these market-based conservation tools.

The sense of the final enclosure of all possibility is a particular psychological symptom in the face of being overwhelmed, not a statement about the structure of the world...Looking for the cracks is rule number one. And looking for the cracks not necessarily from the point of view of marginality or the voice of resistance or the place that isn't yet colonized...Instead you begin your political, intellectual enquiry from the position of folks

who have no choice but to live inside the system of commensurability which is being established, but who don't and can't quite fit... you work through, not the marginal position or some kind of point of resistance that's outside of domination, but many kinds of not fitting...There is no way that the world is totally colonized by a single system of spatiotemporalities" (Harraway 1995 in discussion with David Harvey p.514).

1.5 Politics of articulation and affinity

This dissertation understands attempts at the implementation of conservation offsets (as representative of a neoliberal market-oriented tool) as fractured, partial, and often contradictory processes. The outcomes associated with such projects are less a result of their predictable adherence to ideal types or political allegiances, but are rather determined to a large degree by their intersection with a contingent constellation of pre-existing and emergent variables.

Gramscian theories of hegemony have been widely explored in the literature seeking to understand the expansion of neoliberal conservation tools globally (Igoe et al. 2011, Buscher et al. 2012), and specifically for understanding both the expansion of the extractive project, and responses to its impacts in Alberta (Haluza-Delay 2014). Understood as "political leadership based on the consent of the led, consent which is secured by the diffusion and popularization of the world view of the ruling class" (Bates 1975), there are indeed a number of ways in which the concept of hegemony is useful in understanding the growth of neoliberal forms of conservation. Chapter seven explores the profusion of green discourse from both the state and industry, be it in government propaganda to re-brand the province's image, industry organizations and firms seeking to green the corporate image, or what Katz-Rosene (2014) has called a form of "reactionary environmentalism". The role of hegemonic discourses, and their circulation in schools, popular media, NGOs and other institutions, provides some very useful explanation as to how and why tools such as offsets become a dominant approach to addressing the ecological and social challenges of extractive development. While a number of scholars have documented the construction and circulation of these dominant discourses which extol the benefits of market

approaches (Igoe et al. 2010; Buscher et al. 2012; Brockington et al. 2008), and have even explored the psycho-social components of their operation (Brockington 2008; Fletcher 2014), relatively scant attention has been paid in the literature to exploring strategies that might subvert or undermine the stability of what Igoe et al. (2010) have termed a 'sustainable development historic bloc', or the possibility of appropriating elements of the neoliberal conservation tool kit to alternative political projects. This absence may, in part, be a result of the rather limited recognition of the incomplete, and often contradictory, nature of hegemony that accompanies much of this discussion.

Politically, this absence leads us into the same sorts of problems that scholars like Gibson-Graham have outlined regarding the consequences of capitalocentrism. In our relative silence on the always incomplete and mutable nature of hegemony, we end up granting power to the very formations that many of us are interested in working to subvert. In doing so, the formulation of counter-strategies and the development of an alternative, leftist, or counter-hegemonic program often takes a back seat to discussions of the power and functioning of existing hegemonic formations. Although a focus on how a powerful formation comes into being and remains stable is certainly important, too great a focus on these aspects may divert attention away from projects of political action aimed at undoing and supplanting the existing status quo. In addition to our focus on existing power formations, I would caution that we also need to remember that politics is always in the making,

It is where forces and relations, in the economy, in society, in culture, have to be actively worked on to produce particular forms of power. This conception of politics is fundamentally contingent, fundamentally open ended. There is no law of history which can predict what must inevitably be the outcome of political struggle (Hall 1987, p.20)

As well as being incomplete, we should also recognize that the presence of contradiction within any given ideology does not necessarily point to its fundamental weakness, but in many respects represents its very strength. Drawing on Gramsci in his discussion of Thatcherism, Hall

(1987) reminds us that despite the contradictory and often incoherent nature of Thatcherite ideology its strength was often in its ability to "articulate into a configuration different subjects, different identities, different projects, different aspirations...it constructs a 'unity' out of difference" (p.19)

In many respects the empirical discussions in the chapters that follow are reflective of this kind of hegemonic formation, that includes not only some aspect of powerful interests manipulating messages from above (chapter 7), but also and importantly a more common theme in which people do not buy into the project of market-based conservation wholesale, but rather find aspects that work for them within a constrained field of options. And while recognizing that inconsistency is often a strength, rather than a weakness of such politics, might it be possible to also pick up aspects or elements of powerful societal formations and employ them to different ends? Rather than creating a coherent and directly oppositional counter narrative, or looking exclusively for hope beyond the bounds of the seemingly neoliberal, might counter-hegemonic projects benefit by incorporating the same sorts of contradiction and incoherence that are often the strength of existing power formations? More to the point, how might we appropriate aspects of particular power formations and put them to work in more progressive projects? While some aspects of a political project might be said to have an essential connection, others have a less prescribed and more contingent belongingness. Hall (in Gossberg 1986 p. 53) uses the example of religion to illustrate a similar point. While religion has, "in one historical formation or another...been bound up in particular ways, wired up very directly, as the cultural and ideological underpinning of a particular structure of power", these particular articulations are not essential, necessary, or permanent. Religion can be picked up and employed in a variety of political projects. Now, Hall also cautions that doing so is not easy and that attempts at transformation will run up against the "grooves" that have articulated religion in particular historical formations of power, however, in societies where religion forms a significant aspect of

the social consciousness, any attempts at political transformation will have to, in some manner, engage with and transform the articulations of this element (Ibid p. 53-55). In a related fashion, I would suggest that we reflect on the extent to which market-friendly conservation activities necessarily adhere to a larger, class-based, neoliberal project. Certainly in a number of respects they most certainly do, but are these connections necessary and inevitable, or the result of particular and contingent articulations? Are market-based conservation activities in and of themselves problematic, or do problems arise based on the specific social and political contexts into which any particular market may be embedded, and might they be simultaneously enrolled in a diversity of political projects and formations? Or, even when embedded and enrolled in projects of capitalist neoliberalisation, are there contradictory impacts and outcomes that allow alternative relations to take root? While I admit that an uncomfortable tension underlies the following example from Gibson-Graham (1996 p. 138), it is none-the-less reflective of this process. While the expansion of consumer credit and the proliferation of "self-employment and homebased industries" are certainly aspects of an evolving and expanding capitalism, the rather easy access to consumer credit can also be seen as an extension of "producer credit" which has in no small way been used to fund a whole diversity of other-than-capitalist enterprises of "individual and collective surplus appropriation". As such "the financial sector can be seen...as an opening in the body of capitalism, one that not only allows capital to seep out but that enables non-capitalism to invade" (p.138).

What we seem to be witnessing in Alberta is the coming together of diverse interests and actors around a conservation tool, not as a result of an unquestioning acceptance of the tool and its principles, but rather its ability to unite actors seeking a range of often different goals and outcomes. Jennifer Barron (2000) outlines a similar idea in her case study of political solidarity around opposition to military flight activities over Innu territory in Labrador. Barron outlines what

she calls "articulatory politics" to understand the affinity and alliances forged between the Innu and supporters in Southern Canada and beyond.

Articulatory politics works with the specificity of particular situations, in which strategic alliances are formed around specific shared goals, issues and concerns... Partners in such coalitions are not fused to one another, but act in flexion and extension around a moveable joint, taking advantage of our respective different positions vis-à-vis the joint" (Barron p. 104-105).

Or, put a bit differently,

An articulation is... the form of the connection that can make a unity of two different elements, under certain conditions. It is a linkage which is not necessary, determined, absolute and essential for all time. You have to ask, under what circumstances can a connection be forged or made? (Hall quoted in Grossberg 1986).

I would argue that a framework of articulation is particularly germane for understanding the social alliances forming around the use of conservation offsets in Alberta. The (perhaps surprisingly) broad societal acceptance of offsets is not driven by a shared unity of principles, goals, and aspirations. Rather, diverse groups and interests are coming together around this conservation tool for a variety of purposes shaped in large part by an existing or emergent set of social, economic, and political parameters that condition their willingness and ability to participate and to secure particular types of benefits.

Some would argue that this particular perspective on the uptake of offsets in Alberta is certainly representative of hegemony in action, as diverse interests are incorporated into an overall project that supports the status quo of expanded extractive development in the province, but the question then becomes how to forge alternatives. Following Gibson-Graham's (1996) example of consumer credit, might particular tools, practices, and discourses be appropriated and 'rearticulated' in some measure to achieve more progressive political and material outcomes? The question does not negate the fact that particular tools or techniques are currently enrolled in the political projects of the powerful, but recognition of this fact need not foreclose the possibility

that these tools or processes might also, and simultaneously, present unanticipated opportunities to develop a more complex and diversified political strategy in support of alternative outcomes. I think it is here that, despite their differences, we might identify a certain sort of affinity between the political projects of theorists like J.K. Gibson-Graham and Antonio Gramsci, in that both seem to advance the notion that integrating elements of existing power formations and processes may provide a path to radical political change. A Gramscian war of position may involve "a protracted struggle in and through the institutions of civil society, perhaps as preparation for a final direct assault" (Schwarzmantel 2015 p. 208) in much the same way that that scholars like Gibson-Graham (1996 p. 251) have sought a "lived project of socialist construction" that does not shy away from creative political engagement with, and appropriation of, the tools of the here and now, including elements of existing capitalist formations. I think the question is an important consideration for enriching the strategies of a series of progressive political movements, particularly in light of an emerging array of empirical contexts in which some progressive social movements have been able to engage elements of ostensibly neoliberal practices to achieve consequential gains (See inter alia, McAfee and Shapiro 2010, Mansfield 2007a, Ferguson 2010). The findings of Chapter six are consistent with an emergent literature that explores a geographically and empirically diverse series of situations in which ostensibly neoliberal environmental reforms have been shifted to support progressive social change. The political strategy of "allies and adversaries" described by leadership of the Little Red River Cree Nation in chapter six points to the possibility of conscientiously engaging with market-based conservation tools to lessen resource development pressures, limit the privatization of land and resources, and to promote alternative nature-society relationships. And while these engagements with market conservation are contingent, "interim measures", in the instance described here they have managed to strategically prevent foreclosures, and open spaces for more substantive transformations in the future. And that is just the point.

Engagement with, or appropriation of, techniques and tools of the powerful is not intended to replace more traditional approaches of the left including direct assaults on the state and capital, but are rather viewed as complementary aspects of struggle, and ones which I believe have too often been discounted, in part because of their seemingly reformist nature. To borrow a metaphor from Gramsci (1971), for radical change to occur we will need to participate not only in direct assaults on the fortress walls, but also engage and integrate aspects of civil society that form the earthworks and trenches of our rivals.

1.6 Making "a unity of difference"

Given the diverse perspectives on the use of offsets and the lack of coherent acceptance of the principles and practices associated with this conservation tool, the following chapters also attend to the ways in which diverse (and often divergent) interests are incorporated into a project in which offsets may, with varying degrees of success, prop up the centrality of resource extraction in Alberta.

Conservation groups, especially those with existing connections to land trusts are seeking both funding and tangible conservation gains within a difficult and constrained political-economic context, but this doesn't necessarily negate their possible aspiration for different visions of human-environment relations. Some do not see a contradiction between conservation goals and development and regularly espouse the win-win narrative of 'sustainable development'.

However, more commonly there are critiques of the industrial project, but a sense that offsets provide gains that could otherwise not be achieved, and therefor support or participation is a matter of making gains within very constrained parameters. As an ACA staffer has expressed, "It's easier to work with these guys than it is against them" (Dorge quoted in Bruce 2012).

Industry most certainly seeks to gain public relations benefits which assist with furthering the industrial project, and stands to benefit by framing environmental issues in ways that neatly

align with business and market principles, but this explanation alone is too simple. As is explored in subsequent chapters, industry is also constrained by the context of provincial resource policies that push development and create a highly competitive race for resources amongst firms. Given this context, opportunities to pace, delay or retire development rights become limited – again making decisions about environmental performance within a limited and constrained field of options.

Farmers in communities being impacted by offset projects have been vocal critics of the tool and the Reeve of Municipal District 124 provided some of the strongest critiques of the foundational principles of conservation offsets to emerge from my research. That said, most seemed much less critical of an offsetting framework that would provide compensation based on proscriptive land management (changes to tilling practices, areas of fallow or non-development), rather than property sales. In fact, a recent pilot project launched in the southern regions of the province is exploring this type of a model that would provide financial incentives to farmers to conduct particular forms of land management, and one that offers flexibility in times of economic hardship.

Some First Nations are getting behind the project as a means of asserting greater sovereignty over traditional territory, but as described in subsequent chapters this is not the result of an ideological alliance, but rather a strategic tool to achieve political gains in the here and now. Describing negotiations around the Site C dam development on the Peace River, Little Red River Cree Nation policy advisor Jim Webb sums up this sort of political strategy. "So, strategically, First Nations in a lot of places are accepting things that violate their values as a trade-off for obtaining some ability to influence the way that things will be done" (Webb quoted in Simpson, 2004). But again, these decisions are structured by a series of other existing or emergent contexts. The nations who have pursued offsets have pre-existing access to forest tenures (the retiring of harvest rights provides a mechanism for offset creation), do not have

major sub surface bitumen deposits (that would preclude offsets), and are thus in a unique position to use the tool to assert sovereignty over their traditional territory. Nations whose territory includes bitumen deposits are far more skeptical, and concerned about the ways in which offsets are undermining their decision making in the context of an industrial rush for resources on their territories.

As explored in subsequent chapters, we need to recognize how things come together and fall apart, and the lack of necessary unity in neoliberal approaches. Support for, and participation in, offset programs in Alberta does not just happen because some groups fundamentally believe in the concept and others do not, although at times this explanation may be sufficient. Rather a whole series of existing and emerging relationships and contexts condition the ability of some to participate more than others.

1.7 Structure of the dissertation

The subsequent chapters seek to explore these instances of coming together and falling apart in the context of a seemingly neoliberal conservation model in the province of Alberta. As such, there is a tension that runs throughout; a tension that is both theoretical and empirical. A number of chapters support the fairly standard contention that market conservation serves as an important partner in facilitating recursive rounds of 'accumulation by dispossession' and the expansion of extractive resource development. Others attend more closely to a series of processes that often complicate or contradict a series of dominant narratives on neoliberal environmental reforms, and which highlight the partial, contradictory, incoherent nature of such reforms. Despite these inconsistences and complications the implementation of conservation offsets still achieve the ability to bring together divergent interests in the expansion of the extractive project, but this ability to make a unity of difference is not guaranteed or complete. Chapter six stands out as an instance in which divergent actors, with very different goals and

attachments, have become enrolled in offset projects that have been steered toward a very different end game that challenges the hegemonic status quo.

The following chapter provides an explanation of the scope of the project, research design, primary research questions and methods employed. It also provides a series of reflections on methods that demonstrate the importance of process, which is often as informative as the data collected. Chapter 3 explores the history of conservation in Alberta and the historical development of offsets both globally and in the province. Importantly, the chapter also questions the often assumed newness of neoliberal approaches. While not failing to recognize the ways in which these configurations are novel, the chapter argues for a greater recognition of the significant history of collaborative relationships between powerful political and economic interests and the conservation movement. While the institutional relationships and methods may have changed, the outcomes remain remarkably similar, particularly in regard to the role of the conservation movement in furthering settlement and economic development of the Canadian frontier. Chapter 4 is based on a stand-alone paper, an earlier version of which was published in the journal Ecosystem Services and addresses the institutional configuration of existing offset programs and their relationship to institutional and governance typologies discussed in the literature (Hackett 2015 a). Specifically the chapter argues that despite pervasive economic vocabularies and narratives of free market approaches, the provincial government continues to play an essential role in facilitating, constraining and shaping offset programs, largely in an attempt to avoid a series of potentially serious political risks associated with truly 'free markets'. Chapters 5 and 6 address the topic of 'accumulation by dispossession' common to much of the literature on neoliberal conservation. Chapter 5 is based on a paper that I published in the journal Area and challenges the dominant role of privatization, suggesting that in the context of Alberta's offset program dispossession is as likely to result from the expansion of a de facto public sphere as it is from the expansion of private property (Hackett 2015 b). Chapter 6 is a

revised version of an article that appeared in Geoforum (Hackett 2015 c) and explores the use of offsets by some First Nations in the province. The primary argument of the paper is that neoliberal approaches may do more than simply foreclose and dispossess, but that they may at times provide opportunities for progressive political and economic reforms. Following these series of chapters which serve to complicate, challenge, and queer some of the dominant discourses surrounding neoliberal conservation, chapter seven explores the discursive and public relations benefits of offsets in the context of larger political-economic representations of nature. The concluding section revisits the core research questions, reflects on the implications of the findings for understanding the political dynamics of conserved nature in relation to contemporary capitalism, and outlines a series of new research directions.

2 Methods and reflections on the research process

2.1 Introduction

The problems that intrigue us, the types of questions we ask, and the methods and modes of analysis that we choose to explore them with are not autonomous inventions. Nor are they the result of a universal starting point. The choices we make as researchers are informed by our position in the world, influenced by our interactions with the social and material worlds in which we are situated and the ways in which we identify and are identified by others. Perhaps the greatest influence on our choice of problems, questions and modes of exploration are our very foundational assumptions about the nature of the world and the nature of knowledge - or how we go about understanding the world around us. As such, detailing my ontological and epistemological foundations is a very good place to start. The following chapter begins with an explanation of these philosophical foundations and outlines my personal positionality as appropriate starting points for the research project. Subsequent sections outline the primary research questions and research design, as well as detailing the methods used to collect and analyse data. Moving beyond simply a record of what was done and why, the chapter then explores three reflections on the process of conducting the research for this project. The reflections are intended to make visible a series of power relations, personal discomforts and nagging questions that are often relegated to the shadows of academic production despite their important implications, and contributions to, the conduct of scholarly research.

2.2 Philosophical foundations

Since the publishing of Bhaskar's 1975 *Realist Theory of Science* critical realist positions have become a leading philosophical position amongst researchers in the field of political ecology.

Such an approach has been recognized as providing a 'third way' that avoids the detached and

a-political objectivity of positivism on one hand, and the relativism of extreme constructivist approaches on the other (Proctor 1998; Neumann 2005). A critical realist approach recognizes a material world that exists independently of human beings, and the epistemological limitations of human knowledge of that world which result in explanations that are necessarily partial, situated, and provisional representations of an object beyond ourselves. As a 'third way' approach critical realism recognizes that the world is socially constructed, but only ever partially. While there are a variety of ways in which the world is discursively and materially constructed, an independent materiality often perverts or resists human re-orderings of the world (Easton, 2010). Epistemologically, our ideas of the world are socially situated and informed representations. Seen as a series of representations, knowledge is never direct, but rather approximate and fallible, with some explanations being more accurate or robust than others. Thus the construction of knowledge is an iterative social process whereby "comparatively evaluating existing arguments, we can arrive at reasoned, though provisional, judgements about what reality is objectively like; about what belongs to that reality and what does not" (Archer, Collier & Porpora guoted in Easton 2010 p. 124). There have been ongoing and substantive debates about the relationship between Marxism and critical realism, with some suggesting Marx was practising a form of, or something very similar to, critical realism (Ehrbar 1998, 2002), others suggesting at least amicable contributions between the two on some matters (Castree 2002), and others espousing a fundamental incompatibility between these positions (Cox 2013). Much of this has revolved around processes of abstraction and the identification of 'necessary' and 'contingent' relations. Following Yeung (1997) this work uses critical realism as a philosophical position, rather than as method per se, although the two are inevitably related and the selection of particular "research instruments" should align with broader philosophical positioning. Using critical realism as a philosophical foundation reflects this work's theoretical connections to Marxist approaches, but also its affinity with streams of neo, post, or antiessentialist Marxisms which are concerned with a productive reformation of some key tenants of more orthodox approaches, particularly in regard to pluralism, openness, and contingency.

The dissertation that follows recognizes the existence of both structure and contingency, and importantly explores how political and economic structures intersect with a series of geographic, historic and socially contingent conditions resulting in particular outcomes at specific locations. In line with a critical realist philosophy and informed by the practices of critical human-environment geography and political ecology, my approach is also explicitly political and normative. My work does not seek to produce value neutral explanations, but is rather explicitly shaped by a desire to contribute to broader progressive politics within and beyond the academy.

The early development of this research project was greatly influenced by a Marxian theoretical literature and political economy approaches to understanding nature's neoliberalism (see inter alia Brockington 2011; Buscher 2009; Igoe et al. 2010; McCarthy & Prudham 2004). While my interests remain strongly influenced by political economy, I intentionally chose to take a more inductive approach to the project and to let my empirical case inform my theorizing of the topic. This decision was made for both epistemological and political reasons. First, I was concerned that taking a strong deductive approach early on might lead to a situation in which the research outcomes would simply reflect my theoretical starting points – that my project would simply confirm what I already knew (or thought I knew). On a political front I became increasingly uneasy with the impact that such an approach would have for limiting alternate explanations and political strategies. The approach taken in response to these concerns is in line with what some feminist scholars have referred to as a weak theory approach to the research process (Gibson-Graham 1996, 2006; Sedgwick 2002), or an "ontological politics" (Law & Urry 2003). In opposition to strong theory, which tends toward universal explanations that try to account for or explain all phenomena in reference to existing theoretical parameters and structures, weak theory "refuses to extend explanation too widely or deeply", in part to open up opportunities for

understanding anomalous, contingent, or underexplored phenomena that do not readily fit (and may never fit) pre-existing theoretical frames (Gibson-Graham 2008 p. 7). Importantly, such approaches call for an open recognition that research does not just describe the world, but equally intervenes to help to create particular realities. I am not suggesting that this type of "performative ontological politics" materially produces the world in its totality. This should not be understood as a strong constructivist position – not everything is discourse. However, discourse, including the narratives that academic researchers construct, does have material consequence and is thus inherently political. My approach recognizes structural relations as limiting or enabling aspects of the political field, but at the same time is cautious not to overstate the power of such structures or allow them to become universal explanations for social phenomena. Not everything can be reduced to the economic, or to capitalism, or its neoliberal variants. As such, a weak theory approach is an attempt to "reframe the ontological ground on which we build" (Gibson Graham 2008 p. 18).

To the extent social science conceals its performativity from itself it is pretending to an innocence that it cannot have. And to the extent that it enacts methods that look for or assume certain structural stabilities, it enacts those stabilities while interfering with other realities...If methods are not innocent then they are also political. They help to *make* realities. But the question is: which realities? Which do we want to help to make more real, and which less real? How do we want to interfere (because interfere we will, one way or another)? (Law & Urry 2004 p.404)

The approach taken in this dissertation is one in which no singular theory can be said to explain all aspects of the case study. Insights from Marxian frames are very good at explaining some phenomena and fall short for others, requiring extensions and revisions of theory. I also draw inspiration from feminist scholarship and anti-essentialist political economy approaches that recognize that people and their actions are always multiply situated and contingent. People can simultaneously be environmentalists and extractive resource workers or corporate CEOS, academics and traditional Cree trappers, or homosexual and religious social conservatives.

These multiple identity positions are also simultaneously enrolled in a variety of capitalist, alternative capitalist and non-capitalist economic activities which exert varying degrees of influence over both collective and personal decision making and agency. Support for, or participation in, particular political economic projects -- such as conservation offset programs -- are conditioned by the contingent intersections of these multiple positionalities and a series of geographic, historical and socio-political structures.

2.3 Research questions

I have one overarching research question and two sub-questions:

- Why and how have conservation offsets become a leading solution to the environmental consequences of oil sands development and what are the material implications of their implementation?
 - What are the material, institutional and ideological dynamics of Alberta's conservation offset programs and what kinds of benefits accrue to whom?
 - o What has been the historical development and uptake of conservation offsets in the province, and what has been the reasoning of different stakeholders in their support or dissent for such ideas?

2.4 Scope and research design

The context of Alberta provides a unique opportunity to explore questions about the relationship between market-oriented conservation and contemporary forms of extractive development.

Specifically, Alberta offers an opportunity to explore these relationships in a context in which new conservation models that would, at least on the surface, appear to eschew state intervention run up against a historically strong state-industry nexus that results from the prevalence of public lands and the dominance of resource-based development in the province.

The original scope of the project was to investigate two terrestrial conservation offset projects in Alberta, the Boreal Habitat Conservation Initiative (BCHI) started in 2003 via a partnership

between the Alberta Conservation Association and Suncor, and a second pilot project which involved the Nature Conservancy of Canada, the Little Red River and Tallcree First Nations and corporate partners in the oil industry. BHCI, and its later corporate partners program, is to date the only operational conservation offset program in the province (although a pilot study called SEACOP launched in 2014 in the southern regions of the province). To date the BCHI, and associated corporate partners program, has conserved over 10,000 acres as offsets for industrial disturbances. The LRRCN/TNC project was an attempt by two First Nations to develop a similar program intended to repurpose their existing forestry tenures and generate revenue for the nation via the retirement of timber harvesting rights. While developed to an agreement in principle, the project never got off the ground. Research involved interviews with the principle actors in the development of the proposal.

An intensive approach was taken to research design. Intensive design is distinguished by its desire to understand how processes work in particular sites or events and thus ask questions about situated relations, processes, and actions, rather than generalizable characteristics or patterns. While a focus on in depth exploration of relationships and actors in particular contexts limits generalization, it does not entirely eliminate it in some instances. As Sayer has remarked "actual concrete and contingent relations are unlikely to be generalizable" however, "some necessary relations discovered will exist elsewhere wherever their relata are present" (Sayer 1992 p.243). Claims to knowledge are tested by corroboration rather than replication. Given the types of questions an intensive process seeks to ask, methods become less focused on building reputable sample sizes and may instead focus in on a very few number of specific processes, relationships or events. In line with this rationale Sayer (1992 p. 245), has suggested the need for "less formal, less standardized and more interactive" forms of research methods, in part to avoid one way communication in which respondents are limited by the parameters of the researcher's questions. Less structured interviews allow greater flexibility and reformulation of

interview questions and sequencing. Specific questions can be created based on background knowledge of the respondent, rather than creating the illusion of innocence and objectivity. Following such an approach the content and order of interview questions, as well as the conduct of the interview itself should be varied among participants in order to allow for two directional flows of information and thus afford an understanding beyond preconceived and ridged series of questions. Such an approach serves as a "counter to the rather particular idea that researchers should specify what they are going to find out about before they begin and an acknowledgement of the need to develop research procedures that do not inhibit learning-by-doing" (Sayer 1992 p.245). Put a little differently, "If one accepts that the subject of interest is the very heterogeneity and polyvalence of agents, then it is appropriate to use research techniques that emphasize rather than suppress the differences between subjects" (Pratt 1995 p.68).

2.5 Methods

My approach to this project involved a multi-method design that included semi-structured keyinformant interviews, a 'town hall' style focus group with residents in communities impacted by conservation offset projects, and document analysis.

Key informant interviews were requested from all major stakeholders in the development of offset projects in Alberta, including participants from organizations that had, and those that had not, had a direct connection to participation in offsets. Key informant interviews are particularly useful in gaining information from a relatively small groups of people with direct knowledge or experience with the object of study. Moreover, given their less formal and conversational approach key informant interviews provide a degree of flexibility in how topics and information are explored. For example, a concept or idea that emerges within a discussion with one informant can then be explored with others, and follow up interviews or questions can usually be easily coordinated so that the development of knowledge becomes an iterative process.

However, these strengths are also, conversely, some of the limitations to this instrument, as the data gathered often does not lend itself to broader generalizations and quantification in the same way that survey data would. On a practical level, key informant interviews provide relatively easy access to people with a great deal of information and/or experience on a particular topic at a relatively low cost.

Requests for interviews were made to provincial government ministries (Alberta Sustainable Resource Development and Alberta Parks), representatives of Municipal District 124, major oil sands industry (Suncor, Shell, and Nexen), participating and non-participating NGOs (ACA, Pembina, The Nature Conservancy, Greenpeace, Sierra Club Prairie Chapter, CPAWS Northern Alberta, and the Boreal Conservation Initiative). First Nations located in the boreal region were invited to participate following protocols provided by the Treaty 8 First Nations of Alberta. This procedure involved me sending an introduction and description of the project to official 'consultation contacts' at individual nations and asking for guidance on how they might like to proceed or participate. First Nations participation was open to a form that the representatives of the nation felt was most productive or appropriate. Introductory letters were sent and follow up phone calls were placed to six nations – Athabasca Chipewyan, Fort McKay, Fort McMurray, Little Red River, Tall Cree, and Kapawe'no. These nations were selected because of their location in areas impacted by oil sands development (Athabasca Chipewyan, Ft. McKay, Ft. McMurray), near conservation offset focus areas (Kapawe'no), or due to their involvement in First Nation initiated offset projects (Little Red River & Tallcree). An interview was also requested with representatives of the Treaty 8 First Nations of Alberta due to consistent reference to the organization in the literature on offsets in Alberta. Agreement to participate was received from two provincial government ministries, two oil industry firms, a municipal councillor from Municipal District 124, four NGOs, and two First Nations. A third nation expressed interest in participation, but explained that due to staffing shortages and more

pressing concerns could not commit to an interview. I did however briefly speak with the consultation contact for this nation on the phone, and she provided some very general insight on the nation's position regarding the use of offsets in response to oil sands disturbances.

Semi-structured interviews were conducted either in person or by telephone with 15 key informants of both participating and non-participating stakeholders -- ENGOs (5), management of Alberta Parks (1) and Sustainable Resource Development (1), Municipal councillor (now Reeve) of Municipal District 124 (1), First Nations staff (3), staff at Treaty 8 First Nations of Alberta (2), and major oil sands industry (2).

In addition to key informant interviews, an informal community meeting (organized by the researcher with the assistance of administrative staff of Municipal District 124) was held in September 2012 with residents of the villages of Flatbush and Fawcett Farms which have been heavily impacted by the siting of conservation offsets developed by the ACA and its corporate partners program (8 participants). This community meeting functioned as a small focus group with open ended conversation on the experiences and concerns of residents experiencing the implementation of offsets sites in their community, with the conversation "focused" by prompts and questions by the researcher. This sort of a small focus group allowed for multi-directional flows of information between both researcher and participants and among participants themselves. As opposed to the often two way flow of information in interviews, participants could pick up on, respond to, or expand on the information being discussed by others allowing for multidirectional flows. Again, some of the strengths of this methodological tool were also its weaknesses, as participants may have felt the need to self-censor or provide certain types of information based on the presence of other people in the community. On a practical front, the co-ordination of a 'town-hall' focus group helped me to overcome some of the trouble that I had had early on in trying to reach individuals in communities impacted by offsets. Organizational assistance from municipal staff, and the ability to host the meeting at the local community hall

likely provided an element of legitimacy to my request for engagement, however, I also note that this connection may have influenced who chose to participate and the types of information they were willing to share. The community meeting was advertised through a mailed letter from the researcher, as well as postings at the general store and on the community kiosk outside the municipal office. While a turnout of 8 participants may seem low, these attendance numbers need to be placed in the context of the communities. Municipal District 124 has a small population spread out across a vast, and largely agricultural landscape. 2011 census data list 895 families spread across more than 10,000 sq. km. The village of Flatbush is a social and administrative hub for the surrounding area, with a general store, small post office and municipal buildings. While functioning as a centre for the surrounding agricultural region the village has a small resident population with fewer than 50 residences within a reasonable distance of the venue. Turnout was also likely impacted by the timing of the meeting which was held in early September, which coincided with harvest season. The letter that was mailed to all boxes at the Flatbush post office also invited individuals to contact me personally if they were interested in participating in a format other than the town hall meeting.

Information about participating landowners was difficult to obtain due to privacy involved in land trust purchases. This is consistent with the experiences of researchers working on private conservation in Alberta who have also noted the difficulty of securing access to information about landowners involved in land trust transactions (Hanson & Filax 2009). A request for contact information of participating landowners was made to the CEO of the Alberta Conservation Association, and was forwarded by the CEO to the lands department of the ACA, but no contact details for participating landowners were forthcoming. Information about participating landowners was gained via publications and radio interviews with two primary participants, John O'Mahoney (Deceased) and Albert Karvonen. Mr. O'Mahony was involved in the establishment of some of the first offset sites created under the BCHI near Winagami Lake.

A high school math teacher and naturalist Mr. O'Mahoney acquired the 30 acre site in 1991 and had been leading interpretive programs with local residents on the property. He sold the property to the ACA-Suncor BCHI program in 2003, with the intention of maintaining his stewardship and interpretive role at the site. Albert Karvonen is also a retired school teacher and principal, who left the profession in his forties to become a wildlife and nature filmmaker. Two parcels of land belonging to Mr. Karvonen's homestead have been secured by the ACA-industry offset program beginning with a 160 acre property in 2008, followed by a 144 acre property 3 years later.

In addition to key informant interviews and the community town hall, research included the collection and analysis of more than 300 documents related to conservation offset programming in Alberta, including relevant government documents and legislation; NGO and industry documents; grey literature; and newspaper, magazine, video, and online media items related to the use of offsets. Interviews and documentary data were organized using NVIVO software. Initial thematic categories or codes were developed based on key concepts relevant to the research questions, with additional codes being added as I worked my way through the data. Segments of text were coded into one or more relevant categories which allowed for the generation of documents which indexed the prevalence of particular themes across the data, and allowed for triangulation of themes or ideas between different types of sources (i.e. government documents, NGO reports, industry press releases).

2.6 Reflections on the research process

The following sections move beyond what was done and why and provide a series of reflections on the process of conducting the research. It is well understood that the process of conducting research itself is often a significant generator of information beyond the strict data collected (Pratt, 1995; Sayer 1992). The first of these reflections touches on the way in which the process

or conduct of the research often provides significant, albeit often unspoken, insight into the operations of power in specific cases. The second of the three reflections addresses ethical and political concerns with research at specific field sites and while these anxieties remain unresolved, they perhaps point to the need for further reflection and thought on the implications of the work we do as academics. The final reflection in this series provides an opportunity to comment on a series of methodological questions raised by both colleagues and reviewers and to address some common assumptions about appropriate research methods when engaging with Aboriginal peoples in Canada.

2.7 Networks of power and participant and researcher anxiety

I opened the newspaper recently to see an article about a lawsuit being launched by a prominent business man against a magazine reporter who had written an unflattering article. Butterflies hit my stomach, and my mind swirled with anxiety about the possible implications of my research, the things I have written and published and the possibility that someone, or some corporation -- magnitudes more powerful than I -- might find some sort of flaw with my work. Or, might the risk of reprisal come from my own government? Bill C51 – the new and sweeping antiterrorism law – has recently come into effect, and conservative ministers of parliament have already openly identified environmental critics as being potential threats to the national interest (Oliver, 2012). The fear of reprisal and the desire to self-discipline is intense. Attempts to silence critics have been well chronicled and retaliation for the criticism provided by clergy, medical doctors, and academics has been well documented (see inter alia McCarthy 2012; Hazula-Delay 2014; Katz-Rozene 2014). Despite being ethically rigorous, maintaining an open mind, and providing balanced analysis, someone might be upset. As a PhD candidate facing an increasingly precarious labour market and drowning in nearly \$70,000 of student loan and credit card debt, it would not take much to sink me. This sort of anxiety haunts my academic work, and

it speaks volumes about the power relationships that mark my field site. It is also reflective of the shifting constitution of the academy and the increasing casualization of academic labour. In both the United States and Canada tenure is becoming elusive as universities and colleges are increasingly staffed by an enormous reserve army of disposable academic labourers. While such a transformation has been economically advantageous for governments and university administrators, it has also severely eroded academic freedom as the producers of uncomfortable knowledge can simply be made to disappear, or are forced into neurotic acts of self-censorship.

One of the largest and most unanticipated obstacles associated with my fieldwork was the nervousness of many of my informant participants to be seen as saying something overly critical or 'unbalanced' about the industrial super-project underway in the Athabasca tar sands. As many have noted, even that term, tar sands, has been widely abandoned for the less pejorative 'oil sands' (Davidsen 2011, Davidson & Gismondi 2011). Early in the process I had anticipated being able to audio record my interviews, particularly given that key informants were providing me with information in their professional capacity. In at least one instance I was able to do so. However, early on it became clear that there was anxiety among participants about the possible implications of audio recordings. Some of this reluctance was explained as being related to the rise of social media and the 'democratization' of news, where anyone can post a clip or poorly contextualized snippet to the internet with possibly negative repercussions. The other, often less explicit concern – not unrelated to that mentioned above – was that such 'leaks' or improperly contextualized content could jeopardize a network of relationships between NGOs, First Nations, and industry. Many of the NGOs I spoke with pride themselves on a nonconfrontational approach to industry, and base their work on collaborative approaches with a broad range of stakeholders. Part of this is related to the general political climate of Alberta, which, as explored in subsequent chapters, is strongly pro-development, and whose

environmental movement has historically been much less influenced by radical approaches. As one NGO respondent commented, the organization he worked for was "being cognizant of the culture of the society which they operate" (TNC 2012). Many also had significant relationships with government either through direct partnerships or funding agreements, or as required allies in the pursuit of their specific conservation activities. As a result, many of the NGO participants were cautious not to position themselves in a way that might jeopardize funding and partnership opportunities (both with government and industry), or their ability to have a recognized and legitimate voice in debates over extractive industry and conservation.

Some First Nation representatives were equally reluctant to be recorded, agreeing to recordings on the condition that they would be destroyed and not stored. Participants again voiced concerns over the risks associated with potential leakage of information and the possibility of the indiscriminate posting of sound bites to the web. I regularly began interviews by openly discussing these concerns and anxieties with participants, and given the often expressed discomfort, I agreed to take notes instead. Notes were recorded during the interview process and immediately following interviews any gaps or short hand were filled in to complete the record. As a result direct quotes were limited to items that caught my attention during interviews or were specifically solicited, rather than the ability to sift through audio transcripts at a later time. While the need to take notes created additional work, modified the style of the interviews and provided fewer opportunities to revisit conversations, the concerns about possible repercussions and the apparent self-censoring of critique provided great insight into the web of institutional relationships and power dynamics surrounding oil sands development and related conservation responses.

Other forms of silence were less self-imposed, but similarly resulted from the relationships between industry and other societal actors. As an example, one First Nation I approached expressed a strong desire to participate, but felt as though they could not spare the time or

resources to do so. In a brief telephone conversation this particular contact expressed some of the strongest critique of conservation offsetting as a means of addressing the impacts of oil sands development, but explained that while her office was interested in participating in my research, it was swamped by the administrative requirements of engaging with big oil. The office had limited staff and resources and was overwhelmed by the volume of reports and documents being sent by oil companies that were operating in their traditional territory. As this particular person described it, it was almost a concerted strategy to overwhelm, and thus silence, the nation. As such, she provided some brief comments on the use of offsets during a phone call, but could not provide an hour, or the resources of an appropriate staff person, for a full interview. Again, the silences said much about the context of power relations in the field.

Perhaps surprisingly one of the major industry players was marked by similar anxieties about participation. After quickly agreeing to an interview request in a very relaxed fashion, my contact followed up with a week-long series of emails seeking more and more information about myself, the research and the interview. I was happy to oblige with the required information and agreed to a request that he remain anonymous and not have content publicly accredited to the firm. In this instance the silence was about control of corporate messaging.

While some of the silences and concern over audio recordings could be seen as a set-back, they also told me a lot about the relationships between stakeholders and the networks of power in which they were operating. The power of big oil business saturates the field and creates a sort of focauldian self-discipline. Following some of Bebbington's (2010) comments on how corporate social responsibility projects shape the spaces of conflict, so too do the power relationships of the industrial project itself serve to shape the ways in which people interact and engage. To be seen as overly critical, is to jeopardize the ability to have a voice, to be perceived as legitimate, or to capture the benefits associated with partnerships and the industrial project itself. There is also a significant perception of inevitability at play, and many people I interviewed

seemed to suggest that given this context, the goal was not to challenge the overall project, but to obtain small, but significant modifications and gains. For some this meant securing conservation gains via corporate partnership, the ability to actively engage in discussions as a recognized participant, or to secure financial or development gains associated with the project. In many respects the process of conducting interviews was as informative as the content derived from them. The process of being in the field, of expressions and impressions beyond the record, taught me plenty about the operation of power and the connections between various groups in society. The anxieties expressed by a number of my research participants were, to a significant degree not dissimilar from my own. Fear of reprisal – whether direct or indirect – marked the interactions of both researcher and participants and were reflective of the shifting power dynamics associated with a series of political and economic transformations linked to contemporary capitalism, be it in the re-organizations of academic labour or the expanding frontiers of extractive resource development.

2.8 Resource booms and research booms

Resource booms cause major social change for the communities caught up in their wake. Arn Keeling (2010) has astutely described the intensity and scope of these changes using Innis's cyclonic metaphor, in which forces from across scales are sucked into a swirling vortex of capital accumulation at particular sites, often only to leave as quickly as they began. The Regional Municipality of Wood Buffalo has undergone a significant transformation as a result of the explosive growth of tar sands development. The region's main city, Fort McMurray has gone from a small frontier town to a city of more than 100,000. The growth has been rapid, with the city's population more than doubling in the past decade, excluding a significant, but a difficult to capture 'shadow population' of workers living in nearby camps. Fort McMurray has been rapidly transformed from a resource outpost to a city connected by daily flights from across the country

and an influx of national and international migrants (some permanent, some seasonal and temporary) in search of their share of the money associated with black gold. And money has been flush. While many of these new migrants toil in the service sector, a significant population of skilled trade labour is basking in good fortune, with more than quarter of households reporting annual incomes of over 250,000 in the 2012 census (Thompson 2012). Such radical transformations in demographic makeup have spawned a series of geographic challenges including housing shortages, and significant pressure on infrastructure from sanitation to transportation (Lewis 2014). By 2012 nearly 34% of the region's population was living in "project accommodations" – the great sea of barrack style temporary housing that marks the landscape of the urban periphery. Much great scholarship has documented these upheavals and transformations (Dorow & Shaughnessy 2013; Major 2013).

Less attention has been paid to the tendency for these regions to experience co-occurring research booms, and the impacts these have on communities. As mining companies, machinery, and migrant labour moves in, so too do a small army of academic researchers, journalists and celebrities, often leading to a sort of double extractive boom. Concerns of this nature first arose during an informal panel discussion organized by myself and two colleagues at the 2014 AAG in Tampa. A small group of academic researchers who work on the social science end of extractive resources came together to discuss some of the challenges of working at sites of resource booms. From mineral mining in Central Asia and the Canadian Arctic, to unconventional fuel booms in the Canadian and American west, this small group of us shared experiences and stories about being in the field. Common to many of our experiences was the perception of a co-occurring research boom at sites of 'cyclonic' development. As miners strip the earth of metals and minerals, so too do academics swarm these same sites in search of academic gold – a great case study that will lead to publications, and promotion in the ivory towers of distant urban centers of the 'global north'. In what ways are we part of the cyclones of

development going on at these disparate research sites? In what ways do our activities mirror those of big industry, who come in, extract, and channel benefits back to the offices and homes of the urban metropoles? Sure, many of us talked about, and in many instances constructed project elements, as a way of returning benefit to communities at the research site. But is this any better, or significantly different than the 'benefits at the margin'² so commonly provided by the big corporations undertaking extractive development projects? I do not claim to have any answers to these and related questions, but it does leave me feeling somewhat uneasy. I certainly think that the unease that such questions generates begs for further exploration and reflection upon the practice of social science field studies at sites of extractive resource booms.

2.9 Indigenous research participants, methods, and colonialism

Another pressing issue that arose from my fieldwork concerns my engagement with First Nations participants. Concerns over best practice when engaging with indigenous peoples has received significant attention in the literature over the last several decades (Tuhiwai Smith 1999; Bull 2010), and rightly so, as there is a long and significant history of academic collaboration in colonial knowledge production and extractive and unethical practice has plagued many social science disciplines.

The scope of my research project did not exclusively focus on First Nations involvement in conservation offsets and extractive development. Rather, as nations whose territory was being impacted by development and in some select instances proponents of offset projects themselves, several First Nations were invited to participate in the larger study of the provincial uptake of this conservation model. The community was not my unit of analysis, either for the

² Bebbington (2010) uses the term 'benefits at the margin' to describe the ways in which corporate social responsibility projects serve to shape conflict over extractive development.

larger study, or in my engagement with First Nations, and as such I chose to engage exclusively with representatives of First Nation governments. This approach was reflective of the nation-to-nation framework that structured my research, and the recognition of Canada and its provinces as settler states operating in a context of unresolved and contested claims to sovereignty. My approach recognizes the inherent right to self-determination of First Nations, including the authority to establish their own political, legal, economic, and social systems. While terminology of "the state" is used frequently throughout the dissertation, I would remind readers that this terminology refers to the settler states of provincial and federal governments which many argue do not possess legitimate, or unilateral, authority in the governance of First Nations and their respective territories. As mentioned in previous sections of this chapter, my engagement with First Nations governments followed protocols provided by the Treaty 8 First Nations of Alberta and I was happy to follow any procedures or protocols provided by the consultation contacts of individual nations.

I feel compelled to briefly comment on this procedure due to questions I have received from participants at conferences, journal reviewers, and academic colleagues who have questioned the decision to engage with First Nations governments rather than at the level of the community. A common thread to these questions was to point to a potential disconnect between First Nations governments and the desires and aspirations of community members. Are interviews with government representatives enough to be able to be make a judgement about what the nation wants or desires? These are indeed valid questions, and I don't presume that the official policies of government officials or civil servants constitute the desire of all members of a nation — in either this context or those of any other nation. There is always a significant degree of debate and disconnect between the people and those who represent them, and in the case of First Nations, the additional imposition of colonial governing structures that don't reflect traditional governance. However, these governing bodies are responsible for decision making

and guiding participation in political and economic projects of import to the nation. Given the scope of my research design and questions, obtaining an understanding of the ways in which First Nations governments were responding to conservation offsets was important. While both community level and more ethnographic based approaches are common methodological approaches to research with Aboriginal peoples in Canada, and would certainly yield more nuanced results of community preferences and understandings, a combination of time and financial constraints, issues of access, and the scope of the project and associated research questions precluded a community-level approach.

2.10 Final thoughts

Beyond outlining my philosophical foundations and providing details of my research design and methods, what I hope to have achieved in this chapter is also a commentary on the ways in which the practice of fieldwork – decisions about scale of analysis, interview style, the selective silences, critiques, nagging anxieties and discomforts – are powerful tools of learning and analysis. The process itself, as much as the contents of its results, provide valuable insights into the functioning of power at particular sites of exploration. The insights derived from both content and process inform subsequent chapters of this dissertation.

3 How new are 'neoliberal' approaches to conservation? Charting the history of collaboration between capital and conservation

3.1 Introduction

The past several decades have seen the production of an abundant literature which attempts to understand what some have termed a 'neoliberal turn' in conservation practice (Igoe & Brockington 2007). Indeed conservation practice across the globe has witnessed a marked shift in actors, institutions, and practices surrounding attempts to 'save' nature. While in many instances former state-led conservation in the form of national parks and protected areas continue to be a dominant model, we have also witnessed a co-occurring increase in the role being played by private non-governmental actors, corporations, and supra-national organizations. Increasingly NGOs, corporate partners and philanthropists have taken a more dominant role in conservation activities, and with it have emerged a new series of market-oriented approaches to conservation that seemingly deviate from former state-led command and control models. Many have sought to explore both the motivations and rationales for such involvement, and the material implications of greater private actor involvement and market-based instruments for conservation practice (see inter alia Brockington et al. 2008; Cavanagh & Benjaminsen 2014; Hanson 2014; McAfee 2012).

While at times recognizing that conservation and capitalism have a long history of collaboration, much of this recent scholarship has focused on the differences between emergent market mechanisms and their non-state actors and earlier forms of state-led, or command and control conservation. The literature has provided rich accounts of the work involved in the creation of new eco-commodities (Robertson 2006, Sullivan 2013b), the establishment of new market-based conservation tools (Boisvert et al. 2013), new institutions and shifting scales of

governance (MacDonald 2005, 2010, Fairhead et al. 2012) and the policing and securitization often said to accompany many new market-based forms of environmental governance (Dunlap & Fairhead 2014; Lyons & Westoby 2014). Relatively less attention has been paid, however, to the discursive and material continuities between these new market approaches and earlier forms of conservation practice. The following chapter seeks to query these distinctions, and to deepen our understanding of these changes by charting some of the ways in which conservation and capitalism share a substantive history of collaboration. Such an examination is intended to enrich our understanding of contemporary changes, and to complement, rather than specifically challenge, narratives of neoliberal conservation's apparent newness. While undoubtedly there are marked differences between these state-led and market oriented models, and critical scholars have wisely drawn attention to their various modifications, in many respects these novel conservation methods represent a new iteration on a historical continuum of collaboration between capitalism and conservation. The following sections explore the historical development of conservation practices in western Canada, and specifically the province of Alberta, including recent shifts to tools like conservation offsets as a means of enriching some of the dominant discussion of the apparent newness of 'neoliberal' conservation practices. While indeed novel in many respects, a historical examination of conservation practice draws attention to a much longer collaborative relationship between conservation and economic growth, suggesting that in many respects what we are witnessing is less novel than often presented. The emergence and development of new conservation mechanisms such as offsets might best be thought of as a continuation, or morphological iteration, of a much longer historical relationship between powerful economic interests and attempts to 'save' nature. Specifically, in the Canadian context, conservation activities have, and I will argue continue to, play a significant role in nation building activities and the extension of investment and settlement into

new frontiers. While the mechanisms and institutional arrangements have changed, in many respects the material outcomes achieved are remarkably similar.

3.2 Nation building and the expansion of capital, a brief primer on conservation in Canada

Perhaps an appropriate point at which to start this exploration of the conservation movement in Alberta is with the advent of the first National Parks in Canada, which are commonly regarded as the birth site of coordinated conservation practice in Canada (and co-occurring developments elsewhere in North America). While certainly there is a long history of active land management in Canada, dating back to practices of North America's first peoples, the establishment of National Parks is often referenced by environmental historians as the marker of a new ethic and concern about the preservation and management of nature and is often looked to as the genesis for modern conservation in North America (Nash 2001; Kopas 2007; Campbell 2011). However, as historians of Canadian conservation practice have documented (Foster 1998; Loo 2007; Sandlos 2007; Kopas 2007), the development of these early parks were often marked by contradictory logics and rationales, many of which were often more highly informed by a series of economic imperatives and nation building exercises than they were with 'saving nature'. Whilst discourses about the preservation of a wild nature were not absent, and many note the influence of thinkers such as John Muir and romantic notions of 'wilderness', such considerations regularly appear in a role of service to projects of economic growth, the building of the colonial nation, or consumption of 'wilderness' itself. It is perhaps here that we can most easily discern some of the collaborative history of conservation and economic development. Whilst often juxtaposed, I would suggest that the romantic ideas of preservationist thinking have often intermingled with, and in many respects supported a much stronger wise-use ethic in early

Canadian conservation. The establishment of Canada's first national park at Banff Springs is illustrative of this history.

The establishment of Canada's first National Parks came, in part, as a result of efforts to build a transcontinental railroad, thereby opening up the western frontier to settlement and development and to draw the far flung reaches of the dominion into the political and economic circuits of a larger Canadian nation. As historians of the railroad and the park have made clear, the significant energy and resources put into building the transportation corridor were an attempt to unite a nation, but also, and importantly and attempt to 'make useful' the vast wilderness of a newly acquired western frontier (Foster 1998, p. 23). As such, the building of the transcontinental railway was a project that sought to expand and solidify colonial sovereignty, settlement, and economic growth into new territory.

The building of the railroad was one of the largest infrastructure projects undertaken in Canadian history and both private interests and the Federal government were keen to find a way to compensate for the financial burden of such an undertaking. One of the primary solutions to this problem emerged with the discovery of hot springs at Banff -- at that point in time the only known hot springs in the dominion -- which were quickly realized to be a source of economic benefit to both the railroad and the federal government. Although prospectors associated with the railway spent little time in staking claim to the commercial potential of the springs, the federal government stepped in to create a situation that would ultimately benefit both the state and the railway. The new park that resulted was intended to serve as a major tourism operation that would drive ridership on the new railway, replenish federal coffers, and drive settlement of the west. As such, the rationale for the establishment of Canada's first National Park was, in many respects, thoroughly economic and was regularly and explicitly discussed in such terms. The railroad was surely a political and economic project to tie the west to the rest, and to make useful the resources of the frontier. The park also presented a wonderful economic opportunity

to recoup some of the significant cost laid out, by both industry and government, to achieve these tasks. Prime Minister MacDonald's comments in the House of Commons defending federal involvement in the establishment of the park reiterate the role of parks in both settlement, sovereignty, and economic gain.

I do not suppose in any portion of the world there can be found a spot, taken altogether, which combines so many attractions and which promises in as great a degree not only large pecuniary advantage to the Dominion, but much prestige to the whole country by attracting the population, not only on this continent, but of Europe to this place. It has all the qualifications necessary to make it a great place of resort...a perennial source of revenue, and if carefully managed it will more than many times recuperate or recoup the Government for any present expenditure (Commons Debates May 3 1887, p.233).

While the 'restorative' potential of the park -- in the dual sense of both the restorative health benefits of the hot springs and the ability to restore the financial coffers of the state and industry - was a key motivator, it was but one of many economic considerations in the development of the park. Developed under what Canadian historian R.C. Brown (1968) has termed a 'doctrine of usefulness', early park policy saw little conflict between recreation and extractive development and sought to foster both as a means of maximizing the economic utility of the park. Lumbering, mining, and a number of extractive activities took place within the park and just beyond its boundaries, including the establishment of a coal mining town 7km northeast of the Banff town site that was owned by a subsidiary of the Canadian Pacific Railway. Moreover, throughout the early 20th century both park landscapes and boundaries were also highly influenced by a series of dams, diversions, and reservoirs associated with the Calgary Power Company's project to harness hydro electricity from the Bow River (Armstrong & Nelles, 2013). What is important from my perspective is that these early state-industry relationships surrounding the establishment of some of the nation's first major conservation areas were intended to drive capital investment and settlement into new colonial frontiers, not unlike the ways in which current conservation offsets schemes are facilitating similar processes of

economic expansion into new territory today. As subsequent sections will outline, conservation projects in Canada, and in Alberta specifically, have regularly been involved in the facilitation of economic development and growth from some of their earliest iterations. While the discourses, institutional arrangements, and methods have shifted over time, the core collaborative relationships are certainly less novel than often presented in the literature on new 'neoliberal' approaches. Particularly in Alberta, the conservation movement has lacked some of the radical, counter-hegemonic variants that developed elsewhere in North America, and instead has had a historical tendency toward wise-use, collaborative approaches.

While the first national parks are perhaps one of the most obvious examples of a collaborative role for conservation in fueling settlement, commercial expansion and uniting the nation, it is but one of a series of historical examples. Scholars of Canadian conservation have noted a substantial history throughout the 19th and 20th centuries which sought to remake nature in ways that benefited communities of existing social privilege, or promoted particular forms of economic development and colonial control. In her extensive study of Canadian conservation practice, Tina Loo draws attention to the ways in which early conservation practitioners sought to actively 'make a modern wilderness' to the benefit of an elite sportsmen's lobby and game hunting interests (2001), or more contemporary examples such as a mid-century attempt to establish a commercial bison meat industry in Wood Buffalo National Park (Loo, 2007). Others have added to this growing literature documenting the ways in which conservation activities were enrolled in promoting transitions to new livelihood strategies amongst Aboriginal peoples – representing an attempt to lessen both fiduciary and administrative problems for the colonial state. From Southern Manitoba (2008), to the Northwest Territories (2007), Sandlos has charted conservation's hand in promoting sedentarism and shifts in livelihood activities that would make administration of populations easier, draw Aboriginal peoples into the larger political economic circuits of the nation, and reduce the fiduciary responsibilities of the federal government. The

role of conservation in pushing forward and securing colonial interests is not unique to Canada and has been well documented in a number of contexts globally (Neumann 1996, Robbins 2006).

Sandilands (2009) has moved this research forward demonstrating how the mid-twentieth century growth of parks and protected areas were often deployed as economic development tools for regions in decline, as a means of demonstrating sovereignty in remote regions, or as gifts for the allegiance of particular political constituencies. Moreover in their role of building national unity she argues that Trudeau's national parks plan sought to mirror a "multi naturalism" in the landscape that would reflect and support emerging multiculturalism policies of the day. Moreover, Sandilands (2009, 2013) suggests that rather than simply a complementary component of the larger practices, that concerns over ecological integrity take a very active and productive role. Whether naturalizing the social diversity of the nation or creating properly representative landscapes, concerns over ecological integrity become actively engaged in these larger political and economic processes. In fact concerns over ecological health have long been implicated in the promotion of economic growth and development, and Sandilands (2013), much like Cronon (1996) and others, suggest that the separation of humanity and nature that lies at the core of much conservation practice serves to absolve our responsibility for destructive behaviours in other contexts. The discursive construction of a pre-historical nature 'out there' often provides licence to turn a blind eye to destructive behaviours elsewhere. To a large degree, this primary foundation of much conservationist thinking -- the strict separation of humanity from nature and the existence of a pre-human world -- is the conceptual core of offsetting programs described in this dissertation. So long as we conserve some 'wilderness' over there, we should somehow feel better, or less concerned, with critically examining the legitimacy of our environmental behaviours elsewhere. In both historical and contemporary contexts this separation has served to facilitate the expansion of capital investment and

extractive development into new frontiers. In many respects conservation practices, in their various forms, have been deeply entwined in relationships of power, at times as interventions in support of dominant state and economic interests, while at others serving to protect society and nature form the excesses of growth and accumulation, albeit often perversely serving to legitimate and fuel further growth elsewhere.

3.3 Historical conservation practice in Alberta

3.3.1 Game Management and 'Sportsmans' clubs

The history of conservation practice in the province of Alberta shares a number of the historical tendencies outlined in the early national parks projects. As was the case in much of Canada, early conservation practice was heavily influenced by game management. This was often a twofold interest, in both the management of landscapes and game animals to appease the needs of 'sportsmen' and settlers, and the desire to sustainably manage a harvest of fish, birds, animals and their associated products for economic benefit. Alberta's early colonial history was very much tied to the fur trade, and the first permanent European settlements in the province spring up near important waterways in the province's north. Aside from Metis and Aboriginal rules governing the conduct of hunts, the frontier remained largely lawless until the early 20th Century. The first game laws in what is now Alberta date back to the late 19th century and come as a result of concerns over dwindling game animal populations – particularly Bison – as the new railway brought an influx of settlers and game hunting tourists to the southern and central portions of the province. This period saw significant reductions in big game, as a result of indiscreet hunting -- both for sport, and sustenance -- and as a result of significant land use changes that replaced game habitat with agriculture and ranching. The first conservation laws in the region were specifically aimed at the protection of game species, including a short lived 1887 ordinance by the then Council of the Northwest Territories that sought to regulate the

Buffalo hunt, and the 1893 "Game Ordinance" which introduced closed seasons for a number of important species and limited the volume of per person take. The restrictions of the ordinance were tightened in 1903, and would become the foundation for the new Provincial Game Act when the province joined confederation in 1905 (Meredith & Radford 2008). Subsequent federal and provincial conservation legislation well into the twentieth century was equally directed at the preservation and wise management of game (Loo 2001, 2007; Foster 1998).

Conservation in Alberta was not however, an explicitly top down exercise, but was highly influenced by a series of local hunting and angling clubs who monitored local conditions, lobbied for particular restrictions, and were often involved in enforcement activities (Meredith & Radford 2008; The Fish and Wildlife Historical Society 2005; Loo 2001). While the membership base of these clubs often displayed elements of economic diversity, on the whole the clubs themselves tended to be initiated and driven by the interests of a local elite. Moreover the significant influence of these early conservation groups, such as the Albert Fish and Game Association and related local sportsmen's clubs, pushed for the development of conservation activities that supported the vision and recreational needs of their membership – which was largely male, Northern European, and economically secure. The development of conservation in Alberta thus shares a very blended history, with both non-governmental sportsmen's associations and provincial and federal governments working in tandem to construct and support particular landscapes and human-environment interaction in the province.

The results of this collaborative process between state and non-state actors tended to reflect the preferences of privileged segments of society, often leading to dispossession and marginalization along lines of race, class, or ethnic origin. Tina Loo has described this as a process of 'conservation as colonialism'. According to Loo,

Aboriginal peoples bore the brunt of criticism...for their 'savage' hunting methods...However, the same rhetoric -- and racialization -- often applied to non-

Aboriginal rural folk...who hunted at night with lights or ran deer with dogs, and to southern European and Asian immigrants who shot birds or deer in urban parks or just outside city limits. (Loo 2001 p.10)

While conservation practice at both the NGO and government levels became increasingly professionalized over the twentieth century the influence of private sector involvement by hunters and anglers remains strong, as has the role played by prominent business interests in the local NGO conservation movement (ACA 2 2013). Groups dedicated to the preservation of Alberta's wildness were often headed by men of corporate backgrounds. For example, the major forces behind the Alberta Fish and Game Association, arguably the oldest sportsman-led conservation NGO in the province, was spearheaded by prominent lawyers, real estate developers, and corporate executives. A number of prominent oil executives were involved in founding the Alberta Wilderness Association in the 1960s and indeed throughout much of the province's history Alberta's civil society groups dedicated to saving the wilderness have been largely supported by the work and resources of major industrial and business figures (Alberta Parks 2013). Indeed, unlike many other North American jurisdictions where 20th century environmental groups often positioned themselves as counter hegemonic, most conservation outfits in Alberta remained their historical attachment to the 'sportsman's movement'. The conservation movement in Alberta, both historical and contemporary, is markedly more Leopold than Muir³. Since 1962 The Alberta Fish and Game Association has held annual trophy hunt awards for the most impressive specimens of large game taken in the province. A publication celebrating the group's centenary proudly displays past award winners and others with magnificent trophies of cougar, moose, and bighorn sheep (Meredith and Radford, pp. 395-

³ Interviews with ACA and TNC both commented on the historical strength of the wise use movement in Alberta. A TNC manager quoted Leopold in an interview "putting all the grizzlies in Alaska is like relegating all the happiness to heaven". March 2, 2012.

399). These connections to game hunting are not limited to a few groups, but are rather the pervasive historical face of major conservation groups in the province. The head offices of the Alberta Conservation Association – a major conservation NGO in the province and one with ties to both government and corporate partnerships in offsets – is decorated with a series of taxidermied animals, including a prominently featured bison head above the reception counter. My intent is not to suggest that hunting is antithetical to conservation -- in fact the wise use focus avoids some of the nature/society dualisms so present in other variants -- but rather to recognize the historical development of the conservation movement in the province and its ties to game hunting and historical social privilege related to race, gender, and class. It is also important to recognize that local non-government conservation groups, which have played and continue to play a significant role in provincial conservation, have had a historical tendency to center on business friendly, wise-use approaches, as opposed to some of the more radical and counter-development conservation movements in other North American jurisdictions⁴. Moreover, rather than representing a new development, conservation activities in Alberta have always been marked by a strong involvement of private, non-governmental actors.

⁴ I do wish to recognize that there are a diversity of approaches taken to environmental activism in the province, including a number of organizations who are far more critical of development. However, a good number of these organizations (Greenpeace, ForestEthics, etc.) have roots external to the province and operate as either national or international environmental NGOs or networks. A disproportionate number of environmental organizations that have organizational roots in Alberta have tended to take a less critical, more wise-use approach to industry and resource development. For example, while the Alberta-founded Pembina Institute has been critical of government legislation and oil sands development, they are also cautious not to alienate collaborative partnerships and have been a key promoter of participation in offsets. Grassroots opposition to oil sands expansion does occur in the province, often occurring among communities most gravely impacted by development, and these grassroots movements have often forged alliances with national or transnational NGO groups and networks to improve the efficacy of their activities.

3.3.2 Provincial parks and the conditioning of labour

The first provincial parks in Alberta were established in the 1930s, facilitated, in part by the Natural Resources Transfer Act, which gave the province ownership of its natural resources. These early parks were small and were primarily intended to serve recreational purposes (Alberta Parks 2015). Aspen Beach, Park Lake and Sylvan Lake are examples of these initial parks, and were often located in relatively close proximity to areas of settlement and intended to provide Albertans with places to swim, play and enjoy the outdoors. While the depression and subsequent war era greatly reduced the province's ability and interest in a parks system, the post war era saw a significant boom in the establishment of provincial parks. Between 1951 and 1971 46 new provincial parks were established (Alberta Parks 2015). Such expansion cooccurred with social and economic changes associated with the post-war era including increasing urbanization of the population, related changes in labour and consumption patterns, the growing influence of the welfare state, and the development of post war car culture. In much the same way that parks and outdoor recreation areas in other locales of North America had sought to remedy the perceived evils of urbanization, and to condition and rejuvenate a growing industrial and professional labour force (see inter alia Sandilands & Erickson 2010; Kopas 2007; Cronon 1996) the explosive growth of provincial parks during this period was largely a response to an increasing demand for outdoor recreation spaces for a growing urban and industrial society. A review of annual provincial Parks reports from this period (late 1950s to early 1970s) demonstrates a strong focus on improvements to park amenities (playgrounds, beach and road access improvements, sanitation services and campgrounds) as a means of meeting growing recreational demands. While not entirely absent, considerations of ecological preservation are regularly framed and justified by recreational demands. Again, this interest in conserving an external nature was driven by an ethic which would suggest that social and environmental problems in urban areas could be relieved via the existence of a separate nature 'out there'.

Despite a shift toward ecological considerations in the later part of the twentieth century, the connection between outdoor amenities and labour considerations remains an important component of parks and protected areas in the province. During interviews conducted in 2012-2013 with managers at Alberta Parks and The Nature Conservancy both men suggested that access to outdoor recreation amenities were an important driver in encouraging talent and skilled labourers to settle in the province. As a manager at the Nature Conservancy suggested, even after the draw of oil has disappeared in 30 or 50 years, the close proximity to world class outdoor amenities, such as those at Banff and elsewhere, will continue to draw people to settle in the province, contributing to ongoing growth and prosperity. Both men spoke of the draw provided by outdoor nature amenities in ways that mirror Sir John A. Macdonald's comment on the first National Park – as a means to draw settlement and development to the west.

By the 1990s the heavy recreation focus of Alberta Parks had been replaced with a greater emphasis on concepts of protection and ecological integrity. The shift also coincided with a period of remarkable expansion of provincially protected areas, largely in the form of 'Wildland Parks', which provide fewer recreational amenities than Provincial Parks, but permit hunting and off-road vehicles. This expansion largely came as a response to the 12% protected area goals outlined in the 1987 World Commission on Environment and Development (WCED) report 'Our Common Future', and a provincial commitment to participate in Canada's desire to complete a network of protected areas. Between 1995 and 2000 the 'Special Places' program of the Alberta government expanded provincially protected areas by approximately 700%. However, the program was widely criticised for its nervous desire not to 'sterilize' resources, and its rather poor protection of ecosystems (Kennett 1998; Nikiforuk 1998). Moreover, this same period of growth saw significant institutional re-organization of administration of parks, including a regular shuffling of the parks division within government, a 50% reduction in staff and a 30% reduction

in funding, leading many to believe that despite the growth in protected areas on paper, the government was not sufficiently committed to the project (CPAWS 2008).

While the 1990s saw a rapid expansion of provincially protected areas under the 'Special Places 2000 program' it was also a time of a co-occurring expansion of private involvement in conservation. While Alberta has a long history of private sector involvement in conservation – via the sportsmen clubs mentioned above -- the 1990s saw an increased focus on the potential for private conservation activities to complement those of the state. Part of this shift was motivated by a global trend toward more 'lean state' approaches to government, but was also the result of a recognition that some of the province's greatest conservation challenges lay in areas where private property tends to dominate. The past two decades have seen an increasing role for private actors, particularly via the involvement of land trust organizations – which now constitute "one of the fastest growing segments of the conservation movement in Canada" (Hanson and Filax 2009 p.212). Both federal and provincial programs converged in the mid-1990s to support the growth of this sector, including the federal Ecological Gifts Program that provided tax incentives and the Alberta government's active facilitation of land trust activity via the provincial Environmental Protection and Enhancement Act's recognition of easements. Both of these governmental incentives led to a significant expansion of private conservation activities. While historically the private sector had always played a strong role in terms of advocacy, data collection and monitoring, and to a lesser degree land trusts, provincial and federal incentives led to an increasingly active role for private conservation NGOs, particularly via land trusts. These changes in the conservation field have been further supported by the provincial Land Use Framework (2008) and the Alberta Land Stewardship Act (2009) that recognize and facilitate an increased role for private conservation activities, including land trusts and new market-oriented approaches such as conservation offsets.

3.3.3 Offsets and the 'neoliberal turn'

Much has been made of the 'neoliberal turn' in conservation practice and an apparent shift from state-centered management and control to a greater role for non-state actors, including industry, and the development of a number of market-based conservation tools. Terrestrial conservation offsets, such as those that are at the core subject of this dissertation, might be thought to reflect the characteristics of such a shift. The following sections review the historical development of mitigation, conservation or biodiversity offsets, as they are variously called, and the development of offset projects in Alberta.

Offsets in their diverse current forms can trace their history back to at least the early 1970s and ideas of compensation (or mitigation) for development induced disturbance of biodiversity in the context of wetlands. The Ramsar Convention (1972), recognized as one of the first intergovernmental agreements on environmental issues, sought to develop a series of measures to deal with increasing loss and degradation of wetlands on a global scale. The convention has been cited as one of the earliest to suggest the idea of compensation for disturbance or degradation of disturbed ecosystems (Hrabanski 2015). This initial reference to the idea was part of a larger mitigation hierarchy. Early versions of mitigation offsets were intended to be the last step in a tiered hierarchy of avoidance, minimization, rehabilitation/restoration, and finally as a last resort, offsets (BBOP, 2015). However, it has been argued that the focus on following such a hierarchy and utilizing offsets as a last resort was rarely applied in practice (Robertson 2000; Hrabanski 2015; Clare et al. 2011; Robertson & Hough 2009). The development of mitigation principles and compensation, and their associated implementation patterns, underwrite and are roughly contemporaneous with the development of concepts of no-net-loss and wetland mitigation offsets in the USA. The concepts of no-net-loss and the use of mitigation offsets in the USA began gaining ground in the 1970s, and the 1977

Clean Water Act in the United States provides an early legislative foundation for the use of mitigation hierarchies in relation to disturbed wetland ecosystems (CWA, 1977). However, as Robertson (2000 p.470) notes, the on the ground use of mitigation measures to ensure no-net loss of wetlands pre-date the CWA by several years and "mitigation of wetland destruction through wetland creation or restoration became very common during the 1970s", despite its tendency to avoid consideration of the guiding principles of the mitigation hierarchy. As such, early developments in the use of mitigation offsets, both in the United States and globally, often paid relatively scant attention to impact avoidance and minimization, and instead skipped ahead to the broad use of mitigation offsets to compensate for ecosystem disturbances.

Both the Ramsar Convention and American wetland management are early examples of the evolution of mitigation offsets, however, these early iterations were largely based on a governance framework of state-centred management, legislative requirements, and compliance. However, the general principles of mitigation offsets dovetailed quite nicely with a number of major ideological shifts and a rescaling of governance mechanisms on a global scale, most notably the emergence of lean-state, neoliberal approaches to governance which came to the fore in the last two decades of the twentieth century. Beginning in the late 1970s and continuing well into the 21century, radical shifts in governance have taken place on a global scale. Environmental governance and conservation practices were equally impacted by these broader shifts in governance strategies and while not without their detractors (Gatto & De Leo 2000; Peterson et al. 2010; Radford & Adams 2009), lean-state and market-oriented mechanisms have become increasingly pervasive within the conservation community. Stephen Bernstein (2001) has brilliantly documented the history of what he calls the development of 'a norm complex of liberal environmentalism'. Tracing ideological and institutional shifts from the 1972 United Nations Conference on the Human Environment (UNCHE) in Stockholm to the 1992 United Nations Conference Environment Development (UNCED) Rio Earth Summit, Bernstein

demonstrates a significant transformation in approaches to environmental protection that gained ground during the last two decades of the 20th century and which saw a progressive erosion of state-centred management and the evolution of a new suite of governance techniques based on market principles. This same period saw the increasing advancement of supra-national involvement in issues of the global environment, notably through organizations such as the United Nations Conference on Environment and Development and Organization for Economic Development and Co-operation (OECD). These supra-national organizations and international negotiations further solidified the move toward a greater involvement of non-state actors and market mechanisms, concepts that were promoted in the 1987 Brundtland report, and the associated 1992 Rio earth summit. These included the rise of green consumerist strategies, associated industry and third party certification systems, and environmentally grounded economic development proposals. A significant portion of this trend was a move to value nature in economic terms and thus to "internalise the externalities". This new shift in valuing nature was perhaps best captured in the seminal paper by Costanza et al. (1997), which placed an economic value of somewhere between 16-54 trillion dollars on the services provided by the world's biosphere. While compensation mechanisms for disturbed habitat have roots in early state-centred management, their general principles were easily adapted to the shifting terrain of environmental protection during this period. By the early 1990s American wetland mitigation had evolved to include offset banking and the creation, storage, and trade in mitigation credits. As discussed in subsequent chapters, these shifts to market-based approaches did not do away with state intervention, they merely represent shifts in state involvement. However, despite an ongoing role for state-centred management in the promotion and facilitation of these tools, mitigation offsets increasingly look to a series of market approaches for the creation and trade of ecosystem credits to compensate for disturbances. During the last 10-15 years this move has accelerated with the development of mitigation offset programs across a number of global

contexts (Masden et al. 2010), including increasingly market-oriented wetland banking in the United States, habitat banking for endangered species in many US states (notably California and Florida), and programs such as Biobanking in Victoria and New South Wales, Australia. Further support for market-based conservation offsets comes from the recognition of the ecosystem services model in the Millennium Ecosystem Assessment (2005), International Union for Conservation of Nature (IUCN) recognition of biodiversity offsets and banking (Ten kate et al. 2004), and the development of ecosystem marketplace, an online clearinghouse for information on multiple forms of market-based environmental management, including offsets and conservation (or biodiversity) banking (Ecosystem marketplace, 2015). More recent support comes from the Business and Biodiversity Offsets Programme (BBOP), an international organization of industry, government and NGO partners who seek the advancement of training, advocacy, and the development of best practices in the use of biodiversity offsets across the globe (BBOP, 2015).

Canada has been a relative late comer in the exploration and adoption of market-based conservation instruments, including the use of offsets, although that is beginning to change. Antecedents to contemporary market-oriented conservation offsets in the Canadian context include the Department of Fisheries and Oceans (DFO) policies on the disturbance of fish habitat, and limited exploration of related offset mechanisms such as carbon offsets for large industrial polluters (GoA 2014b; Klinsky 2015). The earliest precursors to conservation offsets in Canada mirror those of the international and American experience in that they focus on aquatic habitat, although in Canada this is tied to the disturbance of fish habitat. The federal Department of Fisheries and Oceans has, since 1977, had a policy to avoid the harmful alteration, destruction or disturbance of fish habitat (referred to as HADD). Dating back as far as 1986 the department adopted concepts of no-net-loss of fish habitat, and following a standard mitigation hierarchy required any unavoidable disturbances to be compensated through the creation or

enhancement of equivalent habitat (DFO, 2002). Mirroring international precedents, DFO policy sought to avoid or minimize disturbance, leaving mitigation compensation as a last resort. Over the past three decades the no-net-loss provisions of HADD have required the mitigation of unavoidable disturbances to fish habitat across the country, and have generally proscribed disturbance to compensation ratios greater than 1:1. DFO fisheries policy on compensation has not developed fully market-based initiatives for the delivery of compensation. Habitat banking related to DFO policy has existed in Canada since 1993 with the establishment of the first habitat bank in North Fraser Harbour, B.C. and subsequent projects in a number of other Canadian jurisdictions, notably Quebec (Hunt et al. 2011). Despite these examples, the use of habitat banks has not been widely used to address DFO HADD compensation requirements and has seen little involvement of private industry. Rather, the limited use of banks have generally been established and used by government departments and agencies (transportation, port authorities etc.) requiring compliance with disturbance mitigation. This limited exploration and use of banking models is beginning to shift, however, and the DFO is exploring the greater use of banking models to meet regulatory compensation requirements (Hunt et al. 2011).

Similar antecedents to conservation offsets can be found in the limited exploration of carbon offset models in Canada. Exploration of carbon offsets in Canada have been occurring on various scales over the last several decades, although until recently these have been voluntary in nature and lacked any legislative requirement for participation. This changed in 2007 with Alberta's implementation of a carbon emissions offset policy in 2007, making it the first jurisdiction in the country to introduce such regulatory requirements (although British Columbia followed a year later and Quebec developed a cap-and-trade system in 2011). It has been speculated that Alberta's move to develop a carbon market was an attempt to get out ahead of impending federal legislation and avoid potential losses to resource revenues, although the threat of federal carbon trading legislation failed to materialize (Alini, 2013). Both the Alberta

and British Columbia regulated systems, as well as voluntary programs and pilot projects across the country, have operated on similar models which would generate carbon offset credits via a series of conservation, afforestation, or other restoration type activities. The general principle in Alberta puts a cap on emissions of large polluters (those over 100,000 tonnes annually). Large emitters who cannot meet the requirements of the cap can pay a fee of \$15/tonne for excess emissions, or alternatively invest in a number of conservation and environmental projects, which are counted as credits against their over limit emissions. In many respects these sorts of interventions mark a contemporaneous development of environmental governance tools operating on principles not dissimilar to conservation or biodiversity offsets. In both DFO fisheries policy and nascent carbon markets we see a guiding principle that ecological harm (either in the form of pollution or habitat disturbance) can be compensated for via the protection, improvement, or creation of healthy ecosystems elsewhere. These same principles underlie the foundations of conservation offsets, and their development fits within this larger historical trajectory of the development of similar tools in the Canadian context.

The introduction of conservation offsets models in Alberta is also tied to broader changes in the structure of conservation practice in the province and the involvement of private conservation trusts. As has been mentioned, private NGO and civil society groups have always played a significant role in the history of conservation practice in the province, however scholars have noted a marked shift in government policies in the 1990s that led to an increasingly important role for private land trusts and non-governmental actors (Ryan et al. 2014; Hanson & Filax 2009). Scholars of the Alberta case have suggested that the introduction of Federal government's 1995 Ecological Gifts program was a major catalyst for the increased interest in private land trusts (Hanson 2014). Beginning in the late 1990s and carrying into the new century the province of Alberta has developed a series of policies which further support conservation through private land trusts (Kwasniak 1997; Land Use Framework 2008). Thus, rather than

representing an autonomous or spontaneous entry into conservation practice in Alberta, offsets are perhaps more accurately viewed as an insertion of industrial investment in pre-existing land trust activities. Offsets in response to extractive industry develop at the convergence of broader global trends favouring market friendly non-state tools and mitigation, and regional and provincial trends toward a greater role for land trusts. This nexus of influences remains present today, as current offset programs are perhaps best thought of as corporate funding of land trust activities as a form of compensation for industrial disturbance, while industry and NGO groups actively lobby for the development of a provincial banking system that would more accurately resemble a market mechanism. This interpretation – of a convergence of global governance trends and provincial shifts toward greater private sector conservation - are reflected in the makeup of offset participants. Conservation organizations who have an existing connection to land trust activities (Albert Conservation Association, The Nature Conservancy, Ducks Unlimited) have been the primary NGO actors engaged with industrial offset projects. As such these NGOs are already both procedurally and ideologically aligned and have entered into conservation offset programs with industry as a means to fund existing land trust activities. Other groups, most notably Pembina and the associated Oil Sands Environmental Coalition are not active participants in the creation of offsets, but have been supporters, in part as a means to leverage these tools in their role as interveners in extractive project applications.

Interviews conducted in 2012-2013 with members of provincial government, industry and non-governmental conservation organizations in Alberta all identified initiatives taken by oil firm Suncor as the genesis for conservation offset projects in the province. All stakeholders interviewed suggest that the initial interest in using conservation offsets date back to 2003, when Suncor contacted Alberta Parks, looking for opportunities to offset the disturbance footprint of its oil sands operations via conservation projects. A number of reasons have been cited for Alberta Parks response, which was to suggest -- and ultimately broker -- a partnership

between Suncor and the Alberta Conservation Association to develop a conservation offset project. Is has been suggested that both Parks and Suncor may have been concerned with the optics of a direct partnership between Provincial Parks and industry (Alberta Parks 2013; ASRD 2013; Suncor 2012) while others have suggested that Parks may have had reservations about the financial implications of taking on additional conservation work via a partnership with Suncor (ACA 1 2012). Whatever the reason, Parks and Suncor sought out a partnership with the ACA, a non-governmental conservation group with the capacity to carry out the activities. The ACA's experience with the purchase of private lands for conservation was a significant factor in this regard (Waterman 2013). The initial project that grew out of this was known as the Boreal Habitat Conservation Initiative and focused on the conservation of shoreline properties around Winagami Lake Provincial Park. The initial commitment was a modest investment of \$200,000 to purchase and protect 470 acres of property adjacent to the lake and park. This partnership has been renewed several times since and has over the last decade led to the commitment of more than 4 million dollars and conservation of approximately 7,000 acres of boreal habitat via direct partnership with Suncor. The partnership was most recently renewed in 2013, with Suncor committing 600,000 annually over the next three years (ACA corporate partners program 2013). Three years into this initial project Shell Canada was brought on board as a corporate partner, although their participation was less overtly voluntary. The Pembina Institute had partnered with a number of small local grass roots environmental groups in the Fort McMurray area under the banner of the Oil Sands Environmental Coalition (OSEC) and have actively sought, and been

granted, participation in mine development and expansion approval reviews as affected parties⁵. Part of this strategy has involved OSEC/Pembina leasing a portion of land downstream for recreational purposes in order to establish itself as a directly impacted party (Pembina 2012). Despite being primarily located in Edmonton and Calgary, this lease arrangement provides the group with a regional voice, and the ability to meet the requirements of new rules over who can have standing at project approval hearings. Shell's participation in offset programming was largely driven by the involvement of OSEC in the approval process for Shell's Muskeg River Mine expansion project (Pembina 2012; AOIF 2013). In 2006 OSEC sought and received Shell's participation in offset programming with the ACA as a condition of approval for the firm's Muskeg river project. This initial commitment saw Shell agree to supply financing of 200,000 annually for 10 years for the ACA to purchase lands to serve as offsets for the projects disturbance footprint, and an additional commitment of 200,000 annually over ten years for afforestation activities on these sites through a partnership with Tree Canada (Buss 2006; ACA 2 2012). The afforestation activities of the Shell offset projects differ from the Suncor commitments which most often do not include tree planting. Some have speculated that the afforestation activities may provide a link to carbon offset credits, although this connection has not been established or verified. Shell's partnership with the ACA has expanded significantly since this initial agreement. In 2012 Shell, via a partnership with the ACA, purchased more than 1,800 acres of lands adjacent to Moonshine Lake Provincial Park. This purchase was part of Shell's participation in the ACA corporate partners program, rather than the early BCHI program, however the creation of this significant conservation area is regularly cited as

⁵ The group was barred from participation in a number of application hearings beginning in 2012. According to internal government memos, this decision was based on a perception that the group was "un-cooperative". The courts later overturned the decision. See MacLeans (2013).

providing compensation for the firm's development disturbances in the province. In 2007 Total E&P initiated a partnership with the ACA through the BHCI and a year later provided funding for the conservation of 138 acres adjacent to Hubert Lake Wildland Park, and has agreed to the purchase of an additional 1,235 acres to serve as an offset for disturbances associated with its Joslyn projects in the Athabasca (Total E&P, 2015). Much like Shell, Total's entry into conservation offset agreements with the ACA came as a result of OSEC interventions in approval hearings. OSEC agreed to withdraw its objections to the Total Joslyn III in situ development in exchange for a commitment from Total to offset the disturbance footprint of the project through a partnership with the ACA (OSEC 2010).

The success and growth of these early conservation offset projects have been complemented by a growing interest in this conservation model by practitioners, researchers and the provincial government. In 2008 energy firm Nexen supplied a donation of \$40,000 for research and an associated workshop on the use of conservation offsets in the province carried out by researchers from the Pembina Institute and the University of Alberta, which led to the 2008 publication of the report "Catching up: Conservation and biodiversity offsets in Alberta's boreal forest". The report served as a foundation for the Boreal Conservation Offsets Advisory Group, a working group comprised of industry, conservation organizations and some First Nations, who in 2009 published a draft business model and policy report on the use of conservation offsets with banking – which has been identified as a preferred format across a broad range of provincial stakeholders (Dyer et al. 2008; OSLI 2009). Over the last several years these foundational reports and policy recommendations have been expanded upon via research and reports by Alberta Innovates Technology Futures (Weber 2011a&b), and the Alberta Conservation Association (Croft et al. 2011). In the winter of 2014 researchers and practitioners gathered at a conference hosted by the University of Ottawa to discuss the future of

conservation offsets in Canada. Research related to the pilots underway in Alberta featured prominently.

The provincial government has also recognized the use of conservation offsets. According to interviews and based on a review of government documents, the first official recognition by the provincial government dates to 2009, and the explicit inclusion of offsets in the Alberta Land Stewardship Act (ALSA), a new piece of land use planning legalisation that provides the enabling conditions for the use of offsets in the province. The provincial government has also made reference to the use of offsets in a number of documents and media pieces (GoA, 2009a; ALSA 2009). Despite the passage of enabling legislation and reference to the use of offsets in government documents, the provincial government has yet to roll out regulatory measures that would facilitate a province wide offset system, or associated markets and banking. As explained by a senior manager at Sustainable Resource Development, the government is currently seeking ways to test the models, account for their associated impacts, and understand the risks and benefits involved prior to rolling out a provincially regulated system – although interview participants, industry and others seem to think this will happen in the future. The provincial government's interest in testing the model also led to the development of a pilot project known as SEACOP, the Southeast Alberta Conservation Offsets Pilot. The pilot has been in development since approximately 2012, has recently been rolled out over a study area encompassing lands in the vicinity of Medicine Hat, Brooks and Lethbridge. The project differs in some significant ways from the boreal conservation offset projects, in that it seeks to conserve areas of grasslands in the Southeast which have historically suffered from significant disturbances from agriculture, oil and gas and urban development. Moreover, rather than relying on the purchase of lands and their conversion to offset sites that broadly resemble parks, the model explored in this pilot would see the creation of offsets through proscriptive land management practices. As such, agricultural land owners would not be selling their lands, but

rather managing them in specific ways that produce the conservation benefit and associated offset. This new model addresses a different set of land uses and needs in southern regions of the province, but also avoids some of the conflict that has resulted from the boreal projects undertaken by the ACA on a model of fee-simple purchase. The study is in its early stages and results will not be available for some time, however, both residents and local governments in agricultural areas impacted by the ACA boreal offsets program have expressed interest in a model of this nature that would see opportunities for agriculturalists to generate offsets through land management practices, rather than the sale and conversion of farms to park-like offset sites.

3.4 In what ways is the neoliberal particularly new?

What I have outlined above is a historical sketch of the development of conservation practices in Alberta and the more recent evolution of the use of conservation offsets, which are often held by the literature to be representative of a new 'neoliberal' turn in conservation practice on a global scale (Pawliczek & Sullivan 2011; Lohmann 2011). However, despite their apparent newness – and there are indeed ways in which they are novel – these new conservation instruments do not necessarily represent the radical break or transformation that is often highlighted in the literature. As an examination of the history of conservation practice in Alberta demonstrates, conservation activities in Alberta have only partially been a top-down state-centered governance system. Private civil society groups and non-governmental organizations have always had a strong role to play in the province's conservation practices and in many historical instances have driven and shaped government policy and legislation. While a marked shift toward greater private sector involvement has occurred since the early 1990s, it could perhaps be argued that the mid-century strong welfare state model was more of a historical aberration, given the strong historical role of private actors in the province.

Moreover, there is a long and significant history of conservation playing a collaborative role with economic development and the interests of powerful societal actors. Such a history is not uncommon in most jurisdictions in Canada (Loo 2007), nor in many regions globally (MacDonald 2005; Neumann 1996). However, even more pronounced in the Alberta case is the very limited development of a mid-twentieth century conservation movement that would present itself as oppositional to development, as was common in other regions of North America⁶. Rather, from its earliest developments through to more contemporary examples the movement in Alberta has often been as collaborative as it has been oppositional.

This is not to say that the foray into conservation offsets, or other market-based environmental governance strategies in the province, are not new in some consequential ways. The results presented here are consistent with other explorations of market conservation that suggest that what we are witnessing is an intensification of collaborative processes in some respects (Brockington et al. 2008), a more explicit paring of industrial development and conservation, and the production of novel forms of discursive and semiotic benefits (Brockington 2008; Sullivan 2010) which often serve to facilitate further development (Wekerle et al. 2007; Ervine 2012). Indeed the explicit connection between industry involvement in conservation and the ability to generate public relations benefits that legitimate extractive development are powerful new developments. The chapters that follow explore some of these changes and seek to outline the rationales, logics, and material outcomes of the use of market-oriented tools such as offsets. However they also serve to complicate some of the dominant narratives associated with the ascendency of these new governance tools.

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⁶ For example some of the movements originating in the American and Canadian west (Earth First!, Greenpeace, etc.)

In contrast to the often grand pronouncements that the underlying institutional configurations, rationales or material outcomes are entirely 'new', I would suggest that what we are witnessing is actually a new configuration of a much longer history of collaboration. The growing acceptance of offsets does not mark some radical break between former state-led conservation, rather conservation practice has been and continues to be dominated by coalitions of both private and state involvement. More importantly, the material outcomes of these processes remain remarkably similar in many respects. As noted in the beginning sections of this chapter, conservation activities, both in Alberta and elsewhere in Canada, were often part of a politicaleconomic project to expand development into new territorial frontiers. I would argue that one of the most substantive material impacts of the use of current offset projects in the province achieves much the same, albeit in a somewhat different fashion. Rather than creating a tourist draw, or attempting to discipline and manage populations, offsets are serving as a legitimation strategy for the expansion of economic investment and extractive development into new frontiers in Northern Alberta. By providing development's other, offsets are in many respects facilitating the expansion of the development whose impacts they seek to mitigate. Their increasing appearance as conditions of project expansions and approvals are a testament to this facilitating role. In this respect new conservation offset projects are achieving some very well-worn outcomes, pushing investment, settlement and industrial expansion into new frontiers and opening up and "making useful" new territory in ways not dissimilar to the first National Parks. As a result, a move to market-oriented tools is perhaps better conceptualized as a new iteration of a pre-existing nexus of private and state actors in conservation practice, and an extension (and intensification) of a much longer historical relationship between conservation and powerful interests, particularly in the case of Alberta.

4 Market-based environmental governance and public resources

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4.1 Introduction

Over the past decade there has been increasing interest in the use of terrestrial conservation offsets as a policy tool to address the growing ecological impacts of Alberta's oil sands industry. Offsets have garnered the support of industry, environmental and conservation groups, the provincial government and some First Nations. Despite this broad support, and a decade of pilot projects and studies, a market in terrestrial offsets has failed to take hold in Alberta. A number of factors have been responsible for the constrained development of markets in offsets in the province, but perhaps none as important as a lack of state leadership and intervention in support of such strategies. This chapter explores how the lack of a diversified provincial economy, state reliance on the revenues derived from extractive resource development, and a context of public land and resource ownership have led to a lack of state intervention and the hindering of attempts to implement conservation offsets as a market-led mitigation tool in the province. Such an analysis complicates some of the dominant narratives surrounding the growing global trend toward market-based environmental governance tools.

Market-based instruments for environmental governance (MBIs) have become increasingly popular on a global scale. Support for the use of MBIs is often premised on the assumption that these new techniques offer greater flexibility and efficiency than state-centred command & control, and often espouse the ability to reconcile economic development and growth with environmental protection (see inter alia Anderson and Leal 2001; Daily and Ellison 2002; Shogren 2005; Turner and Daily 2008). Over the last several decades there has been a growing interest in a variety of market-based instruments from markets in atmospheric carbon to the banking of significant ecological habitat. Payment for ecosystem services, tradable credits in

pollution and biological resources, and biodiversity offsets are but a few examples of these new market-based instruments. The concept of conservation (or biodiversity) offsets has global antecedents in earlier regulated compensation or mitigation measures, but have more recently evolved to include a stronger focus on the use of market initiated systems whereby development disturbance is mitigated via the purchase, storage, and exchange of terrestrial habitat credits. The concept of mitigating ecosystem disturbance via the conservation of equivalent units of habitat elsewhere can occur through a variety of mechanisms, including voluntary initiatives on the part of industry, or government regulation requiring mitigation via offsets, which in many instances have been facilitated via market-based systems where third party bankers develop offset credits for sale to buyers requiring them under government regulation. Ecosystem Marketplace documents the existence of approximately 65 conservation (or biodiversity) offset programs in various stages of development across the globe (Masden et al. 2010).

A number of researchers in geography and cognate social sciences have provided rich typologies for understanding the various forms these market-based governance tools might take (Bakker 2007; Castree 2008; Lemos and Agrawal 2006; Heritier and Rhodes 2011). In his exploration of nature's neoliberalizations Castree (2008) outlines a series of core characteristics or "ideal types" found in much of the literature on neoliberal environmental governance and the shift to market-based approaches. While recognizing the limitations of such ideal types, Castree's (2008) overview includes: privatization, marketization, deregulation, reregulation in support of privatization and marketization, the development of "market-proxies in the residual public sector", and the "construction of flanking mechanisms in civil society" (p. 142). Bakker's (2007) study of water governance provides a series of similar typologies of possible neoliberal governance reforms that may be employed either singularly, or in combination, by a number of governance actors and institutions.

Much scholarship on the use of MBIs as governance tools have wisely recognized the ongoing role of the state, albeit this recognition most often focuses on the role of the state as facilitator via re-regulation in support of privatization and markets. Despite this recognition there has been a strong tendency in much of the critical literature to focus on a co-occurring deregulation, or retreat, of the state. This is most clearly seen amongst critics who view the use of market-based instruments as a shift from state-centred command and control to governance via private interests and markets. Much critical scholarship has raised concerns about the level of democratic deficit that results from these shifts, a concern that is largely premised on the apparent shrinking of the public sphere (Katz 1998; Smith 2007; Walter 2003; Swyngedouw 2005; O'Neil 2007; Prudham 2004; Ervine 2012).

Other scholars of neoliberal environmental governance have complicated these understandings and have drawn our attention to the need to evaluate the complexities and contradictory logics of actually existing attempts at market-based governance (Roth and Dressler 2012; Dressler and Roth 2011). There is now a growing body of literature that suggests that market-based tools (or attempts at neoliberal governance, as it is often termed) may hybridize with, or be complicated by geopolitical context and existing systems of governance, such that these new market tools (or neoliberalizations) no longer fit the neat categorizations and typologies to which they are said to cohere (see inter alia Milne and Adams 2012; McElwee 2012; Shapiro Garza 2013).

The sections that follow explore the development and use of an apparent MBI, terrestrial conservation offsets, in response to oil development in the Canadian province of Alberta. The paper queries the extent to which governments actively shape and manage what are often presented as market-based instruments. Such analysis complicates some of the dominant narratives to be found in the existing literature which would characterize offsets as part of a growing global trend away from state-centered governance toward a greater reliance on

markets in the provision of environmental goods and services. The following chapter demonstrates that rather than representing a clear shift from state-centred management to markets, attempts at offset programs have been complicated by existing geopolitical context, including the lack of a diversified provincial economy, a relatively rigid policy realm and provincial property regimes. These factors have hindered the development of a true market-based system in conservation offsets, resulting in governance mechanisms that don't neatly fit standard interpretations or ideal types. Despite language that would suggest an adherence to market principles, what have emerged in their place are perhaps best thought of as a form of industry-NGO corporate social responsibility program that has been highly constrained by the provincial government.

The case study of Alberta demonstrates the absolutely crucial role of state involvement in apparently market-driven governance. However, what this chapter aims to demonstrate goes further than the pervasive narratives around a retreat of the state, or common recognition of the role the state plays in re-regulation in support of market-based instruments, and rather, focuses on the ways in which active and ongoing intervention of the state shapes the discursive and material contours of the projects in ways that benefit particular actors.

4.2 Context of Alberta

The province of Alberta in Western Canada is a resource driven economy. The province has historically relied on the benefits of a few natural resource industries to fuel much of its economic development and growth. The history of European settlement of the province was largely influenced by the fur trade, and agriculture has been an important industry in the prairie regions since the expansion of the transcontinental railroad. Coal was the basis of Alberta's entry into the production of fossil fuels and played a key role in the province in the late 19th and early 20th centuries. Although not immune to the boom and bust cycles linked to war, economic

recessions and the advent and ascendency of new technologies and fuel sources, coal was a significant industry in early 20th century Alberta, and by 1918 the province was supplying approximately 40% of the nation's coal (Payne et al. 2006). The coal industry also played an important role in transforming labour relations and laws at both the federal and provincial levels. The coal industry was heavily unionized and a series of strikes in the early 20th century have been credited with improving working conditions and remuneration, introducing limits to the hours worked in a day, and the province's Workman's Compensation Act of 1908 (GoA 2015; Payne et al. 2006). The industry began to wane in the second half of the century and particularly after the discovery of oil at the Leduc field in 1947. The decline of the industry was related to a number of factors, including a severe reduction in domestic demand and a switch to new fuel sources and technologies beginning in the 1950s.

Oil was quick to fill the gap left by the decline of coal. The discovery of oil at Leduc in 1947, and again a year later at Redwater, led to major changes in the province, including huge increases in both investment and population, and started Alberta on its path as a major petroleum producer. The shift to oil also marked a turn in labour relations, as the highly unionized coal industry was supplanted by an oil and gas industry with significantly lower rates of unionization. By the 1970s, and in part as a result of the global oil shocks, Alberta was in a full-fledged oil boom. By 1981, the petroleum, refining and mining sector accounted for more than a third of provincial GDP (Anielski 2002). While there has been a notable diversification of the provincial economy over the past 30 years, including the expansion of the forestry industry in the 1980s, and increases in economic contributions from construction, finance, business and commercial service sectors, the energy sector continued to account for a quarter of provincial GDP in 2014 (AEDT 2015). Since the 1970s, the province has witnessed a number of periodic economic booms related to petroleum resources, the latest of which has been the expansion and

intensification of bituminous oil sands extraction over the last decade and a half in the Athabasca region of the province's Northeastern frontier.

Much of the northern portion of the province and its great storehouse of natural resources are provincially owned (Crown) lands. The provincial government, as tenure holder and resource manager, provides leases to private firms to develop the resources in these areas within the constraints of provincial government guidelines and policy. The government draws significant general revenues from royalties flowing from the development of these resources on state owned lands. The historical context of public lands and resources in the province place the provincial government in the often conflicting role of approving and regulating extractive development, while simultaneously profiting from these activities via resource derived royalties – a scenario that is common in most Canadian provinces (Howlett and Rayner 2001; Beyers and Sandberg 1998). Scholars of Canadian resource management have noted that such an arrangement has historically resulted in provincial resource policies that have tended to favour large scale extractive industry and have led to a type of state-industry power nexus in resource sectors (Howlett and Rayner 2001; MacKendrick 2005). This focus has not been without ecological cost, but has provided significant revenues for state supported social services from

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⁷ This conflict may be even more pronounced in Alberta due to the governance structures that oversee oil development in the province. The provincial Ministry of Energy is charged with managing the development of the province's fossil fuel resources, in collaboration with the arms-length Albert Energy Resources and Conservation Board (recently reformulated and streamlined in 2012-2013 as the Alberta Energy Regulator), and Alberta Sustainable Resource Development (as of mid-2015 now known as Alberta Environment & Parks). A number of people, including the Province's newly elected Premier, have been critical of what they see as a conflicting mandate within the Alberta Energy Regulator (AER). The AER was introduced as a means of streamlining regulatory approvals, and has in recent years taken over much of the responsibility for environmental protection standards and monitoring related to oil development, while simultaneously being charged with promoting energy development. The nomenclature of government ministries may also suggest a pro-development focus, given that until very recently the provincial environment ministry was formally called Alberta Sustainable Resource Development.

healthcare to education, and has led the province to become an economic powerhouse within the broader Canadian economy.

Despite their wide use in many regions globally, Canada has been relatively late in exploring the use of MBIs. Although the uptake in Canada has been slow, the province of Alberta has been a leader in exploring the use of MBIs, including market-oriented projects for water allocation and an emissions market for large greenhouse gas emitters (GoA 2014 a, b). The province's history of resource planning has been driven, in large part, by the conflicting demands generated by the boom-bust economic cycles of its rich natural resource industries and major developments in land use planning legislation have regularly co-occurred with periods of rapid expansion of resource industry (Stirrett et al. 2012). The most recent examples include the 2008 Land Use Framework (LUF), and the 2009 Alberta Land Stewardship Act (ALSA). Both pieces of legislation are intended to balance land use needs associated with economic development and environmental protection, with the ASA setting out the legal basis for land use planning in the province, and the LUF forming the basis for the development and implementation of seven regional land use plans across the province. The ALSA in particular provides the foundation for the state to support research and development of market-based conservation instruments, including conservation offsets. According to the Government of Alberta the "ALSA indicates, in general terms, where an offset many be applied and identifies provisions for accountability, including monitoring and compliance. ALSA also provides for setting out the rules for trading and defining an offset through regulations" (GoA 2016). While the Act provides enabling legislative foundations, these remain broad scale, and have not yet provided a provincial regulatory requirement for conservation offsets to mitigate disturbance, nor frameworks that would facilitate the development of banks and credit trading tied to disturbance reclamation.

4.3 Terrestrial offsets in response to resource development

Despite the lack of supporting regulatory frameworks, attempts at innovation via conservation offsets had been in development by industry and NGO partners for nearly a decade prior to the provincial government's introduction of broadly sympathetic legislation. The general concept of terrestrial conservation offsets have global antecedents dating back several decades (see Boisvert et al. 2015), and the Canadian Department of Fisheries and Oceans has a history of using disturbance mitigation requirements for fish habitat, albeit absent of a market mechanism for development and sale of mitigation credits (DFO 2007). While both provincial and federal regulators have requirements to avoid or minimize disturbance associated with oil sands development, mitigation offsets of terrestrial disturbances are not currently a regulatory requirement for oil industry in Alberta and all existing programs function on a voluntary basis driven by industry concerns with corporate social responsibility.

Although government support for the use of offsets has been eluded to in a number of policy documents (GoA, 2009a) and in recent legislation (GoA 2009b), this support has remained largely symbolic and no substantive government measures have yet taken place to initiate a regulated system, or market-based distribution of offsets linked to disturbance and land reclamation related to extractive industry. Despite significant corporate and civil society buy-in, and the apparent support of the provincial government, regulatory requirements for offsets and associated markets in offset credit provision have not taken hold. As such, conservation offsets in Alberta cannot accurately be characterized as a market-based instrument. What has resulted instead are collaborative agreements between major oil firms and conservation NGOs whereby industry provides funds for NGOs to purchase lands for use as conservation sites, thereby partially offsetting or mitigating industrial disturbance.

The first serious attempt to use conservation offsets as a response to disturbances caused by oil and gas development in Alberta date back to 2003 and were initiated by staff at the oil firm Suncor. The basic concept would involve mitigation of the ecological disturbances caused by oil sands development in the province's boreal forests via the conservation of equivalent units of boreal forest elsewhere in the province. Suncor had originally contacted Alberta Parks seeking recommendations on how it might voluntarily offset its landscape disturbance via conservation projects. By some accounts Parks was reluctant to take on any new responsibilities and costs associated with such a proposal (ACA 2, 2012). Moreover, both Alberta Parks and Suncor wanted to avoid the appearance of impropriety or influence peddling that might arise through direct partnerships with government led conservation projects, and thus sought the involvement of an NGO partner. Alberta Parks facilitated a partnership with the Alberta Conservation Association, an NGO that was believed to have a scope and capacity consistent with the demands of such a project (Alberta Parks 2013).

The resulting program, known as the Boreal Habitat Conservation Initiative (BHCI) involves financial partnership between the Alberta Conservation Association (the ACA), and major oil industry firms who have provided the NGO with long term funding commitments to purchase conservation lands as an means to offset their terrestrial disturbances (Straub 2008; ACA/Shell Canada 2008). Since its inception in 2003 the BHCI program has grown to include a wide range of corporate partners, including major oil firms Suncor, Shell, and Total. Over the past decade the initiative, and its associated corporate partners program, have secured approximately 10,000 acres of land as terrestrial offsets for oil and gas related disturbances in the boreal forests of the Athabasca region (Alberta Parks 2013). The initial success of the ACA BHCI program has spurred interest in conservation offsets across a broad range of stakeholders, and has sparked a number of publications and policy reports encouraging wider use of the strategy (BCOAG 2008; Dyer et al. 2008; U Ottawa 2014).

Although a non-governmental organization, in many respects the ACA represents what Castree (2008 p. 142) has called "a flanking mechanism in civil society" in that it is a civil society organization that provides governance activities that were formerly, or could potentially be, the purview of state management. Established in 1997 the organization is involved in a series of conservation activities formerly led by government, and for the past eight years the NGO has operated as a delegated administrative organization (DAO) for the provincial government to deliver a series of responsibilities outlined in the Wildlife Act (GoA/ACA 2006). This partnership includes partial organizational funding through levies collected on provincial hunting and fishing licences and collaborative conservation activities between the organization and the provincial government on both Crown and private lands.

Despite these successes the following sections explore the provincial government's reluctance to introduce regulatory frameworks which would initiate and incentivize a provincial offset market related to resource related disturbances. In contrast, lack of a diversified provincial economy and state reliance on the revenues derived from extractive resource development, coupled with a context of public land and resource ownership have led the province to intervene in shaping and constraining the use of offsets in very particular ways.

4.4 Risky business and state intervention in offset programming

A number of factors have contributed to rigid institutional structures and policy regimes in the province and may, in part, explain the reluctance on the part of the provincial government to facilitate the reforms needed to incentivize a market in conservation offsets. The provincial government has a justifiable need to shape these programs as a means of navigating and avoiding a series of potential conflicts amongst provincial stakeholders and political constituencies that could emerge from a fully developed offset system. Key among these are the need to address environmentally derived public relations problems on an extra-provincial

scale, while not alienating political constituencies at home. Importantly, the province needs to appear to be acting to limit and mitigate the ecological disturbance associated with development, without limiting such activities or complicating revenue streams derived therefrom. As such provincial engagement with offset projects is a type of balancing act intended to create symbolic benefits while not significantly interfering with business as usual.

Alberta has a very stable political environment compared to other Canadian provinces. Unlike other Canadian jurisdictions that see regular changes of governing provincial parties, the Progressive Conservative party has, until just recently, held successive majority governments in Alberta for the past 43 years⁸. Interviews with NGO and industry stakeholders suggest that rather than providing the confidence to implement change, this long term hold on power has actually led to significant rigidity and resistance to institutional reform in the policy realm (Pembina 2012; Suncor 2012). Moreover, this institutional rigidity was regularly cited by offset proponents as being a contributing factor to a lack of progress on the implementation of a provincially regulated offset program. The long legacy of power by one party and the relative stability of the political arena has led some to suggest a provincial governance strategy summed up by the idiom 'If it ain't broke, don't fix it'. Moreover, environmental protection, while not unimportant, does not register as a primary concern for most political constituencies in the province, and there may be limited domestic appeal for pursuing reforms, especially those that threaten to restrict development. Interview respondents from all sectors of Alberta society,

⁸ The Conservative political dynasty came to an end in May of 2015, when the ostensibly left-of-centre (social democratic) New Democratic Party won a majority and formed government for the first time in the province's history. Some have attributed this historical shift to spending scandals that had plagued the Conservative party in the years preceding the election, and a perception of arrogance on behalf of Premier Prentice, who chose to call an early election in hope of securing a fresh mandate. Others have speculated that the collapse of the right leaning Wildrose opposition party, many of whom crossed the floor to join the Conservatives, and a dramatic collapse of oil prices may have been contributing factors.

including environmental and conservation groups, spoke of a concern that conservation activities should not "sterilize the land", an expression commonly used in the province in defense of resource development. Most of the push for greater regulation comes from external forces -- other regions of Canada, the USA, and internationally -- which are key markets for Alberta's resources. These external public anxieties about the ecological consequences of oil sands development have been a significant factor driving offset participation, and corporate interest has had a tendency to correspond with heightened environmental concern in the United States (ACA 2 2012). Thus, while there is a political-economic need to improve public perception of environmental regulation beyond the province's borders, such activities may provide little political gain at home. This particular political context may explain why the province and industry have initiated significant international re-branding activities over the last half decade to combat poor public perceptions of environmental protection in the province (Takach 2013; Harris-Decima 2011), while making little progress in terms of regulation and enforcement in the extractive resource sector (Grant 2013; Timoney and Lee 2013). It may also play a significant part in explaining the state's desire to limit the scope and scale of offset projects such that they can provide much needed public relations benefits, while not significantly modifying development goals.

Part of the complication of introducing a regulated system may revolve around mitigation ratios and concepts of no-net-loss. The scale of environmental disturbance in Alberta's Athabasca sands is substantial and it is well recognized that offset ratios could never be anywhere near the levels that are common to most established mitigation offset programs (ACA 1 2012). A regulated system would face significant pressure to develop an appropriate offset ratio that generates sizable mitigation without having serious implications for extractive development. Leaving offsets as a voluntary NGO-industry partnerships allows for greater flexibility and results in offset gains that are much less than would likely be required under a regulated

system. For example, the recent expansion plans for the Shell Jackpine Mine involved the firm committing to the conservation of 730 hectares as compensation for the 8,500 hectares of disturbance associated with the expansion (Sterritt 2013). While these gains are significant, mitigation offsets in the order of 9% of the disturbance area are much easier goals to achieve than one to one ratios, or the three to one offset to disturbance ratios that have been suggested by some environmental groups and which are currently the standard for mitigation of disturbed fish habitat under DFO programs (ACA 2 2012; Croft & Zimmerling 2011). Leaving these programs as unregulated voluntary measures limits their scope and scale and avoids the negative implications that a scaled up regulatory system would have for limiting resource development in the boreal.

A regulated program would likely require significant portions of the province's boreal Eco zone to be made available to host offset sites. However, most of this ecoregion is Crown land and currently leased to one or more extractive uses, predominantly forestry and petroleum (Lee et al. 2009). A regulated program with any reasonable offset ratio would likely need access to some of this area in order to generate the required boreal credits. However, doing so raises the potential for conflict among resource users and political constituencies. Some have suggested that under a fully marketized system involving Crown lands, oil and gas firms who are significantly more powerful than other resource industries may attempt to buy out and retire forest harvesting rights in areas with little subsurface mineral potential. Such a scenario would demonstrate clear additionality and generate the required offsets but would reduce provincial revenues from forestry, complicate fixed capital investments such as mills and processing facilities, and would alienate forestry dependent political constituencies (ACA 2 2012).

In order to avoid some of these complications not only has a government lack of regulation limited the scope of projects, but the province has also been reluctant to allow the generation of offsets on Crown lands in the boreal. There is currently no legislative mechanism for the

generation of offsets on Crown lands and the province appears to have limited interest in supporting the generation of offsets on these lands due to potential resource conflicts. Offsets could be generated through the retirement of extractive leases or the staged delaying of development, however, government representatives suggested that these were not preferred scenarios (ASRD 2013). Despite the contention by some proponents that the retirement or delay of development on Crown lands provides a clear demonstration of additionality, the provincial government has little interest in such plans. A senior manager at Alberta Sustainable Resource Development suggested that rather than delaying or retiring development, the government's preferred option for Crown lands would be to generate offsets through the restoration of historic disturbances. Under such a plan offsets could be created by restoring historical disturbances from past resource development (such as old seismic lines and mine sites) that were, for whatever reason, not reclaimed by their previous lease holders (Ibid). NGO participants are not keen on this idea, suggesting it does not meet the challenge of additionality, while others have clearly stated that they have no interest in cleaning up historical disturbances that slipped through the cracks of state regulation in the past (ACA 2 2012). Importantly, what a focus on the remediation of historical disturbances would accomplish is the ability to generate offsets on Crown lands without major repercussions to ongoing resource development or associated revenue.

As subsequent chapters explore, the result of these restrictions on Crown land have forced existing offset projects to focus almost exclusively on the purchase of privately owned agricultural lands along the southern fringe of the boreal forest. Doing so has largely avoided risks of conflict between offsets and development that might result from the use of Crown lands by limiting projects to private lands that have little resource development potential. This has also been responsible, in part, for the current configuration of projects where NGOs hold title to the offset sites in perpetuity, which may complicate the development of fully marketized systems

based on transferability of credits tied to disturbance reclamation, despite government assurances that existing offsets will be recognized in any future regulated systems (Knight 2010).

These contributing factors are not unique to attempts to institute provincial markets in conservation offsets. In fact, such political and economic limitations support earlier findings by Davidson and McKendrick (2004) and McKendrick (2005) who demonstrate a significant history of provincial resistance to institutional reform related to reliance on extractive revenues. In her study of attempts at voluntary corporate greening in the forestry and petroleum sectors via integrated landscape management, McKendrick (2005) highlights the provincial government's refusal to lead environmental reform, particularly when it threatens to limit resource development in the province. According to MacKendrick,

The Alberta government's mandate to expand oil and gas development is accordingly much stronger than its mandate to protect the province's natural environment, despite demands for reform emerging from the very sectors responsible for a great deal of landscape-level environmental degradation (p. 40).

Similar sentiments were expressed by a First Nation environment and regulatory manager. As he explained, provincial resource policies may be responsible for limiting industry's ability to introduce more substantive environmental policies. Provincial resource policies award corporations rights to resources based on a time contingent demonstrated ability to develop the resource. For example, a firm must demonstrate an ability to develop the resource within a five year, or ten year, time frame, or risk losing the lease to someone else who can. Incentives to stagger, pace or delay development evaporate in a situation where multiple competing corporate interests are trying to capture the same resource, and the ability to do so is based on a demonstrated ability to develop it in short order. Thus resource policies where access rights are contingent on development of the resource effectively limit environmental policy options,

including the development of offsets through delayed or staged development or retirement of extractive tenures (AFN 2012).

Davidson and McKendrick (2004) move beyond a simple reluctance to facilitate attempts at corporate greening and suggest that the provincial government has displayed a historic tendency to discursively embrace elements of ecological modernization, without making substantive policy reforms. These authors argue that the language of ecological modernization has served to silence dissent, absorb social anxiety and deflect criticism surrounding resource governance while leaving existing institutional structures and policy directions largely unchanged. These findings are consistent with other findings from policy studies and natural resource management literature that suggest that governments often harness the displacement qualities of discursive shifts associated with ecological modernization or non-state governance actors when faced with calls for substantive regulatory reform (see inter alia Howlett 2000; Howlett et al. 2009; Michaels 2010; Walker et al. 2009). The upshot of such a strategy, they argue, is that a discursive reframing deflects criticism and challenges to the state's legitimacy as resource manager, while leaving a business as usual context in place. Moreover, a discursive shift of this nature is also important to the extent that the government can deflect some of the concern about resource management activities outwards on to a new range of governance actors in civil society, without substantively reducing government's primary role as manager. In a related vein Walker et al. (2009) have referred to biodiversity offsets as a form of "symbolic policy" that often deflects attention from the more difficult questions and substantive reforms needed to adequately address environmental problems.

4.5 Impacts and implications

The direct involvement of the state in creating the contours of offset projects has generated as series of benefits and sought to ameliorate or avoid conflicts. Importantly, both the state and

industry are able to benefit from the public relations benefits of offset programming while not impeding further resource development. It is for both a low cost solution to the difficult public relations and marketing challenges faced by the state and industry. The CEO of the ACA has been quoted as saying that "enacting conservation offsets affects how shareholders, potential shareholders and the general public view a company. It may not have any direct bearing on their bottom line but it does have a bearing on how they sit on a social responsibility scale" (Zimmerling quoted in Straub 2008 p.16).

In fact, industry interest in offsets may in part be driven by their flexibility and relatively low cost, both of which are significant. In 2011 the Alberta Conservation Association released a study which explored the potential cost of offset programming for a series of oil sands projects currently underway in the province. According to the study,

The cost of securing terrestrial conservation offsets for the predicted surface disturbance represents approximately 0.09% of the total capital costs of the project...Perhaps more important to realize is that under the worst case scenario...the costs for each project would be close to 1% of capital expenditure. (Croft and Zimmerling 2011 p 10-11).

Studies by the IUCN (2004), and more recent reports on the Alberta context by Alberta Innovates Technology Futures (Webber 2011), and consulting group Green Analytics (Kennedy 2013) also suggest that conservation offset programs may benefit industry by lowering the cost of environmental compliance and providing a degree of flexibility in both how and where companies mitigate their industrial disturbance impacts. However, a full market with banking is the preferred option for many large industrial players. The Oil Sands Leadership Initiative, comprised of major oil industry firms, have been lobbying the provincial government for development of a provincial framework for full markets and banking systems in offset credits tied to site remediation (OSLI, 2009). The framework for proposed programs would see the provincial government introduce a requirement for mitigation via the purchase of conservation

offsets during the lifespan of an extractive project, and the release and re-sale of credits to other firms requiring offsets upon project termination and successful site reclamation (Croft and Zimmerling 2011). The introduction of a full banking system may present some additional reduction in costs to industry, by reducing administrative costs associated with locating and purchasing offsets under current voluntary NGO collaborations. A full market would incentivize a banking industry which would absorb some of the administrative burden of current systems. As mentioned it may also open the potential for industry-industry partnerships with one corporation paying another for the delay or retirement of development, resulting in lower costs and increased flexibility but potentially generating a series of risks for the province. Voluntary NGO-Industry partnerships strike a balance between these risks and provide efficiencies for government as well, who can point to landscape level progress in conservation, without the need to make significant regulatory changes, hamper development, or take on the administrative burden of creating and managing new protected areas associated with mitigation.

However efficient these constrained and limited systems may be on some fronts, they open up spaces of potential conflict on others. Voluntary systems with strict limitations on the use of Crown lands have raised concern among many First Nations that are facing development related impacts. The Athabasca oil deposit is predominantly located on Crown lands and underlies multiple traditional territories of First Nations (Dene, Cree, and Metis). While many First Nations are not opposed to development per se, some Nations have objected to inadequate consultation surrounding development proposals, cumulative impacts on their traditional territories and the negative implications these have for the practice of constitutionally protected treaty rights to forest resources. The Fort McMurray Metis Local 1935 have expressed concern over conservation offset initiatives that operate as a tri-lateral process between the provincial government, NGOs and industry but exclude meaningful consultation with Aboriginal communities being impacted by development (FMML 2014). Similarly the Athabasca Chipewyan

First Nation (ACFN) has raised concerns that existing conservation offsets are not adequately addressing Aboriginal land use and treaty rights, and have called for greater Aboriginal engagement in offset projects, including Aboriginal participation in site selection (ACFN 2013). Exclusion from participation in offset proposals has been cited in a recent court challenge by the ACFN alleging a breach of Crown duty to consult and accommodate First Nations (Court file T-13-14). As explored in chapter six, some First Nations outside of the Athabasca sands region have explored the use of offsets as a means of protecting traditional territory, however those in the immediate impact zones have limited ability to do so under the current constraints of provincial regulations that exclude offset generation on Crown lands. This has presented significant limitations to existing NGO-industry programs to adequately address First Nation participation and needs, but is again, likely driven by a series of trade-offs intended to assure that offset programs do not significantly limit or hinder development.

4.6 Discussion and conclusion

In contrast to the pervasive discussion in the literature that characterizes MBIs, such as offsets, as a reduction of state involvement in environmental governance the case study presented here demonstrates that rather than a hollowing out of state authority or re-regulation in support of markets, that the state remains at the forefront of efforts to actively shape the discursive and material contours of these new governance tools. The need to maintain strong state guidance results from the unruly nature of "free" markets and the state's need to avoid conflicts among resource users, political constituencies, and above all, to protect revenues flowing from resource industry.

While often presented in the critical literature as a natural ally of powerful interests, marketbased instruments are complicated by a series of existing social, political and geographic contexts and may also end up creating situations unfavorable to powerful interests. As a senior manager of the ACA commented in an interview, "markets can't be truly free" (ACA 2 2012). Free markets create too many uncertainties, complications, and challenges for the government. Drawing on the provincial water allocation market to illustrate his point, this NGO manager suggests that markets do not always produce the results desired by powerful actors, including the state. As he explained, a system of water allocations that allows for trades between willing buyers and sellers might benefit powerful industrial users, however, it might also be possible that a large and well-funded conservation group begins buying up water allocations effectively limiting industrial uses. Similar risks to the limiting of development abound in a truly free market in conservation offsets involving public lands.

Of course many have noted that a shift to MBIs necessarily relies on state intervention (MacKendrick 2005; Mansfield 2007; Castree 2008). This is not particularly new. Such insights pre-date contemporary discussions concerning the neoliberalisation of environmental governance. As Karl Polanyi (1944 p.147) wisely noted "the introduction of free markets, far from doing away with the need for control, regulation, and intervention, enormously increased their range". Indeed markets rely heavily on the same state that they are often said to supersede. What I have aimed to demonstrate here is that this intervention goes beyond the recognition that states remain essential actors and play a critical role in supporting or constraining the functioning of market systems; beyond documenting state re-regulation in support of market initiatives. Rather, market-based instruments articulate with a constellation of existing local contexts, such that ongoing state management is required to avoid potential conflicts and impacts.

Despite being discursively constructed as a MBI, offsets in Alberta do not easily meet most of the broad categorizations discussed in the literature. They are, perhaps, better thought of as what Castree (2008) describes as a "flanking mechanism in civil society" -- that is, state encouraged, and constrained, civil society groups working to achieve governance goals that

could be, or previously had been, carried out by the state. Whether or not current programs and ongoing research forms the foundation for the development of a fully developed market in terrestrial offsets remains to be seen. There is certainly much work to be done, and the provincial government is wisely concerned to test the impacts of these new mechanisms before rolling them out on a significant scale. That said, in their current context, and throughout the last decade, these programs have tended to more closely resemble a corporate social responsibility program carried out in partnership with conservation NGOs, rather than an instance of a market-based instrument.

5 "Shell games", displacement, and the reordering of boreal landscapes
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5.1 Introduction

The growing acceptance of conservation offsets in Alberta may at first glance be characterized as an instance of a much larger global trend toward the rescaling of environmental governance and the ascendance of privatized, market-driven approaches. Increasingly the impacts of economic growth are being mitigated via new economies of nature conservation and climate change mitigation and adaptation initiatives, thereby facilitating further development, and spawning new socio-natural configurations associated with economies of environmental adaptation, mitigation, and restoration (for a recent review see Fairhead et al. 2012). However, as a growing body of scholarship now documents, these apparently "neoliberal" approaches rarely follow predetermined paths, but rather articulate with a series of localized contexts producing uneven, partial, and hybridized results (Roth & Dressler 2012). The following chapter explores the new geographies and material implications of current offset programs in Alberta.

There is not, as of yet, a particularly well-developed literature specifically focused on the use of terrestrial offsets (some exceptions include Sullivan 2013a; Robertson 2006; Dempsey & Robertson 2012), however the broader literature on market-based or 'neoliberal' conservation practice has provided us with a wealth of research focused on the practices, calculations and rationales of market-based conservation, and much literature on the potentially perilous material outcomes for both society and nature (see inter alia, Brockington et al. 2008; Buscher et al. 2012; Brockington & Duffy 2010; Buscher & Arsel 2012).

Much of this literature has rightly observed that neoliberal governance techniques are not monolithic and significant work on actually existing neoliberal conservation has demonstrated the polyvalence of institutional forms, discourses and material outcomes associated with such

conservation projects (Mansfield 2007 a, b; Bakker 2007; Roth & Dressler 2012). However, among this diversity we can discern some common themes. As discussed in the previous chapter, both proponents and critics of market-based environmental governance have shared a strong tendency to view this as a shift from state-centred command and control measures to a reliance on private economic activity to generate and allocate environmental goods and services. The role of the state is characterized as shifting from regulation to the facilitation of market conditions, for example through re-regulation or protections for private property. In tandem with this apparent shift from state to market, a significant group of scholars have drawn on Marxian frameworks of accumulation by dispossession to raise concern about the ways in which market-based conservation measures may act to expand the private sphere and open up new avenues for dispossession and accumulation associated with trade in ecological commodities. Some of these critiques center on the expansion of private property that often accompanies the creation of new conservation commodities and concomitant concern that such privatization serves to depoliticise environmental decision making, and increasingly dispossesses communities through the enclosure of formerly collective or common property (Smith 2007; Bond 2012; Lyons & Westoby 2014; Beymer Farris & Bassett 2012). In a related fashion, others have focused on the apparent opportunities for new forms of accumulation as units of conserved habitat, ecosystem services, or atmospheric carbon become privately owned commodities circulating in capitalist markets (Brockington et al. 2008; Sullivan 2013a). Cindy Katz (1998) has cleverly referred to this phenomenon as a strategy of "bioaccumulation", while Smith (2007 p.26) succinctly sums up the concerns of much of the Marxian inspired scholarship on the topic in his claim that "any choice over what kinds of environments and landscapes are to be produced, and for what purposes, increasingly passes from any semblance of broad social discussion into narrow class control orchestrated through the market."

The sections that follow contribute to these ongoing debates about the institutional forms and material and political implications associated with the use of market-based instruments. The findings support the work of other recent scholarship (Dressler & Roth 2011; Roth & Dressler 2012; McAfee & Shapiro 2010; Milne & Adams 2012) that complicates the often static, essentialized, categorizations of neoliberalism in both popular discourse and academic scholarship, and suggests that neoliberal reforms often collaborate and hybridize with preexisting governance forms. Moreover, I aim to complicate some of the pervasive focus on privatization to be found in the critical literature on neoliberal conservation. Despite a decade of pilot projects, a market in terrestrial offsets has failed to take hold in Alberta, significantly hindering attempts to profit from trading in terrestrial offset credits. This is not to say that offsets are unimportant in facilitating accumulation, but the pathways by which they do so may be less conventional. The use of offsets in Alberta does not primarily represent a push for enclosure and accumulation via new conservation commodities, rather offsets often appear to be working collaboratively with the state to convert private lands into functionally public commons⁹ as a means of securing the extra-economic conditions required to facilitate private accumulation on public (Crown) lands. Specifically, titled land in the southern boreal is being purchased by NGOs to offset industrial disturbance in the Athabasca oil sands region and subsequently managed as a public space similar to state run parks and protected areas. As a result, terrestrial offset projects in Alberta have in many instances served to dispossess and displace people at both the

⁹ The term functionally public commons or functionally public lands is used here to identify de facto changes in land use rather than de jure changes in land ownership. The offsets discussed in the paper are exclusively the result of NGO purchases of private titled lands (generally farms or agricultural lands) which are then managed in a manner consistent with public spaces such as parks. While these lands remain privately owned by the NGO, there is a marked shift in land use. The resulting offset parcels are open to the general public and do not require prior permission of the landowner to access the sites for recreational purposes or for the collection of certain resources (hunting, fishing etc.).

sites of resource extraction and at sites of mitigation, however, the dispossession associated with conservation offsets in Alberta frequently occurs through the expansion of a functionally public realm, rather than its enclosure. Rather than representing a uniform move to privatization, offsets often expand public access on private lands as a means of facilitating greater private access to resource wealth on public lands. In a counter-intuitive twist it is often the expansion of the commons, rather than its enclosure, that serves as a primary mechanism of dispossession.

5.2 Terrestrial conservation offsets, enclosure and accumulation

As anticipated by much of the critical literature, the use of terrestrial conservation offsets as a tool to mitigate the ecological consequences of tar sands development does indeed provide a series of pathways for contemporary rounds of enclosure and expanded accumulation. Decisions about appropriate responses to industrial impacts are increasingly negotiated by conservation and environmental NGOs, industry partners and government regulators, albeit the role of the latter is often less explicit. To some extent this new institutional arrangement does, at least in appearance, decentralize governance and spreads risk and responsibility across a new constellation of actors. However, this institutional rearrangement is certainly less complete than some would have us believe. As the previous chapter explored, the state retains a very central authority, and while perhaps appearing to be less top-down and proscriptive, the province will ultimately decide the parameters, scope and extent of any current or future use of the tool. The provincial government has constrained existing programs such that we cannot adequately characterize the tool as market-based, or even market-like. Should markets in offsets develop at some point in the future, as is the hope of key players in the oil industry and a number of NGO proponents (OSLI 2009, Croft & Zimmerling 2011), these will most certainly be regulatory markets rather than 'free' markets. Moreover, conservation gains derived from offset programs are a smaller subset of province wide activities and serve as a complement to, rather than a

replacement of, state-centred activities. As is explored in subsequent sections of this chapter, offset programs in the province do result in significant landscape changes and a series of new geographies that limit or foreclose access for some, while providing new gains for others. However, the intersection of these programs with existing local contexts produces results that are often more nuanced and inconsistent than those provided by traditional Marxian narratives of enclosure and privatization.

There is also some legitimate concern to be raised about the potential for private wealth generation through the trading of conservation commodities in Alberta. A number of key proposals have outlined a future business model whereby industry would be required to purchase offset credits during the lifespan of a project, but upon successful reclamation of disturbance be able to sell credits to others requiring them. While this type of business model could be facilitated by private conservation bankers or NGOs, who could develop and sell the necessary credits for the market, it is also possible that industry would become increasingly involved in producing not only their own offset credits from lands owned or leased by the company, but also oversupplying for the sale on the open market. Shell has mentioned such a strategy for its operations in an international context (Shell 2009). There are also rumblings about the possibility of linking or stacking credits, so that any given parcel of land might generate not only a terrestrial disturbance offset, but also water, carbon, or other specific ecosystem service values (ASRD 2012; Poulton 2014). There is some speculation as to whether or not Shell's explicit preference for reforestation activities on its offset sites with the ACA is linked to the possibility of generating stacked carbon credits. Despite these very real possibilities, the current lack of a market in credits and existing program parameters where offsets are owned in perpetuity by conservation NGOs precludes the development of many of these scenarios. Interview respondents have also suggested that any possible financial incentives from trading in credits or linkages to carbon offsets remain financially insignificant

drivers of participation at this point in time. Although strategies to generate new forms of wealth from conservation commodities remain largely speculative at this point in time, conservation offsets do play a significant role in strategies of accumulation. Rather than providing a new series of commodities, terrestrial offsets seem to be working in a complementary manner with existing state-centered conservation and may be assisting in the politically difficult task of expanding functionally public conservation areas in the southern boreal as a means of lubricating further resource development on Crown lands.

5.3 Collaboration with the state and the reordering of boreal landscapes in Alberta

As was introduced in the previous chapter, one of the key benefits of conservation offsets have been their ability to explicitly link conservation and development, and in doing so to improve public perceptions of the extractive project. However, offsets are not alone in this regard. Both offsets and more traditional state-based parks and protective areas have been engaged in providing a counter-point to the excesses of a resource based economy, often as a means of securing social license for the advancement of development. In fact conservation offset projects may, in a number of instances, be seen as working in tandem with state-led parks and protected areas, with industry funded NGOs contributing to gains for parks that would be difficult for the provincial government to secure independently. Certainly much of the conservation activity in the province is about protecting particular landscapes and species, and it is not my intention to discredit what I believe to be the legitimately well intentioned actions of those involved in conservation efforts. Interviews with representatives of the provincial government, industry, and NGOs all revealed a genuine interest in the protection of important natural landscapes and the potential to mitigate the negative impacts of development. However, in these same interviews all participants highlighted the crucial role that conservation plays in furthering development in the oil sands by improving public perceptions both at home and abroad, and perhaps most

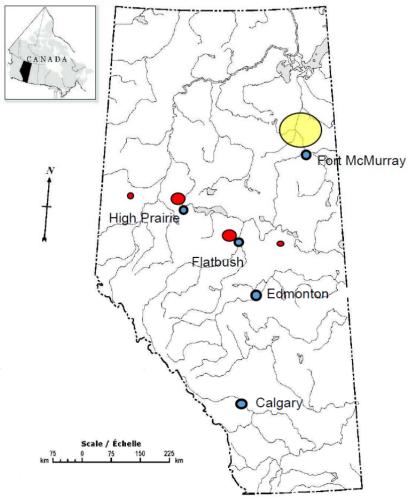
importantly, in removing barriers to pipeline development that is critical to gaining access to foreign markets, particularly in the United States (ACA 1 2012; ACA 2 2012; Pembina 2012; Suncor 2012; AOIF 2013; ASRD 2012; Alberta Parks 2013). This focus on improved optics is consistent with Bebbington's (2010) contention that the political strength of corporate social responsibility programs resides in their ability to inhabit and shape spaces of conflict over resource extraction, and Buscher et al. (2012, 21) concerns about neoliberal conservation and the "disciplining of dissent". Activists Stainsby & Oja Jay (2009) refer to this as "offsetting resistance".

The establishment of new provincially protected areas in the government's recent Lower Athabasca Regional Plan (2012) were largely motivated by a need to balance development and conservation. As a senior manager from Alberta Parks explained, an area on a map, or a place that people can visit, is more legible to the average person than parts per billion in water or air quality samples and goes a long way to improving public perceptions of oil sands development. Similar sentiments have been expressed by NGOs, who suggest that terrestrial offsets are an effective means of removing "environmentally-driven barriers to market access" (Dyer 2013), as well as "preserving a social license to operate, and retaining access to the resource" (Dyer et al. 2008 p.2). While rooted in a genuine interest in being good corporate citizens, representatives of oil industry firms also listed improved public perception of oil sands development as a primary motivator for participation in offset programs (Suncor 2012; AOIF 2013).

Thus, whether state-led or offset driven, conservation projects in Alberta are serving as a complementary component of resource extraction. However, establishing conservation areas in the northern boreal regions of Alberta may present some significant challenges for the provincial government, and this is where we begin to see some collaborative potential between state-led conservation and new terrestrial offset programs.

A quick review of land ownership in Alberta helps to better understand this situation. The province is divided into white and green land use areas. White areas are predominantly settled, privately-owned lands of agricultural or urban uses. With few exceptions green lands are almost exclusively state owned (Crown) lands, usually, but not always forested. While both white and green areas are experiencing development pressures, provincial Crown forests are under significant pressure from the province's extractive resource driven economy.

To date there is no regulatory mechanism to generate offsets on Crown lands in Alberta, and nearly 83% of the province's boreal forest is Crown land. As a result, all existing offset projects over the last decade have occurred through the purchase of privately held lands, predominantly family farms and agricultural lands, along the southern fringes of the boreal forest. This has led to a geographic distribution where most offsets sites are located 350-400 km away from the sites of disturbance they are intended to compensate for.



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Legend:

0

Cities and towns

Approximate location of oil sands disturbance

Approximate location of ACA conservation offset sites

Base Map Source: Atlas of Canada. Contains information licenced under the Open Government Licence - Canada http://open.canada.ca/en/open-government-licence-canada

Figure 1: Approximate location of ACA offset sites in relation to oil sands disturbance

While some proponents have suggested that the inability to generate offsets on Crown lands is a limitation to an effective system of boreal forest offsets (ACA 2012; LRRCN 2 2013), there may be specific benefits to keeping offsets on private lands. Importantly, opening up Crown lands to offsets would likely create problems for the provincial government as most of the province's green area is covered by resource leases to forestry or mineral extraction. As has been mentioned in the preceding chapter, allowing offsets on Crown lands would likely create tensions between existing extractive resource lease holders, involve retiring resource leases or delaying development, and potentially disrupt royalties flowing from mineral and timber extraction across the boreal forest (ACA 2 2012). The potential loss of resource royalties is also exacerbated by the need for the state to allocate resources to managing new protected areas. As such, the province may be able to achieve conservation benefits while avoiding some of these problems by maintaining a regulatory framework that forces offsets onto private lands. In addition to a focus on private lands, existing offset sites have had a strong tendency to cluster around existing provincial parks. Interviews with NGO stakeholders support the findings of a recent study by Ryan et al. (2014) who note that private land trusts in Alberta often prioritize sites near existing protected areas given the opportunities for contiguous protection. Moreover, private conservation activities, including offsets, represent opportunities to deliver some very important conservation benefits, and to contribute to both national and international efforts to conserve boreal ecosystems.

Beyond these very real biophysical benefits, what this rationale has also achieved is the ability to acquire private lands adjacent to existing parks, and in doing so, to ostensibly expand provincial parks and protected areas through the use of offsets. Winagami Lake Provincial Park is a prime example. Over the last ten years ACA/Suncor offset projects have purchased over 3,000 acres of privately held property around the fringes of the park, in essence expanding the park through the purchase of private lands. Alberta Parks and Suncor have both confirmed that

at some point some of these privately held offset lands will be re-designated as extensions of the park. However, interviews with representatives of the ACA and senior management at Alberta Sustainable Resource Development disagree with this suggestion (ACA 2 2012; ASRD 2012; Suncor 2012; Alberta Parks 2013). The uncertainty about re-designation is likely a result of the ambiguity surrounding future regulated systems as well as concerns about who should carry the burden for management of these new conservation areas.

Official ownership, however, often matters less. In many instances offset sites, although legally owned by NGOs, function as if they were public spaces. A senior manager at Alberta Parks explained that there are some instances in which ACA properties adjacent to provincial parks are essentially managed as if they were a part of the park even though they are private holdings¹⁰. Moreover, offset sites are publically accessible and promoted as outdoor recreational areas with some relatively minor differences in use restrictions. Employing language similar to that used to describe provincial parks, promotional materials often describe these offset sites as legacy gifts to be enjoyed by all Albertans (Straub 2008; ACA 2011). The general public is encouraged to engage in a suite of recreational activities on these sites including hunting and fishing. Thus while offset sites remain legally private holdings, they operate as de facto public spaces.

Similar siting arrangements exist near the Hubert Lake Wildland Park where in recent years the ACA, Shell and Suncor have purchased more than 1,000 acres of private lands adjacent to the Park, or more recently the 2012 establishment of the Shell True North Forest, situated less than 1km away from Moonshine Lake Provincial Park, and covering an area nearly equivalent in

¹⁰ The sites referenced are small holdings of quarter sections near Provincial Parks in the Lethbridge area. These holdings are not offset sites.

size¹¹. Approximately half of the offset sites created by the ACA and corporate partners over the last decade are adjacent to existing parks or protected areas.

While the province can, and has, increased the number of protected areas on Crown lands in recent years, this has not proven an easy task as the controversy around new protected areas announced in the Lower Athabasca Regional Plan (2012) have demonstrated. Controversy erupted over the negative implications for industry and the compensation the government may have to pay as a result of cancelled leases (Vanderklippe 2012; Tait et al. 2011). The state has limited abilities to create conservation areas across much of the boreal Crown lands due to existing resource leases. Areas of the boreal eco-region that are not of interest to extractive resource development, and which therefore might be amenable to conservation projects are largely private lands in the south, and yet it would be politically unpalatable for the province to attempt to conserve lands in these areas through purchases or expropriations. Constraining offsets to fee-simple purchases arguably accomplishes the task of securing conservation on private lands without direct state involvement. While neither the state nor NGOs have expressed an intent to do so, the result of current offset programs has been to remove political barriers, and involve non-state actors, in creating larger conservation areas through the purchase of private agricultural lands with little resource development potential. Such a scenario allows for the expansion of conservation lands along the southern fringe of the boreal forest, while simultaneously facilitating further expansion of extractive industry on Crown lands in the northeastern portion of the province's boreal eco-zone. Offsets have proven a creative

¹¹ While not part of the BHCl program, the Shell True North Forest was acquired in partnership with the ACA and demonstrates the firm's commitment to offsetting its disturbance footprint through conservation.

displacement strategy which turns farm lands into conservation commons as a means of facilitating greater private access to resources on public lands.

5.4 Implications for dispossession

Dispossession is occurring at both the sites of extraction and the sites of mitigation. Farming villages are becoming conservation offset hot spots, while the use of offsets furthers development in the Athabasca region. This process has intensified as offsets increasingly become a condition of project approvals. Over the last several years NGO stakeholders have agreed to remove their opposition to projects if offsets are made a condition of approval¹². As such offsets lubricate further development and displacement in the Athabasca, while the mitigation projects are too far away to be of any use to local communities. This has been especially true in the case of First Nations in the Lower Athabasca, which have constitutionally protected treaty rights to hunt and fish on Crown lands. While not all nations object to oil sands development, many remain concerned about how oil development will negatively impact the state's obligation to provide adequate landscapes to support the practice of treaty rights and to protect from settler competition for resources. Specifically, treaty rights provide preferential access to First Nations on Crown lands, however, as those lands are disturbed by development the offset projects intended to mitigate disturbance have universal public access, and as such do not account for the negative impacts development projects have for the practice of treaty rights (AFN 2012). In this respect, offsets are not only displacing people from access to forest resources via a spatial mismatch, but a failure to include socio-ecological factors in these

¹² OSEC interventions have been key in securing terrestrial offsets in several recent extractive plans including those for the expansion of the Shell Muskeg River Mine, Shell Jackpine mine, Total Joslyn III insitu and Joslyn North mine, Teck Frontier mine, and the Petro-Canada McKay River in-situ expansion.

mitigation strategies threaten to dispossess some First Nations of their constitutionally protected rights. These findings are consistent with a recent study by Ryan et al. (2014) who suggest that social and environmental justice considerations often receive scant attention in private conservation models. In the case of offsets this may be related to the incommensurability of such issues with a model based on transferable equivalents.

Beyond the lower Athabasca, mitigation that focuses on the purchase of family farms undermines the well-being of agricultural villages that have become hot spots of offset creation. The villages of Fawcett and Flatbush, located about 150km north of Edmonton, are illustrative in this regard.

During a community meeting held in the hamlet of Flatbush in 2012 residents shared some of their frustrations with the offset sites that had sprung up in their community. Most frequently cited were concerns over a lack of transparency about how farm lands were being appraised and sold as offset sites. Additional concerns included potential impacts on property values, loss of productive agricultural lands, outmigration, predation by wildlife, and increased risk of fires as conservation sites are left to revert through successional growth. Residents spoke of farms having been "boxed in on all sides" by conservation sites, thereby removing development opportunities, increasing risks from wildlife and fire, and negatively impacting property value at resale. Many people, including a local municipal councilor, felt betrayed by conservation groups and resentful of a situation in which their communities were being used to carry the burden for industrial development 400 km northeast in the Athabasca. According to local councilor Murray Kerik, offset projects amounted to nothing more than "a Shell game" which accomplish nothing, while posing a "serious threat to the agricultural land base" of his farming community (MDLSR 2012). The "Shell game" of swapping one location for another, a concept at the very core of offset models, was regularly cited by interview respondents critical of existing programs. As one

First Nation policy advisor described it the existing system that focuses on the purchase of fee simple lands "doesn't create conservation, all it creates is displacement" (LRRCN 2 2013).

Offset programs are thus involved in a complex re-ordering of boreal spaces that go beyond simple enclosure and privatization, but rather represent complex co-occurring expansions and contractions, expanding public domain in some instances and reducing it in others. Thus while dispossession associated with market-based conservation in Alberta is at times associated with processes of privatization and enclosure, it just as often occurs through the expansion of a de facto public sphere. Converting private lands to functionally public commons in one area, creates the extra-economic conditions that support further extractive expansion – and associated dispossession – elsewhere.

5.5 Discussion and conclusion

What I have outlined here demonstrates that what we are witnessing in Alberta is not so much a clean transition from one governance form to another, but the collaborative co-existence of market-oriented and state-led forms of environmental regulation. Perhaps even more interesting is that this intersection with the existing social and political context in Alberta has meant that attempts at establishing offset projects as a conservation tool may be playing out in ways that do not neatly resemble many of the privatization narratives associated with broad scale understandings of neoliberal conservation.

Of course conservation induced displacement is nothing new, and many have outlined the significant history of state conservation serving to displace local populations both within and beyond Canada (Sandlos 2008; Lunstrum 2010). There is also a significant history of conservation working collaboratively to fuel economic development and growth (Foster 1998, Brockington et al. 2008). However, the direct "twining" of conservation and development certainly represents an intensification of these collaborative relationships. Once largely the

domain of the state, corporate-NGO collaborations are increasingly responsible for establishing the extra-economic conditions for accumulation, particularly in cases where the state faces challenges to creating such conditions.

These new economies and their resulting geographies are perhaps more complicated than often assumed. Despite a number of well-grounded concerns about the opportunities for enclosure and privatization of both nature and environmental politics outlined by a number of critics, the findings presented here suggest that socio-natural configurations associated with market-based mitigation programs are complex and often underwritten by contradictory logics. In attempting to facilitate further growth via the mitigation of its consequences, approaches such as offsets reorder spaces in the boreal, increasing access for some (general public access on offset sites and industrial access to resources on crown lands), while limiting access for others (agricultural communities at sites of mitigation and populations in the impact zones of resource development). As such these shifts require a more nuanced analysis than the pervasive focus on enclosure and privatization to be found in much of the critical literature. There are indeed instances of privatization and enclosure associated with offset programming, however, it is often the case that the benefits for private interests are contingent upon a co-occurring expansion of functionally public spaces in the boreal. Given such a scenario dispossession is as likely to result from mitigation efforts and the expansion of functionally public space as it is from enclosure and privatization. What results is dispossession and displacement at both sites of extraction and sites of mitigation.

6 Offsetting dispossession? Terrestrial conservation offsets and First Nation treaty rights

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6.1 Introduction

Market-oriented approaches have been a central component of what some have described as a 'neoliberal turn' in conservation practice (Igoe & Brockington 2007; Brockington et al. 2008; Buscher 2008). Mechanisms such as conservation easements and land trusts, payment for ecosystem services, biodiversity offsets, and tradable quotas in biological resources have become increasingly popular on a global scale. These new approaches are often juxtaposed to the failures of earlier state-centered command and control models and are lauded as a means to reconcile environmental conservation with economic development and growth. The increased use of market-based tools is representative of a broader global trend toward the rescaling of governance, including environmental management, and an increased role for non-state actors and market-based tools in the production and allocation of public goods and services.

Discussions of neoliberalism in general, including neoliberal environmental management, have tended to be broken into two distinct camps -- those that view such shifts as utopian win-win scenarios that successfully reconcile tensions between the environment and economic growth (Anderson & Leal 2001; Turner & Daly 2008; Shogren 2005) or a growing array of critical perspectives, which often present the shift to non-state actors and markets as part of a larger class-based project that threatens democracy and serves to channel benefits to powerful societal actors (see inter alia McDonald 2008; Kelly 2011; Bockington et al. 2008). An exploration of terrestrial conservation offsets in Alberta complicates some key narratives of the existing critical literature, providing a case study in how market-based conservation tools may

serve multiple political ends, and may in some instances be used to empower communities resisting threats of dispossession, privatization and the imposition of market logics. The following chapter aims to illustrate broad theoretical claims about the political nature of neoliberal environmental conservation instruments. In doing so, I engage a body of recent scholarship that explores the complex and often contradictory manifestations of neoliberal environmental governance, suggesting that such arrangements might support a variety of political ends. While the increased use of market-oriented conservation is certainly engaged in the channelling of benefits to powerful interests as described in much of the critical literature, the issue of assumed political allegiances may be more complicated than often presented. The following chapter complicates pervasive discussions in the geographic literature of neoliberal conservation practices as being coherently aligned with specific political projects or producing predictable and uniform material outcomes, and rather, provides an analytic framework that deviates from some of the dominant critical approaches to the study of neoliberal conservation. While novel conservation approaches like offsets do indeed participate in processes of accumulation by dispossession, such characteristics are not exclusive or uniform. Market-based conservation tools often do more than simply dispossess and channel benefits to powerful interests. Intersections with place specific contexts often generate a complex series of political openings and closings, including their use as strategies for the attainment of more progressive political ends. While not losing sight of the potentially perilous impacts for both human societies and non-human natures, I suggest that we also remain open to exploring co-occurring political processes that may deviate from the outcomes anticipated by much of the critical literature. An openness to such possibilities deepens our understanding of neoliberal environmental governance, and opens spaces for discussion of imperfect, and yet often effective, political strategies that may engage with neoliberal conservation as a means of achieving progressive

political outcomes, even when those gains are occurring within the confines of existing power structures and a limited range of options.

6.2 Market-based tools and 'neoliberal' conservation practice

While there is not, as yet, a well-developed literature on the rationales and material implications of terrestrial offset programs¹³, there is a growing body of critical scholarship that examines the use of markets and financial mechanisms to achieve conservation goals (see inter alia Mansfield 2007a, b; Robertson 2006; Sullivan 2013 a, b; Pawliczek & Sullivan 2011). There is indeed a long history of valuing nature in economic terms. The most recent iterations of such themes and the new zest for market mechanisms to save nature can be traced back to the sustainable development frameworks associated with the World Commission on Environment and Development, and the emergence of what Steven Bernstein (2001) has called a "norm complex of liberal environmentalism" that explicitly seeks to reconcile economic growth and environmental protection. Under such a norm complex continued economic growth and environmental protection are seen as entirely compatible, and in fact, mutually supportive goals. An increasing array of sustainable development approaches suggest that not only will the invisible hand of market processes guarantee that nature is properly valued and allocated, but that in order to be successful, environmental protection must be made profitable (Anderson & Leal 2001; Daily & Ellison 2002; Kosobud & Zimmernam 1997; Stavins 2003). In a related vein, the concept of placing economic value on nature and employing markets for effective allocation has become increasingly popular in development circles and the last several years have seen explosive growth in the use of such market-oriented conservation techniques as a means to not

¹³ Some notable exceptions include recent work by Sullivan (2013a), Robertson (2006, 2012), Dempsey and Robertson (2012).

only conserve nature, but to generate economic development benefits for 'local communities', particularly in the global south (UN-REDD 2009; for critiques see McAfee 2012; McElwee 2012; Milne & Adams 2012).

The other dominant discussion on the use of markets mechanisms, or neoliberal conservation -and one that has been far more pervasive amongst political ecologists and geographers -- has been a critical literature that questions the motivations, rationales and material implications of these practices. This work has tended to present two coherent criticisms of these new approaches. First, it has been argued that new markets and trading in nature and its services operates as a green-washing strategy which allows industry to look green while conducting business as usual (Buscher et al. 2012; Sullivan 2010, 2013b). A second, and often related, theme draws theoretical support from a Marxian lens of recursive and contemporary primitive accumulation, or to use Harvey's (2003) phrase, "accumulation by dispossession" (Neves & Igoe 2012; Corson & McDonald 2012; Sullivan 2013b; Kelly 2011, Fairhead et al. 2012). Scholars employing this approach have been particularly concerned with what they see as a parasitic incorporation of previously non-capitalist activities, the expansion of private property, the privatization of environmental politics and a shrinking public sphere associated with the commodification of environmental protection. Others have broadened these discussions, suggesting that what we are witnessing are not only new frontiers of accumulation via trading in ecological commodities, but also a larger remaking of the social and material world that seeks to overcome accumulation crises generated by the inherent contradictions of capitalism (Robertson 2012; Buscher & Flectcher 2014, Sullivan 2013b).

Such analyses are theoretically rigorous, and there are numerous empirical examples that support the conclusions found in theses frames, including -- in part -- the one presented here.

What I aim to demonstrate through the following case study is that while market-based conservation activities can enable the dispossession and accumulation associated with these analyses, in other instances they can operate quite differently, and may provide unanticipated strategies and opportunities to resist dispossession. Although the critical scholarship described above provides valuable understandings of the processes at hand, these I argue, are often only partial. I suggest that while we should not lose sight of the foreclosures associated with these conservation tools, that we also remain aware of the possibilities for co-occurring political openings and opportunities.

A growing body of scholarship on the manifestations of neoliberal environmental governance and conservation practice has drawn attention to the manner in which the social, political and economic contexts of particular places complicate attempts at neoliberal reforms, often leading to hybridized practices that combine multiple, and often contradictory, logics (Roth & Dressler 2012; McAfee &Shapiro 2010; Mansfield 2007 a, b; Milne & Adams 2012). In many instances articulation with local conditions and actors weakens the perceived coherence of neoliberal governance techniques, opening up a wide variety of potential reconstructions of the political terrain, and often resulting in systems of governance that are no longer clearly recognizable as specifically neoliberal (Roth & Dressler 2012).

Scholarship on hybridity and place, and recent scholarship demonstrating the polyvalent political nature of neoliberal governance tools have provided important insights to the literature. Despite this attention to complexity, relatively less attention has been paid to the potential for neoliberal governance tools to be used in support of more progressive political ends. Notable exceptions in this regard include recent work by James Ferguson (2010) who suggests that we distinguish between neoliberalism as a particular class-based project, and neoliberal tools or "arts of governance", which may be appropriated and put to a variety of political ends, and Becky Mansfield's (2007a) exploration of fishing quotas in Alaska, which demonstrates that neoliberal

tools such as harvest quotas may expand market logics in some respects, while simultaneously offering others "concrete protections from the market" (p.486).

In his 2010 article for an anniversary edition of Antipode on political praxis, James Ferguson challenges scholars of the left to develop political strategies that move beyond critique. Based on his apparent ennui with the repetitive and "unsurprising conclusions" of critique, Ferguson (2010 p. 167) calls on scholars to shift focus from critique to the development of progressive political strategies and techniques of government that force us to think pragmatically about the question "what do we want?".

Ferguson, drawing on his empirical work in the realm of social policy in southern Africa, takes up this challenge by suggesting that key elements of neoliberal reasoning may in fact be appropriated and put to more progressive political ends. In doing so he challenges depictions of neoliberalism as a unified and coherent political-economic project, and instead encourages us to think of neoliberalism as a series of logics, tools, or "techniques of government", that may be picked up by a range of societal actors and put to a wide variety of political purposes. According to Ferguson (2010),

Techniques...can migrate across strategic camps, and devices of government that were invented to serve one purpose have often enough ended up, through history's irony, being harnessed to another (p.174).

Social technologies need not have any essential or eternal loyalty to the political formations within which they were first developed...with social, as with any other sort of technology, it is not the machines or the mechanisms that decide what they will be used to do (p.182-183).

Similar analyses can be found in Collier's (2005) study of economic reforms in post-soviet Russia in which he suggests the importance of "a technical analysis of neoliberalism" that "draws a clear distinction between, on the one hand, the specific *technical mechanisms* that

distinguish neoliberal proposals, and on the other, the broader political projects...into which such mechanisms might be assimilated" (p.2, italics in original).

Karen Bakker's (2007) study of water politics in many respects mirrors some of Collier's (2005) interest in "technical analyses". Bakker (2007) provides a more precise conceptual model for the study of neoliberalisation by distinguishing between a suite of possible processes and reforms, which may be combined in any number of ways depending, in part, on the specificities of local social, economic and political conditions. Her call for greater precision in the construction of analytic categories demonstrates that neoliberalism is not "monolithic" or cohesive and that in some instances ostensibly neoliberal logics may in fact serve the needs of progressive political movements. Higgins & Lockie (2002) and Higgins et al. (2012) explore similar lines of inquiry in their studies of market instruments for rural environmental and agricultural management in Australia, and along with Castree (2007), remind us that people are rarely passive victims who uncritically accept the new subjectivities that neoliberal reforms demand of them. In a related fashion, Dempsey and Robertson (2012 p. 760) raise an important challenge for scholars of market-led conservation when they ask if such policy mechanisms might be used to help communities "achieve increased autonomy and well-being without imposing a commodity logic on their resources".

The sections that follow look to the case of terrestrial conservation offset projects in Alberta, Canada as a means of illustrating broad theoretical claims about the underlying politics and potential uses of neoliberal environmental management. While the study demonstrates that there are a number of ways in which offset projects in Alberta are illustrative of some of the broad themes of dispossession and accumulation found in the critical Marxian literature, there are also instances in which offsets are being explored as strategies for politically progressive movements, including those that seek to counter forms of dispossession. Attempts at the establishment of offsets in Alberta represent a series of complex and co-occurring political

openings and closings – dispossession and foreclosure in some realms and openings and opportunities in others.

Engaging Ferguson's (2010) recent insights on the "uses of neoliberalism", and recent calls for greater technical clarity in analyses of nature's neoliberalisation (Collier 2005; Bakker 2007; Dempsey & Robertson 2012) subsequent sections of the chapter explore the potentially polyvalent political nature of market-based conservation tools. The discussion that follows complicates the assumed coherence and political allegiances of market oriented conservation initiatives, and while not denying alliances with powerful interests, traces the extent to which market-based tools may be picked up and re-purposed to support a diverse range of political ends. While these new conservation tools remain limited in their ability to produce radical change, they may present imperfect, yet pragmatic tools to achieve important and immediate political gains within the confines of existing power structures. While many might dismiss these less radical, incremental gains as insignificant, I suggest that they may offer important support and foundations for larger, and more radical, transformative projects.

6.3 Terrestrial conservation offsets in Alberta

Terrestrial conservation offsets are a form of environmental mitigation strategy. The general idea behind a conservation offset is that the ecosystem disturbance and habitat loss associated with development projects should be mitigated through the conservation of substitute areas of similar, or ecologically equivalent, habitat elsewhere. Conservation offset programs are part of a growing trend toward markets in ecological commodities, which include nascent markets in atmospheric carbon, and critical natural habitat. A 2010 report by Ecosystem Marketplace documents 39 existing conservation (biodiversity) offset programs around the world with an additional 25 in various stages of development (Masden et al. 2010). Offset programs take a

variety of forms from voluntary or regulated mitigation programs, to third party banking systems involving tradable habitat or ecosystem credits.

Over the last decade conservation offsets have become a leading response to the ecological consequences of oil sands development in Alberta, Canada and have been recognized by much of the oil and gas industry, the provincial government, major conservation non-governmental organizations (NGOs) and some First Nations (Dyer et al. 2008). Several voluntary and quasivoluntary programs have been initiated between industry and various NGOs over the last decade and have led to a proliferation of new conservation areas along the southern boreal forest of Alberta. The provincial government has included the use of offsets in its official policy response to sustainable resource development (GoA 2009), and the Oil Sands Leadership Initiative (Suncor, Conoco-Phillips, Total, Statoil and Nexen), along with several NGO and civil society advisory groups, have expressed their preference for the development of a provincially regulated system with full markets and offset banking (OSLI 2009; Dyer et al. 2008; BCOAG 2009). As discussed in previous chapters, the Government of Alberta has yet to provide a regulatory framework that would require offsets as mitigation for disturbances caused by extractive industry, nor the necessary mechanisms to establish a market in tradable conservation offset credits. As a result, the majority of terrestrial conservation offset projects in the province remain industry-NGO collaborations in which industry voluntarily (or not so voluntarily) supplies funding to conservation organizations to develop offsets on their behalf. To date all existing offset programs in the province operate on this model and the conservation NGOs are responsible for management of the offset sites. The proposed offsets discussed in this paper were intended to take a somewhat different approach, and would involve the retirement of timber harvests on state owned forest tenures under lease to a local First Nation, with the resulting conservation units actively managed by the nation.

6.4 Conservation offsets and accumulation

Offset programming is not unproblematic and, as anticipated by much of the critical literature, does act to remake society and nature for the benefit of powerful interests. While a lack of a fully developed market has hindered accumulation through the trading of new ecological commodities, terrestrial offset projects in Alberta have proven a low cost and effective means of lubricating further extractive resource development.

Conservation offsets do represent important gains in the preservation of boreal habitat in Alberta and it is not my intention to negate the important work they have achieved in this regard. However, both the constrained scope of existing offset projects and the scale of extractive disturbances in the province have meant that offset projects are unlikely to achieve the goal of no-net-loss, or 1:1 disturbance to mitigation ratios, which are often a core principle of such conservation mechanisms. While I do not discount the important gains that existing offset projects have made, nor the best intentions of participating stakeholders, offset projects yield important material benefits beyond the conservation of forest habitat.

Specifically, terrestrial offsets, as a form of corporate social responsibility initiative, benefit industry by serving to shape and diffuse conflict over oil sands projects¹⁴. The development of Canadian oil sands in the Athabasca region has been a politically volatile issue both domestically and internationally over the last decade. Both scientists and the general public have raised concerns over the scale, pace, and environmental consequences of oil sands development, and protests of the industry have been widespread (CBC 2010, 2011; Snow 2013). This controversy has negatively impacted industry's ability to access both the resource

¹⁴ For a discussion of how corporate social responsibility programmes shape conflict see Bebbington (2010).

and international markets¹⁵. Easily recognizable by the general public as a green area on a map, or a place one can visit, conservation projects are a highly legible and effective means overcoming some of this social resistance to oil sands projects (Alberta Parks 2013). Interviews conducted in 2012-2013 with representatives from major oil sands companies, NGO partners in offset projects, and provincial government representatives all confirmed the findings of an earlier study by Dyer et al. (2008 p. 2) which identified "growing public expectation, preserving a social license to operate, and retaining access to the resource" as the primary factors influencing industry support for offset programming (ACA 1 2012; ACA 2 2012; Pembina 2012; Suncor 2012; AOIF 2013; ASRD 2012; Alberta Parks 2013).

As explored more fully in chapter seven, conservation, and images of green landscapes, have been a core component of campaigns to re-brand Canadian oil sands in a more positive light. These material and discursive re-organizations of nature support recent work by critical scholars (see inter alia, Wekerle et al. 2007; Brockington et al. 2008; Sullivan; Buscher et al. 2012; Takach 2013), that outline the ways in which nature conservation projects are increasingly being "twinned" with economic development, thereby serving as a "cornerstone, or lubricant...in the service of growth" (Wekerle et al. 2007 p. 34). Moreover, as Bebbington (2010 p. 7-9) suggests, corporate social responsibility projects of this sort are doubly successful in that they serve to shift attention to conflicts over distribution of benefits "at the margin", rather than "ideological conflicts" that "call into question the overall legitimacy of the extractive activity in the first place". In recent years, securing an industrial commitment to terrestrial offsets has become a key condition of removing NGO objections to oil sands development or mine expansion applications.

¹⁵ Interviews with government staff and representatives of oil firms suggest that negative public perceptions of the industry have delayed the approval of essential pipeline projects, have hampered access to important foreign markets and often complicate development approvals.

Conflict shifts from challenging the inevitability of development, to one of securing benefits at the margins (conservation offset agreements)¹⁶. Terrestrial conservation offsets are being effectively employed to "offset resistance" and to shape the contours of conflict over extractive industry (Stainsby & Oda Jay 2009). Doing so facilitates industrial access to the resource, pipeline expansion, and access to important international markets.

As discussed in the previous chapter given the current institutional configuration, existing offset programs have often served to dispossess people at both the sites of extraction and the sites of mitigation. The use of terrestrial offsets have intersected with the geographies and properties of forest resources, existing provincial resource policies and patterns of land ownership in ways that displace and dispossess some communities, while simultaneously opening up new strategies to resist such enclosures by others. As a means of avoiding the sterilization of petroleum resources, the establishment of offset sites in the province have been focused on lands with minimal subsurface mineral resources, often 300-400 km away from the disturbances they are intended to mitigate in the lower Athabasca oil sands region. Such a scenario is consistent with recent work by Robertson (2006) and Sullivan (2013b) who demonstrate that such instruments often work by "decoupling the distinctiveness of non-human natures from the geographic localities in which they occur" (Sullivan 2013b p.10). This spatial mis-match furthers the expansion of resource development in the Athabasca and its associated dispossessions, displaces the burden of mitigation into communities far removed, and is of little benefit to

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¹⁶ Several NGO interview respondents spoke of terrestrial offsets as making the most of a bad situation. Many believed that further development was unavoidable and that offsets were better than nothing in return.

¹⁷ Current offset programs work through the purchase of fee simple lands (almost exclusively farms). An open house meeting with residents of Flatbush and Fawcett ALB. and interviews with a municipal councillor for Lesser Slave River district revealed that many residents worry that the conversion of farms to conservation offset sites threatens the wellbeing of their villages.

residents in development impact zones. Moreover, the de-coupling from place-based socioecological relationships generates additional dispossessions, including negative consequences
for the practice of treaty rights by First Nations facing landscape disturbances caused by oil
sands development. First Nations across the province have constitutionally protected treaty
rights to access certain resources on Crown lands, and the state has obligations to provide
adequate landscapes to support the practice of these rights and to protect from settler
competition for resources. Specifically, First Nations have preferential access to resources on
Crown Land, access which is infringed upon once those lands are disturbed by industrial
activity. Further, biodiversity offsets meant to mitigate for that disturbance allow for universal
public access, are not classified as Crown Land, and thus do not recognize treaty rights (AFN
2012).

While the displacement and dispossessions associated with current offset programs present very material challenges for some communities, others have found opportunities to explore the use of the tool to achieve very different political and material ends. It is not my intention to trivialize the very real involvement of offsets in furthering displacement and accumulation, but rather to suggest that the socio-natural reconfigurations associated with these tools are often more complex. Rather than representing uniform tools of enclosure and dispossession, I argue that what we are witnessing are a series of place specific hybridizations resulting in co-occurring expansions and contractions of the political field -- facilitating accumulation by dispossession in some realms, and providing strategic tools of resistance in others. The following sections explore attempts by Little Red River Cree Nation to strategically embrace the use of offsets as a means of countering dispossession.

6.5 Little Red River Cree Nation and terrestrial conservation offsets

Little Red River is a Cree First Nation of approximately 5,000 people located in three communities in northern Alberta adjacent to the western border of Wood Buffalo Park. The community of John D'Or Prairie serves as an administrative centre and is connected by a road to the town of High Level at the junction of the Mackenzie Highway. Fox Lake is the most populous of the three communities and the smaller community of Garden River lies within the borders of Wood Buffalo National Park. Both Fox Lake and Garden River have limited transportation access and are only accessible by a seasonal ice road in winter or fly-in service during the remainder of the year. The Little Red River Cree Nation (LRRCN) is a member of the North Peace Tribal Council and a member of the Treaty 8 First Nations of Alberta.

LRRCN currently practices mixed economic activities. Primary businesses include forestry and forest fighting companies, a fly-in fishing and tourism operation, hardware and convenience stores, as well as a small aviation operation providing charter flights and air ambulance services to small communities in Northern Alberta (LRRCN 2001; INAC 2005). Given the isolated nature of these communities, Cree cultural traditions and language remain relatively strong (LRRCN 1 2012; Nelson 2003). The isolated nature and limited road access have also meant that subsistence activities remain materially important for the survival of the nation as food stuffs brought in from outside the region are very expensive.

The Little Red River Cree Nation is a signatory to Treaty 8 which is an historic agreement signed in 1899 between the Crown and First Nations covering large areas of Northern Alberta, British Columbia and the Northwest Territories and affirms certain Aboriginal rights to land use. The rights outlined in the treaty were reaffirmed and constitutionally protected in section 35 of the Canadian Constitution Act. Specifically the treaty states that,

Her Majesty the Queen hereby agrees with the said Indians that they shall have right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered...saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes (Treaty 8, 1899).

As such, the treaty created a complicated situation of overlapping rights to land and resources, granting the Crown the ability to take up lands for settlement or resource development and infrastructure, but also guaranteeing First Nations the right to access resources on unoccupied Crown lands as part of their vocations of hunting, trapping and fishing. LRRCN contends that the treaty was not a surrender of lands but an agreement on the sharing of the land between settlers and First Nations (Nelson 2003; Webb 2013). At the time of signing these overlapping rights may not have presented much of an issue. The northern frontier was sparsely settled and it would have seemed unlikely that the Crown's interest in settlement or development would conflict with Aboriginal rights to continue their way of life on unoccupied lands. However, pressures from agricultural conversion and settlement, and infrastructure and resource development during the 20th century have increasingly infringed on LRRCN rights to land based vocations, a situation which has only increased over the last several decades (Webb 2013; Statt 2006).

Although signed in 1899, implementation of the treaty has been a slow moving and unresolved process. Between 1922 and 1935 both the federal government and the province began discussing the creation of "special reserves" as areas specifically designated for First Nations to practice traditional livelihoods. These special reserves were intended to address the Crown's obligation to uphold First Nation rights to hunt, trap, and fish, and to provide adequate lands to support these traditional livelihood practices. Several special reserve areas were identified for the use of nations signatory to Treaty Eight, however conflicts among the provincial and federal governments effectively prevented the creation of the special reserve areas in Alberta (LRRCN)

2 2013). As such, LRRCN and other signatory nations claim that they have unfinished business with the Crown, which has not upheld its duty to maintain landscapes large enough to secure traditional livelihoods and protect First Nations against settler competition (LRRCN 2 2013).

Given this historical context, the LRRCN, like many other First Nations in Canada, are skeptical of the Crown's commitment to upholding its obligations under the treaties and are concerned about the impact that infrastructure, resource development, and agricultural expansion may have for their rights to access resources on unoccupied crown lands. Specific challenges in maintaining landscapes conducive to the practice of treaty rights for LRRCN arise from agricultural expansion and the associated conversion of Crown lands to private agricultural uses, forestry, and downstream impacts of hydro developments in neighbouring British Columbia. These threats will likely intensify as both international and domestic demand for scarce resources grows and technological advances, climate change, and state policies that favour development make extraction in the north more viable.

Landscape transformations associated with such activities are of particular concern to the LRRCN because they reduce the ability of the Crown to uphold its obligation to maintain sufficient lands, functioning ecosystems and adequate supplies of animals, birds and fish for the nation to practice their vocations as outlined in the treaty (Webb 2013). Failure to fully consider both proximate and remote impacts of major infrastructure projects and extractive resource exploitation has been a regular point of contention between provincial and federal governments

¹⁸ According to a senior policy advisor for the LRRCN, the government of Alberta would only approve the creation of the special reserves on the condition that the federal government assume responsibility for the Metis People of Alberta.

and Aboriginal peoples in the region. Furthermore, there is a historical legacy of the Crown either ignoring, or narrowly interpreting, both development impacts and treaty rights.

In the face of 100 years of broken promises and failed attempts to have the Crown uphold its treaty obligations the LRRCN began exploring a new political approach via a series of pragmatic "interim measures" that were intended to assist the nation in asserting greater control over the use of their traditional territory (LRRCN 2 2013)¹⁹. Recognizing that resolving treaty disputes with the Crown was unlikely to happen in the near future, the adoption of these pragmatic measures were part of a policy shift within the nation during the 1980s that sought to regain control of traditional territory "by any means available" (Sewepagaham quoted in Colton, 2008 p. 97). These new strategies involved entries into forestry co-management and ecotourism as strategic tools to gain further control of activities in the nation's traditional territory (for an overview of these political strategies see Stevenson & Webb 2003; Natcher 2008). The rationale behind this move was to increase LRRCN's involvement in a number of economic activities in the forest, and as a result, secure greater influence over forest use in their traditional territory. This policy shift subsequently led to the 1995 signing of a Memorandum of Understanding (MOU) with the provincial government for co-operative management of all renewable resources within a 35,000 sq. km special management area situated west of Wood Buffalo National Park. Working with two forestry companies, the LRRCN and neighbouring Tallcree First Nation were also awarded commercial timber harvesting licences on forest tenures covering approximately half of the special management area. The co-management of this special management area

¹⁹ The material referenced in relation to the strategy of interim measures are publications authored or coauthored by representatives of the nation, or the outcome of collaborative research and policy projects by the nation. These documents support information gathered in interviews and were recommended sources of information by interview participants.

and related timber harvesting tenures meant that the nation would have greater input into the management of forests and allow for a greater balance between industrial and traditional uses. This often meant an increased focus on non-consumptive uses. "We want to refocus non-Indian use to non-consumptive uses...by replacing these activities such as forestry and oil and gas exploration with sustainable activities and ones which are culturally relevant, we can control and strengthen our claim to our traditional territory" (LRRCN advisor quoted in Colton 2008 p. 98). The nation developed new forestry management plans that sought to balance industrial forestry and traditional uses to the benefit of the nation. During this period LRRCN also pursued opportunities to secure non-consumptive uses in their territory and to protect areas of economic and cultural significance. This included the purchase of fishing lodges in the Caribou Mountains, which effectively gave the nation a monopoly on tourism operations in the region, and collaboration with the government of Alberta to create the Caribou Mountains Wildland Park in 2000 – a move that conserved 6,000 square km of lands with economic and cultural significance for the nation (Kremar et al. 2008).

The nation's exploration of offsets are part of this larger strategy of practical "interim measures" to guide land use and protect traditional territory in the face of unresolved treaty implementation. The idea of conservation offsets had first emerged during the development of Sustainable Forestry Plans for the nation's forest tenures in the late 1990s and early 2000s. These early explorations of offsets were linked, in part, to a federal government carbon offset initiative, whereby the nation would retire the harvest of 10,000 cubic metres of white spruce on its forest tenures in exchange for payment from a federal government program for carbon sequestration (LLRCN 2 2013). Such an arrangement was of interest to the nation as a means to generate revenue while maintaining landscapes conducive to traditional forest uses. Despite having developed a rigorous project plan, including metrics for measuring carbon sequestration, in collaboration with scholars at the Universities of Ottawa and British Columbia, the LRRCN plan

to participate in the federal program was effectively halted by the Government of Alberta because it would not permit the retirement of harvests in provincial Forest Management Units (FMUs) in exchange for offset credits (Ibid). The government of Alberta's refusal to allow retirement or delay of development on Crown lands as an offset generation mechanism has posed challenges for offset projects across the province and results from existing policy that requires resource development by lease holders on Crown lands.

A more recent exploration of offsets emerged in 2007 and similarly envisioned the ability to collect payment for conservation activities in lieu of timber harvesting revenues, this time through the sale of terrestrial offset credits to the oil industry. Preliminary discussions included the participation of The Nature Conservancy of Canada, which would have acquired a shared interest in the forest tenures held by the Nation, and was to act as a facilitator with the oil and gas industry who were to fund payment for the offsets (TNC 2012). Under these preliminary discussions it was envisioned that timber harvesting would be eliminated across approximately half of the LRRCN's 10,000 sq. km forest tenure (TNC 2012; LRRCN 2 2012). Under this proposed conservation plan a significant portion of the nation's forest tenure was to be managed in a fashion similar to an IUNC category four protected area (Webb 2008b), with the nation employing active traditional management approaches. In addition to generating general revenues for the nation through offset payments, this active management approach would also employ Cree hunters and trappers as active resource managers on the conserved lands. The LRRCN sought the establishment of a conservation trust capable of generating annual revenue equivalent to the profit derived from the retired timber harvesting quota (Webb 2008b). Management at The Nature Conservancy of Canada reports that negotiations included a trust in the order of 3 million dollars from industry as well as an educational endowment for the nation (TNC 2012). Although the project progressed to the stage of an agreement in principle, a number of events prevented the realization of this program. Disagreement between industry and the nation over appropriate amounts of compensation (lbid), and the lack of a provincial regulatory framework that would permit the retirement of harvest (LRRCN 2 2013) have both been cited as factors that hindered the agreement. Moreover, issues of ownership and perpetuity further complicated the process. The nation does not hold title to the lands in question, only to rights to harvest timber on these lands within management guidelines and timelines established by the provincial government. As such, the nation and its conservation partners did not have recourse to a mechanism that could establish conservation in perpetuity without the provincial government's approval of both the retirement of the timber harvest and the establishment of a conservation area on state owned lands. It is also uncertain how such an arrangement would operate if a full banking model with credit trading were introduced in the future, as industry has been assured by government that pre-existing offsets pilots will be recognized as meeting any future regulatory requirements introduced by the province. Lack of land ownership by the nation and related uncertainties in securing perpetuity further hampered the proposed project. Despite these initial setbacks the LRRCN remains interested in opportunities to receive compensation for conservation activities via a terrestrial offset model with industry, and the general principles for such an agreement have received public support from the energy firm Nexen (Wood 2012).

What is most interesting, for the purposes of my argument, are the nation's rationales and motivations for pursuing offsets through the retirement of timber harvests in their traditional territories. Interviews with the former lands and environment director of LRRCN, the nation's current policy advisor, and a number of publications and conference reports document the government's desire to use offsets as a pragmatic policy tool to secure greater control over traditional territory, and in doing so, to protect landscapes essential to the practice of treaty rights (LRRCN 1 2012; LRRNC 2 2013; Webb 2008 a, b). Offsets are seen as a useful strategy

to guard against industrial extraction in the forests, but even more importantly in recent years, to protect against the privatization of Crown lands for agricultural expansion.

LRRCN's desire to reconcile outstanding treaty implementation and to secure areas for livelihood practices have faced significant challenges, particularly from local settlers whose interests in the forest often conflict with those of the LRRCN. Many in the settler community feel that co-management plans, such as the 35,000 sq. km special management area, ceded too much influence over land management in the region, thereby negatively impacting, or disadvantaging, the interests of non-Aboriginal communities (Stevenson & Webb 2003). In fact, debates of this nature delayed the renewing of the special management MOU in 2001. One of the key challenges in the region has been a strong interest amongst the settler community to have more crown lands opened up for conversion to private agricultural uses. The Mackenzie County Council is a specialized municipality in northern Alberta covering more than 80,000 sq. km in the northwestern portion of the province, including lands of specific interest to LRRCN. The council is largely controlled by the region's agriculturalist community, who have been seeking agricultural expansion in the region. While the region sits along the northernmost fringe of agriculturally viable lands in Canada, forest lands can be converted to farmlands, largely for grain crops and livestock. In its 2009 Municipal Development Plan the council identified approximately 923 square km of Crown lands suitable for future agricultural expansion, and sought immediate conversion of more than half of this area to agricultural uses (MCC 2009)²⁰. It is anticipated that the Mackenzie County Council will continue to push for the expansion of

²⁰ The province of Alberta is divided into two basic land categories, White Zones and Green Zones. While there are some exceptions to the rule, Green Zone lands are predominantly Crown lands, often consisting of forest, whereas White Zone lands are usually privately owned, settled lands dominated by either urban or agricultural uses. The MacKenzie County Council's interest is in converting Crown Green Zones to privately held White Zones to facilitate agricultural expansion. The Alberta government controls the release of Crown Green Zone lands for purposes of urban and agricultural expansion.

private agricultural lands in the upcoming Lower Peace Regional land use planning process. The conversion of forested Crown lands to privately-owned agricultural lands presents a direct conflict with LRRCN interests, and seriously weakens their ability to manage the landscape to their needs. Moreover, the former lands and environment director for the nation has raised concerns that climate change may only exacerbate the mounting pressure for agricultural conversion and settlement in the region (LRRCN 1 2012). Securing lands as conservation offsets is seen as one tool to create a buffer against these threats from settlement and agricultural pressures.

It is this context of unresolved treaty implementation and mounting pressures from settlement and development that forms a significant part of the motivation for LRRCN pursuit of conservation offset programs. LRRCNs policy advisor has commented that a primary motivator for the exploration of offsets has been the recognition that "the province of Alberta does not have enough land to develop its resources and meet its duties to uphold Treaty 8 obligations to maintain landscapes supportive of the nation's livelihood practices" (LRRCN 2 2013; also see Wood 2012). The former lands and environment director from LRRCN explained the exploration of offsets as a desire to create a "cultural buffer zone" between the nation and competing pressures from agriculture, settlement, and extractive industry in parts of their traditional territory. The general idea being that conservation offsets would provide a means of removing portions of traditional territory from threats of settlement or development, and, at the same time, generate revenues for the Nation from the sale of terrestrial offset credits. Such a strategy is intended to direct a greater portion of traditional territory to the benefit of the nation -- including the protection of landscapes essential to both material and cultural well-being – in the absence of resolution of disputes surrounding treaty implementation.

The LRRCN are not alone in their exploration of offsets as a tool to protect traditional territory, and by extension the landscapes required to support the practice of treaty rights. A 2009 report

by the Boreal Conservation Offsets Advisory Group (BCOAG) also recognizes the potential for conservation offset markets to support the landscapes and ecological attributes essential to the practice of treaty rights and makes a number of recommendations about how such goals could be achieved (BCOAG 2009). The Treaty 8 First Nations of Alberta (T8FN), an organization consisting of 32 signatory nations, have called on the provincial government to reallocate 30% of the province's boreal forest to a new form of tenure called First Nation forest conservation (or management) agreements (BCOAG 2009; LRRCN 2 2013). The proposal of this new form of Aboriginal tenure is intended, in part, to redress some of the unresolved issues of treaty implementation, but is also widely seen as providing a foundation for signatory nations to generate and sell terrestrial conservation offsets. Moreover, as part of that recommendation, T8FN have suggested that the participation of First Nations in conservation offsets may generate a number of benefits, including the conservation of landscapes necessary for the practice of treaty rights (BCOAG 2009). Treaty 8 signatory nations across the provincial border in British Columbia are also exploring the use of offsets to protect against the impacts of mining, infrastructure and hydro-electric projects threating traditional lands (LRRCN 2 2013). The benefits that terrestrial offsets may offer as a pragmatic political strategy are being explored well beyond the LRRCN. These findings support a growing literature outlining First Nations projects to assert greater control over traditional territories via engagement with conservation measures, including a suite of market approaches, across a number of regions of Canada (Bennett et al. 2010; Murray & King 2012).

6.6 Allies, adversaries, and prefiguration

There are a number of widely recognized limitations to the use of offsets as a strategy to secure greater control over traditional territory. Some are specific to the case presented, while others are more general in their critique. To begin, there is the broad scale concern of attempting to

address legal and constitutional rights through the lens of offsets, and the potential this has to depoliticize ongoing disagreements surrounding treaty implementation and the legal obligations of the Crown. Skeptics argue that the pragmatic "interim measures" approach of the LRRCN risks undermining the larger political issue of reconciliation and forces the nation to accept the terms, language and frameworks of the hegemonic status quo (for a discussion see Stevenson & Webb 2003).

On a more practical front, concerns must be raised about the perpetuity of offsets²¹ and the potential that they may no longer be needed once particular extractive activities reach the end of their lifecycle. The risk here is that the 'pragmatic measure' of an offset may only be a temporary solution to protecting landscapes of traditional territory, and one that industry will have a large hand in determining. The benefits gained though the offset may disappear when industry no longer requires mitigation, or finds it more attractive to offset its footprint elsewhere.

As discussed earlier, offset projects are also regularly involved in facilitating extractive development on the territory of other nations, and as such, certainly represents making the best of some very limited and less than ideal options. Interviews across all stakeholder groups revealed a perceived inevitability to further expansion of oil sands development and involvement in offset programs was often cited by NGOs and First Nations as making the best of a bad situation.

The weaknesses and limitations associated with participation in offsets and other 'pragmatic measures' are recognized by the leadership of LRRCN. In fact, recognition of weakness is part

²¹ Currently there is a lack of clarity about the temporal components of offset measures. Many existing projects are envisioned to provide protection in perpetuity, while models for trading systems would only require offsets be held until meeting disturbance reclamation requirement, at which time they could be sold to others.

of the very political strategy at hand. Stevenson and Webb (2003 p. 97) outline the LRRCN's political strategy as one of "allies and adversaries". Such a strategy is built on the understanding that "within any policy arena, a potential 'ally' for one issue could well be an 'adversary' in relation to another issue or within the same or another policy arena". As such, the nation seeks collaborative relationships and policy approaches that meet their needs, but "does not assume that any of these coalitions are grounded in a larger, shared, broad-based set of common perspectives, interests and objectives" (Stevenson & Webb 2003 p. 97). Moreover, the strategy of "allies and adversaries" is fluid, "when it ceases to be effective, or when it appears to be intolerably co-optive, these two First Nations will abandon it and, and seek other means to achieve their directives" (Ibid p. 102).

The embrace of market-based conservation activities like conservation offsets by the LRRCN are part of a suite of practical interim measures to work within the confines of existing political frameworks to achieve incremental changes toward a more substantive political goal.

Participation in conservation offset projects may be an appropriate strategy to gain specific political goals and material outcomes in some instances, and may not be desired, or produce adverse results in others. The LRRCN's approach to conservation offsets is representative of the fluid and politically polyvalent nature of market-oriented conservation strategies and other seemingly neoliberal forms of governance. Although undeniably caught up in processes of accumulation and dispossession, in this instance offsets are also offering an opportunity to strategically freeze development and settlement on traditional territory. Some may argue that this is simply making the best of a bad situation, and settling for increased control over territory via market tools rather than reconciliation of treaty disputes. This is certainly true, however, to the extent that such measures can shield the landscape from development and settlement pressures it can assist in preserving the landscapes necessary for the practice of treaty rights. Future resolution of disputes about treaty implementation will prove much more difficult should

the lands in question be increasingly converted to settlement or development. Such strategies are imperfect, and are no doubt the result of particular constraints and existing power structures, however they also provide a tool to respond to immediate and important threats, and in doing so contribute important foundations for larger transformative projects. The LRRCN's "allies and adversaries" approach, and use of "pragmatic interim measures", may represent an important tool in laying the socio-ecological foundations of a more complete project of self-determination and reconciliation of treaties signed with the Crown. The ability to extend control over traditional territory represents more than an expedient tool to achieve tangible goals in the absence of better alternatives, it also directs land uses in a manner that prevents the foreclosure of future opportunities for resolution of treaty and territorial disputes.

6.7 Conclusion: Implications for the study of neoliberal conservation

The analysis presented here has much to teach us about the study of neoliberal governance tools, both within and beyond their use by First Nations in Canada. First, it highlights the importance of historical and place-based approaches to understanding market-based, or neoliberal, conservation tools. As such it contributes to a growing body of literature that has drawn our attention to the complex and often contradictory logics and material outcomes of attempts at nature's neoliberalisation (Mansfield 2007; Roth & Dressler 2012; Bakker 2007). Much has been made in the critical literature of the use of neoliberal conservation in the service of hegemonic class-based projects, and in many instances empirical study -- including that presented here -- supports these claims. However, we must remain open to the possibility that the use of these specific tools of governance may not have an inherent allegiance to a particular political project, and may in fact be picked up and put to a variety of political uses, including more progressive projects that seek to counter dispossession and the expansion of private property. The work presented here is not intended to dismiss the important insights of Marxian

scholarship on the topic, but rather, to suggest a deviation in approach that expands our understanding of the complex re-orderings of society and nature associated with these conservation approaches. While market-based mechanisms for saving nature are certainly enrolled in processes of enclosure and accumulation they also intersect with place specific contexts in ways that generate co-occurring political openings and opportunities and, as a result, may simultaneously serve very different political ends. As such, these new approaches to conservation contain characteristics beyond those widely anticipated by much critical scholarship that -- while recognizing the hybridity that results from convergence with existing socio-political and historical contexts -- has paid relatively scant attention to engagements with neoliberal conservation tools as a strategy for more progressive political projects.

The implications of this analysis are also important for policy. If critical geographers and political ecologists take seriously their commitments to justice and equity, we would be well-advised to expand our understandings of the 'uses of neoliberalism' and temper our tendency toward negative knee-jerk reactions to neoliberal governance tools. Doing so would enable us to recognize the instances in which they may support the struggles of people with whom we often share political values and aspirations. Noel Castree (2007 p. 53) sums up this point most succinctly when he suggests that we as academics "need to take seriously those situations in which nature's neoliberalisation seems to 'work', without always supposing that those for whom it works are the victims of ideology, 'sell-outs' or otherwise naïve".

Certainly terrestrial offsets are being deployed as a part of a political project intended to channel benefits to powerful actors, but in some unanticipated contexts they might also be picked up and used to secure the socio-ecological conditions that allow some of us to 'fight another day' so to speak, and in doing so support larger, ongoing projects of resistance and transformation.

Importantly, we need to move beyond seeing these instruments as doing one thing exclusively. It is my contention that neoliberal governance measures, such as terrestrial offsets, may in fact

do many things, some of which we may wish to support and others we most certainly would reject.

The analysis presented here provides not only a recognition of the limitations and negative consequences of existing power dynamics, but also suggests the need to take seriously the opportunities for political-economic transformation latent within existing structural and institutional frameworks and a call to open ourselves to working creatively with the tools at hand to achieve desired outcomes. This may at times involve engagement with some unlikely allies, including neoliberal governance tools. However, doing so may enable us to achieve immediate interim benefits, and to plant the prefigurative seeds of more substantive transformative projects. Such a strategy may prove an effective complement to critique and more traditional elements of radical politics. While critique is important, and much has been done to further our understanding of the hegemonic uses of neoliberal governance tools, I suggest that we remain open to opportunities for strategic appropriations and fruitful metamorphoses at the heart of neoliberal logics – even when these are merely strategic hold outs in part of a larger assault.

7 Coupling and decoupling: discursive and material collaborations between conservation and development

7.1 Introduction

As previous chapters attest, attempts to implement a provincial offset policy have been marked by contradictory logics and material outcomes. Despite these disjunctions and contradictions there are some seemingly collaborative processes at play between conservation projects and extractive development, particularly on a discursive front. The following chapter explores the ways in which conservation is increasingly being joined with extractive development and queries the material implications of this partnership. The following discussion explores the power of discourses surrounding the use of offsets – the circulation of images and texts to a variety of audiences – and the very material relationships that they help to shape and solidify.

As outlined in early chapters, the relationship between conservation, capitalism and powerful interests is nothing new. There is a significant history of collaboration between conservation and capitalism in earlier forms of both laissez faire liberal, and Fordist traditions. So what is new about the neo-liberal? Certainly the direct and overt coupling of these activities represents an intensification and new iteration of a much longer tradition of collaborative relationships between extractive capitalism in all of its forms and a range of conservation activities. Where once the perceived existence of a separate pre-human nature served to excuse the ecological harm of extractive activities – and to an extent still does – conservation tools like offsets increasingly collapse this separation. Rather than appearing as pre-human, conserved nature becomes a direct and linked outcome of extractive development. Drawing on an emerging literature concerned with derivative natures the following chapter argues that perhaps the greatest collaborative relationship between conservation offsets and extractive development are derived

from the circulation of images and texts which explicitly link the saving of nature to the extractive process. These discursive and semiotic productions are increasingly decoupled from the often far too complicated and messy material realities of both wild nature and extractive development. Moreover, they target both audiences and interventions at specific scales, while largely ignoring processes and relationships at others, the consequences being the production of a specific set of benefits for particular societal actors.

7.2 Offsets, abstraction, and derivative nature

A growing body of critical literature on market-based conservation tools has sought to counter and complicate their ascendency as an environmental governance strategy. Critics have raised concern about the negative implications for democratic participation in determining the types of environments we construct (Prudham 2004; Swyngedouw 2005; Smith 2007), and the role of fictitious conservation commodities in overcoming systemic crisis inherent to capitalist growth (Kelly 2011; Buscher & Fletcher 2014), as well as a general sense that market approaches have unwittingly prescribed the cause of environmental problems as their very cure (O'Neil 2007; Rogers 1994, 1998; Evernden 1999; Buscher 2014).

A significant portion of this discussion has raised concern about the processes and metrics by which nature is translated into various ecosystem services or nature assets. Chief among these have been strong criticisms of the simplifications, abstractions and decoupling from material context that are required for the creation of fungible units of nature and its associated services. Morgan Robertson's prolific work on the metrics employed to translate wetlands into wetland habitat credits in the United States has illustrated a number of these challenges (Robertson 2000, 2006, 2007, 2012). Following the work of ecological field scientists Robertson (2006) highlights the absolutely crucial role of abstraction and decoupling from specific geographic and ecological context required to produce a "nature that capital can see". According to Robertson,

"a market in the generic, undifferentiated wetland credit has successfully been erected at the cost of ignoring a good deal of ecological information...which assure(s) circulation by ignoring the all too particular or too-uncertain details" (p.383).

Others have expanded this theme in new directions, employing a frame of 'derivative nature' to explain the discursive and material shifts involved in reframing non-human nature into abstractions better aligned with financial products (see inter alia Buscher 2010; Buscher et al. 2012; Sullivan 2010). Drawing on frameworks and vocabulary from financial markets these scholars have suggested that market-based instruments such as payments for ecosystem services and mitigation offsets operate in a manner where the materiality of conservation becomes increasingly decoupled from the value derived from images, discourses, and public relations values related to these projects. Buscher (2010) describes this as a process by which natural and social worlds are "increasingly becoming the underlying assets for what has become the real source of value of neoliberal conservation, namely images and symbols within the realms of branding, public relations and marketing" (p. 261). The concern here is that the value associated with a company's involvement with conservation activities comes from the production and circulation of images and branding exercises, while the material benefits to nonhuman nature are questionable (Sullivan 2012; Buscher et al. 2012). Under such a scenario, reference to the natural world becomes increasingly decoupled from the value embodied in the trading of semiotic derivatives. Issues of scale have been a dominant theme in much of this literature, suggesting that the primary audiences of these powerful representations of nature are often significantly removed from the embedded lived experience at sites of conservation. Brockington (2008 p. 553) has referred to this as "the authority of representation over experience", whereby powerful images and discourses of nature allow target audiences to cope with a lived experience of alienation from the natural world via a series of "para-social" and, I would argue, para-natural relationships. Igoe (2014) draws similar conclusions suggesting that

the spectacle of "ecofunctional nature" regularly obscures the grounded day to day struggles over representation of, and access to, the non-human natures that underlie these innovative new conservation tools. In a related text, Buscher (2014) provides a reworking of a number of Marxist tenets, noting recent shifts in contemporary capitalism surrounding the relationship between value, circulation, and production. Buscher contends that the "liquid nature" that results from conservation commodities is part of a larger trend in which in which the circulation of value is increasingly detached from its embodiment in material objects or productive labour.

It is not my intention to suggest that offset projects in Alberta lack a significant material component. Offset projects have, and continue to make, significant contributions to broader landscape level success in conservation in the province. However these gains have often come as a result of significant decoupling and abstraction of both human-environment and biophysical considerations. While recognizing these material gains, I suggest that a significant portion of the value derived from such projects are related to their ability to generate discursive and symbolic benefits for both the provincial government and industry at extra-local scales. As such, the processes at hand often mirror the decoupling and derivative narratives to be found in much of the critical literature. A certain level of abstraction and decoupling lies at the core of any mitigation offset project. Whether state-driven by regulatory requirements or supplemented by the use of banking, trades and market principles, mitigation (or compensation projects) are regularly complicated by issues of equivalence. Equivalency is only ever approximate. However, in order for industry and the provincial government to benefit from offsets without impeding the expansion of extractive development, the province has constrained and shaped existing offset programs in a manner that regularly intensifies the abstraction and decoupling associated with these mechanisms. Doing so allows government and industry to benefit from the public relations benefits of offset programming without hindering development. However, this decoupling has generated very different discursive and material impacts at varying spatial scales. While the

geographic and ecological decoupling of current offset projects have produced significant benefits for both the provincial government and industry, they fail to address questions about the legitimacy of the broader extractive project and its impacts on the global scale, while simultaneously failing to address linked socio-ecological systems at local scales, producing potentially adverse impacts for communities facing the impacts of both extractive development and the conservation projects that seek to mitigate disturbance.

7.3 Equivalence and decoupling

Issues of equivalence, along with additionality and leakage, have been at the forefront of discussions about mitigation offsets by both proponents and critics (Croft et al. 2011; Weber 2009; Environment Canada 2012; Robertson 2006). The very concept of a conservation offset is driven by a perceived ability to compensate or mitigate disturbances via the protection of relatively similar habitat or ecosystems in another geographic location. However, concerns about the commensurability of like for like swaps have been heavily debated and many critics point to the inherent difficulties of creating fungible equivalents for trades (Robertson 2006, Lohmann 2014; Klinsky 2015).

Offset frameworks in Alberta have struggled with equivalency for a number of reasons. Existing programs operate on a "course measure" conception of equivalence, boreal-for-boreal swaps. Attempts are made to maximize similarity in vegetation types and productivity, and potential sites are, at minimum, to be located within the greater provincial boreal ecozone. While site selection criteria involves attempts to maximize significant landscapes and ecological features, or to match corporate requests for particular landscapes [i.e. Shell has an explicit preference for sites that can be actively re-forested (ACA 2012)], the basic contours of equivalency remain very broad scale. In many instances the sites selected for use as offsets are minimally disturbed areas of boreal forest. However, due to current restrictions that limit offset creation to private

lands more often conservation sites are being created on significantly altered landscapes of farmlands and grazing leases and are thus like-for-like to the extent that they occur within a broadly defined ecological region. Of course provided that these highly altered sites are returned to forested landscapes (as is the intention with Shell sponsored sites), these areas may present a bigger ecological gain than merely protecting existing forested landscapes that may or may not be threatened with disturbance.



Figure 2: Shell/ACA conservation offset site in Flatbush AB

While current policy restrictions have intensified the inherent de-coupling associated with mitigation offsets in terms of a geographical and spatial mis-match discussed in previous chapters, it has also had repercussions for the ability to secure similar types of habitat. As the CEO of the ACA explained in an interview, the disturbance of Muskeg is the dominant form of terrestrial impact occurring in the Athabasca sands – a form of slow growing northern peat bog system that has formed over thousands of years. Very few farms or grazing leases would contain this type of ecosystem as it is not conducive to agriculture. Historically, sites containing muskeg would have been avoided by agriculturalists or have been drained or otherwise

converted, making the ability to conserve equivalent ecological systems very challenging. Moreover, unlike afforestation or other forms of landscape restoration, muskeg cannot (at present) be reproduced²². An additional complication of a focus on private lands in the boreal is size, as agricultural holdings in the boreal tend to be much smaller than those in southern prairie areas of the province creating challenges for assembling large contiguous areas for the establishment of offsets (ACA 2 2012). Confounding all of this is the inability of such land swap activities to deal with the impacts of habitat fragmentation, compensate for the loss of slow growing plants and ecosystems and the resulting impacts for wildlife populations.

The other component perverting strict interpretations of equivalence is cost. A recent study of the Alberta context suggests that strict equivalence-based systems can be 2 - 17 times more expensive than offsets systems that allow for greater flexibility in the type of habitat conserved (Habib et al. 2013). Similar analyses have suggested that both lower costs, and greater conservation benefits may be achieved by allowing for greater flexibility in the types of ecosystems and habitats conserved, including allowing offsets to target high-risk landscapes or species in other ecozones or regions (Weber 2014). Interviews with industry and government representatives also suggested that a like-for-like model may not capture the greatest conservation bang for their buck and several have mused about the idea of permitting offsets to move out of a boreal-for-boreal model to include conservation activities on grasslands in the south and beyond (Alberta Parks 2013; AOIF 2013). This sentiment was reiterated by Suncor CEO Rick George in 2008, who speculated about an expanded (and more intensely decoupled)

²² Although the CEO of the ACA suggested that experiments are underway to scrape up muskeg in the Athabasca and store it in a frozen state, thereby creating a seedbank for future reclamation efforts. Similar references to 'salvaging' muskeg for later use in restoration can be found at the Oils Sands Discover Centre. The technology however, remains unproven.

conservation offset approach. "Perhaps it's time to start thinking beyond localized areas or corners of a province when it comes to conservation offsets for land impacted by development...Could reclaiming a gravel pit in Quebec or re-stocking a lake in Ontario achieve the same net benefit as restoring a mined parcel of land in northern Alberta?" (Suncor, 2008). While there are an array of economic, property, and policy contexts that are intensifying the decoupling associated with conservation offsets in the province, a more profound rupture is inherent in the overall conceptualization of such programs. Conservation offset programs as a whole, but particularly in Alberta, are exclusively concerned with the ability to mitigate biophysical disturbances via biophysical equivalents. Practitioner and research communities tend to be dominated by physical scientists, economists and lawyers. There is no explicit consideration for linked socio-natural relationships, the impacts of disturbance on these relations, or the ability – or lack thereof – for offsets to address these concerns. This conceptual foundation – one that to a large degree views society and nature as separate realms -- has been challenged by a number of First Nations in the province. While not fundamentally opposed to the use of offsets, several First Nation representatives have suggested that models must include socio-cultural components and a linked conceptualization of human-environment relationships. As one First Nation respondent explained, "There is some benefit on a strictly ecological level. There is no consideration of social, spiritual values and functions. You cannot create equivalents for that. You can conserve another area, but it is not the same as the one your parents, grandparents, great-grandparents hunted, harvested berries from etc. They cannot compensate for social/spiritual values" (AFN 2012).

Issues of equivalence and commensurability have been hotly debated in broader discussions of offsets as a mitigation model and will likely remain a node of ongoing ideological contestation.

As much scholarship has pointed to, achieving the equivalency required for the trading of ecological units necessarily involves bracketing out the finer gained details. In fact, as

Robertson (2006) suggests, the more we try to achieve fine detail (in order to generate an even wider range of ecological commodities) the more the abstractions that stabilize trade are irreparably shattered. At present property relations, policy, cost constraints, and communities of intellectual practice in Alberta have served to intensify the level of abstraction and decoupling inherent in any form of mitigation project. Of course beyond the risk that heightened abstraction becomes untenable, there is the more fundamental assertion that some things are simply incommensurable. This line of argumentation was most commonly cited by First Nation participants who note that no level of ecological equivalency can adequately address the rupture of linked socio-ecological systems.

7.4 Discursive and material benefits for the state and industry

While issues of abstraction and equivalence generate a number of conflicts and problems for offset programming, in other respects these material disconnections are less consequential. In fact the circulation of images and discourses that they engender need not have strong material referents to achieve their goals or to generate benefits for specific social actors.

Interest in the use of conservation offsets are, I would argue, a component of a much larger project to discursively link conservation and development. Such a project is not unique to Alberta, and a number of empirical studies have outlined the ways in which reference to nature has been used to fuel and facilitate economic growth both within, and beyond, Canada (Wekerle et al. 2007; Brockington et al. 2008; Ervine 2012). Much of this has been achieved by an inversion of discourses surrounding environmental problems and their proposed solutions. No longer seen as a counter point to development or a counter-hegemonic project, saving nature becomes explicitly tied to economic value, financial principles and the advancement of growth. These sentiments were mirrored in a speech to the World Heavy Oil Congress by Suncor CEO Rick George in 2008, "I believe we need to do what capitalists do best – turn challenges into

business opportunities. And this includes seizing the environmental challenges our industry now faces and turn them into business opportunities that enhance the long-term value of our resource base" (Suncor 2008). Discourses of nature and economy in Alberta are illustrative of this broader global trend to link environmental well-being with the advancement of capitalist growth. However, these discursive connections need not have a strong material referent in order for them to achieve their goals. In fact, abstraction and the omission of too many nitty-gritty details may be the key to their success.

Alberta and its oil sands industry have demonstrated a sustained interest in the benefits thought to arise through this discursive linking of economic expansion and pristine wilderness on a number of fronts. Recent provincial re-branding strategies, advocacy campaigns by the Canadian Association of Petroleum Producers (CAPP) and of individual oil firms are illustrative examples of this larger project. Facing a tarnished public image as a jurisdiction lax on environmental protection, as well as campaigns against 'dirty oil' in the USA and EU, in 2008-2009 the province launched a \$25 million dollar rebranding project for the province under the tag line "Freedom to create, spirit to achieve". The project involved the production of a suite of multi-media projects aimed at re-framing the province as an open frontier of boundless opportunity, while at the same time placing strong visual emphasis on iconic landscapes and nature spaces. According to the Premier's director of communications this major re-branding effort was intended to "tell the world we are producing clean energy", largely as a means of countering criticism regarding the province's environmental record (Markusoff 2008). Specifically there was a desire to counter poor perception of the province among foreign audiences in the United States, who represent major export markets for Alberta's bitumen sands, and to draw skilled workers (both domestic and international) to settle in the province (Ibid). Several scholars (Techach 2014, 2013; Davidsen 2014; Katz-Rosene 2014) have suggested that the overt twining of nature and development that pervades projects such as

Alberta's rebranding strategy relies on a series of iconic nature images that are increasingly abstract and that in doing so, "by force of repetition", displace "other possible representations, particularly those that locate and connect such issues in actual concrete processes such as globalism and consumerism." (Hansen & Machin cited in Teckach 2013 p.212). As such, repetitive and abstract linking of iconic wilderness images with resource driven development serves to legitimize existing power relations and political-economic processes by evading broader questions about the grounded socio-material processes through which they are constituted. Iconic scenes of mountainous vistas and glacial lakes become a symbolic stand in for boundless opportunity and an open frontier, while displacing any reference to the material impacts of apparently 'boundless' economic opportunity, the ways in which such activities shape and transform landscapes or the historical processes and social relations that underpin the current context of the province and its economy. As Takach (2013 p. 220) astutely notes, the web-oriented slideshow produced as part of the campaign provides "relatively little indication of environments in which Albertans actually live and work", disproportionately focusing on images of parks and other iconic natural landscapes, rather than the urban, suburban, and working rural landscapes that constitute the environmental realities of most Albertans. De-contextualization, and symbolic metaphors tied to natural landscapes abound in the provincial rebranding campaign. As an example, shortly after the campaign's launch it was discovered that images of children playing on a beach used in campaign images and videos were actually stock images of a location in Northumberland, England (CBC News 2009). The government's response to this mishap, and associated apology, highlights a tendency toward abstraction from the place-based and particular, to a series of ideas or concepts in the abstract. Government officials suggested that the scene was not intended to imply that the children or the beach were in Alberta, but rather a reference to children and environment in the abstract. As then premier Ed Stelmach commented in the press "I'm not a marketer, but children, you know, two children, that's our

future ... — no matter where they live. Should they be Alberta children? Well then, let's have them Alberta children — but children, no matter where they are around the world, they are the next generation" (CBC news 2009). In this broad scale re-branding project we can clearly discern a strategy that seeks to benefit from the circulation of images — often to distant, extra local audiences — that discursively connects wild nature with economic growth and development via abstraction and decoupling. This trend occurs in a number of contexts related to the politics of oil development, including the growing popularity and material implications of offset projects.

The Canadian Association of Petroleum Producers (CAPP), and indeed individual oil firms, have been engaged in similar re-branding initiatives over the last several years and have spent millions on print and television marketing campaigns that link oil sands production with verdant landscapes, environmental protection, and wild nature. This visual and discursive linking is one of the most prominent themes to be found in marketing across the industry. The pervasiveness of the theme may be the result of its efficacy. Research conducted by Harris-Decima (2011) for the Canadian Association of Petroleum Producers (CAPP) suggests that the organization's oil sands "advocacy campaigns" launched in 2010 have been successful in improving public perceptions of the industry and increasing support for development of the resource, even among political constituencies that have historically been the strongest critics. The findings suggest that the repetitive messaging made significant gains, increasing positive impressions of oil sands development by 8% points, and lowering negative impressions by 11% points between March 2010 and July 2011 (Harris-Decima 2011). Moreover, impression momentum, an indicator of whether impressions were becoming more positive or negative and thus an indicator of future perceptions also demonstrated significant positive movement. "Increasingly positive impressions" grew from 14% to 29% during the same period under study (Harris-Decima 2011). But again, part of the power of these messaging campaigns is their ability to link abstract and often decontextualized images of nature or conservation to extractive development and in doing

so to evade difficult questions about activities occurring at different spatial scales. Take as an example a recent Syncrude advert where a company employee guides the viewer through a forest reclaimed from a former mine site²³ – the first to receive such status from the provincial government. While undoubtedly a good thing, the ad does not address the scale and scope of cumulative landscape disturbance, nor the fact that less than 10% of historical disturbances have ever been restored in any way (Turner 2012). As of 2010, and after a half century of extractive activity in the oil sands, less than 0.2% of disturbances were certified as reclaimed by the provincial government²⁴ (Barrios & Putt 2010). In fact Syncrude, one of Canada's oldest oil sands producers has adopted the Wood Bison as an iconic corporate animal, in part due to its relocation of a herd of Wood Bison to reclaimed lands adjacent to its Mildred Lake operations. Large sculptures of the Bison mark the entrances to the Mildred Lake processing facility and regularly appear in corporate branding. A fenced range on reclaimed lands adjacent to the Mildred Lake facility supports this introduced herd, and reference to the animal in corporate branding marks a clear attempt to erase the contradiction between the massive landscape level disturbances associated with tar sands development and the health of regional ungulate populations. The attempt, however, is incomplete and is best consumed at a distance. Just beyond the fence of the bison range is a dystopian landscape like no other, a small city of smoke stacks and heavy machinery is surrounded by tailings ponds the size of lakes. A lifeless community of scarecrows in yellow rubber suits populate the shoreline, while the silence is regularly pierced by the firing of sound cannons intended to scare away the birds. The juxtaposition is bizarre, but largely invisible to the distant populations that are its primary

See https://www.youtube.com/watch?v=iXtHFPGXjIY. Accessed June 10, 2015.
 Industry suggests higher numbers, but as of 2010 these had not been certified as reclaimed (Barrios and Putt 2010).

audience. Similar connections can be found at the Oil Sands Discovery center in Fort McMurray, a museum extolling the benefits of heavy oil. The museum is a series of interactive family-friendly displays organized into sections on mining, extracting, upgrading, etc. The environmental section, while noting 'challenges', is highly focused on technological fixes. Environmental problems are constrained to the local and immediate scale, to which innovations in technology provide reliable solutions. Site reclamation is presented as if it were the norm, clearly demonstrated by barley sprouts growing in a jar of "consolidated tailings". Again we are presented with linked images of verdant nature and extractive development, while impacts and processes at other spatial scales (i.e. cumulative impacts and global climate change) are bracketed out.



Figure 3: The linking of extraction and nature conservation at Syncrude's Mildred Lake facility.



Figure 4: The Syncrude bison range adjacent to the Mildred Lake facility and tailings ponds.



Figure 5: The landscape immediately to the east of the bison range on reclaimed lands.

In many ways existing offset projects represent a smaller, but no less important, component of this larger trend that links extractive development with natural landscapes. In many respects offsets projects work in tandem with, and are intended to produce, very similar public relations benefits. Whether boreal-for-boreal, or a model less focused on equivalency, offset projects necessarily rely on ignoring some of the all too nitty-gritty details of both ecological systems and human-environment relationships. However in doing so the state, and by association industry,

has been able to capture public relations benefits on an international scale via the circulation of green areas on maps, numbers and figures in corporate branding packages and websites²⁵, all of which are rarely experienced by the primary audience consuming such images. Perhaps unsurprisingly media images of the nature conserved via offsets rarely includes any visual cues as to its provenance. Images of verdant landscapes and animals abound, while visual reference to the industrial disturbances that fuel such conservation successes are absent. A co-occurring coupling and decoupling marks these discursive productions. Conserved nature is now a direct result of industrial development, but the narrative holds together by bracketing out a series of practices and relationships that generate the production of these new conservation spaces. In a similar vein, although the benefits associated with images of conserved nature operate across scale (distant, extra-local audiences), the benefits are often derived by localizing the materiality of the extractive/conservation project. While absolutely representing conservation gains on some level, a focus on conservation offsetting tends to avoid detail at other scales, including the overall legitimacy of the larger extractive project, particularly in light of its contributions to fossil fuel dependence and global climate change, or the socio-ecological impacts at sites of extraction and mitigation. Such a focus bypasses important political questions about the legitimacy of the larger extractive project underway in Alberta's Athabasca sands. Rather, we are more often presented with the idea that we can have it all, both the economic and social benefits derived from extractive driven growth and environmental protection. In fact, the two become increasingly linked, such that conservation via offsets becomes contingent on the expansion and growth of industry. The expansion of oil and gas

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²⁵ Examples include the ACA's Outdoor Adventure Guide and Conservation magazine, as well as corporate messaging on the websites of participating industry partners.

development becomes a necessary condition of the expansion of conserved areas in the province. The power of these abstractions and discursive linkages is in part related to the distant audiences that are the primary consumers of their messages.

7.5 Scale, audiences and benefits

As outlined throughout this dissertation, part of the attractiveness of offset programming is driven by the need to generate the images and messages to international audiences (and those elsewhere in Canada), while not offending the sensibilities of provincial audiences and constituencies that have a far less critical view of the environmental consequences of oil sands development. As has been mentioned in earlier chapters, the discursive benefits derived from conservation offset projects are quite often extra-local in nature. Support for oil development is quite strong in the province, and stable long-term majority governments and low voter turn-out have been the norm (until very recently), suggesting that the need to improve perceptions is not predominantly focused on the domestic front²⁶. A 2006 poll of 500 adult residents found significant support for oil sands development in Alberta, with respondents holding somewhat positive (41%), or very positive (37%) views about the province's oil sands development (cited in Davidson & Gismondi 2011). Economic benefits top the list of rationale for this support. While environmental concerns are not absent, they tend to take a back seat to economic considerations around jobs, low taxes and provincial royalties (ACA 2 2012). Further evidence of the extra local focus is the lack of knowledge about offsets among the population at large. As the CEO of the ACA commented "I don't think at this point the average Albertan even knows

²⁶ It should be noted that despite a recent election that unseated 40 plus years of conservative government in the province, the incoming New Democratic government was very cautious not to alienate oil sands industry or political constituencies that are supporters.

what a conservation offset is or could distinguish it from a carbon offset" (per com Feb 25, 2013). Indeed this poor understanding, and conflation with carbon offsets, has been documented in a number of local newspaper articles in which participants have demonstrated confusion over the terms (McWilliams 2010, 2011).

The importance of American audiences should not come as surprise given the vital economic integration of the province with the United States, which accounts for two thirds of foreign investment and sixty percent of foreign tourists. Moreover, more than 86% of the province's global exports flow into the US, with mineral fuels accounting for more than 80 of total exports (Alberta 2014). It has also been the site of far more critical 'dirty oil campaigns' by both Canadian and international environmental groups. A number of scholars have pointed to the USA as being the primary target of much of the public relations and rebranding campaigns undertaken over the last decade (Davidsen 2014; Katz-Rosene 2014; Takach 2013, 2014; Davidson & Gismondi 2011). The development of conservation offsets has been described as part of this approach to address American audiences. As environmental law expert and the head of the newly formed Alberta Association for Conservation Offsets group has commented,

For better or worse, environmental protection measures in Alberta are often framed in terms of their contribution to Alberta's international reputation, particularly as it is relevant to the marketing of our petroleum resources. If that is part of the purpose of the new policy, or a use to which the policy might be put, then it is important that we consider international thinking on conservation offsets... Among those with the most experience in habitat offsets is our largest trading partner, and the focus of a large part of Alberta's reputational concern: the United States... It might serve Alberta well, therefore, to be cognizant of American experience and direction" (Poulton 2013 p.2).

In line with this analysis the CEO of the ACA has also commented that corporate interest in participating in offset programs has tended to coincide with intense public and political criticism around 'dirty oil' in the United States (ACA 2 2012). He has also made reference in the press to the importance of foreign audiences.

Far too often, Alberta's looked at as just a big hole in the ground with oil seeping out of it," he explained. "That's what certainly a lot of the American environmental groups try to paint Alberta as being. And I think we've worked really hard to try and show, not just people internationally, but Albertans that there are green places that you can go to in this province. And just because a company is a major oil sands company, it doesn't mean they can't also be concerned about conservation efforts and doing what they can to help future Albertans.""It's good for people outside of Alberta to see that Alberta industry is involved in conservation and they can work with conservation groups. And, I think, in many cases, it's good for conservation groups. You can actually work with industry and you can get a lot accomplished if you're working with the right partner within industry." (Zimmerling quoted in Waterman 2013 p.11).

Management at Alberta Parks also reiterated the important role that offsets and other conservation activities played in responding to the international scrutiny of oil sands development brought on by the internet and new media, suggesting again that the primary audience was not provincial, but international shareholders and foreign markets. In fact international investors, lenders and supra-national industry governance may have a significant role to play in encouraging the use of offsets. Despite consistent claims by corporate and NGO interview respondents that conservation offset programs are a unique 'made in Alberta' policy initiative, evidence suggests that extra-local forces have also been a key facilitator. An IUCN report on the business case for offsets references their benefit as a tool to ensure compliance with the lending principles of major banks, specifically in reference to the equator principles adopted by major lenders (for example Barclays, Citigroup, West LB, Royal Bank of Scotland, Credit Lyonnais, Credit Suisse First Boston, Westpac, Rabobank, HVB and the World Bank) that supply financing to projects with capital costs exceeding \$50 million. Combined, these lenders account for 80% of the global finance market and are serving to drive a range of payment for ecosystem services, carbon, and terrestrial offset programing (Wright 2006). Increasingly participation in offsets are being driven by a global community of investors and lenders. Ethical funds, a major mutual fund investment firm, made participation in terrestrial conservation offsets a measure of responsible performance in 2011. The use of offsets may also facilitate corporate mergers and acquisitions, which are common in the oil and gas sector.

"Companies are regularly involved in mergers and acquisitions at the group level and may wish to dispose of particular assets and liabilities. As discrete, agreed packages, with project budgets paid up-front to cover implementation by third parties such as NGOs, biodiversity offsets may help companies hand over assets more cleanly" (ten Kate et. al 2004).

Much like the CAPP and industry ad campaigns or the provincial re-branding strategy, offset benefits are often derived via the consumption of images and messages to distant audiences that are unlikely to ever experience the grounded materiality of either extractive development or its associated compensation programs. Images and dialogue in corporate media, news releases and NGO publications regularly feature landscapes that meet the public's expectation of what boreal conservation should look like – minimally disturbed forest landscapes and wetlands abundant with wildlife. And while some offset sites do in fact correspond with these images, many others do not. Bracketed out are the near treeless abandoned farms that make up many of the current offset locations, but then again many people – aside from local residents -- don't ever experience these. Despite serving as de facto public spaces open for recreational pursuits, there is little evidence to support visitation and use by the general public. As a resident of Flatbush commented "no one is driving two hours north of Edmonton to go berry picking on foot with their family", particularly when parks provide more attractive landscapes and amenities and hunting on Crown lands involves fewer restrictions.

7.6 Don't look too closely: coupling and decoupling

The decoupling and scalar mis-match associated with the provincial government's actions to shape and constrain existing offset projects has resulted in a constellation of impacts. Some of these have generated extra-local and international benefits in relation to public relations. The tensions between extractive development and ecological well-being seem to disappear.

However, they do so at the cost of ignoring both alternative spatial scales and linked socio-

ecological systems. Conservation becomes compatible – and even an outcome of development - provided that it doesn't interfere, but rather supports development. There is also evidence that, as a number of scholars have claimed (Sullivan 2013, Igoe et al. 2007, Robertson 2006), an interest in making conservation a commodity. While revenue generation from trade in offsets remains speculative in the Alberta context, on an international level major firms like Shell are exploring opportunities to "turn risk to opportunity" by "monetising the ecological value" of lands the firm owns but is not using for hydrocarbon exploration as well as exploring plans to "proactively develop conservation credits to mitigate its own liabilities and perhaps over-supply to sell into the market" (Shell 2009). The use of conservation offsets are becoming increasingly entwined in global economic processes, and driven by the need to secure benefits from extralocal actors in terms of improved public relations, investment and financing, and corporate restructuring. As Robertson (2006) has noted, conservation commodities only work via a good deal of abstraction and ad-hoc science -- including I would argue, a relative disregard for social science and linked socio-ecological considerations. Moreover, as the desire for ever greater economic integration progresses, so too does the desire for increasing levels of decoupling and abstraction, until, as Robertson argues, the abstractions and suturing becomes untenable. While still in its infancy, there are signs that offset programing in Alberta is exploring opportunities for greater levels of abstraction and a re-orientation away from equivalence-based models. Recent business models, interviews with industry and government informants, and industry documents suggest an interest in moving away from a boreal-for-boreal model, in part to achieve greater conservation impact in highly disturbed landscapes in other regions of the province, or indeed as Suncor's CEO has mused, in other provincial jurisdictions (Habib et al. 2013; Suncor 2008; Alberta Parks 2013; AOIF 2013; TNC 2012). Of course some of this may also be about cost and logistics and the desire for an increasingly flexible mitigation pathway. There have also been attempts to explore a move away from land purchases, and rather to

develop proscriptive land management agreements as a means of generating offset credits from private properties, and government representatives have suggested that credit stacking -- i.e. credits for carbon, water conservation and terrestrial disturbance all generated from the same parcel – could be a useful tool to help incentivize emerging systems based on proscriptive land management agreements with landowners (Seiferling 2015, Poulton 2014, SEACOP 2014; ASRD 2012).

Even with their current focus on ecological equivalency, mitigation offsets remain largely unable or unwilling to address the impacts of the larger extractive project across scale -- impacts associated with transportation, refining, and consumption of the end product and its contributions to consumer culture and global climate change. Such near sightedness may generate additional problems for the use of conservation offsets, particularly in terms of leakage and additionality, should climatic changes brought on by fossil fuel consumption lead to increased risk of fire, insect damage, shifting boreal boundaries, or new extractive opportunities – a particular concern given the tendency for offsets to cluster along the southern fringe of the boreal ecozone.

As explored in chapter three activities associated with nature conservation have long worked as a collaborator in the expansion of capitalist economic activities, including extractive resource development. The discursive and material construction of pristine, pre-human nature has often served an important role as society's constitutive outside, or other. The construction of such spaces has historically granted greater legitimacy, or at least a pass, to destructive socioecological processes beyond its bounds. So long as a wild nature was conserved "out there", beyond the realm of human society (and appearing innocent of its historical construction), the need to address the ecologically destructive processes elsewhere could be overlooked (Cronon 1996). Indeed this historical separation of humanity and nature is still pervasive today and informs much of the discussion surrounding expansion of tar sands development. Comments

made to the CBC (Paris 2011) by former federal Minister of Natural Resources Joe Oliver are exemplary of the ongoing importance of this relationship, "That (oilsands) land, which only represents one-thousandth of our boreal forest, is uninhabitable... uh... by human beings. So, you know, no community is being disrupted". The minister is not alone in this sentiment, and the existence of 'plenty of nature' or an unpopulated wilderness frontier is a common retort to concerns over the advancement of tar sands development²⁷. A non-human nature continues to serve as a legitimating counterbalance to the advancement of development.

What is new about the expanding interest in conservation offsets is the direct and overt linking of these activities. No longer does a non-human nature need to appear timeless or pre-historical. The dichotomy of inside/outside has shifted. The illusion of autonomous creation has been eroded, and conserved nature appears directly as a residual product of economic development. Nature still serves as development's 'other', but it no longer needs to appear pre-human or sublime, rather it explicitly becomes a product of the extractive process. As an American habitat banker has commented, "Without development, there would be no need for what we do -- and vice versa" (Matthews quoted in Reese 2009). The two become linked processes. Conservation occurs as a result of extractive development and vice versa in a continuous loop. Indeed this looping and direct linking has been discussed by a number of project proponents who suggest the need for something like a rotational system of development and conservation offsets. Rather than serving in perpetuity, such a system would operate along

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²⁷ Official population statistics dispel the notion of the Lower Athabasca as an uninhabited, or uninhabitable, frontier. A 2012 census conducted by the Regional Municipality of Wood Buffalo cites a total population of just over 116,000 people largely centred in Fort McMurray and nearby work camps. Census figures also note a population of more than 4,000 in the rural hinterland, including the communities of Fort McKay (~560), and Fort Chipewyan (~1000), that are respectively located in the industrial impact zone or immediately downstream. The region also encompasses the traditional territories of several First Nations.

the lines of rotational forestry or agriculture, in which extraction and conservation (or recovery) would become involved in a shifting dance across the landscape. The idea again is premised on a balance between development and its natural 'other'.

Many have argued the value derived from such practices is more often in the form of legitimizing images and discourses, while the benefits for the natural world are guestionable (Sullivan 2013a, Buscher 2010). Returning to Buscher's (2014) argument concerning the creation of 'liquid nature' and the 'fictitious conservation' it generates as value becomes increasingly detached from material embodiment, while this analysis provides much in terms of explanation in a number of global contexts (carbon, PES, others), the case explored here does not exhibit such intense dematerialization. Offsets are still very much in their infancy, and while imperfect in terms of equivalence and additionality, have still contributed to some very real and permanent contributions to conserved lands in Alberta's boreal. Moreover the ACA, as the originator and largest player in offsets in the province displays a strong commitment to mitigation within the same ecozones that disturbance occurs. However, the processes described by Buscher and his colleagues are certainly visible, if only in their infancy. The driving force of these programs are certainly the benefits derived from images and discourses aimed at non-local audiences, and there has been much discussion about moving beyond a model of boreal for boreal equivalency that would see conservation anywhere serve as mitigation for extractive disturbances, particularly from government and industry, although some NGOs have been equally receptive to the idea (Alberta Parks 2013; ASRD 2012; TNC 2012). Industry has shown the greatest interest in this regard, with Suncor's former CEO suggesting a significant shift and intensified abstraction. While mitigation offsets occurring 300-400 km away from sites of disturbance rely on problematic frames of equivalency, there is some evidence that industrial players would be equally happy with compensation offsets 3,000-4,000 km away. Conversely, it might be just as likely that multinational oil firms advance offsets in the boreal for disturbances elsewhere. It may

after all be more cost effective to offset disturbances in the boreal than in other areas where property values are higher (i.e. Shell's vision of oversupplying for the market). While Buscher's assessments of liquid nature are not particularly apt at understanding the current context in Alberta, we can certainly discern the contours of similar processes within the existing frames of conservation offsets in the province. Whether this path continues remains to be seen, and will depend to a large degree on the support available from the province, NGO collaborators and the general public.

What I have outlined here raises the concern that the primary benefits of offsets are those derived from the circulation of images and texts that support the extractive project, while producing questionable material outcomes for nature, particularly when viewed at a variety of socio-ecological scales. While certainly better than nothing, offsets cannot address the larger scale impacts of cumulative landscape disturbance, the disturbance of linked socio-ecological systems, nor the contribution of the tar sands to global processes of consumption and our reshaping of the global climate system. And while certainly not new, we are witnessing a marked shift in the relationship between conservation activities and development. Extractive development and nature conservation are becoming more explicitly linked activities. The relationship between non-human nature as the legitimating other of development is shifting as each becomes increasingly reliant on the other, to the point at which they become part of the same process. However, doing so relies on the production of a new series of illusions, abstractions, and relationships that intensify the discursive value of images and texts, while ignoring the irreconcilable nitty-gritty of the grounded materiality of both interlinked projects.

8 Conclusion: thoughts, reflections, and new directions

8.1 What have we learned and where to from here?

This dissertation sought to answer a series of questions -- about the institutional and governance dynamics associated with market-based conservation tools, the implications of project implementation on property relations and access to land and resources, and the assumed political allegiances of conservation offset projects in Alberta – as a means of enriching a broader scholarly conversation on the political dynamics of conserved nature in relation to contemporary capitalism. The following sections discuss key themes and findings of the dissertation, offer some concluding thoughts on what these teach us about contemporary collaborations between conservation and capitalism, and outline a series of paths for future exploration.

8.2 Historical developments and future directions

As explored in chapter three, collaborative relationships between conservation and development are not particularly new, and examples both within and beyond Alberta attest to substantive historical partnerships whereby conservation activities have sought to provide both economic and extra-economic conditions to facilitate expansion and growth. Further, the involvement of private interests in conservation activities, while currently intensifying in some respects, are not something new in the development of Canadian conservation practice. This is especially true in Alberta, where the movement has been heavily influenced by sportsmen's clubs, wise use and co-operative approaches. Thus, while the development of offset projects do represent a series of new actors, relationships and techniques, the results achieved by these new constellations of

actors are often remarkably similar to previous collaborations, most notably where conservation activities assist in projects of economic and geographic expansion into new frontiers.

Despite the often similar outcomes, the direct and overt linking of conservation and development is something we have not seen to this point and raises a series of concerns about the intensified and overt participation of conservation activities in fueling further growth, the regular inability to achieve the functional equivalencies that underlie such models, and the consequences for conservation when development stalls, becomes more cost intensive, or ends. I also think that we should be concerned about the possibility that on some level, both individually and collectively, activities like offsetting allow us to avoid addressing (even if only temporarily) the more substantive socio-and ecological repercussions of our dominant political-economic systems.

Despite several interview respondents' assertions that conservation offsets are a 'made in Alberta' policy solution, evidence suggests that offsets as a means of compensating for development impacts have arisen as a series of convergences between global trends in conservation practice, social responsibility concerns of international corporations and investment capital, and the specific histories, institutions and pathways of conservation practice in Alberta. In much the same way that mitigation offsets started out as a regulatory instrument, whose parameters neatly fit with the subsequent emergence of neoliberal governance models, we should not be surprised to see it take hold here as the province was in many respects historically and ideological pre-aligned, or at least open to the general contours of such an approach. What has resulted in both the global context of biodiversity offsets, and in the specific case of Alberta are the creation of hybrids of both state regulation and private actors, and perhaps, although by no means the norm, the use of markets. Thus the tool is reflective of its history as both a state-based regulatory policy and its inherent amenability to new market-driven models.

8.2.1 A few thoughts on comparative and historical study of 'neoliberal' conservation

Throughout this dissertation I have questioned and complicated the accumulation by dispossession theme in much of the critical geographic literature on 'neoliberal' conservation. I do not reject its explanatory importance in many empirical contexts, including the one presented here. I do however, believe that there is work to be done in better understanding the specific pathways and processes associated with this theoretical approach and an expansion of comparative and historical work on this theme. How do apparently market-based conservation activities reorder human-environment relations, creating impacts and articulations beyond immediate acts of enclosure and dispossession? Dispossession is surely occurring, but what sorts of geographic re-orderings accompany or facilitate these activities? Further, the great bulk of work employing frames of accumulation by dispossession have approached the topic through the lens of inequitable north-south relationships and a series of perilous impacts for communities in the developing world. While this has presented us with a wealth of knowledge about the connections between conservation and contemporary dispossession in the global south, far less attention has been paid to similar, and contemporaneous, processes occurring in the global north, nor have there been sustained attempts to place these activities within a historical continuum. This is somewhat odd given that doing so would better align with the recursive-continuum framework that underlies the theory. How, for example, do we understand these new conservation programs in a historical context of conservation induced dispossession that dates as least as far back as British game laws of the 18th century? What can be learned from an exploration of the continuities and disjunctures of these relationships across time and space? I think that constructing such a historical dialogue is an important, and understudied, component to understanding contemporary politics of conserved nature and capitalism.

8.3 Institutional dynamics and governance

Despite a vocabulary reflective of an ideological attachment to market-based conservation, offsets in Alberta are not, at least at present, a market-based model. More than a dozen years after the launch of the first project in the province, and lobbying by NGOs and industry, there is still no indication that the government will facilitate a market any time soon, for reasons mentioned across the chapters of this dissertation. Political and economic risks associated with limiting or delaying resource development, the importance of resource derived revenues, or alienating specific political constituencies remain serious obstacles for provincial governments of any stripe.

The absence of markets is not a particularly unusual finding, and supports the findings of scholars working in diverse empirical and geographic contexts who have demonstrated that attempts at neoliberal conservation, whether through offsets or PES programs, rarely operate on the market principles they are said to adhere to (Milne & Adams 2012; Wunder 2007; Roth and Dressler 2012, McAfee and Shapiro-Garza 2010; Fletcher and Breitling 2012). More frequently these tools encounter friction with existing local contexts resulting in hybridized interventions, that are at least as much state as they are market governance models. Many have noted that the sustained disjuncture between 'vison' and 'execution' of neoliberal conservation reflects fundamental failures of the model's own principles, such that the "deeply flawed understandings of human behavior and social action in which it is grounded frequently compel intervention contrary to free market principles in order to preserve the goals that market mechanisms are intended to achieve" (Flectcher 2013 p.796). Despite their attachment to discourses associated with 'neoliberal' or market-based conservation tools more broadly, conservation offsets in Albert are reflective of this broader trend in the empirical literature toward

partial and hybridized intersections of new private actors and economic rationales with state centred intervention.

Events that have transpired since the bulk of this research was conducted also open a new series of questions about the role of offsets in the Alberta context. The provincial election of 2015 brought to an end more than 40 plus years of conservative government in Alberta, and rather surprisingly its replacement with an ostensibly social-democratic New Democratic majority government. While such a monumental shift may eliminate some of the rigidity of the former government and open opportunities for policy change, I would be cautious in any assumption that this will necessarily expedite the development of provincial offsetting policy. The incoming New Democratic government, while surely different, was careful not to position itself as oppositional to resource development or to alienate pro-development constituencies and many of the same political and economic risks associated with a full-fledged offset policy will need to be astutely managed by this new government.

The ongoing need to intensively manage these new 'market' tools underscores their inherent malleability and undermines the often assumed uniformity of their impacts and political allegiances. If neoliberal conservation tools cleanly adhered to a number of the typologies outlined by both proponents, and to a certain extent some of their critics, there might be little need for going state intervention. However, as has been outlined across chapters four, five, and six, ongoing state intervention is required to achieve the specific results that are all too often assumed to be the natural outcomes of neoliberal conservation tools. While I do not dismiss the fact that a greater focus on market instruments often favours societal actors with greater existing access to resources and capital, the outcomes are not guaranteed. Left solely to the invisible hand of market principles, the intersection of these new sorts of conservation tools with existing local contexts could produce a variety of human-nature transformations, some of which might favour existing centers of power, but these outcomes are less than certain. It is for this

reason that the state retains an essential role in the use of these new conservation tools, managing the risks of what are often politically and economically malleable conservation activities that could produce a range of outcomes. The ongoing role of state intervention is required to manage these risks and to ensure that these new tools provide the discursive and material outcomes sought by the state-industry extractive nexus in Alberta.

8.4 Dispossession and political alliances

In many respects the material implications of conservation offsets are unsurprising. They are absolutely driven by a series of public relations benefits that serve to legitimate further development of the oil sands (and increasingly other forms of development). Although some firms have cleverly claimed that this is simply a happy "output" rather than a "driver" of participation (Shell, 2009). Such findings support much of the existing literature on the topic and are a well-worn tactic of appropriation and co-option of radical discourses by powerful political interests. Just like Neil Young's "rocking in the free world" becomes an anthem for Donald Trump's election campaign, or the Parachute Club's "rise up" an invitation to enjoy frozen pizza, so too should we remain acutely aware of instances when the appropriation of a decontextualized chorus obfuscates the lyrical base of the composition.

But co-option isn't a one way street, and tools, ideologies and discourses associated with the class-based politics of the neoliberal right can also (although perhaps not always as easily) be appropriated and used to achieve very different material outcomes. As outlined in chapters five and six, as much as some of the material benefits of offset programming are predictable, they are also just as often diverse and unanticipated. While forms of dispossession are certainly associated with the use of these tools, the pathways by which this occurs often take some unanticipated twists and turns that do not neatly fit most abstract, and certainly some historical, accounts of how recursive rounds of accumulation by dispossession are thought to operate. As

chapter five outlines, the ability to employ offsets as a tool to gain greater private control over common (public) resources, is often predicated on the expansion of a de facto public realm in other areas. As such, it is marked by an ebb and flow, and a series of openings and closings that provide gains and opportunities for some, and foreclosures for others depending on a series of geographic, historical, and political contexts. Moreover, chapter six and the political strategies of the Little Red River Cree nation call into question the political uses of these new tools as the exclusive domain of the powerful, and demonstrate that in some limited and contextually specific instances, these tools can be appropriated and put to use in political projects that serve to resist the advancement of privatization, extractive development, and forms of dispossession. The ability to detach these conservation tools from their assumed political allegiances and to employ them in divergent contexts and for very different political ends calls into question a number of the dominant critical geographic discourses surrounding the politics of 'neoliberal' conservation. While much of what is presented across the chapters of this dissertation supports the notion that these new tools are part and parcel of a class-based project to silence dissent and support the expansion of accumulation through extractive resource development, at other times the empirical chapters of this dissertation call attention to the cracks in this characterization and raise the possibility that it is not the tools themselves but rather the social, political and economic contexts in which they are embedded that determine their potential political uses and material outcomes.

Of course, perhaps the one of the most pressing concerns related to the use of conservation offsets are implications for the non-human, or more-than-human world. Certainly existing offset programs provide tangible conservation gains for conservation groups that are already aligned with private conservation activities. These gains should not be dismissed, however, the increasing production of conservation as an end product of oil sands extraction raises a number of very real concerns about what happens when extraction stalls or ceases, and the ecological

efficacy of such activities when coupled with contributions to landscape level disturbances and global climate change. Moreover, as is demonstrated in the final chapter, such solutions only hold by erecting a series of conceptual blinders that allow for the negation of a series of social and ecological processes at other scales and locations. And while there is substantial evidence that such decoupling and shifting of scale is a discursive strategy of the state and industry to legitimize the extractive project, there appears to be an opening or opportunity in which some actors, conditioned by a very limited and specific set of circumstances, may be able to take this conservation tool and employ it in support of entirely alternate conceptions of humanenvironment relations. The ability to engage offsets to freeze the landscape and exert control over traditional territory is not only an expedient political response to the challenges of broken treaty promises. It may also create an opportunity for the flourishing of alternative economies, and the maintenance and expansion of alternate human-environment relationships. While I do not aim to suggest that this limited and contextually specific opportunity necessarily leads to revolutionary transformations on a broader societal scale, such gains should not be dismissed. I would argue that the ability to prevent such foreclosures are important bulwarks in a larger project of societal transformation and may constitute crucial outposts from which larger assaults and transformative activities might take place. Such an approach is sympathetic to recent work by Sian Sullivan (2013c p.55) who, while cautious to avoid romanticizing the Aboriginal other, calls for a "re-activation of animist relational onto-epistemologies" as a means of combatting the deadening of nature associated with new conservation markets and the financialization of human-environmental relations. Part of this involves identifying "what 'gaps' remain for (re) embodying socio-ecological arrangements that are both differently democratic and nourishing of life's alive diversity" (p.54). Perhaps, in a very unusual twist, engagement with conservation offsets may not exclusivley mark a deadening of the aliveness of nature, but rather and simultaneously provide a unique political strategy that works in support of alternative

conceptions of human-environment relations, and ones that, in the words of Sullivan (2013c p. 55), "pose danger to the transcendent coherence of modern (b) orders". Thus, despite their current enrollment in discursive strategies of the state and industry to legitimate the status quo, in specific and limited contexts like the one described in chapter six, creative political engagement with these tools may, in a strange twist of fate, offer opportunities to counter (at least on a limited scale) the deadening of the natural world so often associated with the financialization of environmental problems and our proposed solutions to them.

8.5 Broader political questions about neoliberal conservation

If I were to identify a metaphor for the themes that run through this dissertation it might be one of the breathy movement of sea anemones or octopi. Running throughout this work is a continual and recursive theme of coming together and falling apart, opening and closing, expansion and contraction. A sort of ebb and flow between coherent attachment to well-worn analyses, and contradiction.

In many respects the implementation and mainstreaming of conservation offsets as a response to the largest extractive project on the planet is neatly reflective of much of the critical social science literature on the topic. Despite the inherent 'messiness' of attempts to roll out such tools in a series of empirical contexts, the pervasive faith in market-based (or at least rhetorically market-like) solutions, regularly serves to overcome a series of political, psycho-social, and ecologically induced barriers to further rounds of capitalist expansion. But this is not all that it does.

Much valuable work has been done to investigate the ways in which these new market-friendly environmental interventions serve to overcome inherent crises and perpetuate capitalist growth and development (see inter alia Kelly 2011; Buscher and Fletcher 2014; Fairhead et al. 2012). What I hope to have accomplished here is to contribute to a growing sub section of the literature

that explores the many empirical instances where frictions between neat theoretical forms of both proponents and critics, and locally specific contexts result in a series disconnections, hybridizations, and contradictions of some seemingly straightforward and universal principles (Roth & Dressler 2012; Milne & Adams 2012). We must also, and importantly, attend to the instances when attempts at market-based conservation do not adequately conform to the pathways, processes, and discourses laid down by neat theoretical accounts, but none-the-less operate to support existing structures of power and material relations. The chapters of this dissertation have, if only in an embryonic way, sought to explore some of these tensions. The implementation of offsets in Alberta are in many respects emblematic of these frictions, expanding de facto public spaces as a process complementary to the expansion of dispossession, or aiding to solidify a state-industry nexus that, at least on the surface, such measures would seem to eschew.

While attending to the ways in which such incoherence and contradiction still works in the service of power is certainly and important goal, what I hope to have done here is to contribute to a lesser developed investigation of often simultaneous instances in which ostensibly neoliberal conservation tools can be picked up, appropriated and enrolled in far more progressive political projects, including those that may serve to counter dispossession, limit the expansion of resource extraction and support alternative human-environment relationships.

Such data highlight the need to take seriously instances in which neoliberal conservation seems to work for some groups and particular social movements and struggles, without dismissing them as inherently misguided. Further, the growing empirical instances of such situations should serve as a call to think critically about the assumed (essential?) political allegiances of these conservation tools, and the possibility that such tools can be incorporated into a variety of projects depending on the context of specific places, actors, and environments. Should our reaction as critical scholars always default to an outright dismissal of these tools, and if so, on

what grounds and with what alternatives? Or might we find that the incoherence of the hegemonic project can be both its very strength, and, in other instances a critical weakness that opens space for new political articulations. Can the tools of market conservation do something other than build the master's house? While partial, and at times surely inadequate, it appears that in particular contexts they can certainly be used to lay the foundations of a new building.

8.6 New directions

There are many things that could not be explored in this dissertation as a result of the scope of the project, time, and financial constraints. Further, the process of fieldwork often uncovers processes, relationships and other phenomena that could not have been anticipated in advance, and generates a series of ideas on future research directions.

8.6.1 Nation building and nationalism

There has been much good work on how both extractive development (Keeling 2010; Innis 1999; Piper 2009), and nature conservation activities (Sandlos 2008; Sandilands 2009) have played a key role in Canadian nation building. Less often have these two aspects been brought into conversation to explore the historical relationship between these processes and projects. Certainly our responses to the ecological implications of tar sands development presents an opportunity to expand an exploration of such topics, not least of which because of the overt linking of the activities occurring in this case. Both extractive development and responses to its ecological dimensions are also taking on new, and intensified, connections to Canadian nation, nationalism, and securitization in the 21 century. Oil sands developments, and related infrastructure, are increasingly being framed by discourses which suggest they are "an urgent matter of Canada's national interest" (Oliver 2012), while critics are increasingly framed as security threats, terrorists, traitors, or foreign interlopers (McCarthy 2015; Payton 2012).

historical relationships to nation building. This is particularly evident in new programming focused on engaging urban populations, youth, and new Canadians, the establishment and promotion of urban parks intended to serve as a gateway to the larger national system, and a series of learn to camp initiatives geared to new Canadians. Thus in both the realm of extractive development and our responses to it, and more traditional forms of conservation activities, we are witnessing new dialogues and discourses about the nation, belonging, and citizenship. The increasing meshing of the development/conservation nexus through tools like mitigation offsets may provide fruitful ground for exploring these themes and contribute to our understanding of collaborative processes between conservation, development, and nation building that have often been dealt with in isolation.

8.6.2 Rise of reactionary environmentalism?

While touched upon throughout this dissertation, most notably in the final chapter, there is significant need for further exploration of what Katz-Rosene (2014) has called "reactionary environmentalism", and the processes and pathways by which powerful corporate actors are increasingly co-opting of the concepts, discourses, and organizations of the mainstream environmental movement. There has been some notable scholarship on this topic, evidenced in part through McDonald's (2014) collaborative event ethnography project, or the work of scholars like Chapin (2004) and Cizek (2007) who have charted the political implications of NGO funding. Despite these notable texts, work in this area is in its infancy and much of the discussion in the Canadian context has been peripheral to academic study, with stronger discussions emanating from social activist communities (Stainsby & Oda Jay 2009; Cizek 2007). Understanding these relationships in the context of Canada's expanding extractive development is of particular import given the linkages between organizations like Pew Charitable Trusts and major conservation and environmental groups in Canada. The Pew Trust, which was established by endowment

funds of industrialist Joseph Pew (founder of Sunoco & Suncor, and Canada's first oil sands project), has become increasingly involved in funding Canadian environmental organizations over the past twenty years. A number of anti-oil sands advocates have suggested Pew and related organizations are operating as corporate fronts, and that funding mainstream environmental organizations allows them to act as "a drag anchor on any activities that are excessively disruptive to the status quo" (Cizek 2007 p.54). This largely activist discussion suggests that some of the nation's largest environmental NGOs have become increasingly complacent as a result of ties to corporate funding via Pew, and link their support of conservation and carbon offsetting to such interference. Conversely, the Federal government and development boosters have argued that foreign interests are increasingly sabotaging Canadian economic stability, and national security, via their funding of environmental groups and meddling in domestic affairs. A 2014 RCMP threat assessment report identifies the existence of a "well-financed anti-Canada petroleum movement", and raised concerns that foreign financing is fueling radical and extremist opposition to Canada's development goals, and thus threatens national security (McCarthy 2015). This apparent paradox between the alleged corporate co-option of the mainstream environmental movement, or conversely its co-option by foreign radicals and anti-government terrorists is intriguing to say the least and certainly calls for further study. More sustained attention to these tensions and contradictions would substantially enrich our understanding of the relationships between industry, the environmental movement and the evolving contexts of environmental management in Canada.

8.6.3 Comparative study of intersections with diverse economies and political projects

There has been much great scholarship documenting the diversity of the neoliberal project and its intersection with complex historical, geographic, and socio-economic conditions that don't easily give way to the imposition of ideal neoliberal models. Notable examples have explored

this complexity, and the resultant geographies, through the lens of property (Mansfield 2007c), institutions (Froger & Hrabanski 2015), and intersections with progressive social movements (Shapiro-Garza 2013, Mansfield 2007a, Ferguson 2010). These 'travelers along the road', and many others (Dressler & Roth 2011; Roth & Dressler 2012), have provided useful analyses exploring the frictions between theory and practice in a diverse array of empirical contexts. However, much as Castree (2008) had suggested nearly a decade ago, these studies remain a rather disparate collection of empirical cases that may, or may not, speak to each other in consequential ways. I am not suggesting the need to seek out unifying themes and metanarratives. Such a task may not be possible, or desired. However, I do think that there could be fruitful analysis that stem from opening up and expanding the conversation about how neoliberal environmental tools intersect with the diverse social, economic and political contexts in which they become enrolled.

Work that explores the intersection of market-oriented environmental policies within an explicit framework of existing diverse economies has been relatively sparse (exceptions include St. Martin 2005, 2007). While not abandoning the need to explore the relationship between conserved nature and contemporary forms of capitalism, we also need much work to explore the relationship between market-oriented environmental policy and its interactions with the diverse economies of the world. How do market-based conservation tools help or hinder the other than capitalist activities that constitute so much of world? Can they be appropriated and transformed in such a way as to achieve different goals, including the promotion of other than capitalist economies and political projects? Rather than assuming that neoliberal conservation tools simply replace, destroy or adulterate existing economies, as the standard narrative often goes, we should perhaps shift our conceptual frame to allow for an understanding of how these new conservation tools intersect with a diversity of existing more-than-capitalist economies, often in very politically consequential ways.

The findings outlined in chapter six were perhaps the most intriguing from my point of view. They certainly shattered many of my preconceptions of the political uses of neoliberal conservation tools, and in many ways profoundly influenced the core frameworks of the dissertation. Moving forward, I think it would be enormously productive to place into conversation the diverse instances where, to paraphrase Castree (2007), neoliberalism is shown to work for some people, without assuming that they have simply been duped by false consciousness. How are we to make sense of an emerging series of instances, in both the developing and developed world, in which progressive social movements have been able to appropriate and harness these tools to different political ends? Or, how it is that neoliberal environmental policies might not only be complicated by diverse local contexts and conditions, but might also be re-purposed to support other than capitalist economies, whether in the context of First Nations, rural social movements in Latin America (Shapiro-Garza 2013), or fishing communities in the USA (Mansfield 2007a, St Martin 2007)? To return to the concept of ontological politics and productive performances, such an effort is not a quest for overarching meta narratives, although some generalization may be likely, it is rather, part of a project to document and bring forth the enormity of alternative-capitalist, anti-capitalist and other-thancapitalist economies. Rather than being the pervasive economic framework, neoliberal approaches are but one of many existing economies and attempts to understand these new suite of conservation tools might benefit form an explicit recognition of this diversity through and through. Such a move also calls on us to reframe our thinking about markets and their apparent allegiance to specific political movements. Existing conversations around market-based conservation tools have had a tendency to somewhat uncritically present markets as capitalist markets, ignoring the diversity that such exchange mechanisms might express depending upon the socio-political and economic contexts in which such tools are embedded, or indeed the ways in which alternate economies might mold and shape the contours of attempts at neoliberal

reforms in some very consequential ways. Such an exercise is not only a deconstructive move to limit the power granted to a political and economic project that is inherently unstable, but also to seek new forms of political engagement that recognize the cracks and lack of fit between 'vision' and 'execution' that may provide for useful, if only partial or provisional, political action.

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