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Responsive Regulation of Off Highway Vehicle Use on Crown Land in Alberta Headwaters

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Responsive Regulation of Off Highway Vehicle Use on Crown Land in Alberta Headwaters

by

Jeffrey David Surtees

A THESIS

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Abstract

Headwater areas are ecologically important and can be negatively impacted by off highway vehicle use, yet harmful noncompliance with existing regulation occurs. This thesis considers whether compliance with Alberta law regulating OHV use on Crown land could be improved by using responsive regulation, a law and society approach. The traditional approach to the law is reviewed and contrasted with the law and society approach. The physical, regulatory, social and economic contexts of off highway vehicle use and harm in Alberta are examined. The main characteristics of responsive regulation are investigated. One variation of responsive regulation, restorative justice, is examined and it is concluded that theoretically it could be applied to off highway vehicle regulation, but unanswered questions remain as to the cost-effectiveness of doing so.

Preface

This thesis is original, unpublished, independent work by the author, Jeffrey D. Surtees.

Acknowledgements

I wish to acknowledge the contributions of all the members of the University of Calgary Faculty of Law from whom I received advice and inspiration while completing this project, especially my professors Jennifer Koshan, Jonnette Watson Hamilton, Sharon Mascher and the members of my committee - Shaun Fluker, Dr. Fenner Stewart and David Wright and of course my ever-patient thesis supervisor and professor Martin Olszynski.

Dedication

I was fortunate to be surrounded by family and great friends who encouraged me to take this on, challenged my ideas and supported me throughout. I thank them all and dedicate this thesis to them. I also dedicate it to the memory of my father, Les Surtees Sr., who went to law school after serving as a pilot in WWII, then was a respected member of the Saskatchewan legal community until he died in 1983. In a loving partnership with my mother Betty, he taught my brother Doug, my sister Leigh and I the importance of fairness, kindness, forgiveness, humor, informed debate, good tools, good tires, good shoes and a good bed.

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Epigraph

The nights are cool and I'm a fool

Each star a pool of water

Cool water

But come the dawn

We carry on

We won't last long without water

Cool water

“Cool Water” – written by Bob Nolan (1936), revised by Joni Mitchell (1988)

Chapter One: Introduction

1.1 The Research Problem

Recent media reports illustrate a common and increasingly significant problem on Crown land in Alberta:

A Provincial government study warns that off-highway vehicles threaten the environment in a large park planned for Alberta's southern Rocky Mountain foothills It says the region has at least 1,700 kilometres of unofficial trails and 1,600 stream crossings The report, released late last month, says there's strong evidence linking such trails to erosion, stream degradation and grizzly bear deaths.¹

[A] District Conservation Officer of the Red Deer District Parks Enforcement Branch . . . said there have been individuals illegally operating off highway vehicles (OHVs) within the provincial park 'This has caused damage to parkland and the groomed ski trails' he said.²

An area around . . . Chipman Creek was badly vandalized last weekend . . . just hours after volunteers worked all day trying to restore a portion of it as a fish and wildlife habitat more than 200 trees, shrubs and grasses were planted in the area, branches were used to help rebuild the stream banks Hours after the volunteers left on Saturday . . . the area was vandalized stakes were pulled out, and a vehicle was driven into the creek, destroying some of the bank that had been built up.³

The Kiska-Wilson Public Land Use Zone (PLUZ) is an incredibly popular area for random camping on weekends, as it backs onto Abraham Lake in a PLUZ it is illegal to operate an off-highway vehicle anywhere that isn't a designated trail There is evidence everywhere of people joyriding in the lake and on the river beds. All of the surrounding hills have tracks running up and down them and the hills are visibly slumping.⁴

¹ "Government study finds OHV trails threaten planned Alberta park", *Red Deer News* (4 January 2018), online: <<https://rdnewsnow.com/article/567408/government-study-finds-ohv-trails-threaten-planned-alberta-park>>.

² "Illegal OHV use damaging provincial park", *Lacombe Express* (21 January 2016), online: <www.lacombeexpress.com/news/illegal-ohv-use-damaging-provincial-park/>.

³ "Vandalism to Chipman Creek after reclamation and restoration work completed", *Lethbridge News* (23 August 2017), online: <<https://lethbridgenewsnow.com/article/570407/vandalism-chipman-creek-after-reclamation-and-restoration-work-completed>>.

⁴ Joanna Skrajny, "Not in my Backyard ("NIMBY")", *Wildlands Advocate* 24:5 (October 2016) 13.

This thesis will examine how the Government of Alberta protects headwater areas on Crown land from harmful and illegal off-highway vehicle (“OHV”) use.⁵ Currently the rules governing such use are found in many places, with no single government department having overall responsibility.⁶ The research problem is that negative slippage (i.e. harmful noncompliance, as further discussed below) occurs despite existing regulation.⁷ Adopting a law and society approach, the thesis being explored is whether there are societal factors that those regulating OHVs could and should be responsive to, provided that those factors can be identified and understood. If so, regulators could then choose to regulate *responsively* where doing so would reduce the levels of harmful non-compliance more effectively than by using conventional command and control rules. In other words, this thesis argues that adopting a law and society lens, particularly from the subfield of responsive regulation, is likely to yield a more effective approach to the regulation of OHV use than is currently the case.⁸

⁵ In this thesis, unless the context shows that just one type of vehicle is intended, the terms “off-highway vehicle” (“OHV”), “off-road vehicle” (“ORV”), “all-terrain vehicle” (“ATV”) are used interchangeably and include full size street-legal four-wheel drive vehicles, full size non street-legal four wheel drive vehicles, off road motorcycles (which can be subdivided into different types including motocross, enduro, rally and trials bikes), one person quads and trikes and larger, heavier and more powerful side-by sides capable of carrying more than one person and snowmobiles. Watercraft will only be included if specifically mentioned. “Regulator” is defined as any government body, agency or individual that has the power to create or enforce rules regarding the operation of off highway vehicles, including but not necessarily limited to cabinet, various departments, police, conservation officers and any person with delegated authority giving them the power to enforce those rules.

⁶ Adam Driedzic, “Managing recreation on public land: How does Alberta compare?” (10 December 2015) Environmental Law Centre, online: <www.elc.ab.ca/media/105057/Managing-recreation-on-public-land-Final-December-10-2015.pdf> at 14.

⁷ “Harmful noncompliance” is defined here as riding in a prohibited manner. This could mean riding off trail where not allowed or riding in a way that breaches any OHV regulation meant to protect the environment.

⁸ There are two important threshold questions which must be answered in the affirmative for this enquiry to proceed. First, “Do off highway vehicles cause harm to a degree that justifies the regulation of their use?” Chapter four looks at the scientific evidence on this point and a starting assumption is that the answer to this non-legal question is yes. It is important to note that while there is little debate about whether off highway vehicles are capable of creating harm, there will be a range of viewpoints, some well-informed and some not, on how serious the harm is at any particular place and time. That range of viewpoints can lead those who oppose regulation to the conclusion that the rules are unjust. The second threshold question is “Does the government have the authority to decide that public/Crown land cannot be used for some purposes?” Again, the starting assumption is that the answer is yes. It is recognized, however, that someone losing privileges may view the loss as unjust, regardless of legality. A law perceived to be unfair or unjust will be more difficult to enforce, as further discussed below in section 3.3.6.

Responsive regulation is a subfield of the crossover discipline of law and society. “The law and society movement is the scholarly enterprise that explains or describes legal phenomena in social terms.”⁹ Law and society scholars attempt to understand the context that the law exists within. Responsive regulation begins with the proposition that when a regulatory agency better understands the context it operates in, it then will be able to respond to the moves made by those it regulates, escalating and de-escalating up and down pyramids of sanctions and supports as necessary.¹⁰ Proponents of responsive regulation maintain that it will result in higher rates of voluntary compliance than would command and control regulation. That being said, responsive regulation and its variants smart regulation and really responsive regulation have been most commonly used in the regulation of industry, rather than individuals.¹¹

All laws interfere with personal freedom, a core value in liberal societies such as Alberta and Canada more generally.¹² Laws and rules are put in place to cause some constituency to

⁹ Lawrence Friedman, “The Law and Society Movement” (1986) 38:3 *Stanford L Rev* 763 at 763. Friedman goes on to say “People who carry on law and society research vary greatly in method and outlook. What they share is a general commitment to approach law with a vision and with methods that come from outside the discipline itself and . . . to explain legal phenomena . . . in terms of their social setting.” There are several disciplines referred to in the literature including law and society, law and sociology, legal anthropology, law and politics, sociological jurisprudence and socio-legal studies. While there may be differences between these fields, for the purposes of this thesis they will all be referred to as law and society unless specifically stated otherwise.

¹⁰ See generally Ian Ayers and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford: Oxford University Press, 1992) [“Braithwaite 1992”]. Professor Braithwaite has written extensively about responsive regulation and restorative justice. This thesis will primarily refer to his 2010 reformulation of the theory for the University of British Columbia Fasken Lecture, summarized in John Braithwaite, “The Essence of Responsive Regulation” (2011) 44:3 *UBC L Rev* 475, online: <http://johnbraithwaite.com/wp-content/uploads/2016/03/essence_responsive_regulation.pdf>. [“Braithwaite 2010”].

¹¹ The rules we are primarily concerned with are those that regulate the behavior of individual OHV operators. Those rules will be referred to as “OHV operation rules”. Some OHV rules apply equally to corporations and individuals, for example rules regarding registration and insurance. Rules regarding equipment, licensing and insurance will be referred to as “OHV equipment rules.”

¹² The words “rules” and “laws” will be used interchangeably herein to mean some sort of formal dictate that is backed up by the power of the state to enforce it. When it comes to regulating human use of the natural world, the rules go by a lot of different names. The possibilities occupy an enforceability continuum ranging from potential future constitutional rights to a healthy environment through federal and provincial statute law, regulation and Orders in Council, judge-made law, regional plans, management plans and frameworks for geographic areas, parks, watersheds or species and government policies (official and unofficial) down to departmental policies and *ad hoc* rules set by local officials or enforcement personnel. The “rules” toward the end of this list are by definition not enforceable but they are still important and likely often obeyed. In addition, societal “norms” or “values” may be

either do something or to stop doing something. When presented with these commands, the constituency can be supportive and obey or it can try to find ways to work around them. Rules that the constituency believes are a legitimate interference with freedom are more likely to be obeyed and therefore more likely to accomplish the purpose for which they were put in place.

The law and sociology literature shows that social conditions at the time that rules are enacted matter, but that those social conditions are hard to see, hard to judge and can change quickly. Measurement and correlation of cause and effect are problematic: the natural environment and society are both complex systems with countless variables. When complex systems act upon each other, prediction of outcomes becomes difficult and uncertain.¹³ Little in depth empirical research has been conducted into the social factors involved with recreational off highway vehicle use in Alberta.

In his 1999 paper titled “Taking Slippage Seriously: “Noncompliance and Creative Compliance in Environmental Law”, Daniel Farber makes the point that “[i]n all areas of the law, there are gaps between the ‘law on the books’ and the ‘law in action’ but in environmental law the gap is sometimes a chasm.”¹⁴ He states:

The essential picture of regulation in much of the environmental literature is that Congress passes a law, federal agencies implement the program (usually through rulemaking), and compliance follows in due course. Of course, everyone knows that this is not the whole story, because sometimes there is slippage along the way. Still, this is the paradigm, and much effort is devoted to attacking, defending, or reforming it.¹⁵

just as important in some contexts and people may feel just as bound by them but they are not backed up by the enforcement power of the state.

¹³ See generally Lawrence Friedman, *Impact – How Law Affects Behavior* (Harvard: Harvard University Press, 2016). [“Friedman, *Impact*”]

¹⁴ Daniel A. Farber, “Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law” (1999) 23 Harv Env L Rev 297 at 297.

¹⁵ *Ibid* at 298.

Negative slippage occurs when “something that is legally mandated simply fails to happen. Deadlines are missed, standards are ignored or fudged, enforcement misfires.”¹⁶ Non-compliance, a synonym for negative slippage, has been identified as a systemic problem at multiple levels in Canadian environmental law contexts and is central to the thesis being presented.¹⁷ The paradigm that Farber identifies has broad application.¹⁸ It does not need to be

¹⁶ *Ibid* at 299. Negative slippage occurs (a) when regulators do not put necessary rules in place to support laws that have been passed, usually because of unrealistic deadlines or budget shortfalls or (b) when U.S. state regulators are mandated to enforce U.S. federal regulations and don’t and (c) when regulated parties do not comply because of a lack of enforcement or meaningful penalties. In the context of off highway vehicle regulation, negative slippage is anything that results in lack of enforcement of existing rules. Farber describes affirmative slippage as occurring where the required standards are somehow renegotiated downward. Affirmative slippage occurs. Farber says, where (a) the standards morph because of litigation (b) where the standards are renegotiated, sometimes as an attempt to excuse non-compliance on more minor matters in exchange for agreement to exceed standards on more serious matters and (c) where creative enforcement measures or settlements are used in place of the prescribed penalties. *Ibid* at 306.

¹⁷ See David R. Boyd, *Unnatural Law: Rethinking Canadian Environmental Law and Policy* (Vancouver: UBC Press, 2003) 237; Stepan Wood, Georgia Tanner & Benjamin J. Richardson, “Whatever Happened to Canadian Environmental Law?” (2010) 37 *Ecol L Q* 981 at 1016; Nigel Bankes, Sharon Mascher & Martin Olszynski, “Can Environmental Laws Fulfill Their Promise? Stories from Canada” (2014) 6:9 *Sustainability* 6024; Martin Z.P. Olszynski, “From ‘Badly Wrong’ to Worse: An Empirical Analysis of Canada’s New Approach to Fish Habitat Protection Laws” (2015) 28:1 *J. Env L & Prac* 1 at 45.

¹⁸ While Farber intended his paradigm to describe the effectiveness of rules imposed from the top down by government on industry, it could be modified to describe the effectiveness of rules that originate from the bottom up because of societal demand. It could be restated as follows: A subsection of the public is not happy about environmentally harmful activity that impacts them. The impact could be direct because of where they live, perhaps pollution of a river they rely on for water. It could be less direct, affecting an interest that the members of the group have, such as fishing in the soon to be polluted river. It could be even less direct, with the members of the group simply being opposed to pollution generally. (The “directness” of the impact that environmentally harmful activities have is not a theoretical issue in Canada. The right of a person or group to participate in the legal process before various boards and tribunals depends upon whether they are “directly affected”. See Sean Fluker, “The Right to Public Participation in Resources and Environmental Decision-Making in Alberta” (2015) 52 *Alta. L. Rev.* 567). The group organizes and lobbies for change. Consultation occurs and each side (with members of the public on one side and possibly a more structured group on the other) tries to persuade the other (and the government) with argument and scientific evidence. Eventually new rules are put in place, binding on everyone. Compliance follows in due course. This is an oversimplification meant only to illustrate one possible way the public might think environmental regulation works. The process of standard setting, choosing policy instruments and methods of enforcement are far more complex than this. See the four-step process for setting environmental standards described in C. Tollefson, F. Gale & D. Haley, *Setting the Standard: certification, governance and the Forest Stewardship Council*, (Vancouver: UBC Press, 2008) cited and reproduced in Meinhard Doelle & Chris Tollefson, *Environmental Law Cases and Materials* 2nd ed (Toronto: Carswell, 2013) at 279. There are different methods by which environmental standards can be set and performance measured. There are a range of possible policy instruments which might be used to achieve the desired environmental outcomes. See Michael Howlett “Policy Instruments, Policy Styles, and Policy Implementation: National Approaches to Theories of Instrument Choice” (1991) 19 *Policy Studies J* 1 and Kathryn Harrison, “Talking With the Donkey: Cooperative Approaches to Environmental Protection” (1999) 2 *J Ind Ecol* 51. See also generally Robert Baldwin, Martin Cave and Martin

restricted to regulation of environmentally harmful activities but it does fit environmental law and the problems it addresses particularly well. Farber's point is that slippage matters, and it should be considered by regulators. His recommendations overlap with those made by supporters of responsive regulation. First, since slippage (non-compliance) is inevitable, command and control may not always be most efficient method to achieve a regulatory result. Second, there is a relationship between legal compliance and social norms which must be understood to regulate effectively and efficiently.¹⁹

Scientific research shows that headwater areas are important.²⁰ They are important as a source of water for people who live downstream. They are important because they provide habitat for fish and land animals, some of which are endangered or protected species. They are important as places of recreation. Research also shows that OHV use, especially in sensitive areas, can be harmful.²¹ There are many rules in place in Alberta governing OHV use on Crown land. In some areas, OHV use is restricted to trails, in others it is not. Enforcement of the rules has historically been challenging because of the vast geographic areas involved. While some OHV organizations support the important role of education to encourage use that does not harm the environment, behavior in the back country is in the hands of largely unobserved individual users. It is a classic "tragedy of the commons" problem.²² It is very difficult, if not impossible, to prevent some riders from going off trail and damaging sensitive habitat, riding through streams or mud bogging.²³ These illegal activities on a common property resource have a shared

Lodge, *Understanding Regulation: Theory, Strategy and Practice* 2nd ed (Oxford: Oxford University Press, 2012) ["Baldwin et al"].

¹⁹ Farber, *supra* note 14 at 320.

²⁰ Section 4.1 below.

²¹ Section 4.2 below.

²² Garrett Hardin, "The Tragedy of the Commons" (1968) 162:3859 *Science* 1243.

²³ Mud bogging is a usually competitive event where participants attempt to drive vehicles as far as they can through a pit of mud.

cost to society (environmental degradation) but a large perceived benefit (more fun) to each individual user.²⁴

Following a consideration of both the traditional and law and society approaches to law, and applying the lessons of the latter to the problem of harmful OHV use, I reach several conclusions. First, the threshold question of where a total ban on OHV use should be imposed is not a decision that regulatory theory can help answer. I submit that the primary considerations should be ecological — not legal, social, economic or political. These decisions are at the heart of the regulatory problem. The choice to completely, or even partially, close an area, especially an area with prior heavy use, will always be controversial and will likely always be met with heavy resistance. If the science upon which the decision is based is not transparent and accepted, resistance will increase.²⁵

Second, for areas where a total ban is imposed for ecological reasons, command and control regulation is the preferred approach. The risks of harm must be balanced against the costs and possibilities of enforcement. The goal of enforcement should be to obtain compliance in the most effective and efficient manner. Similar conclusions apply to regulation of OHV equipment rules. For easily understood rules that do not depend on context and which do not require interpretation, moving straight to coercive action “will achieve the result with less force than a series of failed escalations”.²⁶

²⁴ See David Feeny et al, “The Tragedy of the Commons: Twenty-Two Years Later” (1990) 18:1 Human Ecology 1. Feeny and his co-authors describe the two defining characteristics of common property resources as control of access (excludability) and subtractability. At page three the authors state, “the physical nature of the resource is such that controlling access by potential users may be costly and, in the extreme, virtually impossible” and “each user is capable of subtracting from the welfare of other users.” This describes perfectly the situation in many areas where unrestricted OHV use occurs.

²⁵ When making such decisions, scientists must rely on the precautionary principle, seeking to protect the environment even when the science behind the decision is not certain. Those affected by the decision on the other hand will want certainty before being satisfied that they should give up privileges they once had.

²⁶ Braithwaite 2010, *supra* note 10 at 509, n 68.

The most difficult regulatory scenario is when OHV use is to be allowed in an area, subject to rules.²⁷ Enforcement is physically difficult. Contact with individual OHV operators is intermittent at best. Restrictions or strict enforcement in one area will increase pressures on substitute areas.²⁸ Nonetheless, I conclude that responsive regulation could play a role and reduce negative slippage if used creatively. Whether it should be used is less clear and depends upon available resources.

1.2 Research Question

Can – and should – responsive regulation be used to guide regulation of the behavior of OHV operators on Crown land in headwater regions of Alberta?

1.3 Chapter content and methods:

1.3.1 Chapter 2 – The Traditional Approach to Understanding the Law

Chapter 2 describes the dominant traditional jurisprudential approaches and schools of environmental thought so that they might be contrasted with the law and sociology approach, of which responsive regulation is a part. To situate the analysis of the law and society approach which follows, the main streams of traditional jurisprudence are surveyed, looking at the questions of how law is conceived and what the relationship is between law *sui generis* and society *sui generis*. As will be seen, these traditional approaches may yield *some* insights into

²⁷ This is the scenario in most current problem areas currently. Allowing some use presents a more difficult enforcement problem than allowing no use at all. With a total ban in an area, if a person is found in the area operating an off-highway vehicle, they will be subject to sanction. It is a “yes-no” analysis. If some use is allowed subject to conduct rules, there will be more users in more places for enforcement officers to monitor and they will also have to decide whether the rules governing allowed use have been met. The potential number of possible outcomes rises rapidly with the number of rules and the number of users.

²⁸ This is a common concern. The Ghost River State of the Watershed Report 2018 states “OHV activity in the area increased significantly in 1978, when the Alberta government established Kananaskis Country and limited OHV use within Kananaskis Country boundaries.” Ghost Watershed Alliance Society, “Ghost River State of the Watershed Report 2018”, online: <www.ghostwatershed.ca/GWAS/ewExternalFiles/GHOSTSOW_FINAL_April2018s.pdf> at 47.

the problem of OHV harmful non-compliance, but they point to very few solutions. The primary methodology used here was doctrinal review of relevant texts and articles.

1.3.2 Chapter 3 – The Law and Society Approach to Understanding the Law

Following a brief historical review, some of the main modern developments and issues in law and sociology are examined, including how law can be a tool for conflict resolution (including environmental conflict resolution), the reciprocity between legal change and social change and the difficulty of assessing the causes of social change. Research into why people obey laws is examined. The chapter concludes by looking at some of the challenges encountered when using a law and society approach, including the difficulties of analyzing complex systems with many variables and the difficulties of measuring change. Chapter 3 methods were limited to a doctrinal review of relevant texts and articles.

1.3.3 Chapter 4 - Applying a Law and Society Approach: Mapping the Context of OHV Regulation and Harm in Alberta

Chapter 4 sets out the necessary context for the problem addressed by this thesis, looking at why headwaters are important, the environmental effects of OHV use and the complex web of current OHV rules in Alberta. In terms of methodology, a review was conducted of the published scientific literature about why headwater areas are ecologically important and the effects that OHVs can have. Statistical information obtained from publicly accessible government and industry websites is also presented to document the rising popularity of OHVs. The rules by which OHV use in headwater areas is regulated in Alberta were researched and analyzed, looking primarily at Alberta provincial legislation.

1.3.4 Chapter 5 – Applying a law and society approach: Mapping the social and economic context of OHV regulation and harm in Alberta

Chapter 5 looks at the social and economic factors which form part of the context of OHV regulation in Alberta. After examining selected demographic data, the dominant schools of

environmental thought in Alberta are set out. Selected empirical law and society research from other contexts which could be relevant to the research questions is examined. Research into Alberta social conditions is explored. Because research is scant, the public positions of Alberta environmental non-governmental organizations regarding OHV use are explored as an admittedly limited proxy. In terms of methodology, a doctrinal review of law and society research was conducted. An analysis of publicly available information was carried out to determine whether non-profit organizations held positions regarding the use of OHVs on Crown land in Alberta. The analysis was limited to websites of the selected organizations and in some cases reviewing documents posted on the websites to determine if public statements had been made which showed an organizational stance. Organizations were selected as follows:

- All of the well-known, larger conservation organizations operating in Alberta;
- All of the organizations mandated under Water for Life (the Alberta Water Council and the eleven Watershed Planning and Advisory Councils);
- A sampling of Watershed Stewardship Groups identified on the Land Stewardship Centre’s online public database of organizations as either “Community Stewardship Groups” or “Conservation or Stewardship Organizations”.²⁹
- Organizations, regardless of size or mission, which were signatories to the document “Communiqué from Eastern Slopes Today and Tomorrow Workshop, December 4 2015, Calgary, Alberta, Canada” authored by the Alberta Wilderness Association and directed to the Alberta Government.³⁰

The purpose of the inquiry was to determine whether publicized organizational positions were held, not to analyze and critique those positions or to obtain the personal opinions of individuals involved with the organizations.

²⁹ Land Stewardship Centre website, online: <<http://stewardshipdirectory.com/>>

³⁰ Online: <https://albertawilderness.ca/wordpress/wp-content/uploads/2016/01/easternslopescommuniqué_5.pdf>.

1.3.5 Chapter 6: Law and Society in the Environmental Law Context: Responsive Regulation

Chapter 6 first examines the principles of responsive regulation. Then, a summary of some of the main social factors found in the previous two chapters to be relevant to the regulation of OHV use in headwater regions of Alberta is presented. Those social factors are then considered while applying the principles of responsive regulation to the questions of regulation of OHV use, first for the most sensitive areas and second, for less sensitive areas where a restorative justice approach is considered.

Methods for Chapter 6 were limited to a doctrinal review of relevant texts.

1.3.6 Chapter 7 – Conclusions and Recommendations

Chapter 7 presents conclusions and recommendations.

Chapter Two: The Traditional Approach to Understanding the Law

2.1 Reason for an explicit theoretical perspective

Jurisprudence can be defined as “the theoretical analysis of law at the highest level of abstraction.”³¹ Whether examined or not, we all have a perspective that has been shaped by our past, by everything that has influenced what we believe. While jurisprudence may be abstract, it is not irrelevant. Understanding, being able to describe and perhaps question the theoretical perspective we hold allows us to ensure our views are internally consistent and justifiable. The purpose of the inquiry is not necessarily to prove which perspective on the law is the true or best perspective.³² The process of becoming aware of the strength of the theoretical justifications for our own views should allow us to better understand the views of others with whom we disagree. Legal questions do not exist in a vacuum. Law and questions about law are important because people exist in a society that is complex:

What legal theory is finally about . . . is the relationship between law and life. Whichever inquiries legal theorists make . . . their interest in and the substance of, their inquiries, arise from, and ultimately turn on some version of how the law both relates to, and ought relate, to the conditions of human association. Because this is so, legal theory is always utopian: in order to encounter inquiries, the legal theorist *must*, with a necessity that is cruel, take a stand on the relationship between law and life.³³

This thesis considers whether Alberta law regulating OHV use on Crown land could be improved by using responsive regulation, a law and society approach. More specifically, I am

³¹ R. Wacks, *Understanding Jurisprudence: An Introduction to Legal Theory*, 3rd ed (Oxford: Oxford University Press, 2012) at 1 n1.

³² Amartya Sen argues that we should avoid “disengaged toleration” when dealing with conflicting claims about what justice means (“You are right in your community and I am right in mine”) and that because there is “valuational plurality” in society, it is possible that even after critical scrutiny and sound reasoning, divergent conclusions may still be reached. See Amartya Sen, *The Idea of Justice*, (Cambridge: Harvard University Press, 2009) at x.

³³ F.C. DeCoste, “Taking a Stand: Theory in the Canadian Legal Academy – A Review of *Canadian Perspectives on Legal Theory*” (1991) 29 Alta L R 941 at 946. The citation for the book reviewed is *Canadian Perspectives on Legal Theory*, Richard Devlin ed (Toronto: Emond Montgomery, 1991).

interested in understanding whether current laws and regulations have characteristics and dynamics which would tend to affect compliance. To better situate this approach, this chapter looks at some of the main variants of traditional legal theory – and its limitations – as put forward by its most prominent proponents, to which the law and society approach can be contrasted.

2.2 Features of the traditional approach to law

The traditional approach comes from the subset of jurisprudence known as analytical jurisprudence, based on the philosophical traditions of analytic philosophy and incorporating its focus on logic and language.³⁴ Analytic jurisprudence examines the nature of law, looking at questions such as what law is and how it, as a system of norms, differs from systems of ethical norms.

According to [the traditional view] law is, and should be, a self-contained system of logic . . . your many social backgrounds are quite independent of any conclusion that follows logically from a set of premises . . . law in the traditional view is considered independent (or autonomous) from society . . . Social and moral considerations are not appropriate to legal reasoning; what is appropriate is logical deduction.³⁵

2.2.1 Defining law and environmental law under the traditional approach:

The most basic question of “What is law?” can have many different answers, depending upon the perspective that one has and upon the purpose for which one asks the question.³⁶

³⁴ See James Garvey and Jeremy Stangroom, *The Story of Philosophy: A History of Western Thought* (London: Quercus, 2012) 333-347 for an outline of the development of analytic philosophy through the work of Gottlob Frege, Bertrand Russell, G.E. Moore and Ludwig Wittgenstein.

³⁵ Steven E. Barkan, *Law and Society* (Upper Saddle River, New Jersey: Pearson Prentice Hall, 2009) at 8 (and the additional discussion at 31).

³⁶ Wacks, *supra* note 31 at 1 states “What is law? What is its purpose? Does it consist merely of rules? Can anything be law? What has law to do with justice? Or morality? Democracy? What makes a law valid? Do we have a duty to obey the law? Every substantive or ‘black letter’ branch of the law generates queries about its own meaning and purpose.” Another author states “There is . . . no general agreement about a definition [of law], nothing that commands a general consensus. Nor can there be. Law is not a thing in the real world that can be described with any precision. There is no such thing as a purely objective definition of law. What we call law depends upon why we want to call something law. Most definitions presuppose two basic functions of the legal system: the process of

Many definitions of law have been put forward.³⁷ The definition provided by Max Weber is as follows:

An order will be called law if it is externally guaranteed by the probability that coercion (physical or psychological) to bring about conformity or avenge violation will be applied by a staff of people holding themselves specially ready for that purpose.³⁸

Under this definition, law includes any prescription which is legitimately enforceable by the state.³⁹ Things that are not law, but which still might be capable of affecting or being affected by law include societal norms or customs, moral obligations, government policy on its own, not backed up by implementing legislation, political promises, not translated into statute, preferences of individuals not arising out of an enforceable right, unenforceable codes of conduct and voluntary arrangements.⁴⁰

Under this definition “law” and “enforceability” are inseparable concepts inside of a sovereign state. Enforceability is a critical and necessary component of domestic law.⁴¹

making authoritative rules, and the process of enforcing or carrying out these rules.” Lawrence M. Friedman “Coming of Age: Law and Society Enters and Exclusive Club” (2005) 1 Ann Rev L & Soc Sci 1 at 3 [Freidman, “Coming of Age”], quoted (in part) in Barkan, *supra* note 35 at 21.

³⁷ See generally Wacks, *supra* note 31 and Barkan, *supra* note 35 at 23.

³⁸ Max Weber, *Economy and Society: An Outline of Interpretive Sociology*, Guenther Roth and Claus Wittich, eds, (New York: Bedminster Press, 1968), quoted in Wacks, *supra* note 31 at 171.

³⁹ Such as constitutional documents, exercise of the royal prerogative, written statutes and regulations, judge made law, procedural rules concerning how substantive laws are to be administered, discretionary powers of officials, where the discretion is granted from a source accepted as law, rights of any kind which are enforceable through court action including those flowing from the common law, rights of any kind enforceable by a legitimately appointed administrative tribunal application, including the rules of natural justice and enforceable codes of conduct put in place by a self-governing organization or profession.

⁴⁰ Excluding any voluntary arrangements that may be enforceable using the rules of equitable estoppel.

⁴¹ But direct enforceability may not be a necessary condition of all law. In international law governing the relations between states, many if not most obligations are not enforceable by direct state action even though they may be enforceable in other ways. See Patricia Birnie, Alan Boyle & Catherine Redgwell, *International Law and the Environment*, 3rd ed (Oxford: Oxford University Press, 2009) at 211 and Hugh M. Kindred and Phillip M. Saunders eds *International Law Chiefly as Interpreted and Applied in Canada*, 7th ed (Toronto: Emond Montgomery, 2011) at 2 where the authors ask the rhetorical question “Is law possible in a global society that is horizontal in organization and that contains no legislature, no executive authority, and only a rudimentary judiciary typically without compulsory jurisdiction?”. For a different view (that international law is still law, but a ‘primitive system’) see the summary of the views of Hans Kelsen in Wacks, *supra* note 31 at 99. Also, under the compliance theory of “smart regulation”, regulation “can be carried out not merely by the state, but by businesses themselves and by quasi-regulators such as public interest groups, professional bodies, and industry associations . . . the pyramid of smart

Though environmental law is a subset of all law, its scope is broad. It can be defined in general terms as “the body of statutes and common law that is and will continue to be used to protect and improve environmental conditions.”⁴² Some environmental laws have a direct effect on the natural world. Others have an indirect effect. Anti-pollution laws, laws that protect biodiversity and wildlife are all environmental laws but so are aspects of zoning and planning law and some aspects of tax law. Some environmental laws are of general application (applying to everyone and all activities), some apply more narrowly to individual sectors or industries.⁴³

2.2.2 Perspective - the traditional approach is an insider approach⁴⁴

Our perspective is the way we think about any problem. One way of thinking about how we are thinking about the law and where participants or observers fit is to consider whether the perspective taken is that of an “insider” or an “outsider” to the legal system or some part of it.⁴⁵ The insider/outsider division is just one way of thinking about the law. The division is not perfect, mutually exclusive or discrete.⁴⁶ Any jurisprudential or social theory might have elements of each and any actor may operate partly as an insider and partly as an outsider and

regulation is, accordingly, three-sided . . . [and] conceives of escalation to higher levels of coerciveness not only within a single instrument but also across several instruments”. Baldwin et al, *supra* note 18 at 286. Under this theory, even though relatively powerless quasi-regulators are involved in enforcement measures, the threat of eventual punishment by government always exists.

⁴² Paul Muldoon et al, eds, *An Introduction to Environmental Law and Policy in Canada* (Toronto: Emond Montgomery, 2015) at 3.

⁴³ *Ibid* at 12.

⁴⁴ The concepts of “insiders” and “outsiders” are drawn from three related sources, Allan Greenbaum, Alex Wellington & Ellen Baar eds, *Social Conflict and Environmental Law – Ethics, Economics and Equity, Volume 1* (Concord Ontario: Captus Press, 1995) at 1-6 [“Greenbaum 1995”]; Allan Greenbaum, Alex Wellington & Ron Pushchak eds *Environmental Law in Social Context: A Canadian Perspective* (Concord Ontario: Captus Press, 2002) at 2-19 [“Greenbaum 2002”] and Allan Greenbaum, Ron Pushchak & Alex Wellington eds *Canadian Issues in Environmental Law and Policy* (Concord Ontario: Captus Press, 2009) at 1-25 [“Greenbaum 2009”].

⁴⁵ *Ibid*, Greenbaum 2009 at 1, citing Patrick Fitzgerald and Barry Wright, *Looking at Law – Canada’s Legal System*, 5th ed (Toronto: Butterworths, 2000) at 1.

⁴⁶ In the same way that the subject divisions between areas of the law as taught in most law schools (contracts, torts, family law, criminal law etc.) are not discrete or mutually exclusive.

may change from one to the other depending on circumstances.⁴⁷ A person who works as a lawyer or court clerk during the week (insiders) may be a hiker or OHV user on the weekends (outsider). Their perspective will change depending upon the role they are playing.

Traditional jurisprudence theories are insider theories:

Internal approaches take the point of view of “insiders” – those who work within the system [and] are therefore mainly concerned with pragmatic issues, [but who] may nonetheless explicitly engage with philosophical, conceptual and analytic issues beyond those that pragmatically arise on a day-to-day basis⁴⁸

Another description provides:

The most prominent knowledge about law is the internal legal learning located among the professional groups that occupy and operate legal institutions (judges, lawyers, legislators, administrators, and their academic and journalistic auxiliaries).⁴⁹

2.3 Natural law:

The first and oldest internal perspective is that of the various schools of thought known as natural law theories. Natural law theories have in common the belief that law cannot be separated from morality or justice. “The principle claim is that what naturally is, ought to be.”⁵⁰

Richard Devlin succinctly describes natural law in its various forms:

Natural law takes pagan rationalistic forms (Greek and Roman), Christian divinic forms (St. Augustine and Aquinas), and secularized social contractarian and rights-based forms (Hobbes and Locke). Several key themes unite these very diverse strands. First, natural law claims to be universal, immutable and objective, and to transcend any particular political or historical context. Second, natural lawyers propose that the validity of any law depends not just on its forms but on its content: there is an integral relationship between law and morality. Third, natural law is said to be superior to human law, and therefore to have the

⁴⁷ Another way of describing people in the system is as participants or observers. Greenbaum 2002, *supra* note 44, citing Donald Black, *The Behavior of Law*, (New York: Academic Press, 1976) and Donald Black, *Sociological Justice* (New York: Oxford University Press, 1989).

⁴⁸ *Ibid.*

⁴⁹ Marc Galanter, “In the Winter of Our Discontent: Law, Anti-Law, and Social Science” (2006) 2 Ann R L Soc Sci 1 at 1. DOI: <10.1146/annurev.lawsocsci.2.081805.105946 1>.

⁵⁰ Wacks, *supra* note 31 at 11.

justificatory and censorial power to determine whether positive (that is, human-made) laws are binding.⁵¹

Other natural law proponents include Jean-Jacques Rousseau (1712-1778) and two proponents of more modern versions of natural law, Lon Fuller (1902-1978) and John Finnis (born 1940).⁵²

For Fuller, law remains inseparable from morality but he creates a distinction between “morality of aspiration” and “morality of duty.”⁵³ The first relates to “the morality of the good life, of excellence, of the fullest realization of human powers.”⁵⁴ This “higher” subset of morality is important but it is not, Fuller says, properly the basis for law, in fact “when used to impose human aspirations, law risks becoming tyrannical.”⁵⁵ Instead, he suggests that “the authority and legitimacy of law is . . . founded on morally guided practices of lawmaking that involve the consent of those whom it governs [and] that consent derives from the ‘internal morality of law’.”⁵⁶ For Fuller, because law forces people to comply, it is only legitimate if it is created in a way that has this internal morality. Internal morality exists when legislators follow (at least) certain minimum procedures that should lead to obedience from their subjects. Fuller suggests eight things (*desiderata*) that lead to legitimacy, although he acknowledges there may be legitimate systems that don’t have all of these features all of the time: (i) the lawmakers create general rules (meaning rules that are not *ad hoc*); (ii) promulgation (the lawmakers inform subjects what the rules are); (iii) laws are not retroactive (iv) the laws are able to be understood by subjects; (v) laws don’t contradict each other; (vi) compliance with the laws is possible; (vii)

⁵¹ Richard Devlin “Jurisprudence for Judges: Why Legal Theory Matters For Social Context Education” (2001-2002) 27 *Queens L J* 161 at 171.

⁵² G. Pavlich, *Law and Society Redefined*, (Don Mills, Oxford University Press, 2011) at 14.

⁵³ *Ibid* at 32.

⁵⁴ *Ibid*, quoting L. Fuller, *The Morality of Law* (New Haven: Yale University Press, 1969) at 5.

⁵⁵ Pavlich, *supra* note 52.

⁵⁶ *Ibid*, quoting L. Fuller, “Natural Purpose and Natural Law” (1958) *Nat L Forum* 3 at 68.

constancy (rules don't randomly change); and (viii) rules that are announced are the same as the rules that are enforced in practice.⁵⁷ Without internal (procedural) morality, rules put in place by legislators are not truly law and therefore might not have to be followed. As will be seen in Chapter 4 below, current approaches to OHV regulation, at least in the eyes of non-compliant OHV operators, fail to meet some of these desiderata. Because of poor communication, laws may appear to OHV users to be ad hoc. The complexity of OHV regulation likely leads to a failure on the part of some users to understand their obligations. Laws may appear contradictory and constantly changing.

Under the modern version of natural law theory postulated by Finnis, the principles of natural law are “not derived from anything. They are self-evident.”⁵⁸ For Finnis, practical reasoning (i.e. reasoning about our practices) is a self-evident fundamental concept of natural law. Natural law, using practical reason, provides a rational basis for determining positive law and a set of criteria for determining whether a law should be obeyed.⁵⁹ Finnis believes that “each of us has the unique ability to recognize self-evident moral goods through introspection. We do so by using intuitive methods that work quite differently from either scientific disciplines . . . or philosophy.”⁶⁰ Finnis believes that if people ask themselves “What are the basic aspects of my well-being?”⁶¹ they will arrive at the same seven outcomes: (i) procreation and valuing life (ii) knowledge for its own sake (iii) play (iv) aesthetic experience (v) social experience and friendship (vi) practical reasonableness and (vii) spiritual experience.⁶² Finnis believes this list is

⁵⁷ *Ibid*, at 31, quoting Fuller, *supra* note 54 at 39.

⁵⁸ Margaret Davies, *Asking the Law Question: The Dissolution of Legal Theory* 2nd ed (Australia: Lawbook Co, 2002) at 80.

⁵⁹ *Ibid* at 85.

⁶⁰ Pavlich, *supra* note 52 at 34.

⁶¹ *Ibid* at 35.

⁶² *Ibid*, quoting J. Finnis, *Natural Law and Natural Rights* (New York: Clarendon: 1980) at 86.

non-exhaustive but universally and intrinsically valuable across time and place.⁶³ Life requires community and law provides the common code of conduct that leads to achieving the common good.

Natural law theorists have a range of views, with different starting and end-points. It is impossible to make many general statements about how natural law scholars would judge OHV regulations. One common characteristic (with a variation for Fuller as noted above⁶⁴), is that “[l]aw appears as an independent entity in and of itself (i.e. *sui generis*), but one that always derives from higher orders of justice (morality), nature, and reason.”⁶⁵ To be valid from the insider perspective of natural law jurisprudence, then, regulations would need to be consistent with the ways that morality, nature and reason were defined by the particular strand of natural law.

Theories of natural law seem far removed from how most people in modern secular society think. But elements of a natural law perspective can be seen as relevant to OHV regulation in at least two ways. First, one of the primary reasons people most comply with most laws is because doing so fits with however they define morality.⁶⁶ Conversely, some people will feel free to disobey a law they feel is procedurally or substantively illegitimate. As further discussed in sections 5.6 and 6.2 below, it is reasonable to infer that many OHV users share conservative or even libertarian views with respect to state control and are therefore antagonistic to it. Second, some people who would like to see more OHV restrictions believe that it is

⁶³ *Ibid.*

⁶⁴ Fuller still attaches morality to law, albeit morality defined differently.

⁶⁵ Pavlich, *supra* note 52 at 25.

⁶⁶ See section 3.3.6 below.

inherently wrong to harm nature.⁶⁷ Justifications of ecocentric views often rely on natural law arguments.

The perspective that law is an independent entity is a fundamentally different perspective from that of law and society, which sees law as “inextricably fashioned out of, and serv[ing], the societies in which it appears.”⁶⁸ A law and society approach, including responsive regulation, does not require consideration of the “rightness or wrongness” of people’s actions in obeying or disobeying the law.⁶⁹ However, elements of natural law can be seen in the most ecocentric of the environmental schools of thought examined in Section 2.8 below.

2.4 Legal positivism:⁷⁰

The second group of theorists described as having an internal perspective is that of the legal positivists.⁷¹ Early positivism (Hobbes and Bentham) is associated with empiricism, the belief that “the only genuine knowledge is scientific knowledge which emerges only from the positive confirmation of theory by the application of rigid scientific methods.”⁷² Positivists believe the truth of things can be only determined by experiencing what happens in the world through our senses.

At least for the early positivists, law consists only of commands that are put in place (posited) by a sovereign authority who is habitually obeyed because of the believable threat of punishment. In contrast to the natural law theorists, law for legal positivists is a separate matter

⁶⁷ See the descriptions of the more ecocentric schools of environmental thought in section 2.8 below.

⁶⁸ *Ibid* at 7.

⁶⁹ For a summary of criticisms of natural law theory see Devlin, *supra* note 51 at 172.

⁷⁰ Legal formalism, a more rigid form of legal positivism, will not be discussed.

⁷¹ This group includes Thomas Hobbes (1588-1679), Jeremy Bentham (1748-1832), John Austin (1790-1859), H.L.A. Hart (1907-1992) and Hans Kelson (1881-1973) among others. (Pavlich, *supra* note 52 at 40). The divisions between legal theorists are not always clear-cut. Hobbes is seen by some as a proponent of natural law (*ibid* at 43). Devlin, *supra* note 51 at 174 only allows that “hints of positivism can be identified in the work of Hobbes”. See generally Wacks, *supra* note 31 at ch 3-4.

⁷² Wacks, *ibid* at 57.

from morality.⁷³ Legal positivists are concerned more with what the law is than with what the law ought to be. “[L]egal positivists call on legal theory and jurisprudence to analyze the nature of law impartially, and surrender moral discussions to philosophers, theologians etc.”⁷⁴ Legal positivism is synonymous with analytical jurisprudence and the traditional approach, under which law exists as a separate entity from morality and society.

H.L.A. Hart believed that “law is a social construction” and a “historically contingent feature of certain societies, one whose emergence is signaled by the rise of a systematic form of social control administered by institutions”.⁷⁵ Hart agreed with Bentham and Austin that morality should be kept separate from law but he disagreed with their definition of law and the idea that the sovereign or ruler was the only source of law.⁷⁶ He believed that the law could come from other sources. Hart “envisages law, not as a sovereign command, but as a multifaceted and integrated system of rules that he thinks will enable ‘an improved analysis of the distinctive structure of a municipal legal system and a better understanding of the resemblances and differences between law, coercion, and morality, as types of social phenomena’.”⁷⁷ Although

⁷³ Positivists do not deny the existence or importance of morality. They simply say it is separate from law. “Few positivists deny the importance of morality as an external criterion for assessing the merits of any particular law, but they seek a temporary exclusion of morality so that law *sui generis* may be better understood” Devlin, *supra* note 51 at 174. Bentham, while developing his theory of utility, talks about morality “Nature has placed mankind under the governance of two sovereign masters, pain and pleasure. It is for them alone to point out what we *ought* to do, as well as to determine what we *shall* do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne.” Bentham, J. *An Introduction to the Principles of Morals and Legislation*, (1781) Chapter 1, online: <<https://www.utilitarianism.com/jeremy-bentham/index.html>>. (emphasis added – the “ought to do” is governed by considerations of morality, the “shall do” is what becomes law). “Austin insisted that law must be defined without reference to morality, that ‘the existence of law is one thing, its merit or demerit is another’ According to Austin, a person who is habitually obeyed by the bulk of the population, and who does not him or herself habitually obey another person, is sovereign. If that person expresses desire that something be done, or not be done, and then makes a credible threat to inflict harm on those who do not obey, the sovereign has commanded [and] the command is law.” Greenbaum 2009, *supra* note 44 at 4.

⁷⁴ Pavlich, *supra* note 52 at 40.

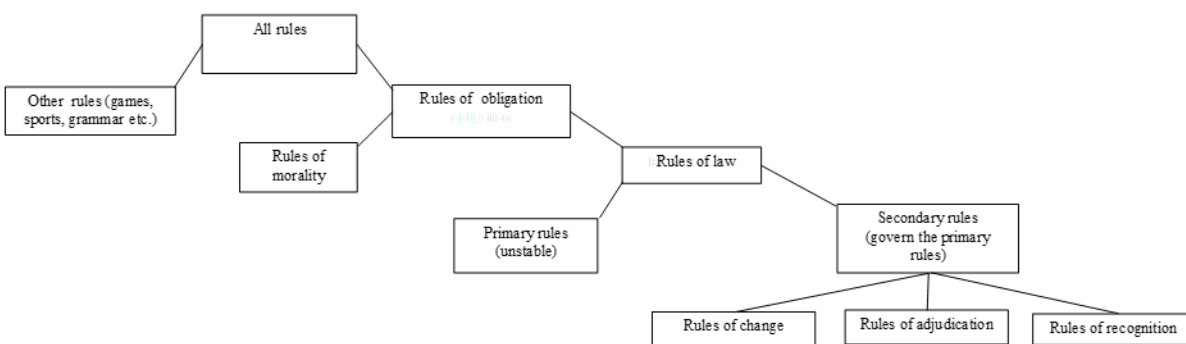
⁷⁵ L. Green, in H.L.A. Hart, *The Concept of Law* (Oxford: Oxford University Press, 2012) at xv.

⁷⁶ The so-called ‘command theory of law’. Pavlich, *supra* note 52 at 46.

⁷⁷ *Ibid*, citing H. Hart, H. *The Concept of Law* (New York: Oxford University Press, 1994) at 17.

Hart is “unquestionably a positivist”⁷⁸ he does believe that natural law has a “core of indisputable truth.”⁷⁹ He believes that rules must be put in place to allow human society to survive in the face of several naturally occurring human characteristics (the “human condition”).⁸⁰ Rules have both an internal dimension apparent to those who use them and an external dimension apparent to all.⁸¹ Understanding *why* people obey rules (the internal dimension) requires different methods than understanding *whether* they obey those rules (the external dimension).⁸² This recognition foreshadows characteristics of the law and society approach.⁸³

Figure 1 Hart’s hierarchy of rules



Hart separates rules of obligation from other rules in society which people might follow but which are not subject to the same social pressure to encourage conformity. Rules of obligation are then divided into moral rules and legal rules. The rules of morality are important but not enforced by the credible threat of physical punishment which is available for breaches of legal rules. Legal rules are divided into two types. Primary rules ban “the free use of violence,

⁷⁸ Wacks, *supra* note 31 at 79.

⁷⁹ *Ibid.*

⁸⁰ *Ibid.*

⁸¹ Pavlich, *supra* note 52 at 47.

⁸² *Ibid.*

⁸³ *Ibid.*, citing B. Bix, *Jurisprudence: Theory and Context* (London: Sweet and Maxwell, 2006) at 36.

theft and deception to which human beings are tempted but which they must, in general, repress if they are to coexist in close proximity to each other.”⁸⁴ Secondary rules govern the operation of the primary rules.⁸⁵ Hart sees two necessary preconditions to the validity of law. First, “citizens . . . must accept the primary rules” and second “officials . . . must accept the secondary rules of change, adjudication and recognition”.⁸⁶ Whether the first condition has been satisfied may be studied empirically, consistent with the observational methods normally proposed by positivists. Whether the second condition has been met (i.e. What do the officials within the system do and what are they thinking about?) requires methods more commonly used in the fields of sociology and psychology, rather than law.⁸⁷

Hans Kelsen’s conception of legal positivism differs significantly from that of Hart. Kelsen “sought to purge legal analysis of the contaminating influences of politics, ethics, sociology and history.”⁸⁸ Kelsen thought that the study of law had been contaminated by ideological considerations, thus he called his theory a ‘pure theory’ because it was “a theory of law purified of all political ideology and all natural-scientific elements.”⁸⁹ A follower of

⁸⁴ Wacks, *supra* note 31 at 81, quoting Hart, *supra* note 75 at 89.

⁸⁵ Rules of change allow for the creation of new primary rules. Rules of adjudication allow judgments of whether primary rules have been violated. Rules of recognition “determine the criteria by which the validity of the rules of a legal system is decided”. Rules of recognition are used by officials to decide which other rules are law. They may be written or unwritten, visible or invisible which means the investigation into what is law in a society must be more than purely scientific, it must also be hermeneutic. (Pavlich, *supra* note 52 at 43 and 48) Hermeneutics is the study of methods of interpretation, methods that “are designed to uncover the frameworks of meaning that people use to make sense of the world around them”. (*Ibid* at 43). Wacks describes the idea of a rule (or rules) of recognition as a “crucial aspect of Hart’s model” and “the centerpiece of Hart’s positivism” but he also acknowledges that commentators have found the idea circular, perplexing for legal theorists, and ambiguous in meaning, (Wacks, *supra* note 31 at 82).

⁸⁶ Wacks, *supra* note 31 at 48.

⁸⁷ *Ibid* at 50, citing criticisms made by R. Cotterell, *The Politics of Jurisprudence: A Critical Introduction to Legal Philosophy* (London: Butterworth, 2003) at 91.

⁸⁸ Devlin, *supra* note 51 at 175.

⁸⁹ Barkan, *supra* note 35 at 31, quoting H. Kelsen, *Pure Theory of Law* (Berkeley: U of Cal Press, 1967) at xviii.

Emmanuel Kant, Kelsen uses formal categories which “do not exist in nature” to describe and understand objective reality.⁹⁰

Kelsen’s positivism defines law as a nested series of norms rather than rules. He rejects the command theory of law. Norms are “commands, prescriptions and orders” which, in addition to commanding also “empower, permit and derogate.”⁹¹ Legal norms differ from other types of norms because of the threat of sanction. “Legal norms can only claim to be valid by referring to other norms (not to morals or even facts).”⁹² The validity of any norm is tested by checking to see if it conforms to a higher norm. At the top, all norms must respect a *grundnorm*, which is not posited and not a law. It is the norm upon which all other norms are based.

For positivists, law can be studied independently from sociology. “What determines a valid law has to do, ultimately, with the efficacy of a legal system within a given society, not extraneous moral codes. In such positivist frameworks, a moral value like ‘justice’ is literally beyond the scope of their analysis.”⁹³

With the small exceptions for some of Hart’s views noted above, legal positivists reject consideration of social factors, human behavior and morality when defining what the law is. As such, their approach differs significantly from a law and sociology approach, and especially differs from the approach required by responsive regulation.⁹⁴ In contrast, understanding the social factors at play is central to a law and society approach and to responsive regulation.

⁹⁰ Wacks, *supra* note 31 at 89.

⁹¹ Pavlich, *supra* note 52 at 50.

⁹² *Ibid.*

⁹³ Pavlich, *supra* note 52 at 53.

⁹⁴ Although “[f]ew positivists deny the importance of morality as an external criterion for assessing the merits of any particular law, but they seek a temporary exclusion of morality so that law *sui generis* may be better understood.” Devlin, *supra* note 51 at 174.

2.5 Legal realism:

A third perspective, primarily internal, is that of the legal realists, who in the early part of the twentieth century sought to understand how the law worked in practice by looking at decisions of juries and appellate court judges:

Legal realists argue that judges make law as opposed to just finding it. By this they meant that judges make their decisions according to certain beliefs which they hold because of their own socioeconomic backgrounds, including their conception of justice, and not just according to legal doctrine. They then reach a decision based on what they consider a fair outcome and, after doing so, write a decision in which they interpret the law in such a way as to justify the outcome.⁹⁵

Legal realism requires a paradigm shift from both natural law or legal positivism. Legal realists reject the claims of natural law theorists. They reject the claim of legal positivists that judges make decisions by applying neutral rules which, if known, would allow us to predict outcomes.⁹⁶ Legal realists make three main claims: First, there will be cases where the existing laws do not provide pre-determined answers to questions that come to the courts. Second, judges have discretion and the power to make new law in these cases. Third, the exercise of that discretion will be influenced as much by the judges pre-existing beliefs as they are by the law.

Legal realism therefore “identifies judges as key legal actors who have significant discretion. It recognizes that formal legal rules themselves often cannot provide determinative right answers, and that there are other significant inputs to judicial decision-making.”⁹⁷ Legal realists reject the moralism of the natural law theories and the conceptualism of the positivists.⁹⁸

⁹⁵ Barkan, *supra* note 35 at 36.

⁹⁶ And again, as was the case within the schools of natural law and legal positivism, there is a wide range of views within legal realism.

⁹⁷ Devlin *supra* note 51 at 177.

⁹⁸ *Ibid* at 174. Describing conceptualism, Devlin states “Positivism emphasized the conceptual processes that underpinned people’s relations but it did not analyse the behavior of actual humans”. *Ibid* at 175.

A primary early proponent of legal realism was Oliver Wendell Holmes (1841-1935), known to many through his oft repeated quote, written in 1881:

The life of the law has not been logic; it has been experience. The felt necessities of the time, the prevalent moral and political theories, institutions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow men, have had a good deal more to do than the syllogism in determining the rules by which men should be governed.⁹⁹

Holmes believed that judge's decisions are affected by their morals, politics and prejudices.¹⁰⁰ These things, internal to the judges themselves, are unspoken but affect the decisions being made in any case being decided. From this, Holmes concludes that to determine what the law is, we must try to predict what judges will in fact decide. Those predictions are what law is, rather than any neutral rules that come from a natural law theory or sovereign.¹⁰¹

Roscoe Pound (1870-1964) saw law as an important form of social control to be used to preserve equilibrium between individuals and groups in society that were pursuing conflicting interests.¹⁰² Pound believed that law, as a social process, could be used as a tool to preserve order, balance between competing interests and benefit society. Judges do this when they create law by exercising their discretion to make decisions. Legislators do it when creating law. As further discussed in Chapter 5, this conflict avoidance function of the law is directly applicable to the development of OHV regulations, where conflict between different user groups and even within OHV user groups has been seen as a problem.¹⁰³

⁹⁹ Barkan, *supra* note 35 at 37, citing Oliver Wendell Holmes, *The Common Law* (Boston: Little Brown and Co, 1938 (1881)) at 1.

¹⁰⁰ Pavlich, *supra* note 52 at 58.

¹⁰¹ Wacks states that there are three central elements to a study of Holmes (1) his views on what judges do were shaped and given credibility by his experience as a Supreme Court Justice (2) his device of listening to a 'bad man' to understand and predict how the law actually works was unique for the times and (3) his belief that there was a science of the law which could be developed by studying and measuring 'social desires instead of tradition'. Wacks, *supra* note 31 at 149.

¹⁰² *Ibid* at 60.

¹⁰³ See sections 3.3.3 and 5.1 below.

Karl Llewellyn (1893-1962) was a follower of Pound and continued the tradition of legal realism by borrowing the concept of ‘institutions’ from sociology.¹⁰⁴ Law is seen as an institution that does functional “law-jobs” which help society to survive.¹⁰⁵ Law has a purpose (helping society survive and thrive) but it does not have values. By studying how the ‘law-jobs’ were done and encouraging decisions to be made pragmatically, Llewellyn sought to make the law more predictable.

Jerome Frank (1889-1957) was a legal realist who sought political change. He believed that judges first came to conclusions based on subjective factors, then sought to justify those conclusions by aligning them with elements of the formal rules which supposedly bind them. Frank was a ‘relativist’, someone who “denies there is any independent, objective truth, but rather that truth is always relative to context”.¹⁰⁶ He believed that two judges could hear the same set of facts in a case and come to different conclusions because facts are what the judge says they are, they are not objectively true. Facts are always subject to the judge’s personal biases, of which the judge may not even be aware. This fluidity makes it difficult, if not impossible, to predict what will happen in any case.¹⁰⁷ Frank recommended psychological training for judges so that they could become aware of their own internal biases.¹⁰⁸

¹⁰⁴ Pavlich, *supra* note 52 at 62.

¹⁰⁵ He identifies six law-jobs (1) Adjustment of trouble cases (which eliminates conflict in society) (2) Regulating conflict, thus producing order (3) Helping people accept change by rechanneling conduct and expectations (4) Organizing society as a whole (5) Providing direction and incentive for people (6) providing the tools, material and staff needed for the juristic method (helping people to do ‘law-jobs’) See Wacks, *supra* note 31 at 150 and Pavlich, *supra* note 52 at 63.

¹⁰⁶ Pavlich, *ibid* at 65.

¹⁰⁷ Frank is known as a “facts skeptic” whereas Llewellyn, Pound and Holmes, because of their belief that the legal rules are always uncertain are known as “rules skeptics”. Pavlich, *supra* note 52 at 65.

¹⁰⁸ Calls for Canadian judges to receive training to help them recognize their unconscious biases have recently been made in reaction to high profile sexual assault cases. See Jason Markusoff et al, “The Robin Camp case: Who judges judges?”, *Macleans* (14 September 2016), online: <www.macleans.ca/news/robin-camp-case-who-judges-the-judges/>.

If the only social factors that are considered are the subjective internal backgrounds and beliefs of judges and juries, then legal realism can be considered an internal perspective. Once factors beyond those are considered, however (say for example the race, income or gender of the participants), it becomes an external perspective. Legal realists admit the influence of at least some subjective factors in judicial decision making. These subjective factors can be studied using the methods of sociology. But legal realists still see law as *sui generis*, something with its own form and content, something that can be studied on its own.

Shifting from legal realism to a law and society approach again requires adopting a different paradigm. Legal realists would look at the regulation of OHVs and be interested in what actually happens and whether judges had any role or discretion to resolve disputes. They would admit that judges have views which might affect outcomes. At first glance, legal realism would seem to have little relevance to OHV regulation in Alberta because most charges for most breaches of OHV operation rules do not require an appearance before a judge.¹⁰⁹ But judges could be involved in more serious cases and would be involved in any appeals.¹¹⁰ Under a restorative justice approach, consider below in Chapter 6, judges and community committees advising judges on sentencing options would play a significant role. Legal realists would be interested in the subjective beliefs of both. Law and society scholars would as well, but would go further and consider all social factors.

2.6 Liberalism/modernism:

Liberal legalism, which contains elements of legal realism and positivism, is based on assumptions from liberal political theory.¹¹¹ Communities are made up of rational people, free to

¹⁰⁹ See section 4.6 below.

¹¹⁰ The incidence of appeals has not been examined.

¹¹¹ The points that follow in this paragraph come from Devlin, *supra* note 51 at 178.

make their own choices. The rights of any individual are separate from those of any other individual and those of the community. Individuals in society are equal. Each person should have the liberty to pursue his or her own self-interests. The state should remain neutral regarding what people choose to do to lead a fulfilling life (the ‘neutrality principle’). But because we live together in a society, the desires of one person may conflict with those of others. Law plays two roles for liberals. First, it facilitates peaceful interactions between autonomous individuals. Second, it regulates the actions of individuals when those actions interfere too much with the liberty and equality of others.

Amongst themselves, liberals debate whether there are some individual rights that should never be over-ridden by the needs of the community, the exact meaning and effect of equality¹¹² and whether community-based norms exist at all.¹¹³

It is important to understand context when the word “liberal” is used. It can describe (1) classical liberal philosophical values as set out above (2) a political ideology, the tenets of which may vary over time and place (3) government programs thought to be generous (or too generous, when the word liberal is used pejoratively) (4) the proper name of a political party in Canada federally as well as provincially and (5) to describe the varied electoral platforms or beliefs put forward by any of those parties.

The tension within liberalism between the neutrality principle and the regulative function of the state has consequences for the acceptance of environmental rules. Different versions of liberalism, and different people in society, would choose different balance points. Some liberals are prepared to accept a greater amount of state involvement and regulation in their lives than are

¹¹² For example, whether affirmative action is an acceptable infringement on equality.

¹¹³ Devlin, *supra* note 51 at 180.

others. Liberals can be left or right of centre economically. Liberalism is a range of viewpoints, not a strict code.

All mainstream Canadian political parties and presumably most Canadians support classical liberal values to some extent. The root of the word “liberal” is the Latin “liber”, meaning free.¹¹⁴ Freedom is a fundamental Canadian value, enshrined in the *Charter of Rights and Freedoms*.¹¹⁵ Accordingly, it is not surprising that liberalism in its many variations is the “dominant mindframe among Canadian legal scholars and practitioners.”¹¹⁶ Liberalism is important to the regulation of OHV use in Alberta. While the overall political makeup of Alberta is difficult to characterize,¹¹⁷ freedom is unquestionably an important value, as it is in the rest of Canada.¹¹⁸

The term “neoliberalism” is a source of further confusion. Beginning in the 1930s, the term was the positive label given to an economic approach which tried to find a middle way between classical liberalism and socialism.¹¹⁹ After falling into disuse, the word re-emerged with a new meaning during the 1980s.¹²⁰ It began to be used to describe the economic policies favored

¹¹⁴ Canadian Oxford Dictionary, 2d (Don Mills: Oxford, 2004).

¹¹⁵ *Canadian Charter of Rights and Freedoms*, ss. 1 and 2, Part I of the *Constitution Act*, 1982, being Schedule B to the *Canada Act 1982* (UK), 1982, c 11.

¹¹⁶ Devlin, *supra* note 51 at 178.

¹¹⁷ Alberta overwhelmingly elects federal members of the Conservative party and elected consecutive right leaning governments provincially from 1921 to 2015. But Albertans decisively elected a New Democratic Party government in 2015 and survey results in 2018 show that more Albertans consider themselves in the political middle than on the extreme left or right, especially on social issues. The same poll indicated that only two per cent of respondents viewed the environment as a ‘top of mind’ issue. Drew Anderson, “While there's still a focus on the bottom line, most are socially progressive” CBC News, (30 April 2018), online: <www.cbc.ca/news/canada/calgary/albertans-not-conservative-road-ahead-survey-1.4639232>.

¹¹⁸ In a non-scientific survey conducted by the OHV user group “Love Your Trails”, ninety-six percent of respondents (1,244 of 1,297) ranked ‘Freedom to roam, right to wander’ as either very important or important in their choice to random camp rather than use formal campgrounds. 80 per cent of respondents (1,081) reported that OHV trail riding was the experience and activity of greatest value to them when visiting the area. See Love Your Trails, “2018 Bighorn Backcountry Recreation Survey” online: <https://loveyourtrails.ca/wp-content/uploads/2018/04/LTY_2018BRS_Final.pdf> at 15 and 8.

¹¹⁹ M. Eagleton-Pierce, *Neoliberalism: The Key Concepts* (New York: Routledge, 2016) at xiv.

¹²⁰ As will be seen, the development of responsive regulation was in part a reaction to waves of deregulation brought on by neoliberal regimes in the 1980s. See section 6.1 below.

by political parties themselves described as conservative and even those thought to be more centrist:

Neoliberalism draws on the ancient Greek idea that our ethics are innate (and governed by the state of nature it calls the market) and on the Christian idea that humankind is inherently selfish and acquisitive. Rather than seeking to suppress these characteristics, neoliberalism celebrates them: it claims that unrestricted competition, driven by self-interest, leads to innovation and economic growth, enhancing the welfare of all.¹²¹

Neoliberalism is now associated with “the expansion of commercial markets and the privileging of corporations; the re-engineering of government as an ‘entrepreneurial actor; and the imposition of ‘fiscal discipline’, particularly in welfare spending.”¹²² Neoliberalism has impacted thinking in all areas of Canadian life, including what are considered acceptable policies regarding the environment.¹²³ The impact of the drastic revisioning of what government’s role in society should be during the Klein era is still apparent in Alberta.¹²⁴

2.7 Post-modern theories:

Devlin describes modernism as an approach that “believes in progress – the idea that inevitably things are getting better and, like liberalism, it believes that we share a relative consensus on our basic core values and on the qualities of being a person” and postmodernism as

¹²¹ George Monbiot, *How Did We Get Into This Mess? Politics, Equality, Nature* (London: Verso, 2016) at 15, citing Paul Verhaeghe, *What About Me? The Struggle for Identity in a Market-Based Society* (Melbourne: Scribe, 2014).

¹²² Eagleton-Pierce, *supra* note 119.

¹²³ Eagleton-Pierce, *ibid*, points to three primary ways. First, “sustainable development” has shifted from being a strategy to protect the environment to being one to promote and sustain development; Second, the market model has become a dominant force in environmental policy (emissions trading, the allocation of property rights for pollution, the movement to self-regulation by industry and third, the rise of green consumerism with attendant greenwashing. *Ibid* at 63.

¹²⁴ For a historical review of the changes neoliberalism brought to the methods of government in Alberta and the impact of those changes on civil society, especially on social services, see Nilima Sonpal-Valias, “Paradoxes in Paradise: Neoliberalism in Alberta’s Developmental Disability Field” (Ph.D. Thesis, University of Calgary, Faculty of Graduate Studies, Graduate Program in Sociology, 2016) [unpublished] at ch 5, online: <https://prism.ucalgary.ca/bitstream/handle/11023/3046/ucalgary_2016_sonpalvalias_nilima.pdf?sequence=3&isAllowed=y>.

having “strong reservations about the extent of our progress and the degree of consensus.”¹²⁵

Postmodernism is an outsider approach:

The attempt to analyse law as a discrete subject matter disconnected from, for example, politics, is contrived and flawed, because law exerts a coercive force (or violence) on individuals. As such, it is inherently political [p]ostmodernism seeks to break down that conformity and provide new insights into how law operates.¹²⁶

Postmodernists are skeptical that collective societal values exist. They may see their particular identity group being victimized by other more dominant groups in society. Law is about power and politics more than morality. Law can be a weapon that is used to further their victimization. It also can be used to defend the group.¹²⁷

Postmodernism as a concept goes far beyond law, but even within law there are many varieties.¹²⁸ Some of the core concepts are (1) a broad concept of “text” meaning anything, written words or otherwise, that represents something (2) how the text and its author relate to each other (3) methods of deconstructing language to discover its impact on legal interpretation (4) how power and knowledge relate to each other.¹²⁹

Some of the main criticisms of postmodernism are: (1) it is essentially negative and offers nothing to replace what it tears down.¹³⁰ (2) it is internally inconsistent, relying on rational argument to question rationality as a basis for legal understanding.¹³¹ (3) it questions whether anything has meaning, but meaning is critical to the existence of law.¹³² (4) some writings are

¹²⁵ Devlin, *supra* note 52 at 181.

¹²⁶ Marett Leiboff and Mark Thomas, *Legal Theories in Principle* (Australia: Lawbook Co, 2004) at 230 and 231.

¹²⁷ Devlin, *supra* note 51 at 182.

¹²⁸ Postmodernism includes new realism and the many identity jurisprudence approaches including feminist jurisprudence, First Nations jurisprudence, critical race theory, gay, lesbian, queer theory and critical disability theory.

¹²⁹ Leiboff and Thomas, *supra* note 126 at 231.

¹³⁰ *Ibid* at 249.

¹³¹ *Ibid.*

¹³² *Ibid.*

apocalyptic, utopian or nihilistic.¹³³ Postmodernism and the law and society approach both take an outsider perspective, looking at the law as non-participants. Postmodernists see their identity group as being victimized by a power imbalance caused or made worse by the law. Their perspective is not necessarily incompatible with that taken in a law and society approach, but it is narrower. Comments by OHV users describing themselves as victims of government action which singles them out could be described as postmodern.

2.8 Schools of environmental thought¹³⁴

Jurisprudence was defined earlier as the “theoretical analysis of law at the highest level of abstraction.”¹³⁵ The different schools of environmental thought, outlined below, are not jurisprudence. Instead, they show different ways of describing how human beings see their ethical relationship with the environment.¹³⁶ Understanding which schools of thought are predominant is important for a law and society analysis of environmental regulation. The views held about what obligations humans have regarding the natural world, whether non-human living things should be given rights, whether we have obligations to treat the natural world in a certain way all influence societal norms. Those norms will influence law.

There are many ways to categorize schools of environmental thought and the lines between them will not always be clear. Karin Mickelson and William Rees say:

How do we conceptualize our relationship to the natural world? How ought we to do so one of the most significant [points of controversy] is whether environmental ethics ought to be utilitarian and instrumental (that is, derived from and/or contributing to human interests) or in contrast, ought to flow from a

¹³³ Wacks, *supra* note 31 at 294.

¹³⁴ Material in this section has been adopted from a graduate paper submitted for credit by the author in the Law 705 Legal Theory Seminar at the University of Calgary in 2015.

¹³⁵ Section 2.1 above.

¹³⁶ The schools of environmental thought correspond to jurisprudence in much the same way as ideology corresponds to philosophy.

recognition of nature’s possessing an “inherent” or “intrinsic” value, which ought to be respected (even at the cost of sacrificing certain human interests).¹³⁷

Mickelson and Rees go on to lay out four schools of thought in modern environmentalism, which they credit to philosopher John Rodman.¹³⁸ Others have proposed more divisions, different divisions and different names for the various groupings. The schools of thought suggested below are a combination of categories suggested by others.¹³⁹

Figure 2 Schools of environmental thought



2.8.1 Resource Conservationism (Mickelson) including Wildlife Management/Conservation (Carmichael) and Light Green Ethics (Curry)

Resource conservationism is the dominant conservation ethic in Alberta policy.¹⁴⁰ This group of discourses share an anthropocentric ethic. “Resource conservationism is primarily concerned with the development of “wise” resource utilization practices that take into account the interests of society as a whole and also incorporate notions of sustainability.”¹⁴¹ Stated another way “[t]he discourse of wildlife management . . . shares a utilitarian vision of the

¹³⁷ Karin Mickelson and William Rees “The Environment: Ecological and Ethical Dimensions” in Elaine Hughes, Alastar R. Lucas & William A Tilleman eds, *Environmental Law and Policy*, 3rd ed (Toronto: Emond Montgomery Publications Limited, 2003) at 20.

¹³⁸ *Ibid*, citing John Rodman, “Four Forms of Ecological Consciousness Reconsidered”, in Donald Scherer and Thomas Attig eds, *Ethics and the Environment* (Englewood Cliffs, NJ: Prentice Hall, 1983) at 82.

¹³⁹ The divisions I use for the schools of thought are an amalgamation of the divisions suggested by Mickelson, *supra* note 137, Patrick Curry, *Ecological Ethics*, (Cambridge: Polity Press, 2006) at 25 [“Curry”] at 31-95, Jason T. Carmichael, J. Craig Jenkins & Robert J. Brulle, “Building Environmentalism: The Founding of Environmental Organizations in the United States, 1900-2000” (2012) 53 Soc Q, 422 at 450 [“Carmichael”]; and Robert Brulle et al, “Measuring Social Movement Organization Populations: A Comprehensive Census of U.S. Environmental Movement Organizations” (2007) 12:3 Mobilization 255 at 260 [“Brulle”] with the terms attributed to the individual authors as appropriate.

¹⁴⁰ See Section 5.6 below.

¹⁴¹ Mickelson, *supra* note 137 at 21.

management of nature for human needs economic growth and environmental sustainability can be reconciled”¹⁴² And from Curry “[t]he light green ethic’s chief characteristic is that of limiting direct value to human beings.”¹⁴³

None of the analysis above tells us why resource conservationists, in general, believe nature has value only because it meets the needs of humans and not for its own sake. For either organizations or individuals, it may just be the path of least resistance. It is easier to make the argument that something should be done or avoided because it benefits humans than because it provides difficult to imagine (and measure) benefits to non-human entities.

Value is an abstract concept, like the concept of utility in economics. It is not easily quantified or measured for an individual or across a group. A resource (say a headwater stream) will have a different subjective value to different people. Resource conservationists are not a homogeneous group. If those who believe the resource has less value have influence, slippage may occur.

People whose actions suggest they have no environmental ethic but who contravene environmental regulations out of ignorance, lack of ability or lack of education may be resource conservationists. Most non-compliant OHV users likely belong to the resource conservationist group.

2.8.2 *Preservationism*

The Preservationist discourse is evident in the positions taken by at least one prominent Alberta organization, the Yellowstone to Yukon Conservation Initiative.¹⁴⁴ The founders of the

¹⁴² Carmichael, *supra* note 139 at 452.

¹⁴³ Curry, *supra* note 139 at 48.

¹⁴⁴ See Section 5.6 below.

preservationist discourse are Americans John Muir and Aldo Leopold.¹⁴⁵ Preservationists still see nature from an anthropocentric vantage point, but the benefits they see flowing to humans from nature include things that are more intangible than would be accepted by the conservationists. Preservationists, or wilderness preservationists as they are called by Mickelson, “focus on the value of nature as sanctuary; wilderness is valued because of its beauty and inspirational qualities.”¹⁴⁶ Carmichael, on the other hand, defines preservationists as being on the other side of the anthropocentric divide:

It defines both a moral and an aesthetic relationship between humans and the environment. In this discursive frame and unlike the conservation discourse, nature has intrinsic worth in itself. It also serves as a source of human self-renewal, as it provides an extra-human vantage point for developing a vision of a just and sustainable society.¹⁴⁷

It may be the case that there are preservationists who see nature as having intrinsic worth and others that do not. If Carmichael is correct, there would be little difference between the preservationist view and the views of reform environmentalists which follow.

2.8.3 Reform Environmentalism/Environmental Health

According to Carmichael, reform environmentalism is the “dominant discourse of the present day” and “is based on the insight that humanity is part of the earth’s ecosystems, and thus human health is linked to the condition of the natural environment it replaces conservation’s limited utilitarian view of nature with the idea that nature has an intrinsic value of its own.”¹⁴⁸

If Carmichael is correct, then the groups struggling for influence over OHV regulation in Alberta will be people who generally support the preservationist/reform environmentalist ethic

¹⁴⁵ *Ibid.* Leopold is often placed with the Deep Ecologists but his views were clearly anthropocentric. See Mark Bryant Budolfson, “Why the Standard Interpretation of Aldo Leopold’s Land Ethic is Mistaken” (2014) 36 *Env Ethics* at 443.

¹⁴⁶ Mickelson, *supra* note 139 at 21.

¹⁴⁷ Carmichael, *supra* note 139 at 452.

¹⁴⁸ *Ibid.*

on the side looking for more restrictions and with groups who support the resource conservationism ethic on the other side, looking for fewer restrictions.

2.8.4 *Moral extensionism*

The grouping is described by Mickelson as “calling for the extension of ethical or moral consideration to entities that, according to conventional thought, lie outside the boundaries of the moral community.”¹⁴⁹ It includes what Brulle calls animal liberation and what Curry calls mid-green or intermediate ethics, animal rights and biocenterism.¹⁵⁰ Curry states:

[I]t extends moral considerability to (primarily) other animals, which are therefore perceived as possessing independent moral status, and therefore as deserving protection for their own sakes, regardless of whether they matter to human beings Extensionism remains human-centered, however it retains the assumption that humans come with deontological ‘rights’ which can in certain cases be extended to honorary humans, but which otherwise trump all other considerations.¹⁵¹

There are no prominent moral extensionist organizations in Alberta.

2.8.5 *Ecological sensibility*

Again referring to Mickelson’s description, ecological sensibility is used to describe a group of discourses which call for “a revisioning of the framework” and “a radical reconceptualization of the understanding of ‘self’ to encompass notions of interconnectedness and interdependence”.¹⁵² There are many variations of discourses which fit within the ecological sensibility camp, tied together by the fact that all have moved even further away from anthropocentrism toward biocenterism.¹⁵³

¹⁴⁹ Mickelson, *supra* note 139 at 21.

¹⁵⁰ Brulle, *supra* note 139 at 260; Curry, *supra* note 139 at 55-60.

¹⁵¹ Curry, *ibid* at 56.

¹⁵² Mickelson, *supra* note 139 at 22.

¹⁵³ Sub-categories which won’t be explored in detail include the deep ecology movement, ethics based on Aldo Leopold’s the land ethic, Gaia theory, deep green theory and left biocenterism. These sub-categories are discussed in Curry, *supra* note 139 at 63-95 and in Mickelson, *ibid*, at 22-28.

Curry suggests that for a discourse to fit within this category, it must satisfy two criteria:

(1) It must be able to recognize the value, and therefore support the ethical defense, of the integrity of species and of ecosystemic places, as well as human and non-human organisms. So it is holistic, although not in the sense of necessarily excluding considerations of individual value. (2) Within nature-as-value, it must (a) allow for conflicts between the interests of human and non-human nature; (b) allow human interests, on occasion, to lose.¹⁵⁴

As with the moral extensionist category, there are no significant Alberta organizations espousing these views as part of their mission.

2.8.6 *Environmental Justice and Ecofeminism*

The environmental justice and ecofeminism discourses do not fit easily onto the continuum presented in Figure 2. This group of postmodernist discourses are described as “alternative” by Carmichael as they “fall outside mainstream environmentalism.”¹⁵⁵ The concern of people adopting this group of discourses is the way environmental problems disproportionality affect groups within society, especially the poor, minorities and women. Brulle notes that these groups believe “ecological problems occur because of the structure of society” and “resolution of environmental problems requires fundamental social change.”¹⁵⁶ He further notes that ecofeminists believe that “Ecosystem abuse is rooted in androcentric concepts and institutions.”¹⁵⁷ The characterization of environmental problems as being tied to societal factors fits with a law and society approach.¹⁵⁸

¹⁵⁴ Curry, *supra* note 139 at 63 [emphasis in original].

¹⁵⁵ Carmichael, *supra* note 139 at 453. He includes deep ecology in this group.

¹⁵⁶ Brulle, *supra* note 139 at 260.

¹⁵⁷ *Ibid.*

¹⁵⁸ No published data could be found regarding the gender balance of charges for violations of OHV Operation rules or related Crown land rules. Anecdotally, charges are overwhelmingly against men.

2.8.7 *Those whose actions indicate they have no environmental ethic*

Few people or corporations would advocate that no care for the environment need ever be taken. Yet environmentally harmful activities persist. It is impossible to discern from the actions of actors alone whether they have no ethic or have just chosen to put it aside, choosing reward (money or fun) over caring for the environment.¹⁵⁹ Activities can be organized and criminal in nature – illegal trade in endangered flora or fauna, illegal trading of ozone depleting substances, illegal dumping or dealing with hazardous substances.¹⁶⁰ Non-compliant actions of individuals may also be a result of misinformation or lack of education. It is a critical distinction because different enforcement measures may be required for actors with different motivations.¹⁶¹

¹⁵⁹ See Emily Huddart Kennedy et al, “Why We Don’t ‘Walk the Talk’: Understanding the Environmental Values/Behavior Gap on Canada” (2009) 16:2 Human Ecology R 151.

¹⁶⁰ See generally Reese Walters, “Eco Mafia and Environmental Crime” in Kerry Carrington, Mathew Ball & Erin O’Brien eds *Crime, Justice and Social Democracy: International Perspectives* (London: Palgrave Macmillan, 2013) at 282.

¹⁶¹ Braithwaite 2010, *supra* note 10 at 483.

Chapter Three: The Law and Society Approach to Understanding The Law

3.1 The law and society approach generally:

Law and society is not a singular discipline and a law and society approach requires choosing between many possible approaches.¹⁶² It has a diverse character:

The sociology of law . . . embraces a host of disparate and seemingly irreconcilable perspectives and approaches to the study of law in society. This diverse character is celebrated by some scholars, who regard it as a source of theoretical pluralism and methodological innovation, and criticized by others who see it as a cause of theoretical fragmentation, eclecticism and discontinuity in research.¹⁶³

Another author states “The sociology of law is a rich and unruly topic, and it is never easy to say what it includes and what it doesn’t”¹⁶⁴ and later “the sociology of law is dedicated to studying the legal behavior of human groups”.¹⁶⁵ Under the law and society approach (also called law and social science or law and social theory approach), law is just one of many social institutions that exist within and affect society.

The social science view of law differs from the traditional view in all these respects . . . law – considered either as rules or as a set of established procedures for creating, implementing, and enforcing these rules – is, in the social science view, considered a social institution. Like any other social institution such as the family, education or religion, law therefore is firmly embedded in society. As such, it has a reciprocal relationship with society: law affects society and society affects law. Social backgrounds matter for law, and law matters for important aspects of our lives. For better or worse, social and moral considerations affect law at almost every turn, and law has social and moral impact.¹⁶⁶

¹⁶² The law and society literature is vast and expanding. Only a brief outline of the portions of the approach thought to be relevant to the subject matter of this thesis will be given. For a more complete overview, see generally Steven Vago and Adie Nelson, *Law and Society* 3rd Canadian ed (Toronto: Pearson, 2011); Reza Banakar and Max Travers eds, *Law and Social Theory* 2nd ed (Oxford: Hart, 2013); Carroll Seron, *The Law and Society Canon* (Aldershot, England: Ashgate, 2006), Pavlich, *supra* note 52 and Barkan, *supra* note 35.

¹⁶³ Banakar and Travers, *ibid*, at 2.

¹⁶⁴ J. Sutton, *Law/Society: Origins, Interactions and Change* (Tousnad Oaks CA: Pine Forge, 2001) at xiv.

¹⁶⁵ *Ibid* at 8. The author goes on to say in the footnote to the quote that “It is impossible to draw a clear distinction between the research interests of sociologists of law and those of anthropologists, historians, economists, political scientists, or psychologists who study law – they all overlap with each other.” *Ibid* at 21 n 4.

¹⁶⁶ Barkan, *supra* note 35 at 8.

Using a law and society approach does not necessarily require one to discard whatever definition of state sanctioned law one accepts. Instead, the approach should broaden one's field of view. Being joined by the conjunction "and", the words "law" and "society" exist together. They are additive. Law exists in a social context which it affects and is affected by. In other words, the law is no longer thought to be autonomous.¹⁶⁷

Steven Barkan states that this point - that the law is *embedded* in society - is the most important assumption in the study of law and society.¹⁶⁸ In Barkan's view this leads to three subsidiary assumptions, first that "laws and legal decisions may have a potential impact on one or more aspects of society", second that "major changes in society often bring about changes in the law" and third that "law, whether considered as rules or as a legal system, reflects the type of society in which it is found."¹⁶⁹

Max Weber recognized the different ways law was conceived in jurisprudence and sociology:

According to Weber, jurisprudence and the sociology of law look at law very differently. Although jurisprudence sees law as a set of rules that should be followed, the sociology of law views law as "a complex of actual determinants of human conduct."¹⁷⁰

In contrast to the traditional/insider/participant approach, the law and social science approach views the law from the perspective of an outsider or observer:

¹⁶⁷ The law and society approach is not just utilitarianism in another guise. The point is not that the costs and benefits of a particular law for society as a whole should be calculated although those costs and benefits will impact the reciprocal relationship between law and society in any case.

¹⁶⁸ Barkan, *supra* note 35 at 10.

¹⁶⁹ *Ibid* at 11.

¹⁷⁰ Richard Swedberg, "Max Weber's Contribution to the Economic Sociology of Law" (2006) 2 Ann R L & Soc Sci 61 at 65 citing Max Weber, *Economy and Society: An Outline of Interpretive Sociology* (Berkeley: U Cal Press, 1922 (1978)) at 312.

External accounts take the point of view of outside observers and include myriad disciplinary and interdisciplinary approaches to law in its social, political and cultural contexts. The two perspectives . . . can intersect.¹⁷¹

Another author states that the outsider point of view means:

looking at legal phenomena from the standpoint of one or more of the social sciences: sociology, anthropology, economics, psychology, political science, and perhaps others . . . each has its own slant . . . [b]ut the social sciences do have certain traits in common. Perhaps the most important is the commitment to empirical observation and scientific measurement, as far as this is possible. . . . Related to this is a commitment to objectivity and neutrality, again, as far as this is possible.”¹⁷²

According to Lawrence Freidman, all of law and society research is interested in one or both of two main questions.¹⁷³ The first is “Where do the laws, decisions, rules, and regulations come from?”¹⁷⁴ and the second is “Once you have a law, rule, doctrine, or legal institution, what happens then? What kind of impact or influence do any of these acts within the legal system have?”¹⁷⁵ Both of these questions are relevant to OHV regulation in Alberta. Responsive regulation is an approach which is concerned with the second question.

3.2 Early influences on the development of the law and society approach

Influential theorists from various disciplines have shared the view that “societal and legal complexities are interrelated. Beyond that there is little consensus.”¹⁷⁶ The central ideas of some of the main pioneers of the field are set out below.¹⁷⁷

¹⁷¹ Greenbaum 2002, *supra* note 44 at 1.

¹⁷² Stuart Macaulay, Lawrence M. Friedman and Elizabeth Mertz, eds, *Law in Action: A Socio-Legal Reader* (New York: Foundation Press, 2007) at 1.

¹⁷³ Freidman, *Impact*, *supra* note 13 at 1.

¹⁷⁴ *Ibid.*

¹⁷⁵ *Ibid* at 2.

¹⁷⁶ Vago, *supra* note 162 at 31.

¹⁷⁷ I have omitted many law and society theorists from this summary review. Karl Marx (1818-1883) studied the rise of capitalism and how the law changed to aid the ruling class’s oppression of the working class by preserving private property and by creating what was in his view a façade of justice. Marx’s focus on economic class warfare is less relevant to the topic of this thesis than it might be to an analysis of environmental matters where corporate interests compete with private interests. For a review of Marx’s contributions to sociology and the law see Pavlich, *supra* note 52 at 87 and Wacks, *supra* note 31 at 177. I have also omitted Sir Henry Maine (1822-1888) who believed that to understand the development of society we must understand how the law and people’s legal relations

3.2.1 Eugen Ehrlich (1862-1922)

Ehrlich was an Austrian jurist and historian who has been referred to as the founder of the field of the sociology of law.¹⁷⁸ His major work *Fundamental Principles of the Sociology of Law*, was published originally in 1936.¹⁷⁹ Ehrlich disagreed with the dominant thinking at the time that “all legal propositions are to be found in statutes, where they are readily accessible to anyone” or in “juristic literature” or judicial decision.¹⁸⁰ He believed instead that there existed a “living law”, a law beyond the law, which needed to be understood:

The living law is the law which dominates life itself even though it has not been posited in legal propositions. The source of our knowledge of this law is, first, the modern legal document; secondly, direct observation of life, of commerce, of customs and usages and of all associations, not only those that the law has recognised but also those that it has overlooked and passed by, indeed even those that it has disapproved.¹⁸¹

By conceiving of the concept of living law Erlich laid the ground for the eventual development of legal pluralism, the idea that “within a single jurisdiction a number of legal systems can co-exist along with the ‘official’ state law.”¹⁸² This idea lies at the very foundation of law and sociology or indeed any multi-disciplinary approach to understanding the impact of law. It has also as, Raymond Wacks points out, been a subject that is:

problematic. It has, in particular, been dogged by the conceptual debate concerning the very meaning of ‘law’ which is plainly a fundamental starting-point for any constructive analysis of competing or parallel systems of ‘law’.¹⁸³

developed historically. He believed that societies will move from legal relations based on ascribed status within the group to legal relations based on contract where the individual becomes independent from the group. See Vago, *ibid* at 33.

¹⁷⁸ David Nelken, “Eugen Ehrlich, Living Law, and Plural Legalities” (2008) 9 *Theoretical Inq L* 443 at 443. For an analysis of Ehrlich’s work see generally Roscoe Pound’s introduction to the edition mentioned, and M.L.M Hertogh ed, *Living law: reconsidering Eugen Ehrlich* (Netherlands: Hart, 2009).

¹⁷⁹ Eugen Erlich, *Fundamental Principles of the Sociology of Law* (New York: Arno Press, 1975) (originally *Harvard Studies in Jurisprudence, Volume V* (Cambridge: Harvard University Press, 1936)).

¹⁸⁰ *Ibid* at 486.

¹⁸¹ *Ibid* at 493.

¹⁸² Wacks, *supra* note 31 at 207.

¹⁸³ *Ibid*.

Legal pluralism exists in a weak form and a strong form. In the weak form, different legal norms and informal systems exist alongside the dominant state system and “apply or not, depending upon the subject-matter at issue or the population sub-group involved.”¹⁸⁴ Weak legal pluralism is dismissed as being “just another form of legal centralism because its implicit message is that all other laws should be organized in a hierarchy beneath state law.”¹⁸⁵ Strong legal pluralism, a concept to which Ehrlich’s living law is one of several suggested “intellectual forerunners”, is something different.¹⁸⁶ It “depicts an irreducible set of legal orders that can be partly in harmony, partly in contest with each other.”¹⁸⁷ The legal orders co-exist and there is no hierarchy.¹⁸⁸ In such circumstances it becomes impossible to come up with a definition of law that covers both state and non-state legal orders:

Law’s conceptual connection to the state cannot be severed. State law, the reigning notion of law, originated in the separation of state from society, with its concomitant division of public and private spheres. In [several quoted suggested definitions of law] the search for the institutional aspect of norm formulation or enforcement is nothing other than a smuggled reference to the state bureaucratic legal apparatus. Thus the state law model inescapably provides the kernel of the concept of non-state ‘law’.¹⁸⁹

From a traditional insider perspective or a weak legal pluralism perspective there are no obvious competing state and non-state legal orders at play in the regulation of OHV use on Crown land in Alberta.¹⁹⁰ There may be multiple, nested, inter-related social factors that can and

¹⁸⁴ Brian Tamamaha, “The Folly of the ‘Social Scientific’ Concept of Legal Pluralism (1993) 20:2 JL and Soc’y 192 at 202.

¹⁸⁵ *Ibid.*

¹⁸⁶ *Ibid.*

¹⁸⁷ Ralf Michaels, “Global Legal Pluralism” (2009) 5 Ann R L & Soc Sci 1 at 5.

¹⁸⁸ The concept of weak and strong versions of legal pluralism is attributed by Michaels, *ibid* and Tamamaha, *supra* note 360 to John Griffiths in his article “What is legal pluralism?” (1986) 24 J Leg Plur 1.

¹⁸⁹ Tamamaha, *supra* note 184 at 201.

¹⁹⁰ Traditional aboriginal law would be an exception. The impact (existing or potential) of traditional aboriginal law on off highway vehicle regulation has not been examined.

do affect the development of law and whether or not law is effective (whether there is slippage) but those factors themselves are not seen as law.

From a strong legal pluralism perspective, the state is just one influence on the behavior of individuals and other influences would equally be law. Tamamaha sees law is a “culturally-generated notion.”¹⁹¹ Law is, in his view, inextricably linked to the notion of the state and trying to include non-state social or cultural norms within the definition is futile and only leads to confusion. In the context of OHV regulation, it is difficult to think how non-state influences on the behavior of OHV operators could be considered to be law.

3.2.2 *Emile Durkheim*

Emile Durkheim (1858-1917) considered law to be an outcome of larger social forces and a means of social control.

Durkheim’s insights focused on how the type of law characteristic of a society depends heavily on the society’s homogeneity (similar norms, beliefs and values) or heterogeneity (dissimilar norms, beliefs and values). As traditional societies grew and became more modern and heterogeneous, he said, their type of law also changed and, in particular, became less punitive.¹⁹²

Durkheim studied the movement from traditional to modern society and concluded that increasing heterogeneity leads to people sticking together because of increasing interdependence rather than because of similarity of views.¹⁹³ In Durkheim’s view (disputed by many scholars) this changes the necessary type of law from repressive law to restitutive law.¹⁹⁴ Durkheim was concerned with how society was held together, even while it changed. He believed that the social group, rather than the individual, should be the starting point of study and that “society has a life

¹⁹¹ Tamamaha, *supra* note 184 at 201.

¹⁹² Barkan, *supra* note 35 at 36.

¹⁹³ Moving from what he calls “mechanical solidarity” to “organic solidarity”, Pavlich, *supra* note 52 at 77.

¹⁹⁴ Barkan, *supra* note 35 at 177.

of its own, quite independent of the members or groups it shapes.”¹⁹⁵ Society had synergy, it was greater than the sum of the individuals living in it. Durkheim believed that solidarity, which could not be measured directly, could be indirectly and imperfectly measured by looking at the laws of the society as indicators of the collective morals of the society.¹⁹⁶

For Durkheim, society is prior to law. Law is both a measure of society’s development (and thus inseparable from morality and justice) and one of many “social facts”, a term Durkheim devised to describe the aspects of social life (institutions, status, class, attitudes, trends, ideologies, culture, ways of thinking etc.) which constrain and shape and coerce the behavior of individuals. Social facts are *sui generis* that should never be explained by thinking of them as the sum of the traits of individuals in the group. They are external to the individual members of the group and are coercive upon those individuals.¹⁹⁷

3.2.3 Max Weber¹⁹⁸

Max Weber (1864-1920) saw law as a means of social control. Weber studied the movement from traditional authority to rational/legal authority and from substantive legal procedures (where decisions consider fairness) to formal legal procedures (where decisions are based only on established rules).¹⁹⁹

Weber’s insights focused on how legal decision-making became more rational as societies became more modern, with this dynamic reflecting focus in much of his work on rationality as the key feature of modern society²⁰⁰

¹⁹⁵ Pavlich, *supra* note 52 at 74.

¹⁹⁶ *Ibid.*

¹⁹⁷ See generally Wacks, *supra* note 31 at 167 and Pavlich, *supra* note 52 at Ch 5.

¹⁹⁸ See generally G. Ritzer, *Sociological Theory* 8th ed (New York: McGraw Hill, 2011) Ch. 4, online: <www.archive.org/details/SociologicalTheory8thEditionGeorgeRitzerUploadedByUniversityOfSargodha..TaimoorAli>. (accessed December 18, 2017).

¹⁹⁹ Barkan, *supra* note 35 at 172.

²⁰⁰ *Ibid* at 33.

Weber believed that an important change as the world became more modern was a change in how people think, moving from accepting that things have a pre-ordained order that can't be challenged to a modern, rational way of thinking based on calculability (the results of social actions can be predicted in advance), methodical behavior (standardized procedures that lead to efficiency) and thinking rationally about what we are doing.²⁰¹ The Protestant Reformation led to the idea that people could improve their lot in life (and the after-life) through hard work.²⁰² Economic success was a sign that a person had been chosen for that success by God. Weber initially was describing the rise of capitalism, but his observations on the rationalization of society expanded to encompass the idea that “actors increasingly understand the meaning of their behaviors toward others as a means to an end” which leads to the growth of “rational administrative organizations (bureaucracy), types of legitimate political authority, as well as economic and legal structures”²⁰³ Advances in technology led inevitably to decisions being made on the basis of rationality and to the creation of a professional bureaucracy which in turn led to requirements for new laws and controls that further reduced individual freedom and traditional interactions in society.

3.2.4 Roscoe Pound

Roscoe Pound (1870-1964) was the Dean of the Harvard Law School, and a leading writer of sociological jurisprudence.²⁰⁴ He is identified with the school of legal realism. He is

²⁰¹ G. Ritzer, “The Weberian theory of rationalization and the McDonaldization of contemporary society” in: P. Kivisto ed *Illuminating social life: Classical and contemporary theory revisited* (Sage, 2005) online: <www.atgstg01.pineforge.com/upm-data/16567_Chapter_2.pdf>.

²⁰² See Pavlich, *supra* note 52 at 104, citing M. Weber, *The Protestant Ethic and the Spirit of Capitalism* (London: Courier Dover, 2003), and see Ritzer *ibid* at 148.

²⁰³ Pavlich, *ibid* at 115.

²⁰⁴ Wacks, *supra* note 31 at 164.

well known for his observation that there is a distinction to be made between the law on the books (law as written) and the law in action (the law as it is applied in real life).²⁰⁵

His purpose was not, however, confined to identifying the tension between the two, but he wanted to show how they could be harmonized. He sought, in other words, to make the latter conform to the former

For Pound, the task of lawyers and legislators is ‘social engineering’. The law, by identifying and protecting certain interests, ensures social cohesion.²⁰⁶

Pound’s views that the law in action should be made to conform to the law on the books has application to OHV regulation where a gap between the two is evident.

3.2.5 Michel Foucault

Foucault (1926-1984) was a French philosopher who is now associated with the associated with the postmodernist school. In most versions of the traditional approach, the monolithic state holds all the power, making the rules and enforcing them. Foucault thought differently. He thought that “[p]ower is intertwined with knowledge, and constructed within a network of constantly shifting social relations truth and power are mutually dependant.”²⁰⁷

In a sort of symbiotic relationship, those inside the legal system have knowledge of the law which allows them to exercise control over legal matters. Legal authorities (the state and the courts) “define what counts as knowledge within the system.”²⁰⁸ Foucault believed that power existed at all levels in society, not just at the top. Power was a relationship, rather than a thing which could be possessed:

But in describing power, Foucault concentrates on the local, or small scale, relationships which cumulatively create ideas of what is acceptable or true within

²⁰⁵ Roscoe Pound. “Law in Books and Law in Action”, (1910) 44 Am L R 12.

²⁰⁶ Wacks, *supra* note 31 at 164. Pound developed an elaborate system through which he categorized various types of interests and he devised methods and rules for deciding which ones should prevail. An analysis of Pound’s system of classification of interests (which Wacks describes as ‘labyrinthine’, *ibid* at 164) is beyond the scope of this thesis. For a critique of Pound’s views see Wacks, *ibid* at 165

²⁰⁷ Marett Leiboff and Mark Thomas, *Legal Theories in Principle* (Queensland: Lawbook, 2004) at 246.

²⁰⁸ *Ibid* at 246.

the particular system, rather than the monolithic structures described by conventional legal theory

Law, then, is not described by reference to institutions or institutional forces . . . but by the myriad local and particular interactions which constitute society . . .²⁰⁹

The idea that law is primarily about power relationships is one seen in current literature described as new realism:²¹⁰

New realists agree with traditional or liberal realists that we must focus not only on what judges say they do, but on what they actually do. But new realists claim that liberal realists exclude certain structural commonalities of the judiciary, such as their relative homogeneity in terms of class, race and gender. Moreover, new realists posit that law is best understood as the complex product of a host of interacting social forces. More specifically, law is about power: law is not only a reflection of the power relations in society; it simultaneously constitutes and legitimizes the power relations in our society. As such, law is a terrain of struggle over the meaning and quality of societal existence. Therefore, contrary to liberal realists who work on an assumption of societal consensus, new realists identify strong social cleavages that result in deep dissensus. In particular, new realists argue that identity is a vital determinant of power (or powerlessness).²¹¹

3.3 The modern field of law and society

The history of the modern field of law and society is not long. As outlined above, the earliest influences date from not long before the beginning of the twentieth century. Most of the development in the field has taken place since the 1960s.

3.3.1 Methods used in law and society research

Law and society research does not follow a standard method of its own, but rather uses the methods already prevalent in the social sciences it draws upon, primarily sociology.²¹²

²⁰⁹ *Ibid.*

²¹⁰ Including the various schools of identity jurisprudence such as feminist jurisprudence, First Nations jurisprudence, critical race theory, gay/lesbian/queer theory and critical disability theory. See Devlin, *supra* note 51 at 182-204.

²¹¹ *Ibid* at 182.

²¹² R. Banakar and M. Travers, *Theory and Method in Socio-Legal Research* (Oxford: Hart, 2005) from the Introduction at ix.; See also the extensive bibliography provided in L. McHugh-Russell, “Qualitative Methods for Law and Society Research – An EUI Research Guide” at 2, online: <<https://www.eui.eu/Documents/Research/Library/ResearchGuides/Law/EUI-Law-and-Society-Qualitative-Methods-Reading-List-April-15.pdf>> (accessed December 2017).

Law and society is . . . not a discipline but the application of other disciplines to a specific social system. Hence, it borrows its assumptions, on the whole, from the other social sciences. It borrows their methods as well.²¹³

The goal of social science research is to explain the relationship between variables.²¹⁴

Most studies are observational. One phenomena, the dependant variable is empirically observed to be affected by other phenomena, the independent variables. The effect is observed and the results are measured, sometimes quantitatively but more often qualitatively. Observational studies can be contrasted with randomized control trials in which experiments are conducted, randomly assigning subjects to either a control group or an experimental group and then measuring the effect of staged changes to the independent variable. Randomized control trials, common in the medical profession, are rarely done in socio-legal research because of the practical difficulty of setting up control groups in the natural world and because of ethical concerns.²¹⁵

The main methods of conducting sociological empirical research are surveys, laboratory or field experiments, structured and unstructured interviews, overt and covert participant observation, ethnographies, case studies and longitudinal studies.²¹⁶ Each research method has sub-varieties. Empirical data is anything that is observable or measurable. Among many

²¹³ Friedman, “Coming of Age”, *supra* note 36 at 2.

²¹⁴ Sutton describes four possible relationships between variables. The relationship can be deterministic (x causes y), probabilistic (y is more likely if x happens), conditional (x influences y, but only if z also happens) or reciprocal (x and y influence each other over time). See Sutton, *supra* note 164 at 16.

²¹⁵ See G. Grenier, and A. Matthews, “Randomized Control Trials in the United States Legal Profession” Harvard Public Law Working Paper No. 16-06 (2016) online: <<http://a2jlab.org/publications/rcts-in-the-us-legal-profession>>.

²¹⁶ Professor Friedman in “Coming of Age”, *supra* note 36 states:

Some scholars do survey research, some look at archival material, some squeeze out findings from masses of quantitative data. Some do experiments—with mock juries, for example, or with the usual guinea pigs, psychology students. Some canvas the scene to find natural or quasi-experiments. Some carefully analyze legal language and legal rhetoric. A few might travel to tropical islands to watch the elders resolve quarrels in the shade of a coconut palm. Some use game theory, regression equations, advanced statistics. Others spin out socio-legal theory, sometimes from nothing more solid than intuition. Law and society is thus a very big tent, and getting bigger all the time.

possibilities, data may be “notes taken while observing people’s behavior, transcripts of interviews, texts in historical archives and legal files, or statistics gathered from surveys, government publications, and organizational records.”²¹⁷ Data generated through research can be quantitative, recording things that can be measured with numbers and then employing a variety of statistical tools to analyse the data. Data generated by law and society research more often is qualitative, recording verbal data rather than numerical data. The data relates to something that is occurring in society and will usually involve preferences, opinions, qualities, perspectives, experiences and circumstances of the lives of the subjects.

While statistical analysis of quantitative data “follows formulas and rules . . . qualitative analysis is a creative process, depending on the insights and conceptual capabilities of the analyst.”²¹⁸ Schmidt and Halliday state that qualitative law and society research requires a grounding in research techniques, but characteristics of conducting field work lead to a persistent fear among potential researchers that they don’t have the skills necessary to do the work.²¹⁹ The features of field work that research texts do not prepare the researcher for include (i) things almost always go wrong (ii) research projects are inevitably longer and more complex than expected (iii) chance opportunities and unexpected disappointments are inevitable and (iv) other researchers are not always transparent about the difficulties they encountered.²²⁰ Because these problems are inevitable, the authors state:

being methodologically *thoughtful* – possessing the capacity to move from the naïve understanding of one’s project to the more sophisticated, and to discover the questions, theoretical potential, and epistemological problems latent in one’s

²¹⁷ Sutton, *supra* note 164 at 15.

²¹⁸ M. Patton, “Enhancing the Quality and Credibility of Qualitative Analysis” (1999) *Health Science Research* 34:5 Part II, 1189 at 1190.

²¹⁹ P. Schmidt and S Halliday, eds, “Introduction” in *Conducting Law and Society Research: Reflections on Methods and Practices* (Cambridge: Cambridge University Press, 2009) at 2. The authors refer to this fear as ‘methodological anxiety syndrome’.

²²⁰ *Ibid.*

engagement with the real world as one sees it – is ultimately more important than being methodologically trained.²²¹

The process of conducting law and society field research, then, is inherently unpredictable and has been described as “a messy business.”²²² The research question at the beginning of a project can evolve or turn out to be the wrong question as the project progresses. This is more likely with qualitative than with quantitative research. With quantitative analysis, the “analysis does not start until data collection is completed. In contrast, in qualitative research . . . much or all of the data is usually collected by the primary researcher(s) and the initial analysis of those data starts simultaneously with the data collection.”²²³ Other difficulties mentioned by this author include the time intensive nature of data collection,²²⁴ the difficulties inherent in handling large volumes of data,²²⁵ choosing between quantitative and qualitative methods (or a combination of the two),²²⁶ choosing between data collected through interviews and data collected through observation when you have both,²²⁷ challenges of interpreting, analyzing the data and communicating the results in writing,²²⁸ working with collaborators who may not have the necessary skills,²²⁹ participants increasingly suffering from survey fatigue²³⁰ and dealing with increasingly stringent ethics requirements.²³¹

²²¹ *Ibid* at 4.

²²² H. Kritzer, “Conclusion: ‘Research is a Messy Business’ – An Archeology of the Craft of Sociolegal Research” in Schmidt, *ibid* at 264.

²²³ *Ibid*.

²²⁴ *Ibid* at 270.

²²⁵ *Ibid*.

²²⁶ *Ibid* at 272.

²²⁷ *Ibid*.

²²⁸ *Ibid* at 274

²²⁹ *Ibid* at 276.

²³⁰ *Ibid* at 277.

²³¹ *Ibid* at 280.

3.3.2 Assumptions and themes in modern law and society research

Professor Friedman argues that there are several core ideas within the law and society movement that would command “at least something close to consensus”.²³² First, law and society scholars would agree that law is not completely autonomous from society, even if they would hold a range of views about the degree of separation between law and society. Second, the impact of legal rules always depends to a large degree on what is going on in society. Third, large changes in society always provoke changes in the legal system and these changes can be positive or negative. Fourth, the type of legal system that exists is a product of the society in which it is created. Modern democratic societies will have legal systems that look different than the legal systems in simpler or more authoritarian societies.

After examining three sources of data, the authors of a 2013 article titled “Is There a Canon of Law and Society?” make five conclusions regarding the current context of the field.²³³ First, the modern field of law and society is itself “a product of the liberal, pluralistic, and democratic politics of the 1960s.”²³⁴ Second, the field rose in part as a reaction to formal doctrinal analysis of law, which was viewed as “inadequate to explain law as it is experienced and lived in and through society.”²³⁵ Third, central claims have developed in the field, being “the meaning of law is not intrinsic to statutes or cases, but rather is dependent on extralegal factors; that the form, interpretation, enforcement, and impact of law tend to reinforce the extant social

²³² Friedman, “Coming of Age”, *supra* note 36 at 6.

²³³ C. Seron, et al “Is There a Canon of Law and Society?” (2013) 9 *Ann Rev Law Soc* 287. The authors first reviewed presentations given by the presidents of the United States Law and Society Association at the annual conferences of the organization from 1983 to 2012. Second, the majority of the meeting themes of the same organization from 1990 through 2012 were analysed. Third, a review was made of what they describe as “exemplary” and “iconic” assigned readings from law and society courses taught at eighteen universities in the United States. The conclusions rely on the first two data sources.

²³⁴ *Ibid* at 289, citing B. Garth and J. Sterling, “From legal realism to law and society: reshaping law for the last stages of the social activist state” (1998) 32:2 *Law Soc’y Rev* 409.

²³⁵ *Ibid* at 290.

structure; and that the sources of law are themselves socially derived.”²³⁶ Fourth, specialization into sub-fields within law and society has occurred and there is ongoing debate over which sub-fields should have a place.²³⁷ There is a tension within the field between a desire to include viewpoints from multiple disciplines and a desire to keep the field cohesive. “To be interdisciplinary is to be inclusive, but if inclusiveness is without limits, then the field threatens to dissolve.”²³⁸ Fifth, the authors state that “[t]he founding commitments to bridging social science and legal scholarship, progressive social change, a pluralistic politics, and a critical perspective on law’s internal accounts continue to shape the field’s discourse and debates.”²³⁹

The authors then identify six themes around which they group readings from undergraduate and graduate level law and society courses across American universities. These themes illustrate what some of the important areas of study are within the field.²⁴⁰ Three of those themes (law as a means of conflict resolution; the reciprocal relationship between law and social change; and law in everyday life (why people obey the law) are particularly applicable to the problem of non-compliant OHV operation and will be dealt with next.

3.3.3 Law as a means of conflict resolution

Under the theme, “Disputing – Individual and Collective” Seron and Sibley provide examples of commonly assigned law and society readings which clearly illustrate the difference in perspective between the traditional legal model and the law and society model. The examples

²³⁶ *Ibid*, citing C. Seron and SS Sibley, “Profession, science and culture: an emergent canon of law and society research” in A. Sara ed *The Blackwell Companion to Law and Society* (Malden, Mass: Blackwell, 2004).

²³⁷ *Ibid*.

²³⁸ *Ibid* at 293.

²³⁹ *Ibid* at 290.

²⁴⁰ The six themes are (1) Situating Law and Society; (2) Disputing – Individual and Collective; (3) Law and Social Change; (4) Law in Everyday Life; (5) Law as Institution; and (6) Emerging Themes. The authors point out that beyond the foundational works there is a great deal of variation between universities and suggest this is a result of the varying intellectual interests of the instructors. *Ibid* at 294.

include studies of how business people tend to avoid contract and rely on informal practices,²⁴¹ how people tend to avoid legal process when deciding what to do with a dispute”,²⁴² and how gender, race and financial resources can play a significant role in the results of cases.²⁴³

The relationship of the law to societal conflict and its resolution is a subject that has been a focus of the modern law and society approach, for example by Paul Bohannon writing in the mid-1960s, Roberto Unger writing in the 1970s and John Dryzek writing in the 1980s.²⁴⁴ Roberto Unger studied what he saw as the movement from customary law (shared patterns of interaction) to bureaucratic law (explicit and enforced rules) to true legal order (law that is autonomous from the state and applicable to everyone) and theorized about the societal conditions needed to ensure the progression.

Limiting the operation of law to being a mechanism for conflict resolution can be seen as too narrow:

Law is sometimes seen as a means of conflict resolution, dispute settlement, or grievance arbitration. We suggest that this view idealizes and oversimplifies the relationship between law and social conflict. We have identified four different ways to characterize the relations between law and social conflict: These are: (1) articulation of conflict that already existed; (2) creation of conflict; (3) transformation of conflict; and (4) resolution or apparent resolution.²⁴⁵

These ways of characterizing the relationship between law and social conflict can be applied to OHV use. Conflict exists between some OHV users and other users of the land.

²⁴¹ *Ibid* at 295 citing S. Macaulay, “Non-contractual relations in business: a preliminary study” (1963) 28:1 Am Sociol Rev 55.

²⁴² *Ibid* at 295, citing D.M. Trubek “Civil Litigation Research Project” (2008) 2:4 Law & Pol’y 495; W. Felstiner, R. Abel & A. Sarat, “Emergence and Transformation of disputes: naming, blaming, claiming” (1980) 15:3/4 Law & Soc’y Rev 631.

²⁴³ *Ibid*, citing K. Bumiller, “Victims in the Shadow of the Law: a critique of the model of legal protection” (1987) 12:3 Signs 421; See also M. Galanter, “Why the ‘haves’ come out ahead: speculations on the limits of legal change” (1974) 9:1 Law Soc Rev 95.

²⁴⁴ See generally Barkan, *supra* note 35 at 92-133; Regarding conflict related to environmental law see Greenbaum 1995, *supra* note 44 at 3-5 and 13-60; Regarding Roberto Unger, see Barkan, *supra* note 35 at 177.

²⁴⁵ Greenbaum 1995, *ibid* at 4.

Charges being laid under existing law or the creation of new legal restrictions “gives legal expression to the pre-existing conflict”.²⁴⁶ Second, the “legal mechanism itself may then pit both sets of citizens . . . against the government in terms of application and enforcement”²⁴⁷ thereby creating new conflict. Third, the conflicts between different land user groups (OHV users, other land users, land owners) have been transformed over the course of the matter, most recently characterized by disagreements over the nature, necessity, management and funding of a trail system, along with the earlier disputes whether a total ban is appropriate in certain areas or at certain times (all of which is discussed in the next Chapter). The fourth characterization of the relationship between law and social conflict created by OHV use, resolution or apparent resolution, is not readily apparent. While some small instances of conflict appear to have been resolved in the sense that decisions have been made (for example, the decision by the Alberta government to temporarily allow some OHV use on designated trails in the newly created Castle Provincial and Wildland Parks²⁴⁸) the resolution is not satisfactory to many.²⁴⁹

Environmental conflicts come in an almost infinite variety. They can vary in geographic scale from world-wide to regional to local, in severity from apocalyptic to minor and in time frame from multi-generational to immediate. They can involve parties with vastly different power and resources.

We can also think about environmental conflicts in terms of the interests of the parties:²⁵⁰

²⁴⁶ *Ibid.*

²⁴⁷ *Ibid.*

²⁴⁸ Alberta Environment and Parks website, online: <www.albertaparks.ca/media/6373227/faqs.pdf> at items 7 and 8.

²⁴⁹ See for example J. Schnarr, “Groups Want OHV Ban in Castle Area”, *The Lethbridge Herald* (21 May 2016) online:< <http://lethbridgeherald.com/news/local-news/2016/05/21/groups-want-ohv-ban-in-castle-area/>>.

²⁵⁰ Using “parties” in a very broad sense as meaning the people on the various sides of the dispute or disagreement. Many environmental disputes do not have legally recognized parties because the issues are not justiciable, interested persons have no standing or, even if those two significant hurdles have been overcome, simply because no legal proceeding has been started.

Some people are drawn into environmental conflict through the pursuit or defence of their own well-being. We will refer to such stakes as material “interests”. Other people are struggling on behalf of the interests of human or non-human others, or for the sake of moral or political principle, or for a position or policy that symbolically the honour of a way of life in which they are invested or of the group to which they belong . . . [w]e will, for short, call all such stakes or concerns “values”. This analysis yields a three-way typology of conflict: (i) interests versus interests, (ii) interests versus values, (iii) values versus interests. This typology is too simple, however, since there are different kinds of interests and values, and because real conflicts involve alliances among parties with different kinds of stakes.²⁵¹

Interests and values are closely related and can be difficult to distinguish between.²⁵² A person may take a stand on an issue in which they have no direct personal stake, based on what they see as principle. Those principles may lead them to assert that they have rights and that others have correlative duties.²⁵³ Some interests are stronger and seen as more important than others (survival interests usually are more fiercely guarded than non-survival interests). Interest conflicts can be symmetrical or zero-sum (where one party’s use lowers the quality of another party’s use) or asymmetrical (where parties have different interests such as economic interests versus pure enjoyment interest).²⁵⁴ OHV user conflicts would not involve survival interests but could be symmetrical (say between a hiker who wants quiet enjoyment and the rider of a loud dirt bike) or asymmetrical (say between an OHV group and a hunting outfitter who says the OHV traffic is scaring game away).

²⁵¹ Greenbaum 2009, *supra* note 44 at 3.

²⁵² *Ibid* at 3.

²⁵³ See generally, David R. Boyd, *The Right to a Healthy Environment: Revitalizing Canada’s Constitution* (Vancouver: UBC Press, 2012), David R. Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment*, (Vancouver: UBC Press, 2012); The Hon Justice Brian J. Preston SC, “The effectiveness of the law in providing access to environmental justice: an introduction” in Paul Martin et al eds, *The Search For Environmental Justice* (Cheltenham, UK: Edward Elgar, 2015). Off highway vehicle users in Alberta often frame regulation as a restriction of their “right” to use Crown land as they please.

²⁵⁴ Greenbaum, 2009, *supra* note 44 at 5.

Environmental conflicts can also be “conflicts of taste” where people simply prefer different things.²⁵⁵ The preferences are subjective and may or may not be based on principle. An example of a conflict of taste can again be found in the OHV user versus hiker dispute. Hikers prefer silence and tranquility in the wilderness, OHVs are noisy. There may be elements of principle woven into the hiker’s position based on other effects of OHV use, but it is also largely a simple subjective preference. A more poignant example of a conflict of taste is conflict which occurs between riders of different types of OHV, for instance between motorcycle riders and those who would like to operate large four-wheel drive trucks in an area.²⁵⁶

While conflicts between the interests of individuals can be serious and positional, in general they should be more suitable to resolution through negotiation, mediation or a consensus-based process than are conflicts of values.

Environmental value conflicts are disagreements over what “is valuable, good or morally right” based on principle.²⁵⁷ The sources of principle are many, including the fundamental beliefs flowing from the different environmental schools of thought and where a person falls on the continuum illustrated in Figure 2 above on page 34 above. Conflicts over values are difficult to resolve and are often seen as zero-sum games, with the gains of one party being losses to another. Conflicts of values are not likely to be resolved monetarily.²⁵⁸ Between some individuals, the conflict over where OHV use should be allowed is a conflict of values.

²⁵⁵ *Ibid* at 6.

²⁵⁶ These conflicts have been studied in the United States but not in Alberta. See Rachel Albritton and Taylor V. Stein “Integrating social and natural resource information to improve planning for motorized recreation” (2011) 31 *App Geog* 85.

²⁵⁷ *Ibid* at 4.

²⁵⁸ *Ibid*.

Environmental value conflicts can be more suited for adjudicative processes (such as court processes or arbitration) than to negotiation, mediation or a consensus-based approach. Environmental disputes, whether over interests or values, can include disputes over facts.²⁵⁹ Environmental matters are often scientifically complex, with support for propositions on both sides being available. There can be legitimate, honest disagreement between experts about the ecological effects of one course of action versus another.²⁶⁰ People in positional disputes tend psychologically to be more receptive to data which supports their pre-existing beliefs (cognitive bias) and which is in line with their underlying values.²⁶¹ This is apparent in the how scientific information about OHV damage is treated by people on both sides of the debate. On the anti-OHV side, claims of water quality harm far downstream may have been accepted without enough scrutiny.²⁶² For those opposed to increased OHV regulation, scientific reports have been routinely been criticized and ignored.²⁶³

The costs and benefits of a proposed environmental measure can accrue to a single entity (or small group) or to a larger group, even to society as a whole. “Generally speaking, if the total levels of costs and of benefits are comparable, more concentrated interests will tend to prevail

²⁵⁹ *Ibid* at 5.

²⁶⁰ Factual disputes between off highway vehicle user groups and others include the extent of harm caused by ohvs, the economic benefits provided by the motorized recreation industry, the dollar cost of providing a trail system, the percentage of citizens who would benefit from new trails and even over how many people operate OHVs.

²⁶¹ See for example Dan M. Kahan, Hank Jenkins-Smith & Donald Braman, “Cultural cognition of scientific consensus” (2011) 14:2 J Risk Res 147, online: <www.tandfonline.com/loi/rjrr20>, DOI:10.1080/13669877.2010.511246>.

²⁶² See section 4.2.5 - Negative impacts on water quality, below. Claims of distant downstream harm to water quality caused by OHV use are easily overstated. The principle harm from increased sedimentation is to the local breeding habitat of salmonids, including trout, although all linear disturbances contribute to cumulative effects that result in faster spring runoffs and associated flooding.

²⁶³ See Lorne Fitch, “Stuck in the mud: the OHV debate” *The Lethbridge Herald* (1 May 2018) online:< <https://lethbridgeherald.com/commentary/opinions/2018/05/01/stuck-in-the-mud-the-ohv-debate/>> and Lorne Fitch, “Opinion: The science behind off-highway vehicle restrictions” *The Edmonton Journal* (31 January 2018) online: < <https://edmontonjournal.com/opinion/columnists/opinion-the-science-behind-off-highway-vehicle-restrictions>> .

over more diffuse interests.”²⁶⁴ This characterization fits the debate between OHV user groups and their opponents in Alberta. Although the number of people belonging to off highway user groups is not large in proportion to the total number of people in Alberta, they have been focused and vocal in their ongoing opposition to new restrictions, such as those put in place in the new Castle Park. They have attempted to reframe the dispute as one about rights, family values and tradition. In contrast, opposition to OHV use has been more diffuse and has tended to focus on showing environmental harm, especially harm to water quality.

3.3.4 Law and social change - societal change leading to legal change

The fact that significant social change will leads to legal change is generally accepted. Large-scale changes in society can produce “far-reaching changes in the nature of a legal system, legal reasoning and other fundamental dimensions of law.”²⁶⁵ Sociologists and theorists including Emile Durkheim, Max Weber, Karl Marx and Roberto Unger have done work in different contexts using different methods but which all were “concerned with a basic social science question: how and why did the law change as society became more modern?”²⁶⁶ At this large-scale level, theorists are interested in studying the effect of social change on “the nature of a legal system, legal reasoning, and other fundamental dimensions of law.”²⁶⁷

Law and society scholars are also interested in the effect of non-system wide changes in society on specific laws and processes. Examples of areas studied by law and society scholars where laws have been enacted in response to changes in society include laws which regulate homelessness and vagrancy, the movement away from tort based claims to compensatory

²⁶⁴ Greenbaum, *supra* note 44 at 6.

²⁶⁵ Barkan, *supra* note 35 at 170.

²⁶⁶ *Ibid* at 170, citing Roger Cotterell, “Law in Social Theory and Social Theory in the Study of Law” in Austin Sara ed, *The Blackwell Companion to Law and Society* (Malden, MA: Blackwell, 2004) at 15-29.

²⁶⁷ Barkan, *supra* note 35 at 170.

workers compensation to redress harm caused to workers in industrial accidents, far reaching changes to the laws regulating family life (no-fault divorce, co-habitation, property division, support, same-sex marriage, parental authority and corporeal punishment of children), legal changes in response to changes in technology, employment insurance, laws which guarantee income for the elderly, welfare legislation, and rules simplifying the civil dispute resolution processes.²⁶⁸

Community values change over time. For most of human history these changes in values took place slowly, allowing the law time to slowly change in response.²⁶⁹ In modern society, change occurs much more quickly. There can be a lag between a societal change, for example the changes to how people communicate and what is viewed as acceptable conversation brought about by the rise of social media, and the legal response to that change. Furthermore, the legal response to any social change may not be perfectly executed and may provoke a backlash, causing a reciprocal round of further social change. These problems are exacerbated when society is polarized and norms are divided between groups, as is the case in the OHV regulation debate. The legal response by one political party attempting to please its base of support may be undone by a subsequent party in power trying to please its different base of support.

3.3.5 Law and social change - legal change leading to societal change

Changes in law can also produce changes in society (law as the independent variable).²⁷⁰ But law is only one of many interrelated factors which impact society, including “technology, ideology, competition, conflict, political and economic factors and structural strains.”²⁷¹ These

²⁶⁸ See generally Barkan, *ibid* at 178-190; Vago and Nelson, *supra* note 162 at 212; Macaulay et al, *supra* note 172 at ch. 3; William J. Chambliss, “Sociological Analysis of the Law of Vagrancy” in David Cowan, Linda Mulcahy and Sally Wheeler, eds, *Law and Society: Critical Concepts in Law*, vol 2 (London: Routledge, 2014) at 3.

²⁶⁹ Vago and Nelson, *supra* note 162 at 212.

²⁷⁰ Barkan, *supra* note 35 at 190.

²⁷¹ Vago and Nelson, *supra* note 162 at 210.

causes of change are difficult to untangle and “one should be somewhat skeptical and cautious concerning one-factor casual explanations in general.”²⁷²

Law and society scholars have studied cases where societal norms have shifted in response to changes in the law. An important example is the rise of the American civil rights movement, partially in response to the decisions in the class-action case of *Brown v. Board of Education*.²⁷³ In the landmark case, Chief Justice Warren, speaking for a unanimous Supreme Court of the United States, ruled that separate educational facilities for black and white children were inherently unequal, paving the way to the conclusion that segregation would not be constitutional in other contexts and facilities.

Barkan notes there are there are two “initiators” of legal change which leads to social change.²⁷⁴ First, in some cases, including the society wide civil rights changes in the wake of *Brown v. Board of Education*, law is used as a tool by (and sometimes against) individuals and groups who are part of a social movement “trying to achieve social, economic, political and/or cultural change.”²⁷⁵ The *Brown* case, for example, was initiated by the Legal Defense and Education Fund of the NAACP (the National Association for the Advancement of Colored People), an organization whose mission is “to ensure the political, educational, social, and

²⁷² *Ibid.*

²⁷³ *Brown v. Board of Education of Topeka*, 347 U.S. 483(1954); *Brown v. Board of Education of Topeka*, 349 U.S. 294 (1955).

²⁷⁴ Barkan, *supra* note 35 at 191.

²⁷⁵ *Ibid* at 199. On the relationship between the law and social movements, see generally Susan Staggenborg *Social Movements*, 2nd ed (Don Mills: Oxford University Press, 2012); Charles J. Stewart, Craig Allen Smith and Robert E. Denton, *Persuasion and Social Movements*, 6th ed (Long Grove, Illinois: Waveland Press, 2012); Michael McCann “Law and Social Movements: Contemporary Perspectives” (2006) 2 Ann R L Soc Sci 17; Cary Coglanes “Social Movements, Law, and Society: The Institutionalization of the Environmental Movement” (2001) 150:1 U Penn L R 85; Lauren B. Edelman, Gwendolyn Leachman and Doug McAdam “On Law, Organizations and Social Movements” (2010) 6 Ann Rev L Soc Sci 653.

economic equality of rights of all persons and to eliminate race-based discrimination.”²⁷⁶ Legal mobilization by such groups has had mixed long-term social change results.²⁷⁷

Second, Barkan notes “some legal changes are initiated primarily by legislators or other government officials themselves, although in practice they are usually responding at least in part to the concerns of certain interest groups, including political lobbyists.”²⁷⁸

In either case, where a new law impacts people, it will cause people’s behavior to change. There are many interrelated variables. The number of people impacted by a new law can vary widely. A law with the intended result of encouraging the limited population of OHV users to stay on designated trails will by definition impact fewer people than will a law such as the *Climate Leadership Act*²⁷⁹ which is intended to change the carbon producing behavior of the entire population of Alberta.

Laws may lead directly or indirectly to changes in behavior.²⁸⁰ Direct impact occurs when the law itself causes a change in behavior.²⁸¹ Indirect impact occurs when the new law changes a social institution, and that change causes the behavior of individuals to change. Social institutions are the practices across a society that are “regularly and continuously repeated, are sanctioned and maintained by social norms, and have a major significance in social structure.”²⁸²

²⁷⁶ NAACP website online: <<http://www.naacp.org/about-us/>>.

²⁷⁷ See generally Barkan, *supra* note 35 at 199 and Vago and Nelson, *supra* note 162 at 224. Barkan at 200 provides six reasons: (1) lack of sympathy from the courts and government (2) lack of resources (3) rules of standing and jurisdiction (4) resistance after victory, including lack of enforcement (5) diversion of the energy of the members of the movement away from strategies that might be more effective than litigation (6) the winning of minor symbolic victories which do not solve the problem but which satisfy the supporters of the movement and cause them to accept the new *status quo*.

²⁷⁸ Barkan, *supra* note 35 at 191. Note that this is the starting point for Farber’s paradigm, *supra* section 1.1. The important question as regards slippage is “What happens next?”

²⁷⁹ S.A. 2016 Chapter C-16.9.

²⁸⁰ Barkan, *supra* note 35 at 218 and Vago and Nelson, *supra* note 162 citing Yehezkel Dror “Law and Social Change” in Rita James Simon, ed, *The Sociology of Law* (San Francisco: Chandler, 1968) at 673.

²⁸¹ What causes people to change their behavior when they are directly impacted by a change in the law will be discussed below.

²⁸² N. Abercrobie, S. Hill and B. Turner, *The Penguin Dictionary of Sociology* (London: Penguin, 2006) at 200.

They organize behavior in patterned ways. Examples of social institutions are the family, the education system, the various health care systems, the legal system and its parts. Social institutions allow society to function in an orderly way and lead to social cohesion. If a new law changes a social institution (for example by making it illegal for schools to segregate children based on race), people may come to accept integrated classes as normal and change their views. The change in the law has then had an indirect effect on behavior in such a case.

Other examples where a legal change has led to a social change include social anti-smoking attitudes changing following laws restricting it, same sex marriage and acceptance of gay rights generally following changes to human rights legislation, social attitudes about marijuana use changing following decriminalization, acceptance of the need to accommodate people with physical handicaps following human rights legislation changes and social attitudes about drinking and driving changing in response to stiffer penalties being imposed.

3.3.6 Why people obey (or break) laws

What leads people to obey laws has been a major focus of law and society research. Throughout history, law has been used to influence social change.²⁸³ The attempted change can be positive, protecting human rights and minorities, increasing civil liberties, reforming education, reducing discrimination, protecting the environment or it can be negative, aimed at accomplishing the opposite of the things mentioned.²⁸⁴ Law can be used in a deliberate attempt to create new societal structures through planning, or it can be used to tear down existing societal structures.²⁸⁵ If new law is going to lead to social change, it must first be obeyed. Under the

²⁸³ See generally Vago and Nelson, *supra* note 162 at 214 and the works cited there.

²⁸⁴ *Ibid.*

²⁸⁵ Lawrence Friedman “General Theory of Law and Social Change” in J.S. Ziegel, ed., *Law and Social Change* (Toronto: Osgood, 1973) at 17.

theme, “Law in Everyday Life”, Seron et al identify literature describing studies of why people follow the law.²⁸⁶ One of the works cited is *Why People Obey the Law*.²⁸⁷ In the study which led to the book, a random sample of 1,575 residents of Chicago were interviewed in 1984 by telephone (and a subset re-interviewed a year later) regarding “their views of the police and courts in Chicago and about their level of behavioral compliance with the law.”²⁸⁸

The author of the study offers the following summary in the Afterword to the 2006 printing of the book:

The overall concern of *Why People Obey the Law* was with the relationship between people and authority. The study explored the conditions under which people were willing to defer to authorities, ceding to those authorities control over their behavior in particular settings. . . . One simple view is that authorities command others through their control of power.

Why People Obey the Law articulated an alternative conception of the relationship between the government and the governed, between authorities and the people. This alternative view argued that authorities should govern based on the consent of those that they govern, consent that develops from the experience of fairness when dealing with authorities. This fairness leads to legitimacy, a key precursor of consent and voluntary acceptance.²⁸⁹

When thinking about the control of harmful behavior by operators of OHVs on Crown land in Alberta, it is easy and common to describe a potential solution as one involving forcing deterrence through stricter rules and more robust enforcement. These are what is described in *Why People Obey the Law* and elsewhere as instrumental solutions.²⁹⁰ The study did not conclude that instrumental solutions had no place, rather it showed through empirical research that they may not always be the most effective tool:

²⁸⁶ *Supra* note 236 at 296.

²⁸⁷ Tom R. Tyler, *Why People Obey the Law* (Princeton: Princeton University Press, 2006).

²⁸⁸ *Ibid* at 12.

²⁸⁹ *Ibid* at 277.

²⁹⁰ *Ibid* at 3. For a criticism of instrumentalism generally on theoretical grounds, see Bruce Parady, *Ecolawgic* (Kingston: 5th Forum Press, 2015) at 1-14.

The first scholarly contribution of *Why People Obey the Law* was to provide empirical support for the value of legitimacy as a motivating force in the area of law. In fact, the findings of this study suggested that legitimacy was more influential than was the risk of being caught and punished for rule breaking.²⁹¹

But if new laws are to change social values, they must do more than fit with existing norms and behaviors. William Evan, writing in 1965, wrote that law doesn't just codify existing customs in a passive way, it also can also act as an educational force actively modifying people's behavior and values if (1) the source of the law is perceived to be authoritative (2) the rationale for the new law emphasizes its compatibility with existing institutionalized values (3) publicity emphasizes that similar laws have worked well elsewhere (4) changes happen quickly (5) there is consistent enforcement with no corruption (6) both positive and negative sanctions are used and (7) funding is provided to protect the rights of people who suffer if the new law is broken.²⁹² Instrumental means to encourage compliance can be positive (rewards) or negative (sanctions). Compliance can also be encouraged through normative means. Laws that are accepted as legitimate and procedurally fair are more likely to be obeyed.

Social factors can be studied individually by law and society researchers.²⁹³ They have also been considered in clusters. For example Michael Ilg offers a "three-interest view" to explain why people obey the law, first for individual gain (broadly defined), second because they wish to protect their reputation and are therefore persuaded to comply by prevailing social norms and third because they are willing to give up personal benefit because of shared beliefs or fidelity

²⁹¹ *Supra* note 287 at 270.

²⁹² William M. Evan, "Law as an Instrument of Social Change" in Alvin W. Gouldner and S.M. Miller eds, *Applied Sociology: Opportunities and Problems* (New York: The Free Press, 1965) at 285.

²⁹³ For example, a 1999 study of Edmonton adolescents found that the level of self-control a person had was the strongest predictor of law breaking behavior with risk seeking and impulsivity being the dimensions of self-control which were the most predictive. The study found that internal self-control interacted with external social control and that males were more likely to offend than females. See M. Reza Nahaie, Robert A. Silverman and Teresa C. LaGrange, "Self-Control and Social Control: An Examination of Gender, Ethnicity, Class and Delinquency" (2000) 25:1 Cdn J Socio 35, online: <www.jstor.org/stable/3341910>.

to a constitutional order.²⁹⁴ Lawrence Friedman offers three differently described but closely related and overlapping reasons (1) rewards and punishments (2) peer pressure and (3) morality.²⁹⁵

Research into what makes people obey laws is extremely relevant to the OHV regulation debate and is lacking.²⁹⁶ If existing penalties do not lead to compliance, then other methods should be considered. As will be shown in Chapter 6 below, responsive regulation can help guide regulators to multi-dimensional methods that should be more effective than the current practice which relies almost exclusively on monetary penalties. Those methods will require a better understanding of the motivations of OHV operators than currently exists. It is reasonable to assume that those motivations could be grouped under the categories suggested by Professors Ilg and Friedman above. For example, if research showed that non-compliant users such as those featured in the media reports sampled on page 1 above simply had a lack of knowledge about the harmfulness of their behavior or about the existing laws, then education might be a better tool than increased penalties. If research showed that a desire to protect sensitive landscapes was not a norm within a subset of the OHV community, then work to encourage the development of that norm might be more effective than monetary penalties.

3.4 Challenges raised by using a law and society approach

3.4.1 Analysis of complex systems

The natural environment is a complex, dynamic system in which determination of cause and effect is not always possible. Decisions, often important and urgent, must be made where outcomes (including the outcome of doing nothing) are less than certain. In complex systems,

²⁹⁴ Michael Ilg, “Profit, Persuasion, and Fidelity: Why People Follow the Rule of Law” (2017) 10:2 L Dev Rev 275.

²⁹⁵ Friedman, *Impact*, *supra* note 13 at chapters 5-8.

²⁹⁶ Some of the social factors which might be important are suggested in section 6.2 below.

problems can be intertwined with and indistinguishable from other problems. Relationships between factors can be any combination of direct, indirect, linear, non-linear, complementary or antagonistic. There can uncertainty about the appropriate scale to analyse the problem, both in terms of geography and of time. Problems can have multiple dimensions and require the expertise of multiple disciplines to analyse. Confusion about how to proceed in the face of an environmental problem can lead to delay and the delay might be exploited to the advantage of groups with an interest in the outcome.²⁹⁷ The development of the precautionary principle is a reaction to the scientific realities that sometimes decisions must be made based on incomplete evidence:

The crucial question for public health is not, Is there enough evidence to decide that *X* causes *Y*? but, Is there enough evidence to act as if *X* causes *Y*, given relevant contextual factors *A*, *B*, and *C*? The answer to the second question . . . depends on the consequences of being wrong. Thus the debate is not an entirely scientific one, as the judgment of ‘how much evidence is enough’ has social dimensions and will depend on political and cultural concerns²⁹⁸

Societies are also complex systems. When decisions about how to deal with an environmental concern lead to risk, the choices that are made may create economic, health or lifestyle winners and losers. There may be power imbalances in society and political factors that favor one group over another that lead to conflict. “Public land access management is embedded in a complex social-ecological system characterized by ‘numerous interacting elements lacking any central control, nonlinear interactions between elements, constant change which is seldom reversible, and no clearly defined system boundaries’”²⁹⁹

²⁹⁷ These points are made in D. Kriebel "How Much Evidence Is Enough? Conventions of Causal Inference" *Law and Contemp Probs* (2009) 72:1 121 at 122 and 123 and generally in N. Lapointe et al, “Principles for ensuring healthy and productive freshwater ecosystems that support sustainable fisheries” (2014) 22 *Env Rev* 110 (“Lapointe et al, Principles”).

²⁹⁸ Kriebel, *ibid* at 128.

²⁹⁹ Rachelle L Haddock and Michael S. Quinn, “An assessment of public engagement for access management planning in southwestern Alberta, Canada” *J Env Plan and Mang* (August 2015), online: <<http://dx.doi.org/10.1080/>

3.4.2 *Measuring changes in societal values in response to changes in the law*

Because modern society is complex and dynamic it can be difficult to determine what societal values exist, when they change and if they do, what caused the change. As with natural systems, there will exist variation in societal values both within society at any one time and within society longitudinally over time. True change will be change outside of natural variation and understanding what the level of natural variation is may be difficult. As discussed above, methodological problems in law and society research are many. Professor Barkan points out that there can be problems with the time scale (a noticeable short-term change happens in response to a change in the law but there is no long-term change). There may be problems determining whether the overall societal effect of a legal change is positive or negative (a positive change in one area may be offset by countervailing negative impacts in other areas). If a social change is observed, it may be unclear whether it was caused by the legal change or by something else.³⁰⁰

3.4.3 *Prevailing conflicts of interest*

Vago and Nelson, stating that the idea originates with Max Weber, say “one of the limitations of the law as an instrument of social change is the possibility of prevailing conflict of interest, which tends to determine which laws are promulgated and which alternatives are rejected.”³⁰¹ Economic and other interests lead to power imbalances in society with the powerful using the law, legal processes and enforcement (or lack of enforcement) to protect their own interests. Changes to laws are orchestrated by those with power for their own benefit. “Social stratification in society will determine to a large extent the part that laws will play in bringing

09640568.2015.1063481> quoting Edward Game et al, “Conservation in a Wicked Complex World; Challenges and Solutions.” (2014) 7:3 Conservation Letters 271 at 277.

³⁰⁰ Barkan, *supra* note 35.

³⁰¹ Vago and Nelson, *supra* note 162 at 224.

about changes” The effect of this is that even if a law is passed, it may be effectively ignored if it doesn’t benefit those with power. For law and society researchers attempting to determine whether a new law will have a social impact, power imbalances must be known and considered.³⁰² The difficulty comes from hidden power structures in society.

3.5 The law and society approach – summary

Law and society is a group of approaches from a group of social science disciplines. Examining legal issues from an external perspective can provide insights not available when examining them only from the internal formalistic perspective of the traditional approach. For example, a law and society approach would consider the motivations and drivers of non-compliant OHV operators, rather than just the fact of their non-compliance. Understanding those motivations and drivers should provide insight into what measures will be most effective to change the unwanted behavior. But law and society research does not lend itself to easy generalizations. Lawrence Freidman states paradoxically that more research is needed but that the existing body of research is vast, confusing and inconclusive:

Much more research is needed. More replications. More attempts at pulling the strands together. Otherwise, everything depends. On time. On place. On situation There are big gaps and holes in the research; but more disturbingly, no consistency. The reader faces a volcanic eruption of research, but it hardly seems to be cumulative; it rarely adds up. Because of, or despite, the volume, the results leave the reader dizzy and bewildered, unsure of what she has learned.³⁰³

It is beyond dispute that societal factors matter to the effectiveness of law, and so will matter to the effectiveness of the law regulating OHV use on Crown land in the headwater regions of Alberta. Responsive regulation, which will be examined in Chapter 6 below, is a subfield of law and society. Its first requirement is that the regulator understand the context in

³⁰² Farber, *supra* note 14, would describe this as positive slippage.

³⁰³ Freidman, *Impact*, *supra* note 13 at 249.

which regulation is taking place. That context consists largely of the social factors which are the subject matter of law and society research. Based on experience it is possible to hypothesise which social factors will play a role and even which ones are likely to be more important. It is more difficult, perhaps impossible, to determine with accuracy exactly how each factor will be important and how multiple factors will interact.

Chapter Four: Applying a Law and Society Approach: Mapping the Physical and Regulatory Context of OHV Use and Harm in Alberta

4.1 The importance of headwaters

The importance of headwater streams and landscapes has been the subject of much analysis.³⁰⁴ Headwaters are the sensitive landscapes where rivers begin. They include the network of small streams, both above and below ground, that channel water into all of our rivers and they include the land that drains into those streams.³⁰⁵ Headwaters are the initial source of clear cold water for everything downstream. They are part of a complex web of ecosystems within ecosystems that support life. People often think of rivers as places where water comes from. When we talk of headwaters, it is more accurate to think of rivers and streams as places where water flows to.³⁰⁶

Most headwaters in Alberta exist on Crown land located on the eastern slopes of the Canadian Rockies. Activities on these lands are regulated under variety of overlapping statutes, with permissions and restrictions varying by where the land is located and how it has been classified by the government, by the industry involved and by the activity being performed. Activities in Alberta's headwaters include oil and gas exploration and production, forestry, mining, ranching, agriculture and many kinds of recreational activities, including OHV operation

³⁰⁴ See generally Thomas Dunne & Luna B. Leopold, *Water in Environmental Planning*, (San Francisco: W.H. Freeman and Company, 1978); Walter Dodds & Robert Oakes. "Headwater Influences on Downstream Water Quality" (2008) 41:3 *Envtl Mgmt* 367; Lapointe et al, *Principles*, *supra* note 297; Lizhu Wang et al. "Influences of Watershed Land Use on Habitat Quality and Biotic Integrity in Wisconsin Streams" (1997) 22:6 *Fisheries* 6; K. Lalonde, B. Corbett & C. Bradley, "Southern Alberta's Watersheds: An Overview" (Prairie Conservation Forum, 2005) Occasional Paper Number 5.

³⁰⁵ This is the definition that is used in this thesis. Other definitions are used elsewhere. Often "headwaters" describes flowing water only and excludes the land surrounding it. The related term "source water" is sometimes used to describe the immediate source of water for human consumption.

³⁰⁶ This paradigm shifting idea comes the first line of the dust jacket of Kevin van Tighem, *Heart Waters: Sources of the Bow River* (Canmore: Rocky Mountain Books, 2015).

in some areas. The ecological harm caused by the cumulative effect of these activities place headwaters under constant pressure, now exacerbated by climate change.

Planning what OHV access to sensitive public land will be allowed is a difficult management challenge in Alberta and elsewhere.³⁰⁷ One author states “managing trails for OHVs can be a lot like herding dragons. They’re big, they can cause a lot of damage, and they sure can heat things up.”³⁰⁸ Land use planning for OHV use fits the definition of “wicked problem”.³⁰⁹ It has been observed that “[t]here is no “right” solution to wicked problems in complex systems, only trade-offs that appear more or less favorable depending on your perspective.”³¹⁰

OHV use in headwater areas (or anywhere else) does not fall under the mandate of any single government department and is not the subject of any single piece of legislation.³¹¹ The following statement, describing the situation on public land in the United States in 2009 could be used to describe the situation in Alberta today:

The combined effect of population increase in the West, unauthorized user-created roads, explosive growth in the use of OHVs, advances in motorized technology, and intense industry marketing have generated increased social conflicts and resource impacts on the public land. The [regulatory authority] faces

³⁰⁷ See generally Driedzec, *supra* note 6.

³⁰⁸ Kevin G. Meyer, “A Comprehensive Framework for Off-Highway Vehicle Trail Management” United States Department of Agriculture, Forest Service, Technology & Development Program, July 2011 at 1.

³⁰⁹ A wicked problem is one for which at least some of the following are true: (1) there is no definitive formulation of the problem (the problem isn’t fully understood until it is solved) (2) there is no ‘stopping rule’ (you don’t know when the problem is solved) (3) possible solutions is “good-bad” not “true-false” (solutions are better or worse, not objectively perfect) (4) there is no immediate or ultimate way to test a possible solution (5) there is no opportunity to learn by trial and error (every attempt has consequences) (6) there isn’t a describable set of possible solutions (7) the problem is unique (there is no way to look at similar problems that have been solved for answers) (8) the problem is a symptom of another problem (9) discrepancies can be explained in numerous ways (10) the planner has no ‘right to be wrong’ (hypotheses can’t be presented and tested, as is the normal scientific method). See Horst W.J. Rittel and Melvin M. Webber, “Dilemmas in a General Theory of Planning” (1973) 4:2 *Pol Sci* 155, online: <<https://www-jstor-org.ezproxy.lib.ucalgary.ca/stable/pdf/4531523.pdf?refreqid=excelsior%3Ad72535b00fe38eab5ba34513d5a4537e>>.

³¹⁰ Game et al, “Conservation in a Wicked Complex World; Challenges and Solutions”, *supra* note 299.

³¹¹ Driedzec, *supra* note 6 at 14.

many challenges--protecting resources, minimizing user conflicts, safeguarding visitor safety, and providing reasonable and appropriate access.³¹²

4.2 Ecological impacts of OHV use

In ecology, “impact” means change, which can be positive or negative but “[i]n wildland recreation, a value judgment is usually placed on the term *impact*, denoting an undesirable change in environmental conditions.”³¹³

Existing studies of the ecology related to outdoor recreation have been described as primarily descriptive, aimed at “describing the nature of and quantifying the magnitude of recreation impacts” on smaller scales but without giving an understanding of impacts at larger geographic or temporal scales.³¹⁴

No comprehensive scientific study of OHV impacts in headwater areas of Alberta (or at a watershed scale anywhere else) could be located. The authors of a recent study note in the conclusion of their report that while the negative ecological effects of linear disturbances are known, “[b]ecause variability in the volume, timing and type of OHV use may affect ecological

³¹² US Department of the Interior, Office of Congressional and Legislative Affairs, Hearings and Testimony, Hearings and Testimony of the 110th Congress, Off-Highway Vehicle Management on Public Lands – Statement of Henri Bisson, Deputy Director Bureau of Land Management, online: <https://www.doi.gov/ocl/hearings/110/OFVManagementOnPublicLands_060508>. This assessment by the Deputy Director of the US Bureau of Land Management shows slippage from the intent of Executive Orders issued by then President Nixon in 1972 and modified by then President Carter in 1977, which provided in section 9:

Special Protection of the Public Lands. (a) Notwithstanding the provisions of Section 3 of this Order, the respective agency head shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence.

Executive Order 11644 -Use of off-road vehicles on the public lands, 37 FR 2877, 3 CFR, 1971-1975 Comp., p. 666, Section 9 added by Executive Order 11989 of May 24, 1977, 42 FR 26959, 3 CFR, 1977 Comp., p. 120, online: <<http://www.archives.gov/federal-register/codification/executive-order/11644.html>>.

³¹³ William E. Hammitt et al, *Wildland Recreation: Ecology and Management* (3rd Edition), John Wiley & Sons, Incorporated, 2015. ProQuest Ebook Central, online <<https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/detail.action?docID=1895439>>, citing R. Lucas, “Perceptions of non-motorised recreational impacts: a review of research findings” in D. Ittner et al eds, *Recreational Impacts of Wildlands*, USDA Forest Service Conference Proceedings No R-6-001-1979.

³¹⁴ D. Cole, “Environmental Impacts of Outdoor Recreation in Wildlands” (2004) online: < <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.5925&rep=rep1&type=pdf>> at 2 (and generally).

response, studies of vehicle use patterns and ecological response would enable a more detailed assessment of potential impacts.”³¹⁵

There have been site specific studies of OHV impact in Alberta, studies of impacts within specific watersheds and some investigation of OHV impacts on wildlife populations.³¹⁶ There have been extensive site specific studies outside of Alberta, especially in the United States, with results that may be applicable in Alberta.³¹⁷ There have been attempts to develop best

³¹⁵ D. Farr et al 2017 “Ecological response to human activities in southwestern Alberta: Scientific assessment and synthesis”, Government of Alberta, Alberta Environment and Parks, online: <<https://open.alberta.ca/publications/9781460135402>>, [“Farr et al 2017”] at 33. Farr et al 2017 is described on page 8 as providing “an objective review and synthesis of published scientific data and information of relevance in examining the environmental impacts associated with human disturbance in the Castle region of southwestern Alberta, Canada.”

³¹⁶ See Farr et al 2017, *ibid*; And see D. Farr et al, 2018, “Linear disturbances in the Livingstone-Porcupine Hills of Alberta: Review of potential ecological responses” Government of Alberta, Environment and Parks, online: <open.alberta.ca/publications/9781460140338>, [“Farr et al 2018”]. Farr et al 2018 draws on the literature reviewed in Farr et al 2017 and uses it to analyze the potential impact of linear disturbances in the Livingston-Porcupine Hills region of southern Alberta, located just north of the Castle area. See also Daniel Andrews, “Water Quality Study of Waiparous Creek, Fallentimber Creek and Ghost River” (Clearwater Environmental Consultants, 2006) Report prepared for Alberta Environment) online: <<https://open.alberta.ca/publications/077854575x>> ; Herb Hammond, “Ecosystem-based Conservation Planning in the Ghost River Watershed: Waiparous Creek Initial EBCP”, PowerPoint presentation for the Ghost River Watershed Alliance, 15 September 2010) online: <www.ghostwatershed.ca/GWAS/Research_%26_Data.html>; Gillian Holloway & Gabor Sass “Oldman Watershed Headwaters Indicator Project – Draft Report Version 2013.3” (Report prepared by Fiera Biological Consulting Ltd for the Oldman Watershed Council); Kim Lalonde, “Southern Alberta Landscapes: Meeting the Challenges Ahead - An Overview of Public Issues” (Report prepared for Alberta Environment, 2006); P.G. Lee, & M Hanneman (2011) “Castle Area Forest Land Use Zone (Alberta): Linear disturbances, access densities, and grizzly bear habitat security areas” (Edmonton: Global Forest Watch Canada); David Mayhood, “Suspended Sediment in Silvester Creek and its Potential Effects on the Westslope Cutthroat Trout Population” (Report prepared by Freshwater Research Limited for the Timberwolf Wilderness Society, July 2013); David Mayhood, “Silvester Creek: Watershed Condition, Foothills Roads and Native Trout” Preserving our Lifeline: Newsletter of the Bow River Basin Council (June, 2014); David Mayhood & Heidi Erdle “Anthropogenic effects on the habitat of a critical population of at-risk Westslope Cutthroat Trout assessed using simple monitoring methods” (Unpublished report prepared by Freshwater Research Limited); Joseph Northrup et al, “Vehicle traffic shapes grizzly bear behavior on a multiple use landscape” (2012) 49 J of App Ecol 1159; Brad Stelfox & Cornel Yarmaloy “An Assessment of the Cumulative Effects of Land Uses within the Ghost River Watershed, Alberta, Canada” (Phase 1 Report prepared for the Ghost Watershed Alliance, issued August, 2011) online: <www.ghostwatershed.ca/GWAS/Research_%26_Data.html> [“Ghost Phase 1 report”]; Brad Stelfox “Ghost River Watershed Cumulative Effects Study Phase 2: Beneficial Management Practices” (Phase 2 Report prepared for the Ghost Watershed Alliance, issued February, 2013) online: <www.ghostwatershed.ca/GWAS/Research_%26_Data.html>; J. Tchir, “Swan Creek Fish Assessment and the potential effects of OHV use within the stream” (Fisheries Management Branch, Environment and Sustainable Resource Development, August, 2013); Cornel Yarmaloy, presentation for ALCES Landscape & Land-Use Ltd. online: <www.alces.ca/home/Presentations/Videos/2011_Cumulative_Effects_in_the_Ghost_River_Watershed>.

³¹⁷ See: Douglas S. Ouren et al “Environmental Effects of Off-Highway Vehicles on Bureau of Land Management Lands: A Literature Synthesis, Annotated Bibliographies, Extensive Bibliographies, and Internet Resources”, US Geological Survey, Open File Report 2007-1343, 2007 online: <<https://pubs.usgs.gov/of/2007/1353/report.pdf>> [“Ouren et al 2007”]; Ken Cordell et al “Off-Highway Vehicle Recreation in the United States, Regions and States:

management practices for trail design and construction.³¹⁸ All outdoor recreation activities have impacts and these impacts vary with the activity, the size, type and weight of the vehicle (for motorized activities), the characteristics of the land being used, the time of year, type of vegetation present, moisture and whether the use is a new use or an expansion or continuation of a prior use. All human activity impacts the environment. “The critical question is not whether impacts occur, but rather what type and level of impacts occur, and whether we are willing to accept them.”³¹⁹

Impacts of OHV use are more severe where riding takes place off the official, legal trails. Unofficial trails exist and may vastly exceed official trails in some areas. In a study of a portion of the Ghost River watershed released in 2001, where approximately 300 kms of official trails were identified, research on the ground showed over 2,000 kms of unofficial (and therefore illegal) trails.³²⁰ The challenges of mapping the total density of unofficial trails using geospatial methods results in both overestimating and underestimating linear features.³²¹

A National Report from the National Survey on Recreation and the Environment (NSRE)” (United States Department of Agriculture Forest Service, June, 2005); Lizhu Wang et al “Influences of Watershed Land Use on Habitat Quality and Biotic Integrity in Wisconsin Streams” (1997) 22:6 Fisheries; R. Fischman et al “An Evaluation of U.S. National Wildlife Refuge Planning for Off-Road Vehicle Use” J Fish and Wildlife Mang 2017 8(1):283 at 285; J. Adams and S. McCool, “Finite Recreation Opportunities: The Forest Service, the Bureau of Land Management, and Off-Road Vehicle Management” (2009) 49 Nat Resources J 45.

³¹⁸ T.A. Switalski and A. Jones “Off-road vehicle best management practices for forestlands: A review of scientific literature and guidance for managers” J Cons Planning 8 (2012) 12; EOS Research and Consulting Ltd. “Review of Access Management Strategies and Tools – Summary of Report Prepared for Foothills Landscape Management Forum” (April 2009), online: <https://friresearch.ca/sites/default/files/null/FLMF_2009_04_report_AccessMgmtStudy_Summary.pdf>; Kevin G. Meyer, “A Comprehensive Framework for Off-Highway Vehicle Trail Management” *supra* note 308 Kevin G. Meyer, “Designing Sustainable Off-Highway Vehicle Trails: An Alaska Trail Manager’s Perspective”, USDA Forest Service online: <<https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf11232804/pdf11232804dpi100.pdf>>.

³¹⁹ J. Adams and S. McCool, *supra* note 318 at 51. The authors also state that few studies have analyzed the long-term effects of outdoor recreation in a quantitative way that would allow benchmarks for long-term use to be set. *Ibid* at 49.

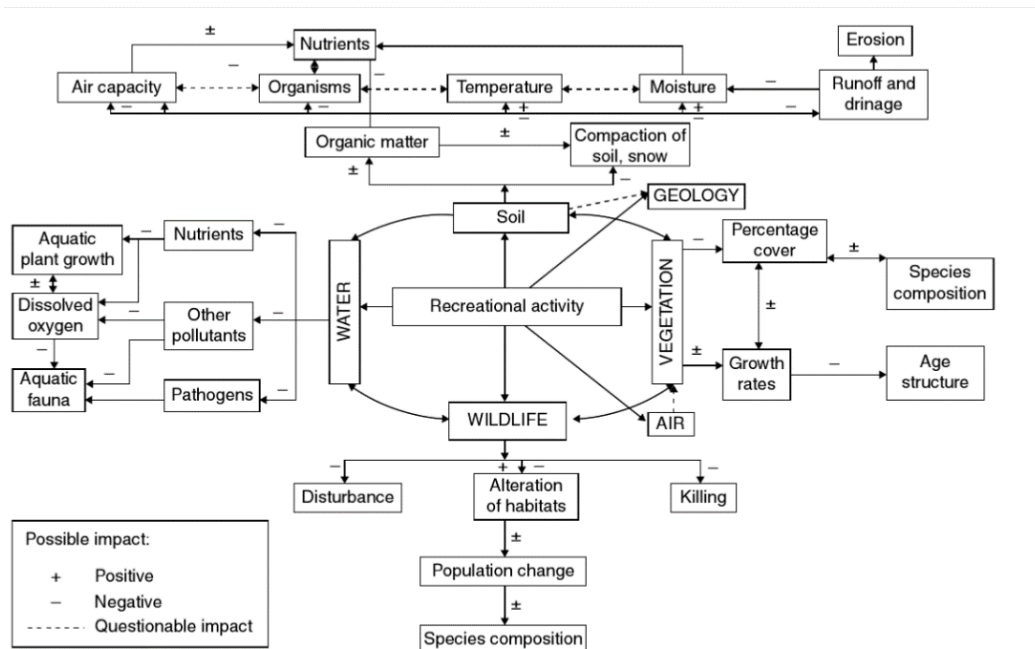
³²⁰ Cornel Yarmaloy, video presentation for ALCES Landscape & Land-Use Ltd. online: <www.alces.ca/home/Presentations/Videos/2011__Cumulative_Effects_in_the_Ghost_River_Watershed> at 5:00 minutes.

³²¹ See Farr et al 2017, *supra* note 315 at 11 and Farr et al 2018, *supra* note 316 at sections 4 and 5 for a description of the challenges of mapping linear disturbances.

OHVs have a wide range of potential environmental impacts. These effects are interrelated and are related to the effects of other activities on the landscape. It is important to note that there is a range of harm and that not all use causes all the impacts listed below. Someone respectfully riding down a legal trail will have a smaller impact than another person operating carelessly through or over sensitive habitat.

Figure 3 illustrates many of the possible ecological impacts and interrelations of recreational activities in wildland areas, not limited to OHV use, under the main areas of wildlife, water, soil, vegetation, air and geology. Additional headings (not related to ecology) of “Economic Impacts” and “Human Conflict” could be added, to consider the social impacts of OHV use which will be considered below.

Figure 3 Recreational impact interrelationships in wildland areas³²²



³²² G. Wall and C. Wright, *The Environmental Impact of Outdoor Recreation*, (1977) Waterloo, Ont., University of Waterloo Dept of Geol Pub Series 11.

Cole lists five recreational use factors as having important land management implications.³²³ First, the amount of use, with research showing that there is often a non-linear relationship between amount of use and impact. Except in cases where the activity has extremely low impact, first use has a greater impact than later use. “Impacts can usually be minimized by encouraging the repetitive use of a small number of sites, concentrating use”.³²⁴ Second, the type and behaviour of use, with research confirming that different activities done in different ways will have different levels of impact.³²⁵ Third, the timing of use, with research showing that impacts of activities can change depending on the time of year in which they occur (for example wet season vs. dry season, or when animals are reproducing versus when they are not).³²⁶ Fourth, the environment’s resistance (toughness) and resilience (ability to heal itself), factors which Cole states have been the subject of much research leading to “voluminous literature”³²⁷ Fifth, the spatial distribution of use, an factor for which Cole suggests further research is needed because “[t]he significance of recreation impacts is likely to vary as much with spacial pattern as it does with the nature an intensity of impact.”³²⁸

The following impacts of OHVs have been noted in the literature.³²⁹

4.2.1 Negative impacts of linear disturbances

Roads, trails and other linear disturbances such as railways and pipelines exist in all but the most isolated areas in Alberta. In sensitive areas such as headwaters the economic benefits

³²³ Cole, *supra* note 314 at 6.

³²⁴ *Ibid.*

³²⁵ *Ibid* at 7.

³²⁶ *Ibid* at 8.

³²⁷ *Ibid.*

³²⁸ *Ibid* at 5.

³²⁹ An extensive and thorough literature review of the environmental effects of off highway vehicles on federal lands across the United States was conducted in 2006 for the United States Bureau of Land Management. The headings used in this section for the general categories of environmental effects are taken from that review. See Ouren *et al* 2007, *supra* note 317 at xii.

must be weighed against the ecological impacts. Man-made roads and trails are included in what are now often described as ‘linear disturbances’ or ‘linear footprint’.³³⁰ The linear footprint densities of geographic areas, measured as kilometre per kilometer squared (km/km²) can be compared and can be used as ‘disturbance limits’ for land use planning.³³¹

The ecological impacts of OHV use are intertwined with and inseparable from the ecological impacts of roads and trails. Roads impact both the watershed in which they exist and the plants and animals that live there:

Watershed-related impacts include disruption of surface runoff, interruption of underground (subsurface) flows, erosion, sedimentation of streams, water pollution, changes in the quantity of runoff and stream flow (exaggerated high and low flows), and stream channel alterations.

Wildlife-related impacts of roads include direct mortality of plants and animals during construction; increased hunting and fishing pressure; displacement of animals from otherwise suitable habitat (habitat alienation); mortality of wildlife due to motor vehicle collisions; mortality of aquatic species due to watershed disruption and sedimentation; the spread of alien weeds, pests, and pathogens along road corridors; detrimental edge effects; fragmentation of habitat; genetic isolation and higher extinction rates of populations; and the increased use of an area by humans who bring chainsaws, dogs, guns, noise, and harassment – all detrimental to wildlife.³³²

The ecological impact of linear disturbances has been studied in Alberta.³³³

³³⁰ Farr et al define linear footprint as “human-made linear features caused by vegetation clearing that contrast with the adjacent area alongside. The most common examples of human-made linear footprints on Alberta’s landscape are roads, railways, pipelines, seismic-exploration trails, transmission lines, and recreational trails.” Farr et al 2017, *supra* note 315 at 24.

³³¹ See for example Government of Alberta, Planning Branch, Policy and Planning Division, Alberta Environment and Parks, “Livingstone-Porcupine Hills Land Footprint Management Plan” (2018), online: <<http://aep.alberta.ca/land/programs-and-services/land-and-resource-planning/regional-planning/south-saskatchewan-region/default.aspx>>.

³³² Shephard, *supra* note 316 at 14.

³³³ See generally Farr et al, 2017, *supra* note 315 and Farr et al 2018, *supra* note 316.

4.2.2 Negative impacts on soils and watersheds³³⁴

The operation of OHVs over sensitive soils can change the density and resilience of those soils. Those changes can lead to reduced ability to absorb water and then to reduced vegetation which would otherwise stabilize the soil. Water runoff speeds up, carrying off organic matter and causing erosion and rutting:

Where biotic and chemical crusts or other soil stabilizers are disturbed or destroyed, soil erosion from water and wind may increase beyond rates found in undisturbed sites with similar soils and conditions; nutrient-cycling processes also are likely to be disrupted, potentially leading to declines in soil fertility.³³⁵

Changes to soil composition can create a “feedback loop” whereby compaction destroys vegetation, which reduces or eliminates root penetration into the soil, which reduces soil nutrients and changes the way the soil functions which leads to the soil being less resistant to further compaction.³³⁶

4.2.3 Negative impacts on vegetation³³⁷

OHVs can damage or remove vegetation³³⁸ even when OHV use of trails is limited.³³⁹ Removal of vegetation can decrease the ability of the landscape to hold back flood waters and runoff, thereby increasing flooding and the speed of the water flowing downstream at peak periods. Impacted areas can be more susceptible to the establishment of non-native plant species.³⁴⁰ A study of 28 off road vehicle trails in the Avalon Wilderness Reserve in Newfoundland and Labrador found that “different habitat types (boreal forest, heaths, and bogs)

³³⁴ Shephard, *supra* note 316 at 5 and 84.

³³⁵ *Ibid* at xii.

³³⁶ Cole, *supra* note 314 at 3. See also Farr et al 2017, *supra* note 315 at 40 and Farr et al 2018, *supra* note 316 at 22.

³³⁷ Ouren et al 2007, *supra* note 317 at 11 and 110. See also Farr et al 2017, *ibid* and Farr et al 2018, *ibid*.

³³⁸ But see Barry R. Taylor & Shane Raney, “Correlation Between ATV Tracks and Density of a Rare Plant (*Drosera Filiformis*) in a Nova Scotia Bog” 115:962 (2013) *Rhodora* 158, where the authors find that moderate and dispersed traffic in a bog environment encouraged the growth of a rare plant species in the water filled vehicle tracks.

³³⁹ Farr et al 2018, *supra* note 38 at 41.

³⁴⁰ Ouren et al 2007, *supra* note 317.

differ in resistance and resilience to both direct on-trail erosion and indirect off-trail vegetation impacts of ATV trails.”³⁴¹

4.2.4 Negative impacts on wildlife and habitats³⁴²

Ouren et al summarize the potential effects of OHVs on wildlife populations as follows:

Networks of roads and trails fragment habitat, reduce patch size, and increase the ratio of edge to interior. This may have serious consequences for area-sensitive species (those that cannot carry out certain aspects of their life cycles without large blocks of habitat or corridors linking habitat patches), predator-prey relationships, and overall population dynamics. In particular, fragmentation and edges created by OHV routes may have strong effects on animal movement patterns.³⁴³

Farr et al note that impacts include physical disturbances and habitat degradation, behavioral alteration and interference with reproduction patterns.³⁴⁴ OHV impacts on grizzly bear populations in Alberta have been studied.³⁴⁵ The noise of OHVs can impact animal populations. A 2013 study of OHV effects on mountain goat populations in west-central Alberta concluded that “[g]oats were moderately to strongly disturbed by ATVs 44% of the time, and disturbance levels were mainly influenced by the direction and speed of the approaching vehicles.”³⁴⁶ OHV effects on elk populations have been studied in Oregon.³⁴⁷ The negative impacts of snowmobile use on wolverines has been studied.³⁴⁸ One American study implicated

³⁴¹ Nyssa van Vierssen Trip and Yolanda F. Wiersma, “A Comparison of All-Terrain Vehicle (ATV) Trail Impacts on Boreal Habitats Across Scales” (2015) 35:2 *Natural Areas J* 266 at 266 (abstract).

³⁴² Ouren et al 2007, *supra* note 317 at 15 and 131.

³⁴³ *Ibid* at 16.

³⁴⁴ Farr et al 2018, *supra* note 316 at 31.

³⁴⁵ Farr et al 2018, *ibid*, at 28. See also P.G. Lee & M. Hanneman (2011) “Castle Area Forest Land Use Zone (Alberta): Linear disturbances, access densities, and grizzly bear habitat security areas” (Edmonton: Global Forest Watch Canada) and Joseph Northrup et al, “Vehicle traffic shapes grizzly bear behavior on a multiple use landscape” (2012) 49 *J of App Ecol* 1159. See also Farr et al 2017, *supra* note 315 at 22.

³⁴⁶ Antoine St. Louis et al, “Factors Influencing the Reaction of Mountain Goats Towards All-Terrain Vehicles” (2013) 77:3 *J Wildlife Mang* 599, online: <DOI: 10.1002/jwmg.488 at 500> (abstract).

³⁴⁷ Leslie Naylor, Michael Wisdom & Robert Anthony, “Behavioral Responses of North American Elk to Recreational Activity” (2008) 73:3 *J Wildlife Mang* 328

³⁴⁸ J. Adams and S. McCool *supra* note 317 at 50 n 20.

OHVs (without quantifying the severity of the impact) in harm to 13 percent of the 2,490 federally endangered, threatened or proposed species and subspecies in the United States as of 1996, including 12% of invertebrates, 16% of plants, 13% of reptiles and amphibians, 31% of insects and 25% of crustaceans.³⁴⁹ The negative impact on caribou in Alberta associated with motorized use of abandoned seismic lines has been studied.³⁵⁰ One study was found which used automatic vehicle counters to collect spatial and temporal data about OHV use, patterns and volume in a remote mountainous region of Colorado between 2005 and 2008.³⁵¹ That study identified two issues requiring further study: first, because wildlife respond differently to people on foot versus those on an OHV, the relationship between OHV traffic volume and the dispersal of people into the landscape needs further research. Second, identifying how “traffic thresholds for keystone species in remote rural areas” vary when traffic volumes vary over time needs to be better understood.³⁵²

4.2.5 Negative impacts on water quality³⁵³

When runoff and erosion occurs in a headwater area, sediment will be deposited in streams and will affect local water quality and the viability of fish populations:

The effects of OHV activities on water quality can include sedimentation (deposited solids), turbidity (suspended solids), and pollutants within affected watersheds. Sedimentation increases because compacted soils, disrupted soil crusts, and reduced vegetation cover can lead to increased amounts and velocities

³⁴⁹ David Wilcove et al, “Quantifying Threats to Imperiled Species in the United States - Assessing the relative importance of habitat destruction, alien species, pollution, overexploitation, and disease” *BioScience*, 48:8 (Aug., 1998) 607 at 610 and Table 6. The authors also list vertebrates (6%), mammals (6%), birds (7%), fish (1%) and mollusks (4%).

³⁵⁰ K.E. Pigeon et al, “Toward the Restoration of Caribou Habitat: Understanding Factors Associated with Human Motorized Use of Legacy Seismic Lines” (2016) 58:5 *Env Mgmt* 821; M.L. Hornseth et al, “Motorized Activity on Legacy Seismic Lines: A Predictive Modeling Approach to Prioritize Restoration Efforts” (May 2018) *Env Mgmt* 1.

³⁵¹ Douglas S. Ouren and Alisa W. Coffin, “Monitoring Intensity and Patterns of Off-Highway Vehicle (OHV) Use in Remote Areas of The Western USA” (2013) 17:1 *Oecologia Australis* 96.

³⁵² *Ibid* at 109.

³⁵³ Ouren et al 2007, *supra* note 317 at 25 and 165; Farr et al 2017, *supra* note 315 at 45; Farr et al 2018, *supra* note 316 at 25.

of runoff; in turn, this accelerates the rates at which sediments and other debris are eroded from OHV-use areas and flushed to aquatic systems downslope.³⁵⁴

The effect of sedimentation on native fish species, including threatened populations of westslope cutthroat trout and bull trout has been studied in Alberta.³⁵⁵ Sediment beyond the amount naturally present in a stream can have negative effects:

Sediment that settles out occludes spaces among cobbles that are used by juvenile trout for shelter, and can suffocate eggs and larvae buried in spawning gravels. Total suspended sediment . . . clouds the water, interfering with feeding success and causing physiological stress that, if prolonged, affects overall condition and therefore long-term viability.³⁵⁶

The direct impacts on water quality noted in the scientific literature are primarily local, involving increased sedimentation from trail runoff beyond the carrying capacity of streams and erosion, rutting and pooling of water leading to stream braiding.³⁵⁷

*4.2.6 Negative impacts on air quality*³⁵⁸

Air quality effects of OHVs have been studied in the United States. Dust from use along unpaved roads and in desert areas has been noted as a significant problem and direct exhaust emissions are also mentioned.³⁵⁹ Smaller OHVs (quads, side by sides, motorcycles) typically are powered by two-stroke gasoline engines which require gasoline and oil to be mixed together in

³⁵⁴ *Ibid* at xii.

³⁵⁵ Daniel Andrews, “Water Quality Study of Waiparous Creek, Fallentimber Creek and Ghost River” (Clearwater Environmental Consultants, 2006), Report prepared for Alberta Environment, unpublished; David Mayhood, “Suspended Sediment in Silvester Creek and its Potential Effects on the Westslope Cutthroat Trout Population” (Report prepared by Freshwater Research Limited for the Timberwolf Wilderness Society, July 2013), unpublished; David Mayhood “Silvester Creek: Watershed Condition, Foothills Roads and Native Trout” Preserving our Lifeline: Newsletter of the Bow River Basin Council (June, 2014); David Mayhood & Heidi Erdle “Anthropogenic effects on the habitat of a critical population of at-risk Westslope Cutthroat Trout assessed using simple monitoring methods” (Unpublished report prepared by Freshwater Research Limited); Kerry Brewin, Greg R. Eisler & Dean M. Baayens “Monitoring Turbidity Events at a Fording on Howard Creek, A Small Stream in the McLean Creek Off Highway Vehicle Use Zone” (2002) (unpublished) (copy from Trout Unlimited Canada library provided to author); J. Tchir, “Swan Creek Fish Assessment and the potential effects of OHV use within the stream” (Fisheries Management Branch, Environment and Sustainable Resource Development, August, 2013).

³⁵⁶ Mayhood “Silvester Creek: Watershed Condition, Foothills Roads and Native Trout” *ibid*.

³⁵⁷ Farr et al 2017, *supra* note 315 at 45.

³⁵⁸ Ouren et al 2007, *supra* note 317 at 29 and 183.

³⁵⁹ *Ibid*.

the fuel tank. Two stroke engines produce harmful exhaust at much higher levels than the four stroke engines used in full sized cars and trucks.³⁶⁰ No research into the air quality effects of OHVs in Alberta has been located.

4.3 Off highway vehicle registration and insurance requirements in Alberta

OHVs exist in a wide range of configurations. The main investigation of this thesis relates to OHV operation rules but it important to have a basic understanding of the OHV equipment rules as well, because those rules form part of the overall context and complex of rules which operators need to be aware of.

OHVs (the machines themselves) are regulated under the Alberta *Traffic Safety Act* and the regulations passed under that Act.³⁶¹ Section 117 of the *Act* provides the following definition:³⁶²

117 In this Part,

(a) “off-highway vehicle” means any motorized mode of transportation built for cross-country travel on land, water, snow, ice or marsh or swamp land or on other natural terrain and, without limiting the generality of the foregoing, includes, when specifically designed for such travel,

- (i) 4-wheel drive vehicles
- (ii) low pressure tire vehicles,
- (iii) motor cycles and related 2-wheel vehicles,
- (iv) amphibious machines,
- (v) all terrain vehicles
- (vi) miniature motor vehicles,
- (vii) snow vehicles,
- (viii) minibikes, and
- (ix) any other means of transportation that is propelled by any power other than muscular power or wind, but does not include motor boats, or
- (x) any other vehicle exempted from being an off-highway vehicle by regulation;

(b) “vehicle” means a device in, on or by which a person or thing may be transported or drawn and includes a combination of vehicles but does not include a mobility aid.

³⁶⁰ Glyn Bissix, Keith MacCormick & Chris Milburn, “Is this the new smoking? An expert panel review of the York University OHV health benefits study” (2012) 28:1 Health Promotion Int 133 at 134.

³⁶¹ *Traffic Safety Act*, RSA 2000, c T-6; *Off Highway Vehicle Regulation* AR 319/2002.

³⁶² *Traffic Safety Act*, *ibid* at section 117.

Under section 119 of the *Traffic Safety Act* all OHVs must be registered and insured.³⁶³ A certificate of registration for an OHV is in most cases valid for one year. Different rules apply to vehicles owned and operated by Canadian federal, provincial or municipal governments, by the US federal government or any state government, by an Indian band or Metis General Council, by a school board or any post-secondary institution.³⁶⁴ Exemptions or partial exemptions exist for use on private land,³⁶⁵ for short-term use of vehicles from another jurisdiction,³⁶⁶ military vehicles,³⁶⁷ dealers³⁶⁸ and for vehicles used by some trappers and commercial fishers.³⁶⁹

4.4 OHVs and hunting

Section 120 of the Alberta *Wildlife Regulation* prohibits transporting a weapon during certain hours in specified wildlife management units with several exceptions, including

³⁶³ *Ibid* at section 119.

³⁶⁴ Those vehicles still must be registered but the registration does not expire.

³⁶⁵ Section 119 of the *Traffic Safety Act*, inserted mainly for the benefit of Alberta's farmers and ranchers, exempts OHV's operated on private land owned by the owner of the OHV or on land owned by another person who has expressly or impliedly given permission to the operator. Such vehicles are exempt from both the registration and insurance requirements.

³⁶⁶ Section 10 of the *Off-Highway Vehicle Regulation*, *supra* note 361 provides that OHV's properly registered and insured in another jurisdiction and being used in Alberta for thirty days or less do not need to be registered or insured in Alberta.

³⁶⁷ OHVs owned and operated by the Canadian military do not need to be registered (or presumably insured although the regulation does not specifically mention that). *Ibid* s.11.

³⁶⁸ OHVs held for sale by "a manufacturer or dealer in off-highway vehicles or a person engaged in the business of servicing off-highway vehicles" may be operated by that person, their agents or employees under the dealer's certificate of registration and dealer license plate for the purposes of testing or servicing (but not for hire) without being separately registered. *Ibid* s. 23.

³⁶⁹ *Ibid* s. 12. Trappers operating an OHV on their own registered trap line and commercial fishers operating in an area of northern Alberta described in the regulation are exempt from the insurance requirement, but not the registration requirements. The regulation of trapping takes place under the Alberta *Wildlife Act*, RSA 2000, c W-10 and the *Wildlife Regulation*, Alta Reg 143/1997. A "trap line" is the land described in "Form WA 19A – Authorization to Hunt Fur Bearing Animals" issued to the holder of a Resident Fur Management License and issued under s.36(1) of the *Wildlife Regulation*. The provisions respecting commercial fishers are probably now stranded since there is no longer a commercial fishery in Alberta. See online: Alberta Environment and Parks < <http://aep.alberta.ca/fish-wildlife/fisheries-management/commercial-fishing-alberta.aspx>> and see Brent Wittmeir "Alberta government kills commercial fishing industry as stocks decline", Edmonton Journal, October 4, 2014 online: <www.edmontonjournal.com/alberta+government+kills+commercial+fishing+industry+stocks+decline/10264848/story.html>.

exceptions for physically disabled persons holding a permit available under section 60 or 61.1, for hunting on private land and for transporting cased weapons under certain circumstances.³⁷⁰

4.5 Where off highway vehicles may be used in Alberta

Land in Alberta may be owned by private individuals, by any legal entity, by the federal government, by the provincial government or by a municipal corporation under powers delegated the province. The owners of land in Alberta generally have the right to do whatever they please on their land, subject to restrictions that come from the common law, from statute or from concurrent rights of others that exist respecting that land including rights that come from aboriginal law.

The Canadian federal government has the constitutional authority to legislate over any federal lands, fish habitat or fisheries on any land, navigation on waters located on any land, aboriginal lands and migratory bird habitat.³⁷¹ The Alberta government, like all Canadian provincial governments, has the constitutional authority to make laws concerning land owned by the province and over most resources related to those lands.³⁷² It has authority over land use planning (except respecting federal lands) and over the system of land administration within the province. The province has authority over wildlife anywhere in the province.³⁷³ Exercise of any of these powers may impact OHV use.

OHV use may be allowed, prohibited or restricted in a particular place because of the location or classification of the land upon which use is proposed or use might be *de facto* prohibited or at least restricted under legislation which on its face has little or nothing to do with

³⁷⁰ Alberta *Wildlife Regulation*, *ibid*, s. 120.

³⁷¹ Section 91, Constitution Act, 1867 (UK), 30 & 31 Vict, c 3, reprinted in RSC 1985 Appendix 11, No 5. See also Arlene J Kwasniak, *A Legal Guide to Non-Private Lands in Alberta* (Calgary: Canadian Institute of Resources Law, 2015) 13-17.

³⁷² *Ibid* at s. 92.

³⁷³ *Ibid*.

OHVs. Such legislation includes the federal *Fisheries Act*, *Species at Risk Act* and *Migratory Birds Convention Act, 1994*³⁷⁴, and the provincial *Wildlife Act*.³⁷⁵

Where off road vehicles may be used in Alberta and how that may change in the future is also impacted by the province's land use planning processes, which are currently in transition. Alberta created the Land Use Framework ("LUF") in 2008 after several years of planning and consultation. It contains seven strategies meant to improve land-use decision making in Alberta.³⁷⁶ OHVs are not mentioned in the LUF but their regulation fits under several of the strategies.

The legislation supporting the Land Use Framework is the *Alberta Land Stewardship Act* ("ALSA").³⁷⁷ ALSA broadly provides for regional land use planning in Alberta by establishing the legal basis for the creation of the regional plans contemplated by the LUF plus sub-regional plans and issue specific plans, should they be necessary.³⁷⁸ ALSA deems regional plans to be expressions of public policy, with the force of regulations.³⁷⁹ However, in the event of conflict (1) between the regional plan and a regulation or regulatory instrument created under another Act, the regional plan prevails (2) between another Act and a regional plan, the other Act

³⁷⁴ *Fisheries Act*, RSC 1985, c F-14, *Species at Risk Act*, SC 2002, c 29, *Migratory Birds Convention Act, 1994*, SC 1994, c 22. These pieces of legislation could have significant impact on the regulation of OHVs. However, examination of these impacts was determined to be beyond the scope of this thesis.

³⁷⁵ SA 2000, c W-10. Section 129(2) of the *Wildlife Regulation* SA 143/97, enacted under the *Wildlife Act* prohibits limits the operation of vehicles in habitat conservation areas to roads and parking areas.

³⁷⁶ (1) Develop seven regional land-use plans based on seven new land-use regions (2) Create a Land-use Secretariat and establish a Regional Advisory Council for each region (3) Cumulative effects management will be used at the regional level to manage the impacts of development on land, water and air (4) Develop a strategy for conservation and stewardship on private and public lands (5) Promote efficient use of land to reduce the footprint of human activities on Alberta's landscape (6) Establish an information, monitoring and knowledge system to contribute to continuous improvement of land-use planning and decision-making (7) Inclusion of aboriginal peoples in land-use planning.

³⁷⁷ SA, 2009 Chapter A-26.8.

³⁷⁸ *Ibid*, s. 10.

³⁷⁹ *Ibid*, ss 13(1) and (2).

prevails and (3) between ALSA and any other Act, ALSA prevails .³⁸⁰ These provisions make regional plans relatively powerful.

Because the rules differ depending on location, it is necessary for OHV users to know exactly where they are at any given time even to the extent of being aware of the legal description of land they intend to enter. Sources of information available to OHV users include an interactive government map of Alberta, available online, showing all PLUZs (further discussed below) and linking to detailed area maps and to webpages with area and contact information,³⁸¹ government websites with information about area trail closures,³⁸² the websites of the Alberta Off Highway Vehicle Association and other user groups,³⁸³ resources on the website of Alberta TrailNet,³⁸⁴ and commercially available GPS mapping tools.³⁸⁵

4.5.1 Private land – farms and ranches

According to the 2006 Census, the total area occupied by farms and ranches in Alberta is 210,000 square kilometers (52.1 million acres)³⁸⁶, with 96,315 square kilometers (23.8 million acres) being cropped.³⁸⁷ Fee simple owners of private land in Alberta have the authority to decide whether to use OHVs on their land and whether others will be allowed to do so.

³⁸⁰ *Ibid.*, s. 17

³⁸¹ Alberta Environment and Parks website, online: <<http://aep.alberta.ca/recreation-public-use/recreation-on-public-land/public-land-use-zones/documents/PLUZ-GreenWhite-Jul07-2014.pdf>> also available online: <<http://aep.alberta.ca/recreation-public-use/recreation-resources.aspx>>.

³⁸² Alberta Environment and Parks website, online: <<http://aep.alberta.ca/recreation-public-use/public-land-closures/default.aspx>>.

³⁸³ Alberta Off Highway Vehicle Association, online: <www.aohva.com/rides.php>.

³⁸⁴ Alberta TrailNet website, online: <www.albertatrailnet.com/>.

³⁸⁵ Alberta Environment and Parks website, online: <<http://esrd.alberta.ca/forms-maps-services/maps/gps-map-project/gps-map-project-dDownload.aspx>>.

³⁸⁶ For consistency, areas of land will be shown in square kilometers followed by acres regardless of the unit of measure used by the source from which the data is taken.

³⁸⁷ Statistics Canada Census of Agriculture 2006 online: <www.statcan.gc.ca/ca-ra2006/analysis-analyses/alberta-eng.htm#r1>.

Most modern farmers and ranchers will use vehicles of some sort off of the roads on their properties. Tractors and other types of farm equipment are not “off road vehicles” as defined in the *Traffic Safety Act*. No survey data could be located quantifying the number of farmers and ranchers who do use (or would allow the use of) OHVs covered by the definitions from the *Act*³⁸⁸. Private use on private land is exempt from the registration requirements.

4.5.2 Private land owned by conservation organizations

Several conservation organizations have significant private land holdings in Alberta. The Alberta Conservation Association owns or manages over 750 “conservation sites” in Alberta totalling over 809 km² (200,000 acres).³⁸⁹ It is a “delegated authority organisation” created under an agreement between the Alberta government and several conservation organisations in 1997 in order to ensure that the revenue from hunting and fishing licences went back into conservation projects rather than into general revenue.³⁹⁰ The default rule on all Alberta Conservation Association Conservation Sites is “foot access only.”³⁹¹

³⁸⁸ An OHV use survey in Utah in 2001 found that one quarter of respondents used private land. A.L. Fisher, D.J. Blahna & R. Bah (2001) “Off-highway vehicle uses and owner preferences in Utah” Logan, Utah, Institute for Outdoor Recreation and Tourism, Department of Forest Resources, Utah State University, Report no. IORT PR2001–02, 80 p, cited in Ouren et al 2007, *supra* note 317 at 33.

³⁸⁹ *Ibid* at 41.

³⁹⁰The original founding members were Trout Unlimited Canada, the Alberta Fish and Game Association, Nature Alberta, the Alberta Professional Outfitters Society, the Alberta Trappers Association and the Alberta Hunter Education Instructors Association. Pheasants Forever was accepted as a member in 2006 and the Wild Sheep Foundation Alberta in 2008. ACA website online: <www.ab-conservation.com/go/default/index.cfm/aca/member-groups/> accessed November 2, 2015. The mission of the organization is stated as “ACA conserves, protects and enhances fish and wildlife populations and their habitats for Albertans to enjoy, value and use.” The ACA describes its role as follows in the organization’s 2016-2017 Annual Report:

In addition to being a not-for-profit organization, and a registered charity, ACA holds special status as a Delegated Administrative Organization (DAO), which means that we deliver responsibilities as outlined in the Wildlife Act and defined in a Memorandum of Understanding (MOU) with Alberta Environment and Parks (AEP). In our role as a DAO, results from our population studies, surveys and assessments feed directly into AEP management plans and can form the basis for fishing and hunting regulation changes and evaluations of new management strategies. (ACA Annual Report, 2016-2017 at 5), online: <www.ab-conservation.com/downloads/annual_report/aca_2016_annual_report.pdf>.

³⁹¹ Online: <www.albertadiscoverguide.com/faq.cfm> under “Frequently Asked Questions”.

The Nature Conservancy of Canada is a land trust which “protects areas of natural diversity for their intrinsic value and for the benefit of our children and those after them.”³⁹² The organization has completed more than 200 projects in Alberta and protects more than 947 km² (234,000 acres).³⁹³ On Nature Conservancy of Canada property the general rule is “muscle based forms of transport” only. Some controlled motorised access is allowed for approved research and restoration activities is allowed.³⁹⁴

Ducks Unlimited Canada has conserved over 5,000 wetlands and associated upland habitat in Alberta.³⁹⁵ Many are on the approximately 404 km² (100,000 acres) of land owned by the organization in the province, some are on land co-managed with agricultural producers. On land that Ducks Unlimited Canada controls, only foot access is allowed.³⁹⁶ The majority of lands owned by the organization are in the prairie region of the province, not in headwater areas.

4.5.3 Federal Crown land - National Parks³⁹⁷

There are five National Parks within Alberta, all owned by the federal government and totalling 63,138 square kilometres (15.6 million acres) or just under ten percent of the province’s land mass.³⁹⁸ All National Parks in Canada are governed under the *Canada National Parks Act*.³⁹⁹

³⁹² Nature Conservancy of Canada website, online: <www.natureconservancy.ca/en/who-we-are/mission-values/>.

³⁹³ *Ibid*, online: <www.natureconservancy.ca/en/where-we-work/alberta/>.

³⁹⁴ Personal correspondence with Bob Demulder, Regional Vice-President of the Nature Conservancy of Canada, Alberta Region, December 17, 2015.

³⁹⁵ Online: <www.ducks.ca/places/alberta/>.

³⁹⁶ Personal correspondence with Perry McCormick, then Alberta Manager of Provincial Operations, Ducks Unlimited Canada, December 17 and 22, 2015.

³⁹⁷ For a complete analysis of all types of public land in Alberta see Kwasniak, *supra* note 371.

³⁹⁸ All facts about National Parks in this section are taken from the Parks Canada website, online <www.pc.gc.ca> and the sub-sites accessible from that page for individual National Parks. The five parks are Banff National Park (6,641 km²), Jasper National Park (11,000 km²); Waterton Glacier National Park (482 km²), Wood Buffalo National Park (44,840 km²) and Elk Island National Park (175 km²).

³⁹⁹ S.C. 2000, c. 32.

Banff, Jasper and Waterton National Parks are located in the Rocky Mountains and are the source of many headwater streams. Elk Island Park is located in the parkland east of the City of Edmonton and contains no headwaters. Wood Buffalo, Canada's largest National Park, is located in the boreal forest south of Slave Lake. While it contains two wetlands of international significance, it contains no headwaters.

OHV use within any Park is essentially prohibited by section 41 of the *National Parks Highway Traffic Regulation* enacted under the *Canada National Parks Act*.⁴⁰⁰

4.5.4 Federal Crown land - Indian reservations

There are 45 First Nations in Alberta in three treaty areas with 140 reserves which total 8,128 km² (2,008,400 acres).⁴⁰¹ Indian Reserves are not private land.⁴⁰² Under the *Indian Act*, a reserve is a "tract of land, the legal title to which is vested in Her Majesty, that has been set apart by Her Majesty for the use and benefit of a band".

The *Indian Reserve Traffic Regulations*⁴⁰³ provide:

- 6 The driver of any vehicle shall comply with all laws and regulations relating to motor vehicles, which are in force from time to time in the province in which the Indian reserve is situated, except such laws or regulations as are inconsistent with these Regulations.

⁴⁰⁰ C.R.C., c. 1126:

41. (1) No person shall operate an over-snow vehicle in a park unless
 - (a) he has the written permission of the superintendent;
 - (b) the over-snow vehicle is licensed, registered and equipped as required by the laws of the province in which the park is situated;
 - (c) he operates it in accordance with such conditions and in such areas as the superintendent may specify; and
 - (d) that person and any passenger on the over-snow vehicle are wearing the equipment required to operate the over-snow vehicle by the laws of the province in which the park is situated.
- (2) No person shall operate an all-terrain vehicle in a park except for purposes of administration of the park and with the permission of the superintendent.

⁴⁰¹ Indigenous and Northern Affairs Canada website online: <www.aadnc-aandc.gc.ca/eng/1100100020670/1100100020675>.

⁴⁰² See Kwasniak, *supra* note 371 at Chapter X.

⁴⁰³ *Indian Reserve Traffic Regulations*, C.R.C., c. 959 s. 6.

“Vehicle” is defined as “any wagon, cart, motor car, motor truck, trailer, motorcycle, traction engine, tractor, road-making machinery or other conveyance that is driven, propelled or drawn by any kind of power.”⁴⁰⁴

The enabling section of the *Indian Act* under which the *Indian Reserve Traffic Regulations* were created is section 73, which sets out:

73. (1) The Governor in Council may make regulations

(c) for the control of the speed, operation and parking of vehicles **on roads** within reserves;

(emphasis added)

Under s. 28 of the Alberta *Off-Highway Vehicles Regulation*, a certificate of registration issued for an OHV does not expire while the OHV is owned or operated by an Indian band as defined in the *Indian Act*.⁴⁰⁵ An OHV owned and operated by an individual band member on or off the reserve would be subject to the normal annual registration requirements.⁴⁰⁶

Section 106 of the *Traffic Safety Act* sets the speed limit of 80 kilometres per hour for “a highway that is located on an Indian reserve where the title to the highway is vested in the Crown in right of Alberta.” The term “reserve” does not appear anywhere else in the Alberta *Traffic Safety Act* or in the Alberta *Off-Highway Vehicle Regulation*.

It is therefore not apparent that any external rules govern the use of OHVs on reserves when they are operated off roads.

⁴⁰⁴ “Motor vehicle” is not separately defined.

⁴⁰⁵ *Supra* note 361. The definition of “band” contained in the *Indian Act* is:

2(1) In this Act,

band means a body of Indians

(a) for whose use and benefit in common, lands, the legal title to which is vested in Her Majesty, have been set apart before, on or after September 4, 1951,

(b) for whose use and benefit in common, moneys are held by Her Majesty, or

(c) declared by the Governor in Council to be a band for the purposes of this Act; (bande)

⁴⁰⁶ Publicly available Alberta government vehicle registration statistics do not separate off road vehicles registered to people who live on reserves from other registrations.

4.5.5 Provincial Crown Land managed by Alberta Environment and Parks

There are seven designations of land managed by the department currently called Alberta Environment and Parks under the authority of several different pieces of legislation.⁴⁰⁷

4.5.6 Provincial Parks

There are 76 Provincial Parks in Alberta totalling 2,214 km² (547,000 acres)⁴⁰⁸. All are governed under the Alberta *Provincial Parks Act*.⁴⁰⁹

Section 27 (1) of the *Provincial Parks General Regulation* provides⁴¹⁰:

27 (1) Notwithstanding anything in section 26 to the contrary, no person shall operate or use an off-highway vehicle or any similar specialized means of conveyance, in a provincial park or recreation area except

(a) on a trail or in an area set aside, designated or identified by signs, notices or trail markers posted as a trail or area for the use of such conveyances and in compliance with any rules indicated by such signs or notices as to the types of vehicle that may or may not be used and as to the use of such vehicles, or

(b) in an area other than a place referred to in clause (a), with the written authorization of the Minister.

⁴⁰⁷ The seven types are (1) Wilderness Areas (2) Ecological Reserves (3) Wildland Provincial Parks (4) Heritage Rangelands (5) Provincial Parks (6) Provincial Recreation Areas and (7) Natural Areas, online: <www.albertaparks.ca/albertaparksca/management-land-use/legislation-regulations.aspx>, accessed December 12, 2015. Detailed information about these seven land classifications as well as for the Wilmore Wilderness Park can be found in the Alberta Land Reference Manual located online: <www.albertaparks.ca/albertaparksca/library/land-reference-manual.aspx>.

⁴⁰⁸ Alberta Environment and Parks website, online: www.albertaparks.ca/albertaparksca/management-land-use/current-parks-system.aspx. (accessed 20 September 2015).

⁴⁰⁹ RSA 2000 c P-35. The purposes of Provincial Parks in Alberta are set out in section 3 of the Act:

3 Parks are established, and are to be maintained,

(a) for the preservation of Alberta's natural heritage,

(b) for the conservation and management of flora and fauna,

(c) for the preservation of specified areas, landscapes and natural features and objects in them that are of geological, cultural, historical, archeological, anthropological, paleontological, ethnological, ecological or other scientific interest or importance,

(d) to facilitate their use and enjoyment for outdoor recreation, education and the appreciation and experiencing of Alberta's natural heritage, and

(e) to ensure their lasting protection for the benefit of present and future generations.

⁴¹⁰ Alberta Regulation 102/85.

4.5.7 Provincial Parks – Wildland Provincial Parks

Wildland Provincial Parks are described as “a type of Provincial Park specifically established to preserve and protect natural heritage and provide opportunities for backcountry recreation.”⁴¹¹ The *Act* contains no reference to this sort of park. There are 32 Wildland Provincial Parks comprising approximately 17,314 km² (4,278,383 acres) listed on the Alberta Parks website, all created by Order in Council.⁴¹² OHV use is permitted on designated trails in some of these parks and some plans for trail development have been made.⁴¹³

The 4,597 km² (1,135,943 acre) Willmore Wilderness Park is similar to a wildland provincial park and is managed by Alberta Environment and Parks under its own piece of legislation, the *Willmore Wilderness Park Act*.⁴¹⁴ Section 1(d)(3) of the *Forest Land Use and Management Regulation*⁴¹⁵, proclaimed under the *Public Lands Act*⁴¹⁶, prohibits OHV use in the Willmore Wilderness Park.

4.5.8 Provincial Parks - Provincial recreation areas

There are 208 Provincial Recreation Areas in Alberta totalling 879 km² (217,183 acres).⁴¹⁷ All are managed by Alberta Environment and Parks under the *Provincial Parks Act* and its regulations.⁴¹⁸ There do not appear to be any differences between the rules that apply to parks

⁴¹¹ Alberta Environment and Parks Website, online: <www.albertaparks.ca/albertaparksca/management-land-use/legislation-regulations.aspx#wpp>.

⁴¹² Alberta Environment and Parks Website, online: <www.albertaparks.ca/albertaparksca/library/land-reference-manual/parks-by-class.aspx?id=Wildland%20Provincial%20Park>.

⁴¹³ See for example Government of Alberta, Alberta Parks, “Trail plan for Hubert Lake Wildland Provincial Park, Northeast Region” (October 2017), online: <<https://open.alberta.ca/publications/trail-plan-for-hubert-lake-wildland-provincial-park-northeast-region>>.

⁴¹⁴ RSA 2000 c W-11.

⁴¹⁵ *Forest Land Use and Management Regulations*, AR 197/76 s.1(d)(3). Section 6 of the regulation does permit some limited use of OHVs in emergencies, to control forest fires for park management or with written permission of the Director.

⁴¹⁶ *Public Lands Act*, RSA 2000, c P-40.

⁴¹⁷ Alberta Environment and Parks Website, online: <www.albertaparks.ca/albertaparksca/management-land-use/current-parks-system/>.

⁴¹⁸ The purposes of recreation areas are set out in section 4 of the Act:

versus those that apply to recreation areas. The phrase “park or recreation area” appears in the *Act* 53 times. There are only two sections which refer to parks alone without also including recreation areas.⁴¹⁹

Section 27 of the *Provincial Parks General Regulation*, noted above, bans OHV use in provincial recreation areas except on designated trails or with written authorization of the Minister.

4.5.9 Provincial Parks - Wilderness Areas

This and the following three categories of land are all governed by Alberta Environment and Parks under the *Alberta Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act*.⁴²⁰ Under section 3 of that Act, the three areas of land described in the Schedule to the *Act* become “wilderness areas”. Wilderness areas total 1,010 km² (249,576 acres).⁴²¹ Section 8(1)(a) of the Act provides that no person shall travel in a wilderness area except on foot.⁴²²

4.5.10 Provincial Parks - Ecological reserves

Ecological Reserves may be created pursuant to section 4 (1) of the Act.⁴²³ There are

4 Recreation areas are established, and are to be maintained, to facilitate their use and enjoyment for outdoor recreation by present and future generations.

⁴¹⁹ Section 6(2), which grandfathers any parks created under prior legislation and section 12(2)(t), which allows the Minister to make regulations designating any part of a park (but not apparently of a recreation area) as a “nature preserve”.

⁴²⁰ RSA 2000 c W-9.

⁴²¹ These areas are (a) The Ghost River Wilderness Area – an area of approximately 153 square kilometers in between the Banff National Park border (just north of Lake Minnewanka) and the west side of the Don Getty Wildland Provincial Park (b) The Siffleur Wilderness Area – an area of approximately 412 square kilometers bordering Banff National Park just south of highway 11 and west of highway 93, near the village of Nordegg and (c) The White Goat Wilderness Area – an area of approximately 445 square kilometers bordering the east side of Jasper National Park, just north of highway 11 and east of highway 93.

⁴²² *Supra*, note 420, s. 8(1)(a).

⁴²³ Section 4 provides:

- 4 (1) Subject to section 4.2, the Lieutenant Governor in Council, in order to preserve public land for ecological purposes, may designate as an ecological reserve any area of public land that, in the opinion of the Lieutenant Governor in Council,
- (a) is suitable for scientific research associated with the studies of natural ecosystems,

currently fifteen Ecological Reserves in Alberta, totalling approximately 268 square kilometers.⁴²⁴ Section 8(1)(g.1) of the Act provides that no person shall take into or use in an ecological reserve a motor boat or off-highway vehicle, a motor vehicle designed primarily for travel on highways other than on a road (excluding, however, its right of way or undeveloped road allowance), a cycle except on a road or prescribed route, or without the Minister's permission or except as prescribed, a horse or pack animal.⁴²⁵

4.5.11 Provincial Parks - Natural Areas

Natural Areas may be created pursuant to section 4.01(1) of the *Act*.⁴²⁶ There are currently 139 Natural Areas in Alberta, totalling approximately 1,300 square kilometers (321,000 acres).⁴²⁷ Activities in Natural Areas are not as restricted as are activities in Ecological Reserves and Wilderness Areas. OHV use is not strictly prohibited in Natural Areas but section 11(1) of the Act provides:

11(1) The Minister may by order close, or prohibit or restrict access to or travel in, a wilderness area, natural area, ecological reserve or heritage rangeland indicated in the order for the period or until the time specified in the order.

-
- (b) is a representative example of a natural ecosystem in Alberta,
 - (c) serves as an example of an ecosystem that has been modified by humans and that offers an opportunity to study the recovery of the ecosystem from that modification,
 - (d) contains rare or endangered native plants or animals that should be preserved, or
 - (e) contains unique or rare examples of natural biological or physical features.

⁴²⁴ Alberta Environment and Parks Website, online: <www.albertaparks.ca/albertaparksca/library/land-reference-manual/parks-by-class.aspx?id=Ecological%20Reserve>.

⁴²⁵ *Supra*, note 420, s. 8(1)(g.1).

⁴²⁶ Section 4.01 provides:

- 4.01 (1) The Lieutenant Governor in Council, in order
- (a) to protect sensitive or scenic public land or natural features on public land from disturbance, and
 - (b) to maintain that land or those features in a natural state for use by the public for conservation, nature appreciation, low intensity outdoor recreation or education, or for any combination of those purposes, may designate any area of public land as a natural area.

⁴²⁷ Alberta Environment and Parks Website, online: <www.albertaparks.ca/albertaparksca/library/land-reference-manual/parks-by-class.aspx?id=Natural%20Area>.

In practice the Minister's power to issue Orders closing areas governed under the *Act* is delegated to local Alberta Parks and Environment employees, including Conservation Officers, under section 2 of the *Provincial Parks Act*.⁴²⁸

4.5.12 Provincial Parks - Heritage rangelands

Heritage Rangelands may be declared pursuant to section 4.1 of the *Act*.⁴²⁹ Two Heritage Rangelands have been dedicated in Alberta to date totalling 120 km² (29,650 acres), the Black Creek Heritage Rangeland and the OH Ranch. On the Black Creek property OHVs are permitted only on two designated trails which provide access to the Bob Creek Wildland Park.⁴³⁰ Under the management plan for the OH Ranch property, recreational access is only allowed on foot or on horseback.⁴³¹ Section 8.1(3) of the *Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act*, which would legislatively prohibit OHV use on all heritage rangelands, has never been proclaimed.⁴³²

4.5.13 Section 7 lands

Ten parcels of land have been “declared” under the *Provincial Parks (Section 7 Declaration) Regulation*.⁴³³ The Regulation provides that six of the parcels are treated as

⁴²⁸ *Supra* note 409.

⁴²⁹ Section 4.1 provides:

4.1 Subject to section 4.2 [a public notice provision], the Lieutenant Governor in Council may designate as a heritage rangeland any area of public land, or land in respect of which the Minister has entered into an agreement that gives the Crown the right to designate it as a heritage rangeland, in order to ensure its preservation and protection using grazing to maintain the grassland ecology.

⁴³⁰ Alberta Environment and Parks Website, online: <www.albertaparks.ca/black-creek/>. Legislation passed in 2004 to allow this does not appear to have ever been proclaimed. *Black Creek Heritage Rangeland Trails Act*, SA 2005, c B-2.5, online: <www.qp.alberta.ca/1266.cfm?page=B02P5.cfm&leg_type=Acts&isbncIn=0779746457>.

⁴³¹ OH Heritage Rangeland Management Plan, Appendix A – Permitted Uses, Alberta Environment and Parks Website, online: <www.albertaparks.ca/media/447228/ohranchmgmtplan.pdf>.

⁴³² *Supra*, note 420, s. 8.1(3).

⁴³³ AR 166/2011.

Parks.⁴³⁴ Two others are to be treated as Recreation Areas.⁴³⁵ The remaining two parcels are treated as Wildland Provincial Parks.⁴³⁶

4.5.14 Provincial Crown Land managed under the Public Lands Act

The *Public Lands Act*⁴³⁷ and the *Public Lands Administration Regulation* (“PLAR”)⁴³⁸ affect recreational use of non-park provincial Crown land. Since 2014, Alberta Environment and Parks has been responsible for Crown land managed under the *Public Lands Act*.⁴³⁹

The rules are complex:

One of the purposes of the 2011 PLAR was to clarify the rules for public access to public lands. What at first glance might seem a simple and straightforward task, on examination reveals a complex web of considerations that, in the end, make the resultant rules anything but simple and straightforward.⁴⁴⁰

By Ministerial Order issued under the *Public Lands Act*, the province has been divided into the white (settled and agricultural) area and the green (mostly unsettled and forested) area.

4.5.14.1 White area - agricultural public land

There are approximately twenty thousand square kilometers of agricultural public land in Alberta.⁴⁴¹ Agricultural public land is Crown land that is leased to farmers and ranchers. A small portion of agricultural public land (primarily grazing leases) is in the foothills.⁴⁴²

⁴³⁴ Dillberry Lake, Eagle Point, Miquelon Lake, Aspen Beach, Dunvegan, Whitney Lakes.

⁴³⁵ Blue Rapids, English Bay.

⁴³⁶ La Biche River, Peace River.

⁴³⁷ *Supra*, note 416.

⁴³⁸ *Public Lands Administration Regulation*, Alta Reg 187/2011.

⁴³⁹ Kwasniak, *supra* note 371 at 100.

⁴⁴⁰ Kwasniak, *ibid*, at 164. The author unravels some of the complexities over the next 6 pages but starts with a warning that “There is no promise that there will be clarity in the end”.

⁴⁴¹ Alberta Environment and Parks Website, online: <www.mywildalberta.com/Hunting/LandAccess.aspx>.

⁴⁴² Alberta Environment and Parks website <online <<http://aep.alberta.ca/recreation-public-use/recreation-on-agricultural-public-land/default.aspx>>.

The rules regarding access for any purpose are set out in the *Recreational Access Regulation* enacted under the *Public Lands Act*.⁴⁴³ This regulation has two parts, the first (sections 2 through 12.1) setting out the rules regarding recreational access, the second part (sections 13 through 22) providing a dispute resolution process. Under the first part a recreational user must seek permission before entering agricultural public land. The leaseholder has a positive duty to provide access with several widely defined exceptions. Access can be denied to anyone using bicycles, transportation animals, motor vehicles or to anyone who proposes to hunt near livestock, use firearms, camp or where the proposed use is contrary to a recreation management plan or director's Order.⁴⁴⁴

In February, 2016 motorized access was refused by holders of a 40 km² agricultural grazing lease east of Waterton National Park in an area known as "Pole Haven". The area, within the watershed of the Oldman River, has been regularly used by OHV enthusiasts for decades.⁴⁴⁵ Members of the Pole Haven Grazing Association have been raising concerns about unmanaged motorized recreation on the lease for several years.⁴⁴⁶ Access, other than for the approximately 35 members of the Grazing Association, is now limited to foot access only because "over-access, rowdiness, human and livestock endangerment and an overall concern for the health of the land".⁴⁴⁷

⁴⁴³ Alberta Regulation 228/2003, online: <http://www.qp.alberta.ca/documents/Regs/2003_228.pdf>.

⁴⁴⁴ *Ibid.* s. 6.

⁴⁴⁵ Dan Still, "Pole Haven – What Happened? And What Happens Now?" (2016), Oldman Watershed Council website, online: <<http://oldmanwatershed.ca/blog-posts/2016/4/8/pole-haven-what-happened-and-what-happens-now>>.

⁴⁴⁶ For concerns raised during public meetings regarding the development of the South Saskatchewan Regional Plan see: Alberta Environment and Parks, "What we heard: protecting livestock and the land in Cardston" (20 November 2013), (blog) online: <<https://albertaep.wordpress.com/2013/11/20/2027/>>.

⁴⁴⁷ Still, *supra* note 445 .

4.5.14.2 Green area - Public land use zones

The *Public Lands Act* provides for the creation of public land use zones, each one commonly referred to as a PLUZ.⁴⁴⁸ PLUZs are located in sensitive landscapes, many along the headwaters on the eastern slopes of the Canadian Rockies.⁴⁴⁹ A public land use zone is land declared to be such under section 178 and Schedule 4 of the PLAR. As of May 2018, Schedule 4 lists 18 public land use zones.⁴⁵⁰ Schedule 4 describes each PLUZ by land description. A PLUZ may contain another PLUZ⁴⁵¹ or it may contain areas with designations under other legislation, such as recreation areas designated under the *Provincial Parks Act*.

Section 185(1) of the PLAR prohibits the operation of on highway vehicles, OHVs and snow vehicles in a PLUZ, subject to exceptions listed under subsections (2) and (3) and to permissions that may be granted under Schedule 4 of the PLAR.⁴⁵² Under Schedule 4, no

⁴⁴⁸ Section 71.1 of the Alberta *Public Lands Act* provides:

71.1(1) The Lieutenant Governor in Council may make regulations

- (a) declaring any area of land to be a public land use zone;
- (b) permitting, prohibiting, regulating or controlling activities on and uses of land in public land use zones;
- (c) declaring any area of land to be a public land recreation area or public land recreation trail;
- (d) governing the use of public land recreation areas or public land recreation trails and prohibiting, regulating or controlling activities in them;
- (e) establishing fees payable for the use of public land recreation areas or public land recreation trails.

⁴⁴⁹ Alberta Environment and Parks Website, online: <www.esrd.alberta.ca/recreation-public-use/recreation-on-public-land/public-land-use-zones/>.

⁴⁵⁰ (1) Kananaskis Country (2) Maclean Creek (3) Sibbald (4) Cataract Creek (5) Blackstone/Wapiabi (6) Job/Cline (7) Panther Corners (8) Upper Clearwater/Ram (9) Holmes Crossing (10) Whitecourt Sandhills (11) Coal Branch (12) Athabasca Ranch (13) Brule Lake (14) Kiska/Willson (15) Dormer/Sheep Public Land Use Zone (16) Ghost (17) Livingstone (18) Porcupine Hills.

no

⁴⁵¹ For example, the Kananaskis Country PLUZ wholly contains the McLean Creek Off-Highway PLUZ and the Sibbald Snow Vehicle PLUZ.

⁴⁵² Section 185 of the PLAR provides:

Restricted use of conveyances

- 185(1) Subject to subsections (2), (3), (8) and (9) and except as expressly authorized for a particular public land use zone in Schedule 4, no person shall, within any public land use zone, operate
- (a) an on-highway vehicle, except on a highway, or

permission is granted for any recreational use of OHVs in ten PLUZs.⁴⁵³ For three others, access is only permitted for snow vehicles on designated trails.⁴⁵⁴ For four others, OHV use is allowed on designated trails, subject to restrictions on dates or on weight, tire pressure and wheelbase.⁴⁵⁵ One PLUZ, the Maclean Creek OHV Area, allows operation of OHVs off of designated trails.

- (b) an off-highway vehicle or snow vehicle.
- (2) The operation of a motor vehicle on land within any public land use zone is permitted
 - (a) to transport an employee of the Government in the course of the employee's work,
 - (b) where the vehicle is being used to conduct or transport any person or equipment to be employed or used in work or activity within the public land use zone that has been authorized by the director,
 - (c) to remove a sick, injured or deceased person from the public land use zone, and
 - (d) in connection with registered trapping at places within the limits of a registered trapping area within the public land use zone where the use of the vehicle is authorized by an officer.
- (3) The operation of a motor vehicle within a public land use zone is permitted only in areas or on trails that have been designated for that purpose by signs or notices posted by an officer in the zone pursuant to this Regulation.
- (4) No person shall
 - (a) take an off-highway vehicle or motorcycle described in subsection (3),
 - (b) camp overnight, or
 - (c) permit the person's horse or a horse under the person's control to graze or be tethered within 100 meters of a lakeshore in any public land use zone except where authorized by a notice posted in the zone or without first obtaining an access permit for doing so.
- (5) No person shall land a helicopter on a lake, or within 200 meters of the shore of a lake, in a public land use zone without first obtaining an access permit for doing so.
- (6) No person shall operate a motorized boat within a public land use zone except
 - (a) in areas designated for that purpose by signs or notices posted in the area, or
 - (b) in accordance with an access permit.
- (7) No person shall
 - (a) camp, or
 - (b) start or maintain an open fire within one kilometre of a public land recreation area or in a provincial recreation area located within the public land use zone.
- (8) Subsections (1)(b), (4), (6) and (7) do not apply to an individual who is exercising a right recognized and affirmed under Part II of the *Constitution Act, 1982* or a right under section 12 of the Transfer Agreement or is travelling to a location to exercise such a right.
- (9) Subsection (3) does not apply to the operation of an off-highway vehicle or snow vehicle by an individual who is exercising a right recognized and affirmed under Part II of the *Constitution Act, 1982* or a right under section 12 of the Transfer Agreement or is travelling to a location to exercise such a right.

⁴⁵³ (1) Kananaskis Country (2) Blackstone/Wapiabi (3) Panther Corners (4) Whitecourt Sandhills (5) Coal Branch (6) Athabasca Ranch (7) Brule Lake (8) Ghost (9) Livingstone (10) Porcupine Hills.

⁴⁵⁴ Sibbald, Cataract Creek and Holmes Crossing (subject to date restrictions).

⁴⁵⁵ (1) Job/Cline (2) Upper Clearwater/Ram (3) Kiska/Willson (4) Dormer/Sheep

Notwithstanding the above, the Alberta Environment and Parks website indicates that OHV use on designated trails is allowed in 10 PLUZs, making OHV use on designated trails the norm, rather than the exception.⁴⁵⁶

Wide powers are granted to designated authorities under section 184 of the PLAR to restrict or prohibit entry into PLUZs. Under Alberta Environment and Parks policy, restrictions on entry will be considered (i) to protect public safety (ii) for environmental protection (iii) for wildlife protection (iv) and in any other case the Director considers appropriate. These powers also apply to public land recreation areas or public land recreation trails.⁴⁵⁷

4.5.14.3 Vacant public land with no disposition

Professor Kwasniak explains:

The PLAR authorises any person to enter for *recreational purposes* (E), *vacant public land* (F), where vacant public land is a *vacant disposition area* (G), or if the land is Environment and Sustainable Resource Development (ESRD) [now Environment and Parks] administered land that is not under a *formal disposition* (H), subject to the limitations set out below.⁴⁵⁸

“Recreational purposes” includes OHV use. “Vacant public land” means either (1) public land where no “formal disposition” (defined in s. 1(o) of PLAR) has been made or (2) a “vacant disposition area” which is defined as public land that *is* subject to any of several types of authorizations, which is under the administration of the Minister *but* where no development is occurring or likely to occur within 90 days. Professor Kwasniak points out that if a formal

⁴⁵⁶ (1) Allison Chinook (now within the Livingston PLUZ) (2) Athabasca Ranch (3) Brule Lake (4) Coal Branch (5) Dormer Sheep (6) Ghost (7) Job/Kline (8) Kiska Willson (9) Livingston (10) Maclean Creek (11) Porcupine Hills (12) Upper Clearwater/Ram. See Alberta Environment and Parks, online: <<http://aep.alberta.ca/recreation-public-use/recreation-on-public-land/public-land-use-zones/default.aspx>>.

⁴⁵⁷ Alberta Environment and Parks Directive, “Restrictions or Prohibitions on entry into Public Land Use Zones by Order – Public Lands Administration Regulation s. 184”, June 14, 2016, online: <<http://aep.alberta.ca/forms-maps-services/directives/documents/RestrictionEntryPLUZbyOrder-Jun14-2016.pdf>>; And see Alberta Environment and Parks Website, online: <<http://aep.alberta.ca/recreation-public-use/public-land-closures/default.aspx>>.

⁴⁵⁸ Kwasniak, *supra* note 371 at 167.

disposition has been issued, while public access is not available under PLAR, it still may be available under another statute or government policy.⁴⁵⁹

Vacant public land may be closed by an “officer” under section 48 of PLAR for periods of up to 28 days. Section 5 of the *Public Lands Act* permits the appointment of officers and other officials needed for the administration of the Act. An “officer” is broadly defined under section 1(o) of the and includes the Assistant Deputy Minister, members of the RCMP or other designated police forces and conservation, wildlife, forest or peace officers.

Determining the total area of land in Alberta subject in this category is difficult. Overlap with other designations is possible, for example vacant public land within a PLUZ. In areas where there is no overlap and no other regulation, OHV users face lower restrictions than elsewhere. Riders are not restricted to trails on vacant public land with no disposition.

4.5.15 Land protected under the Wildlife Act - Habitat Conservation Areas

Regulations put in place under the Alberta *Wildlife Act* can affect whether an OHV may be operated in a particular place. Section 129(3)(h) of the regulation prohibits operating any vehicle in a Habitat Conservation Area off of developed roads or parking areas without authorization. A Habitat Conservation Area is defined to be any land designated as such in Part 1 of Schedule 12 of the regulation. That part describes five such areas.⁴⁶⁰

4.5.16 Municipal land

Under section 13 of the Alberta *Traffic Safety Act*, the council of a municipality may make bylaws with respect to highways under the municipality’s direction, control and

⁴⁵⁹ *Ibid.*

⁴⁶⁰ Which are (1) The Ann and Sandy Cross Conservation Area south of Calgary (2) The Antelope Creek Habitat Conservation Area near Brooks, Alberta (3) The McNabb Habitat Conservation Area southeast of Vermillion, Alberta (4) the Martin Kachuk Habitat Conservation Area north of Vegreville, Alberta and (5) the Beaver Lake Habitat Conservation Area near Caroline, Alberta.

management, so long as those bylaws are consistent with the Act.⁴⁶¹ Similarly, under section 7 of the *Alberta Municipal Government Act*, a municipal council may pass bylaws to protect the safety, health and welfare of people and the protection of people and property, people, activities and things in, on or near a public place or place that is open to the public and transport and transportation systems.⁴⁶² Some municipalities have passed bylaws to regulate OHV use under the authority of these two pieces of legislation, either as a stand-alone bylaw or as part of the municipality's traffic or parks bylaws.⁴⁶³

4.6 Enforcement

Lack of enforcement of the rules has been noted as a concern in reports describing OHV damage, often attributed to a lack of political will.⁴⁶⁴

Enforcement on some Crown lands was increased beginning in 2016 through a new Alberta Government cross ministry program built upon enforcement, education and prevention. "Tools used to successfully execute the program include enforcement personnel, public engagement, social media, and data collection and reporting."⁴⁶⁵ Enforcement officials include

⁴⁶¹ *Traffic Safety Act*, *supra* note 361 s.13.

⁴⁶² *Municipal Government Act*, RSA 2000, c M-26, s. 7.

⁴⁶³ For example: Municipality of Crowsnest Pass, Bylaw No. 983,2017 Off-Highway Vehicle Control Bylaw, online: < www.crowsnestpass.com/public/download/documents/41821>; Town of Canmore, Parks Bylaw 27-97. Section 8 provides that OHVs can only be operated when permitted by signage. Online: <<https://canmore.ca/documents/bylaws/5-parks-bylaw-1997-27>>; City of Calgary Parks Bylaw (20M2003), Section 2(v) includes "all-terrain vehicle" within the definition of vehicle. Section 10 restricts vehicle use in parks to roadways; Strathcona County Traffic Bylaw 16-2015, Section 9 deals with off highway vehicle permits and rules. Online: < www.strathcona.ca/files/files/at-lls-bylaws-16-2015trafficsafetybylaw.pdf>; Town of Cochrane Traffic Bylaw 02/2—5, section 8 provides that off highway vehicles shall not be operated anywhere within the boundaries of the town unless permitted by signage. Online: <www.cochrane.ca/ArchiveCenter/ViewFile/Item/49>.

⁴⁶⁴ See Brad Stelfox & Cornel Yarmaloy, *Ghost Phase 1 Report*" *supra* note 464. Political will has been described as a somewhat ambiguous concept that can be broken down into four components (1) a sufficient set of actors capable of approving, implementing and enforcing public policies (2) a common understanding of the problem (3) commitment to support of a particular policy and (4) a commonly perceived and potentially effective policy solution. See Lori Ann Post, Amber N. Raile and Eric Raile, "Defining Political Will" (2010) 38:4 *Politics and Policy* 653 available online:<<https://doi-org.ezproxy.lib.ucalgary.ca/10.1111/j.1747-1346.2010.00253.x>>.

⁴⁶⁵ Alberta, Public Land Enforcement Committee, *Report on the 2017 Compliance Plan for Activities on Public Land* (April 19, 2018) ["2017 PLEC Report"], online: <<https://open.alberta.ca/publications/report-on-the-2016-compliance-plan-for-activities-on-public-lands-authorized-by-the-plec>>.

RCMP officers, Fish and Wildlife Officers employed by Alberta Justice and Solicitor General, Alberta Environment and Parks, Parks Division seasonal park rangers and permanent conservation officers, Alberta Sheriffs and Alberta Municipal police officers.⁴⁶⁶ Other staff involved in enforcement include Alberta Environment and Parks, Operations Division recreation engagement officers and Environmental Protection Officers.⁴⁶⁷ During 2017, 6,595 enforcement actions occurred.⁴⁶⁸ For the *Public Lands Act* and Regulation, 644 enforcement actions resulted in 85 enforcement orders, 14 evictions, 236 prosecutions, 5 people being given time to produce documents and 304 formal written warnings.⁴⁶⁹ Data from the prior year show 660 prosecutions and 143 warnings for a total of 803 enforcement actions.⁴⁷⁰

From 1979 until 2011, officers had the authority under the earlier versions of the *Provincial Offences Procedure Act* and its regulations to issue tickets for public lands offences.⁴⁷¹ This authority was revoked when the *Public Lands Administration Regulation* was consolidated in 2011, beginning a period during which officers could not issue tickets but instead had to issue a court summons to an offender, a much more unwieldy procedure requiring the issuing officer to appear at the later trial as a witness. Under changes implemented in 2016, officers were again allowed to issue violation tickets for simpler offences occurring in Public Lands Use Zones or Public Land Recreation Areas or on Public Land Recreation Trails.⁴⁷² An officer has discretion to issue a summons (thereby requiring a court appearance) depending upon

⁴⁶⁶ *Ibid* at 5.

⁴⁶⁷ *Ibid*.

⁴⁶⁸ *Ibid* at 3.

⁴⁶⁹ *Ibid* at 12.

⁴⁷⁰ Alberta, Public Land Enforcement Committee, *Report on the 2016 Compliance Plan for Activities on Public Land* (Mar 24, 2017), online: <<https://open.alberta.ca/publications/report-on-the-2016-compliance-plan-for-activities-on-public-lands-authorized-by-the-plec>>.

⁴⁷¹ The current version is the *Alberta Provincial Offences Procedure Act*, RSA 2000 Ch P-34.

⁴⁷² *Procedures Regulation*, AR 63/2017, s2.

the circumstances of the offence. Offences outside of these areas always require summons and a court appearance.

Chapter Five: Applying a Law and Society Approach: Mapping the Social and Economic Context of OHV Regulation and Harm in Alberta

5.1 Social costs and benefits of off highway vehicle use

OHV use can be a highly social activity. Potential positive impacts include spending quality time outdoors with family and friends, increased access to the remote areas for people who have mobility challenges and increased opportunities for fishing and hunting. These impacts are increased when OHV riding is combined with random camping on public lands. Imposing restrictions on either activity has been interpreted by some users as an attack on their cherished lifestyle.⁴⁷³ As with economic benefits, the existence of social benefits to significant groups within Alberta society is a complicating factor for regulation.

OHV operation in wilderness areas is a topic that generates strong and polarized opinions.⁴⁷⁴ Conflict between OHV riders and other recreational users of public land was noted as something that had been raised by participants in the consultations which led to the Land Use Framework.⁴⁷⁵ In a “workbook survey” done as part of the consultation process, 2,450 respondents said they were “somewhat concerned” or “very concerned” about “More

⁴⁷³ Posts and comments made on any of the OHV user group social media pages will often mention lifestyle. See for example the Facebook pages referred to in note 597 below.

⁴⁷⁴ See for example the following news stories and, where allowed, the online comments posted on both sides: “Caribou conservation group wants snowmobilers out” Daybreak North, CBC News Posted: 4 November 2015, 6:35 PM PT online: <www.cbc.ca/news/canada/british-columbia/caribou-snowmobilers-conservation-group-1.3304743>; Colleen Derworiz “Group says province still spending money on off-road vehicle trails in Castle”, *Calgary Herald* online: <<http://calgaryherald.com/news/local-news/group-says-province-still-spending-money-on-off-road-vehicle-trails-in-castle>>; J.W. Schnarr “Illegal off-roaders damaging Alexander Wilderness ridge”, *Lethbridge Herald*, 19 November 2015, online: <<http://lethbridgeherald.com/news/local-news/2015/11/03/illegal-off-roaders-damaging-alexander-wilderness-ridge/>>; Kevin Van Tighem, “Safeguarding the Source” *Alberta Views* Vol 16 No 06, July/August 2013, 28-35 online: <<https://albertaviews.ab.ca/julyaugust-2013/>>; Sean Nichols, “Hummingbird to Hope: Trail Monitoring and a Wildland Park in the Bighorn” *Wildlands Advocate* 23:1 (Feb 2015) 11.

⁴⁷⁵ “However, there are conflicts between recreational users. For example, hikers and anglers expressed annoyance with quad users about the destruction of trails and fishing habitats.” Canada West Foundation, “Stakeholder Input on the Provincial Land Use Initiative – Summary Report” (November 2006) online: <www.landuse.alberta.ca/LandUse%20Documents/Stakeholder%20Input%20on%20the%20Provincial%20Land%20Use%20Framework%20Initiative%20-%202006-11.pdf> at 8.

conflicts between land users” versus only 232 respondents who said they were “not at all concerned”.⁴⁷⁶ Conflicts between OHV users and other groups have been studied more thoroughly in the United States than in Alberta, where no on point field research has been found.⁴⁷⁷ Impacts elsewhere have been found to be “asymmetrical”, meaning that OHV use has a larger impact on non-OHV users than the other way around. In some cases, non-OHV users simply cease doing their chosen activity to avoid the conflict.⁴⁷⁸

Also controversial are claims by the OHV industry regarding reported health benefits of OHV use.⁴⁷⁹

5.2 Off highway vehicles registered in Alberta

It is impossible to determine exactly how many OHVs are owned in Alberta at any given time by looking at publicly available data. Because of allowed exemptions from registration requirements, the number of OHVs will always be greater than the number of registrations. Furthermore, the definition of “off highway vehicle” in the *Traffic Safety Act* includes *all* four-wheel drive vehicles, including those registered for on-highway use. Published government vehicle registration statistics separate vehicles by general body style but not by “vehicle operations” so exactly how many four-wheel drive vehicles are registered in Alberta cannot be determined.⁴⁸⁰ Even if the total number could be discovered, there would be no method to

⁴⁷⁶ Alberta Government, “Land-use Framework Workbook Survey Results” The Praxis Group (2007) at 115, online: <www.landuse.alberta.ca/LandUse%20Documents/Land-use%20Framework%20Workbook%20Survey%20Results%20-%202007-10.pdf>. The report notes at page 4 that participants were not randomly selected and that the survey results are subjective and may not be valid across all Albertans.

⁴⁷⁷ See J. Adams and S. McCool “Finite Recreation Opportunities: The Forest Service, the Bureau of Land Management, and Off-Road Vehicle Management” 49 *Nat Resources J* 45 (2009) online: <<http://digitalrepository.unm.edu/nrj/vol49/iss1/3>>. And see F. Shilling, J. Boggs & S. Reed, “Recreational system optimization to reduce conflict on public lands” (2012) 50: 3 *Env Mgmt* 381.

⁴⁷⁸ *Ibid* at 52.

⁴⁷⁹ See Bissix et al, *supra* note 360.

⁴⁸⁰ Motorized Vehicle Registration Statistics, online: <www.transportation.alberta.ca/3119.htm>.

determine how much time a particular street-legal four-wheel drive vehicle spends on road versus off road or if in fact it is used off road at all.

Nonetheless, we can get some idea of scale by looking at registration and industry statistics, bearing in mind that the actual number of OHVs is always going to be higher than the discoverable number. The following table is a compilation of publicly available Alberta vehicle registration statistics.⁴⁸¹

Table 1: Alberta vehicle registration statistics 2004 - 2017

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OFF HIGHWAY VEHICLES														
ATV-TRACKED	1,806	2,072	2,328	2,769	2,760	2,602	2,465	2,387	2,283	2,280	2,272	2,251	2,225	1,888
ATV-WHEELED	48,564	54,854	64,772	76,704	88,796	94,346	97,727	97,166	99,235	100,911	102,175	105,174	105,601	91,590
MINI AUTOS	36	34	47	54	58	51	61	63	54	48	49	49	56	50
MINI BIKES	309	301	339	379	436	426	429	383	314	305	295	294	341	265
MOTORCYCLES	3,217	3,653	4,513	5,384	6,332	6,548	6,897	6,466	6,478	6,450	6,542	7,052	7,844	6,867
SNOW VEHICLES	26,671	25,016	22,914	28,801	29,979	31,044	30,565	33,385	30,257	34,313	35,245	34,487	33,723	29,758
OTHER VEHICLES	11	11	11	11	13	12	11	11	12	13	13	11	14	23
=====														
TOTAL OFF HIGHWAY: (as of March 31 vehicle counts)	80,614	85,941	94,924	114,102	128,374	135,029	138,155	139,861	138,633	144,320	146,591	149,318	149,804	130,441
=====														

Between 2004 and 2016 the number of registered vehicles in categories “ATV Wheeled” (quads), motorcycles (which does not include motorcycles designed strictly for street use) and snow vehicles increased significantly. Between 2016 and 2017 registrations decreased for all three of these categories of OHVs (registrations of ATV wheeled vehicles went down by 13%,

⁴⁸¹ Motorized Vehicle Registration Statistics, online: <www.transportation.alberta.ca/3119.htm>. The table is a combination of the data from the reports titled “Motorized Vehicle Registrations by Vehicle Style” from 2004 to 2017.

ATV tracked by 15%, snow machines by 12%) possibly as a delayed result of the significant recession which began in the province in 2014.⁴⁸²

5.3 Off highway vehicle sales in Alberta

Sales and service of OHVs is a very large industry in Canada.⁴⁸³ The 2018 price of a new off-road motorcycle can exceed \$10,000 and the price of a larger quads can exceed \$20,000.00. Specialty off-road full-size trucks can have values many times greater than that.

According to a report by recreational vehicle industry group there were approximately ninety-four authorized ATV dealers and seventy-five authorized motorcycle dealers in Alberta in 2013.⁴⁸⁴ The reports produced by the group provide the following sales figures for new ATV sales in Alberta for the period 2010-2016:⁴⁸⁵

Table 2: All terrain vehicle sales in Alberta 2010 - 2016

Year	2010	2011	2012	2013	2014	2015	2016
Units	9,734	8,649	9,245	9,468	9,199	7,472	5,204

The sales figures are described as having been “compiled using data from actual shipments by [Canadian Off Highway Vehicle Distributers Council] members. COHV member companies account for over ninety percent of total ATV sales in Canada”⁴⁸⁶ Canada wide,

⁴⁸² Available data for registrations is not separated into recreational and business users. Both groups would have been impacted by the recession.

⁴⁸³ The Canadian industry is small compared to that in the United States where industry statistics for 2006 show 1,034,966 new all-terrain vehicles and off-highway motorcycle sales and a total number of registrations of 8,010,000. H. Cordell et al, “Off-Highway Vehicle Recreation in the United States and its Regions and States: An Update National Report from the National Survey on Recreation and the Environment (NSRE)(2008)” online: <<https://www.fs.fed.us/recreation/programs/ohv/IrisRec1rpt.pdf>>.

⁴⁸⁴ Motorcycle and Moped Industry Council “2016 Motorcycle, Scooter & All-Terrain Vehicle Annual Industry Statistics Report” at page 15, online: <www.mmhc.ca/wp-content/uploads/2015/11/MMIC-COHV-ANNUAL-INDUSTRY-STATISTICS-REPORT-2016.pdf>, (accessed November 20, 2017). The report uses the acronyms ATV and OHV interchangeably. Figures for the number of dealers are taken from the report from 2014 which is no longer available online, a copy of which is on the authors file.

⁴⁸⁵ *Ibid* at 17.

⁴⁸⁶ *Ibid* at 16.

looking only at data for 2014, sales of ATV's (not including off road motorcycles) totalled approximately \$712 million.⁴⁸⁷

5.4 Economic costs and benefits of off highway vehicle use

The socioeconomics of OHV use are complex and largely unstudied in Alberta and elsewhere. There are environmental costs as outlined above. Economic benefit to particular sectors (dealers, outfitters, local businesses selling supplies and accommodation) are clear, if unquantified. Global economic benefits to the economy are routinely claimed, but largely unstudied with full-cost accounting in Alberta.⁴⁸⁸ The existence of economic benefits to any constituency is an important and complicating factor for regulation.

Ouren et al were unable to locate any published studies analyzing the socioeconomic costs of OHV use in the United States, as of 2007.⁴⁸⁹ They state:

These costs could include the degradation or loss of ecosystem services, the costs of restoring OHV sites, and the loss of revenues from nonmotorized recreators who seek alternate areas for recreation where motorized recreation does not occur. Examples of degraded or lost ecosystem services would be the diminished capacity for a given watershed to provide high-quality water, diminished water infiltration into aquifers, and flooding resulting from increased runoff where soils become compacted. Lost constituencies (and associated revenues) could include not only non-motorized recreators, but also hunters and anglers whose primary recreational foci (wildlife and fish) may have undergone population declines due to the effects of OHV use. At this time, however, the true benefit: cost ratio of OHV use remains unknown.⁴⁹⁰

No broad studies of the overall socio-economic impact of OHV use in Alberta have been located. The 2012 Canadian Nature Survey did contain questions about “motorized recreational

⁴⁸⁷ *Ibid.*

⁴⁸⁸ For example, see Canadian Off-Highway Vehicle Distributors Council, “National, Provincial and Territorial Economic Impacts of ATVs and Sid-By0Sides 2015: Final Report”, available online from the organization’s website online: <www.cohv.ca/press-releases/canadians-spent-6-9-billion-on-direct-activities-involving-atvs-and-rovs-in-2015/>.

⁴⁸⁹ Ouren et al 2007, *supra* note 317 at 33 and 192.

⁴⁹⁰ Ouren et al 2007, *supra* note 317 at 38.

vehicle use on land”.⁴⁹¹ The study found that 18% of Albertans had participated in “ATV, snowmobile use” in the previous twelve months.⁴⁹² Those people that participated in “motorized recreation” spent on average twenty-nine days on trips within twenty kilometers of where they lived and fifteen days on trips further than twenty kilometers from home.⁴⁹³ The study estimates that \$518 million was spent on land based motorized recreation activities in 2012, including \$121 million on transportation, \$20 million on accommodation and \$202 million on equipment, fees and supplies.⁴⁹⁴

Bilberman and Andereck analyzed the economic value of OHV recreation in Arizona in 2003, concluding that OHV recreation produced a high value of consumer surplus (the positive difference between what riders were prepared to pay for the experience and what they in fact paid) to the users, ranging from \$54 to \$96 per trip for the survey participants.⁴⁹⁵ In a similar study conducted in 2014, OHV users in the Crowsnest Pass area of Alberta were surveyed regarding demographic and socioeconomic data as well as trip frequency and preferences.⁴⁹⁶ The study concluded that the average OHV trip provided a consumer surplus of \$258 and that the total economic benefit to riding over the summer and fall months in the area studied was \$2.8 million.

⁴⁹¹ Federal, Provincial, and Territorial Governments of Canada, Canadian Councils of Resource Ministers, *Canadian Nature Survey: Awareness, participation, and expenditures in nature-based recreation, conservation, and subsistence activities*, (Ottawa: 2014), online: <www.biodivcanada.ca>.

⁴⁹² *Ibid* at 68, Figure 30. A 2018 provincial survey reports a lower number, with 14.7% of households having someone participating in OHV use in the previous 12 months. See Alberta Culture and Tourism, “2017 Albertan Recreation Survey” (July 2017) online: <<https://open.alberta.ca/publications/2017-albertan-recreation-survey>> at 11.

⁴⁹³ *Ibid* at 69, Figure 31. The category of motorized recreation aggregates land-based and water-based activities. *Ibid* at 166, Appendix A.

⁴⁹⁴ *Ibid* at 70, Table 24.

⁴⁹⁵ Jonathan Bilberman and Kathleen L. Andereck, “The Economic Value of Off-Highway Vehicle Recreation” (2006) 38: 2 J Leisure Res 208.

⁴⁹⁶ Sarah Prescott *Analysis and Economic Valuation of Off Highway Vehicle Use in Southwestern Alberta, Canada* (MSc Thesis, U of A Dept of Resource Economics and Environmental Sociology, 2017) [unpublished], online: <<https://era.library.ualberta.ca/files/cgh93gz69r#.WmvAW-dG2UI>>.

In one Alberta study, health care costs associated with OHVs accidents were found to be significant and rising between 1998 and 2008. The authors found 459 serious injury cases resulting in 395 trauma center admissions, 4,117 days of hospitalization and a 17% mortality rate.⁴⁹⁷ In another study using data collected at the Calgary Foothills Medical Centre from 1995 – 2010, motorcycle and OHV injuries were positively and significantly associated with rising mean Alberta gross domestic product. The authors state “To our knowledge, this is the first investigation to demonstrate that off-road vehicle-related injuries are associated with economic affluence (ie “toy-related” mechanisms).”⁴⁹⁸

Alberta government statistics show 683 hospital admissions and 5,374 outpatient and emergency visits from OHV use in 2013 (prior to helmet use becoming mandatory in 2017) with a total estimated cost to the health care system of \$16 million.⁴⁹⁹

The cost of building and maintaining OHV trails requires further study. Properly constructed trails require planning, engineering, construction and maintenance, costs which could be offset but likely not completely paid by user fees.

OHV use also generates positive economic activity through the sale and repair of new and used machines, spending on the costs of the activity (fuel, supplies, accommodation, outfitters) and spending on trail construction and maintenance. No thorough analysis has been done of these economic benefits in Alberta.

⁴⁹⁷ Emily Krauss et al “Ten Years of All-Terrain Vehicle Injury, Mortality, and Healthcare Costs” (2010) 69:6 *Journal of Trauma-Injury Infection & Critical Care* 1338 online: <DOI: 10.1097/TA.0b013e3181fc5e7b>.

⁴⁹⁸ Derek J. Roberts et al “A booming economy means a bursting trauma system: association between hospital admission for major injury and indicators of economic activity in a large Canadian health region” (2014) 207 *Am J Surgery* (2014) 653.

⁴⁹⁹ Alberta Government, “Public Health Surveillance Bulletin Number 5” (February 2015)”, online: <<https://open.alberta.ca/dataset/29f11677-134a-40d6-8eb4-be4d21e1c276/resource/d1d1cb1a-e42a-41d7-ab60-b89cd66a249a/download/phsb-05-2015-atv.pdf>>.

5.5 Alberta demographics

Alberta's population has risen rapidly and continuously from 73,000 in 1901 to over four million today.⁵⁰⁰ Growth is expected to continue, and government projections predict a population of between 5.7 million and 7.6 million people by 2046.⁵⁰¹ The geographic census areas which contain Calgary, Red Deer, Edmonton and Lethbridge are expected to grow faster than the provincial average. Nine out of ten immigrants to the province choosing to live in the Calgary - Edmonton corridor.⁵⁰² These popular cities are located on important rivers, with headwaters just a few hour's drive away.

Increasing population brings an increasing need for effective land use planning.⁵⁰³ As noted in the previous chapter, in 2008, the Alberta government presented the LUF which opened with the words:

Alberta's prosperity has created opportunities for our economy and people, but it has created challenges for Alberta's landscapes. Industrial activity, municipal development, infrastructure, recreation and conservation interests are often competing to use the same piece of land What worked for us when our population was only one or two million will not get the job done with four, and soon five million.⁵⁰⁴

In a recent survey, OHV users in southern Alberta indicated they would continue their activities even if user numbers doubled.⁵⁰⁵

⁵⁰⁰ Wikipedia, "Demographics of Alberta", online: <https://en.wikipedia.org/wiki/Demographics_of_Alberta>, accessed 29 July 2018.

⁵⁰¹ Alberta Finance, Population Projections, Alberta 2018-2046, online: <www.alberta.ca/population-statistics.aspx>.

⁵⁰² *Ibid* at 8.

⁵⁰³ See "The Energy of Land Use", a presentation on changing land uses in Alberta given by biologist Dr. Brad Stelfox at TedX Calgary 2013, online: <<https://m.youtube.com/watch?v=A-9S7EbJ7DY>>.

⁵⁰⁴ Land Use Framework, 2008, Government of Alberta, online: <www.landuse.alberta.ca/LandUse%20Documents/Land-use%20Framework%20-%202008-12.pdf>.

⁵⁰⁵ Sarah Prescott, "*Analysis and Economic Valuation of Off Highway Vehicle Use in Southwestern Alberta, Canada*", *supra* note 496 at 52.

5.6 The dominant schools of environmental thought in Alberta

In Section 2.8 above I described a continuum of schools of environmental thought.⁵⁰⁶ The resource conservationist discourse has been commonly adopted in Alberta, at least outside of national and provincial parks. It is visible in provincial policy:

Our province is big, beautiful and bountiful and we are grateful for the opportunities it has given us We need to ensure this land – and all the activities it sustains – is managed responsibly for those who come after us. This means developing a land use system that will effectively balance competing economic, environmental and social demands The purpose of the Land-use Framework is to manage growth, not stop it. The Government of Alberta rejects the simplistic view that to save the environment, we must stop development The goal of the Land-use Framework is to sustain our growing economy, but balance this with Albertan’s social and environmental goals. This is what the Land-use Framework is about – smart growth.⁵⁰⁷

It is also evident in the approach taken by most of the dominant conservation organizations in the province.⁵⁰⁸ Conservation associations with this underlying ethic enjoy a

⁵⁰⁶ See Section 2.8 and Figure 2, *supra* pages 33 and 34.

⁵⁰⁷ Alberta Land-use Framework, Government of Alberta (2008) at 6, online: <<https://landuse.alberta.ca/planforalberta/landuseframework/Pages/default.aspx>>.

⁵⁰⁸ For example (1) Ducks Unlimited Canada was created by hunters in 1937 for the purpose of preserving wetlands to produce more waterfowl for people to hunt. The 2013 Annual Report of the organization states “We are proud of our waterfowling roots and our wetland conservation mission provides many benefits to people – including opportunities to hunt and enjoy the outdoors.” *Ducks Unlimited Canada Annual Report, 2013*, online:< www.ducks.ca/wp-content/uploads/ar-2013/2013-AR-Full.pdf> at 1 and 3; (2) The Alberta Conservation Association was created in 1997 through an agreement between the Alberta Government and several organizations to resolve a long running disagreement about how the funds from hunting and fishing licenses issued by the province should be used. The organization has a mission statement which states “ACA conserves, protects and enhances fish and wildlife populations and their habitats for Albertans to enjoy, value and use.” Alberta Conservation Association website, online: <www.ab-conservation.com/about/who-we-are/>; (3) Trout Unlimited Canada was created by anglers and has a mission to “conserve, protect and restore Canada’s freshwater ecosystems and their coldwater resources for current and future generations.” Trout Unlimited Canada website, online: <www.tucanada.org/index.asp?p=1960>; (4) The Alberta Fish and Game Association’s objectives include promoting conservation of Alberta’s natural resources as well as fostering and promoting the non-commercial harvest of fish and game as a legitimate part of an overall wildlife management program. Alberta Fish and Game Association website, online: <www.afga.org/profile.html>; (5) The Alberta Riparian Habitat Management Society (commonly referred to as “Cows and Fish”) was created by Trout Unlimited Canada and the Alberta Beef Producers Association in 1992 “to foster a better understanding of how improvements in grazing and other management of riparian areas can enhance landscape health and productivity, for the benefit of landowners, agricultural producers, communities and others who use and value riparian areas.” Cows and Fish website, online: <www.cowsandfish.org/about/about.html>; (6) The Southern Alberta Land Trust was created by ranchers in 1998 to prevent development and fragmentation of ranchlands along the eastern slopes of the Rockies in southern Alberta. They do this by placing purchased or donated conservation easements on those lands. Their website contains no mission statement but most of the benefits

broad base of support and have accomplished a great deal.⁵⁰⁹ Curry makes the following point:

[A] great deal of ecologically sound regulation and legislation can be defended in terms of human interests . . . light green or shallow ethics . . . does not even attempt to break out of anthropocentrism . . . This is the dominant philosophy, where nature is concerned . . . Its followers see non-human nature as a resource to be exploited for human ends, and that view is encapsulated in resource management and conservation, human welfare ecology and a great deal of what is called environmentalism.⁵¹⁰

The preservationist discourse was described in Section 2.8.2 above as one whose proponents see nature from an anthropocentric vantage point, but the benefits they see flowing to humans from nature include things that are more intangible than would be accepted by the resource conservationists. In Alberta the organization that fits most closely with the preservationist discourse is the Yellowstone to Yukon Conservation Initiative (“Y2Y”).⁵¹¹ Y2Y has been drawn to the center of the OHV regulation debate in Alberta because of their publicized intent to lobby for creation of new parks within their area of concern.

The reform environmentalist discourse was described in Section 2.8.3 as one in which nature begins to be seen as having intrinsic value, beyond its value to humans. Organizations operating in Alberta with reform environmentalist leanings include the Nature Conservancy of

listed are benefits to people. Southern Alberta Land Trust website, online: < www.salts-landtrust.org/conservingrangelands.html>; (7) The Western Sky Land Trust was created in 2004. The organization conserves land in southern Alberta for its natural, agricultural, scenic, recreational and heritage values. They state “healthy landscapes are essential for sustainable agriculture, clean water, wildlife habitat and recreation.” Most of the benefits stated on the organization’s website are benefits to people. Western Sky Land Trust website, online: <www.westernskylandtrust.ca>.

⁵⁰⁹ Ducks Unlimited Canada has contributed more money to conservation in Canada than most other non-governmental conservation organizations combined. According to their website they have completed almost ten thousand habitat projects and conserved 6.4 million acres of wetlands and associated habitat (online: <www.ducks.ca/who-we-are>. Whether a person is in favor of hunting or not, the benefits of their work cannot be denied.

⁵¹⁰ Curry, *supra* note 139 at 48.

⁵¹¹ The mission of the Y2Y Conservation Initiative is “Connecting and protecting habitat from Yellowstone to Yukon so people and nature can thrive”. Their Vision is “An interconnected system of wild lands and waters stretching from Yellowstone to Yukon, harmonizing the needs of people with those of nature.” Both from the organizations website, accessed November 27, 2017, online: <<https://y2y.net/vision/vision-mission>>.

Canada (“NCC”) and the Alberta Wilderness Association (“AWA”).⁵¹² The mission statement of the NCC states that they will protect “areas of natural diversity for their intrinsic value and for the benefit of our children and those after them.”⁵¹³ The first organizational value set out in the AWA’s 2016-2017 Annual Report is “Ecocentredness – We recognize the inherent importance of nature and humankind’s place in it, and the role of AWA is to be an advocate for that which cannot speak for itself.”⁵¹⁴

While there may be individuals in Alberta who support the moral extensionist group of ethical discourses, there are no significant organizations doing so publicly regarding headwaters or any other wild lands.⁵¹⁵ The same applies to the environmental justice discourses described in Section 2.8.6. With one important exception, these discourses have not been visible as factors motivating the actions of organized groups in Alberta concerned with environmental issues. The exception relates to claims by Canada’s Indigenous peoples that their treaty and traditional rights have been violated by the way the environment has been managed by the provincial and federal governments. These are largely claims about rights and justice.

The fact that there are no significant organizations in Alberta espousing the more ecocentric discourses does not mean they are unimportant. Although it would be difficult to document, I submit that discussion with individuals in Alberta who support the conservation efforts of traditional organizations in Alberta would disclose a wide range of views, some of which would be extremely ecocentric. It may be that those individuals have simply chosen to

⁵¹² If the Preservationist grouping recognizes nature as having intrinsic value, both of these organizations would fit in that category as well.

⁵¹³ Nature Conservancy of Canada website, “Who We Are”, online: <www.natureconservancy.ca/en/who-we-are/mission-values/> (emphasis added).

⁵¹⁴ Alberta Wilderness Association, 2016-2017 Annual Report, online: <<https://albertawilderness.ca/wordpress/wp-content/uploads/2017/11/AWA-Annual-Report-2016-2017.pdf>> at 12.

⁵¹⁵ See Section 2.8.4 above. Groups that have spoken publicly have focused on protection of farm animals and pets.

work within the existing system, realizing that taking what would be seen as an extreme approach would not be effective or politically acceptable. If that is the case, then those individuals might have the effect of shifting organizational views further toward biocentrism than they otherwise might have been.

5.7 Values and preferences of off highway vehicle users

While some surveys have been conducted, there is much we still do not know about the values and preferences of OHV users. We do know that the values and preferences of OHV users are not homogeneous⁵¹⁶. One factor that may result in different views about how lands should be managed is the type of OHV the users operate because users of different types of vehicles may prefer different sorts of terrain.⁵¹⁷ The potential for conflict between different categories of OHV users has not been studied in Alberta. Other possible factors which may lead to different values, perspectives and preferences include age, income, education, prior experience, the purpose for which the user is riding (for example family camping vs. hunting vs. thrill seeking) political party affiliation and gender.

Some empirical research into the values and preferences of OHV users in Alberta has

⁵¹⁶ “Values” are defined as “transituational goals and principles that guide human behavior”. See Michael J. Manfredo et al, “Why social values cannot be changed for the sake of conservation” (2016) 31:4 Cons Bio 772 at 773.

⁵¹⁷ See Rachel Albritton and Taylor V. Stein, *supra* note 256.

been done.⁵¹⁸ More research has been done in the United States.⁵¹⁹ No research could be found testing whether attitudes and beliefs found to exist in one jurisdiction could be assumed to exist in another jurisdiction. Research into how individual or collective conservation values are formed and how they change is sparse.⁵²⁰

5.8 Public views about environmental issues and off highway vehicle use

Research has been conducted into public opinion about OHV use and regulation in Alberta. In an October 2017 phone survey conducted by the Lethbridge College Citizen Society Research Lab, 55.1% of Albertans were found to support the provincial government placing further restrictions on OHV use in public areas.⁵²¹ Majorities of women, university graduates, middle-aged people, seniors, higher income earners and NDP voters were found to be supportive

⁵¹⁸ See Sarah Prescott, “Analysis and Economic Valuation of Off Highway Vehicle Use in Southwestern Alberta, Canada”, *supra* note 496 ; Alberta Government, “Summary of Off-Highway Vehicle Engagement Results” (2016), online: <<https://open.alberta.ca/publications/summary-of-off-highway-vehicle-engagement-results>>. (survey limited to attitudes about helmet use); Canadian Parks and Wilderness Society, “Albertans’ Values and Attitudes toward Recreation and Wilderness: Final Report”, The Praxis Group (2015) online: <https://cpaws-southernalberta.org/wp-content/uploads/2018/06/CPAWS_FINAL_REPORT_2015.pdf> (“CPAWS 2015 Report”); Anish Neupane, “Assessing Recreation Values at Risk for Wildfires in Alberta” (M.Sc. Thesis, University of Alberta Faculty of Graduate Studies, 2005) [unpublished]; B. L. McFarlane, M.K. Haener and B.B. Shapansky, “Characteristics, preferences, and attitudes of campers in or near the Sunpine Forest Products Forest Management Agreement area”, Natural Resources Canada., Cdn. Forest Service. Inf. Rep. NOR-X-388;

⁵¹⁹ Jordan W. Smith, Steven W. Burr and Douglas K. Reiter, “Specialization among Off-Highway Vehicle Owners and its Relationship to Environmental Worldviews and Motivations” (2010) 28:2 *J of Park and Rec Admin* 57; Smith, J. and Burr, S., “Environmental attitudes and desired social-psychological benefits of off-highway vehicle users” (2011) 2:4 *Open Access* 875; Kathleen Andereck et al, “Differences Between Motorized and Nonmotorized Trail Users” (2001) 3 *J of Park and Rec Admin* 62; John C. Adams, “Recreation Allocations on National Forests: The Claims and Frames of Recreationists” (Ph.D. Thesis, University of Montana, Forestry, 2009); USDA Forest Service, Southern Research Station, “Off-Highway Vehicle Recreation in the United States, Regions and States: A National Report from the National Survey on Recreation and the Environment” (2005); Namyun Kil, Stephen M. Holland and Taylor V. Stein. “Identifying Differences Between Off-Highway Vehicle (OHV) and Non-OHV User Groups for Recreation Resource Planning” (2012) 50 *Env Mgmt* 365.

⁵²⁰ Manfredo et al, *supra* note 516 at 773.

⁵²¹ “Alberta Provincial Politics, Public Use Areas Protection Plans: OHV and Random Camping Restrictions, Alberta Public Opinion Study – October 2017” Faron Ellis, PhD, Research Chair, online:< <https://lethbridgecollege.ca/sites/default/files/csrl-provincial-politics-ohv-camping.pdf>> at 2 [“Ellis 2017”]. The question asked was “Beginning with off-highway vehicles, also known as OHVs, please tell me if you think there should be more or less restrictions on OHVs in public use areas. Would you say OHVs should be (1) Banned in all public places (2) More restricted (3) No more/less restricted (4) Less restricted (5) No restrictions at all (6) Don’t know (unprompted) (7) refused (unprompted).” *Ibid* at 6.

of greater restrictions. The only group surveyed that wanted to see fewer restrictions were youth aged 18-29.⁵²² Other surveys have been done.⁵²³

Alberta research into environmental attitudes about topics not directly related to OHV use may also provide insights.⁵²⁴ The Canadian Nature Survey, last conducted between 2011 and 2013, collected information on the types of outdoor activities Albertans participated in and about the awareness Albertans had of several environmental concepts. The study reports that 70% of adult Albertans participated in hiking while only 18% participated in “ATV” or snowmobile use.⁵²⁵ Similarly, in a survey commissioned by the Canadian Parks and Wilderness Society, Southern Alberta Branch, 67% of respondents disagreed, 21% were neutral and 12% agreed with

⁵²² *Ibid* at 3. Out of that group 38.7% wanted fewer restrictions, 30.1% wanted the status quo and 31.3% wanted greater restrictions.

⁵²³ See MD of Bighorn No. 8, “Forest Reserve Multi – Use Dialogue - A one-year information gathering process to identify issues of multi-use within the Ghost River Forest Reserve” Submitted to the Minister of Environment, (1999) online: <www.ghostwatershed.ca/GWAS/ewExternalFiles/FRMuD_Report.pdf>; Alberta Sustainable Resource Development, “Ghost-Waiparous Operational Access Management Plan” (2005) online: <<https://open.alberta.ca/publications/ghost-waiparous-operational-access-management-plan>> at 11. A 2017 province wide phone survey commissioned by the Alberta Conservation Organization dealing primarily with hunting attitudes asked respondents to rate their support (or lack of support) for a variety of activities including OHV use on a 1 – 7 scale with 1 being “Do not support at all and 7 being “Completely support” Results were quite evenly split (1=20.50%; 2+8.58%; 3 = 11.42%; 4 = 20.08%; 5 = 13.50%; 6 = 7.25%; 7 = 18.67%). See Todd M. Zimmerling, “Outdoor Recreation Activity Public Survey Results – 2017” Alberta Conservation Association (May 2018) at 11. Online: <www.ab-conservation.com/publications/public-surveys/>.

⁵²⁴ See Alec Zuo et al, “Exploring Generational Differences Towards Water Resources and Policy Preferences of Water Re-Allocation in Alberta, Canada” (2015) 29 *Water Resource Mgmt* 5073 (looking at age as a factor); Debra J. Davidson and Michael Haan, “Gender, political ideology, and climate change beliefs in an extractive industry community” (2012) 34 *Population and Envir* 217 (looking at gender and political ideology as factors); Glenda Wall, “General Versus Specific Environmental Concern” (1995) 27:3 *Env and Behavior* 294 (looking at political party affiliation); Emily Huddart Kennedy et al, “Why We Don’t ‘Walk the Talk’: Understanding the Environmental Values/Behavior Gap on Canada” *supra* note 159 (looking at individual, household and societal variables to explain differences between the environmental values of Canadians and their behavior); Alberta, Alberta Environment, “Southern Alberta Landscapes: Meeting the Challenges Ahead: An Overview of Public Issues”, prepared by Kim Lalonde Environmental Consulting, (2006) (summarizing public polling done by Environics regarding environmental concerns including land use and summarizing thirteen rounds of public consultations in Alberta on various environmental issues); Adela Tesarek Kincaid and Amber J. Fletcher, “Policy problems, publics, and the power of definition: Competing discourses and the case of Alberta’s free-roaming horses” (2017) 61:3 *Cdn Geographer* 360.

⁵²⁵ *Supra* note 491 at 68. It is not clear how “ATV” was defined.

the statement “I prefer motorized recreation, such as power boats and ATV's over non-motorized recreation such as hiking, running and walking”⁵²⁶

The available research shows that the opinions of the various groups that make up the public regarding OHV regulation are not fully understood. While some polling suggests people generally would like to see more regulation, the research does not tell us anything about whether the people surveyed had any knowledge at all about the issue.⁵²⁷ Surveys conducted with residents and users of specific areas show that opinions are sharply divided between OHV users and residents.

Important questions are left unanswered. To what degree should public opinion be a factor on matters that are primarily scientific in nature?⁵²⁸ Should public opinion be a factor on matters where the local interest and the wider societal interest significantly differ? Should public opinion be a factor on matters where it is not clear or is clearly divided or where a majority favors one approach, but a significant minority favors the opposite? As further discussed in the next chapter, responsive regulation, with its emphasis on understanding societal context, alerts us to the importance of these questions.

⁵²⁶ CPAWS 2015 Report, *supra* note 518 at 21.

⁵²⁷ I am referring here to the CPAWS 2015 report, *ibid*, and the Ellis 2017 survey, *supra* note 521.

⁵²⁸ There is a growing body of literature, beyond the scope of this thesis, on how to most effectively bridge the fact-opinion divide. See for example Michael Bocher and Max Knott, *Science Makes the World Go Round: Successful Scientific Knowledge Transfer for the Environment* (Switzerland: Springer, 2015); Toby Bolsen and James N. Druckman, “Counteracting the Politicization of Science” (2015) 65 *Journal of Communication* 745 online: < <https://doi.org/10.1007/s10584-017-2112-z>>; Deborah M. Hussey Freeland, “Speaking Science to Law” (2012) 25 *Georgetown Int Env LR* 289; Dan M. Kahan, Hank Jenkins-Smith and Donald Braman, “Cultural cognition of scientific consensus” (2011) 14:2 *J Risk Res* 147 online: < DOI:10.1080/13669877.2010.511246>; Patrick W. Kraft, Milton Lodge and Charles S. Taber, “Why People ‘Don’t Trust the Evidence’: Motivated Reasoning and Scientific Beliefs” (2015) 658:1 *Annals AAPSS* 121; Eric Biber, “Which Science? Whose Science? How Scientific Disciplines Can Shape Environmental Law” (2012) 79:2 *U Chicago LR* 471 online: <<http://www.jstor.org/stable/41552908>>.

5.9 Publicized positions of Alberta organizations regarding OHV use

Given the lack of in depth social science research related to the values and preferences of Albertans regarding OHV use and regulation, the positions taken by non-profit groups may serve as an admittedly imperfect surrogate. There are many non-profit groups in Alberta with an interest in land use and conservation. Some are registered as charitable organizations with the Canada Revenue Agency, some are not. A review of online information available for fifty-three non-profit organizations operating in Alberta was conducted to determine if they had published organizational positions or policies regarding OHV use on Crown land.⁵²⁹ Out of forty-nine non-OHV user group organizations examined, eight had published organizational positions.⁵³⁰

Traditional conservation organizations tend to not take organizational positions on matters which may be controversial unless those matters are central to the mission of the organization.⁵³¹ Not having an official position does not necessarily indicate the issue is unimportant to the organization. There are several reasons organizations may choose to not take official organizational positions. First, if the non-profit is also a charity it will have been created

⁵²⁹ See Appendix 2. If an organization had no website, a Google search was done with the organization's name and the phrases "OHV" and (separately) "off highway vehicle". A negative result does not mean that the organization has no policy, it only means that a policy could not be found using this method of searching. Organizations may have taken public positions which are not apparent from their websites. Off highway user groups are assumed to have a position since they exist for the purpose of promoting OHV use.

⁵³⁰ The eight are (1) the Alberta Fish and Game Association (2) the Alberta Wilderness Association (3) the Canadian Parks and Wilderness Society (4) the Castle Crown Wilderness Coalition (5) the Ghost Watershed Alliance (6) the Southern Alberta Group for the Environment (SAGE) (7) the Livingstone Landowners Guild and (8) the Yellowstone to Yukon Conservation Initiative. Groups listed as signatories to the Alberta Wilderness Association document "Communiqué from Eastern Slopes Today and Tomorrow Workshop - December 4, 2015, Calgary, Alberta, Canada" online: <https://albertawilderness.ca/wordpress/wp-content/uploads/2016/01/easternslopes_communique_5.pdf> are counted as having a published position.

⁵³¹ It has been argued that to not take a position on a matter which is within the mission of the organization is a dereliction of duty. See the following series of articles published online on the online journal The Philanthropist, all available online:<<https://thephilanthropist.ca/category/policy-advocacy/>>. (1) Roger Gibbons, "The Moral Imperative for Policy Advocacy" (February 2016) (2) Allan Northcott, "Charities Have a Moral Obligation to Help Develop Public Policy" (February 2016) (3) Roger Gibbons, "The Moral Imperative for Policy Advocacy, Part 2: Options for Reform" (March 2016) (4) Roger Gibbons, "The Moral Imperative for Policy Advocacy, Part 3: Reflections on the Consultations" (August 2016).

for specific charitable purposes. If the matter is not squarely within the organization's purposes, then devoting resources to it may put the organization's charitable status at risk. Second, organizations wish to appeal to as many people as they can to maximize membership and fundraising opportunities. Taking a strong position on a controversial matter may limit those opportunities, unless that matter is also critical to the organization's supporters.⁵³² Third, if a non-profit has little excess capacity, using resources to defend a strong position that has been taken may not be seen by management as the optimal use of the organization's limited funds. Not having an official organizational position does not mean that the group is not making efforts to influence opinions. Many groups use language in their publications indicating they are willing to work collaboratively with OHV user groups and express a goal of educating those users. Such positions indicate that at least some level of OHV use in the relevant area is acceptable or seen as inevitable.

5.9.1 Conservation and environmental non-governmental organizations

None of the four dominant land-owning conservation organizations in the province (the Alberta Conservation Association, the Nature Conservancy of Canada, Ducks Unlimited Canada and the Alberta Fish and Game Association) have published official positions on overall OHV use but interestingly, none allow OHV use on their own land other than by staff or for emergencies. The Alberta Fish and Game Association has published a public letter to the Alberta government supporting use of OHV's on trails in the Castle Park area but not "unrestricted,

⁵³² For example, while Trout Unlimited Canada had no policy on off highway vehicle use on Crown land generally, on February 10, 2017 the organization did express official support for the creation of the new Castle Management Plan, including the OHV phase out, citing legal and moral obligations to protect Westslope cutthroat trout and bull trout, squarely within the organization's mandate. See <http://tucanada.org/tuc-sends-letter>. Conversely, the Alberta Fish and Game Association made the opposite decision. See www.afga.org/pdf/NEWS/NR2017/NR-2017-02-15-Castle.pdf

destructive use of OHVs”.⁵³³ The AFGA has an internal policy position supporting the use of OHVs for retrieval of animal carcasses in some circumstances.⁵³⁴

The Alberta Wilderness Association convened a workshop in Calgary on December 4, 2015 which resulted in the release of a communique signed by fifty-seven individuals and on behalf of ten organizations.⁵³⁵ The Communique forms the basis of the Alberta Wilderness Association’s current policy on off-highway vehicle use and regulation.⁵³⁶ The main points of the AWA position are that all public lands should be ‘closed unless open’ to OHV use, OHV use should be restricted to trails, OHV operation should be regulated as a land use, OHV use should be banned in protected areas and a moratorium should be imposed on OHV use on existing trails in Prime Protection and Critical Wildlife Zones.⁵³⁷

5.9.2 *The Alberta Water Council and the WPAC’s*

The Alberta Water Council and the eleven Watershed Planning and Advisory Councils (“WPAC’s”) were established under Alberta’s Water for Life Strategy and all operate under the multi-stakeholder, consensus decision making model.⁵³⁸ The Alberta Water Council has no

⁵³³ Alberta Fish and Game Association, Letter to Minister Shannon Phillips, (June 11, 2018), online: < www.afga.org/pdf/L-2018-06-11-Castle.pdf>.

⁵³⁴ See Appendix 2.

⁵³⁵ *Supra* note 30.

⁵³⁶ Alberta Wilderness Association, “Position Statement: Motorized Recreation of Public Lands” (1987/2016), online:< <https://albertawilderness.ca/wordpress/wp-content/uploads/2015/10/AWA-PS-OHV-Recreation-1987-2016.pdf>>.

⁵³⁷ Prime protection zones and critical wildlife zones are defined as land use zones in the Alberta government’s 1984 Policy for Resource Management of the Eastern Slopes. While initially no OHV use was to be allowed in critical wildlife zones, over time it has been, an example of affirmative slippage.

⁵³⁸ See the AWC website online: <www.albertawatercouncil.ca/AboutUs/tabid/54/Default.aspx> which states that the AWC is “a multi-stakeholder partnership with 24 Members from governments, industry, and non-government organizations. Its primary task is to monitor and steward implementation of the Alberta’s Water for Life strategy and to champion achievement of the strategy’s three goals:

- Albertans are assured their drinking water is safe
- Albertans are assured that Alberta’s aquatic ecosystems are maintained and protected
- Albertans will be assured that is managed effectively to support sustainable economic development”

The role of the AWC is to make recommendations to the Alberta government rather than to take positions.

decision-making authority. It is a stakeholder and research organization that makes recommendations to the Alberta government. No research project has directly dealt with OHV use and no recommendations have been made to the Alberta government regarding OHV use.⁵³⁹ Members of the Alberta Water Council did consider a proposing a “Headwaters Protection Project” in 2012 but it did not go forward.⁵⁴⁰

WPACs are government approved non-profit organizations that “assess the conditions of their watersheds and develop plans and activities to address watershed issues. They are the source of new ideas and opportunities to help manage and protect our provincial watersheds.”⁵⁴¹ WPAC’s also have no decision-making authority. They receive input from a broad spectrum of stakeholders who may or may not be “members” of the WPAC. Decisions on matters of policy are based on consensus.⁵⁴²

The requirement of consensus, in practice, gives a veto power to any member opposed to putting any policy in place. None of the WPAC’s publish official policies about OHV use on Crown land in their watershed.

⁵³⁹ The AWC publishes a report annually tracking the implementation of their recommendations to government. See Alberta Water Council, “Tracking Implementation of AWC Recommendations – Update Report” (2018), online: <<https://awchome.ca/LinkClick.aspx?fileticket=Ufayi30WQQM%3d&tabid=160>>.

⁵⁴⁰ Alberta Water Council, Summary Report Meeting #34, June 14, 2012, Item 6-4, online <: <https://www.awchome.ca/LinkClick.aspx?fileticket=BF5AMXMwgNg%3d&tabid=64>>, Alberta Water Council, Summary Report Meeting #35, October 25, 2012, Decision 35.7, online: <www.awchome.ca/LinkClick.aspx?fileticket=22sL7GnEvos%3d&tabid=64>.

⁵⁴¹ Alberta WPACs website online: <www.albertawpacs.ca/about-us/our-members>.

⁵⁴² Consensus may not mean 100% support. For example, Article 2.06 of the bylaws of the Bow River Basin Council provides:

“Consensus” means a decision is arrived at with a "high majority support" (between 70% to 80% support) with the following conditions. In the process, (a) everyone was satisfied that a sufficient range of options has been looked at, and (b) everyone agreed that the preferred option is capable of achieving the intended outcomes, and (c) all concerns about the preferred choice were noted along with the decision (as "subject to" statements), and (d) there is a clear mitigation process if these concerns turn out to be significant factors.

One of the primary tasks undertaken by each WPAC is to produce a “State of the Watershed” report under guidance provided by the Government of Alberta.⁵⁴³ Those reports are an assessment of the current state of the watershed. References to OHV use are few but the indicators chosen to measure aspects of watershed health (for instance road density) may be related to OHV use.⁵⁴⁴ Gaps in information regarding recreational land use are apparent.⁵⁴⁵

5.9.3 Watershed Stewardship Groups

Watershed Stewardship Groups are described on the Alberta Environment and Parks website as follows:

Watershed stewardship groups take community-level action to safeguard our water sources. These groups are community, volunteer-based partnerships actively engaged in environmental stewardship of their watershed. They include individuals, organizations, agriculture, industry, municipalities and other forms of local government and set common goals to achieve shared outcomes.

⁵⁴³ See Government of Alberta “A Handbook for Developing State of the Watershed Reports in Alberta” (2008) online: <<http://environment.gov.ab.ca/info/library/8044.pdf>>.

⁵⁴⁴ The following recommendations are found in the Bow River Basin Management Plans produced by the Bow River Basin Council:

- Recommendation number 54 in the Bow Basin Watershed Management Plan, Phase One begins “Continue efforts to reduce erosion from trails, recreation sites or other activities.”; Bow River Basin Council “Bow Basin Watershed Management Plan, Phase One” (2008) 23, online: <www.brbc.ab.ca/our-activities/bow-basin-watershed-management-plan>;
- Recommendation 2.10 found in Phase 2 of the Plan provides “Work with land managers (GOA in Green Zone and Municipal Governments in White Zone), to continue dialogue with OHV User Associations regarding water related negative impacts from OHV use outside of designated trails, to develop a series of next steps.” Bow River Basin Council, “Bow Basin Watershed Management Plan 2012” (2012) 14;
- Recommendation 2.34 of the Phase 2 Plan provides “Working with land managers (SRD on public land in the Green and White Zones, and Municipal Government on other lands in the White Zone) BRBC will help initiate dialogue with OHV User Associations in the Bow Basin regarding water-related negative impacts as a result of OHV use outside of designated trails. This initial dialogue should result in a series of next steps.”, *ibid* at 21.

⁵⁴⁵ See, for instance Red Deer River Watershed Alliance, “State of the Watershed Report” (2009) at 789, online: <www.rdrwa.ca/sites/rdrwa.ca/files/pdf/rdr_sowr_7_0_recommendations.pdf> which states “data regarding the extent of recreational use within the watershed is largely unknown over the last few years. Knowing this information would assist with highlighting areas of high recreational activity, which can have potentially detrimental impacts on the environment.”

Currently there are over 140 stewardship groups in Alberta undertaking a wide variety of activities.⁵⁴⁶

Watershed Stewardship Groups which operate near headwater areas are listed in Appendix 2. Almost none have explicit policies regarding OHV use. One exception is the Ghost Watershed Alliance. OHV use in the Ghost watershed has been a high profile ongoing problem for decades.⁵⁴⁷

5.9.4 Regional Advisory Councils

The Alberta Land Use Framework mandates creation of Regional Advisory Councils (RACs) for each of the seven land use regions in the province to provide advice to government on the creation of the seven land use plans. Three RACs have done so, the Lower Athabasca RAC in 2010,⁵⁴⁸ the South Saskatchewan RAC in 2011⁵⁴⁹ and the North Saskatchewan RAC in 2018.⁵⁵⁰ The Lower Athabasca and South Saskatchewan documents do not make any recommendations specifically directed at OHV use.⁵⁵¹ The North Saskatchewan document deals

⁵⁴⁶ Alberta Environment and Parks website, online: <<http://aep.alberta.ca/water/programs-and-services/water-for-life/partnerships/watershed-stewardship-groups/default.aspx>>.

⁵⁴⁷ See the research reports posted on the Society's website. Online: <www.ghostwatershed.ca/GWAS/research-data.html>.

⁵⁴⁸ Lower Athabasca Regional Advisory Council, "Advice to Government Regarding a Vision for the Lower Athabasca Region" (2010), online: <www.landuse.alberta.ca/LandUse%20Documents/Lower%20Athabasca%20Regional%20Advisory%20Council%20Advice%20to%20Government%20-%202010-08.pdf>.

⁵⁴⁹ South Saskatchewan Regional Advisory Council, "Advice to the Government for the South Saskatchewan Regional Plan" (2011), online: <www.landuse.alberta.ca/LandUse%20Documents/South%20Saskatchewan%20Regional%20Advisory%20Council%20Advice%20to%20Government%20-%202011-03.pdf>. In the document, the RAC made the following statement regarding management of public lands: "Generally, public motorized access into conservation management areas will be discouraged and, where permitted, will be limited to designated trails, routes, roads and staging areas."

⁵⁵⁰ North Saskatchewan Regional Advisory Council, "Advice to the Government of Alberta for consideration in the development of the North Saskatchewan Regional Plan (2018), online: <https://landuse.alberta.ca/LandUse%20Documents/NS%20RAC%20Recommendations%20Report_Final.pdf>.

⁵⁵¹ The Lower Athabasca document recommends an objective which includes developing an all-season trail system. (*supra* note 548 at 24). The South Saskatchewan document recognizes that higher demand for recreational opportunities will put increased pressure on public recreation lands near urban centers. *Supra* note 549 at 57.

with recreation in much greater detail, recommending increased and prioritized planning, greater enforcement and streamlined management.⁵⁵²

5.9.5 Off highway vehicle user groups

The Alberta Off Highway Vehicles Association (AOHVA) was incorporated as a society in 1987. Membership is available to incorporated groups or clubs in Alberta. AHOVA's mission is that:

The use of ATVs (all-terrain vehicles), ORMs (off-road motorcycles) and UTVs (side by sides) will grow significantly and individuals will continue to use OHVs in a responsible, environmentally friendly and respectful manner, on a wide array of public and private lands throughout Alberta.⁵⁵³

AHOVA has participated in a wide variety of public consultations to advocate on behalf of its members⁵⁵⁴ and has released a four-point plan setting out its position on (1) design and development of OHV trails (2) proposed new OHV user fees that would be directed to AHOVA and redistributed to clubs for trail planning, design, construction and maintenance (3) redirecting existing OHV registration fees to fund enforcement and (4) driver, safety and environmental education as well as member club support, all funded through the new OHV fees.⁵⁵⁵ AHOVA is a proponent of self-regulation of OHV activities.

Independent OHV clubs exist across Alberta and conduct a variety of activities ranging from participation in land use planning activities to trail repairs.⁵⁵⁶

⁵⁵² *Supra* note 550, Recommendation 5, at xiv.

⁵⁵³ AOHVA website, online: <<http://aohva.pressrelief.com/about-the-aohva/who-we-are/#what-we-do>>.

⁵⁵⁴ *Ibid.*, at online: <<http://aohva.pressrelief.com/advocacy/#participation>>.

⁵⁵⁵ *Ibid.*, online: <http://aohva.pressrelief.com/wp-content/uploads/2018/01/AOHVA-4-Point-Plan-updates_January-2018-FINAL.pdf>.

⁵⁵⁶ See for example: Calgary ATV Riders, website online: <<http://www.calgaryatvriders.com/>>; Crowsnest Pass Quad Squad, website online: <<http://quadsquad.ca/>>; Northern Alberta 4WD Association, website online: <<http://www.na4wda.com/forums/forum.php>>; Whitecourt ATV Club, website online: <<http://whitecourtatvclub.com/>>.

5.9.6 Summary

The findings of this chapter and the preceding one are summarized in the next chapter, where they are considered within the rubric of responsive regulation.

Chapter Six: Law and Society in the Environmental Law Context: Responsive Regulation

6.1 Responsive regulation principles

Responsive regulation is one of several possible approaches to regulatory enforcement and compliance.⁵⁵⁷ Conceived by John Braithwaite and Ian Ayers in 1992⁵⁵⁸, the theory suggests the “best outcomes will be achieved if regulators employ a blend of persuasion and coercion, the actual mix being adjusted to the particular circumstances and motivations of the regulatee.”⁵⁵⁹ Responsive regulation is not a strategy itself but is rather a strategy for selecting or sequencing strategies (a “meta-strategy”) to encourage compliance.⁵⁶⁰ Responsive regulation research exists within the much broader law and society scholarship. Although encountered more often in the context of regulating industry, “it is relevant to regulating crime by organizations or individuals.”⁵⁶¹

Responsive regulation arose out of a realization that traditional command and control regulation does not always achieve compliance. Under command and control, the state attempts to influence behavior by establishing standards, monitoring performance and enforcing the standards through the threat of prosecution and eventual imposition of penalties. While command and control is still an option under a law and society approach, it aligns more closely with a traditional insider view of the law as outlined in Chapter 2 above. Command and control

⁵⁵⁷ Neil Gunningham identifies seven “distinctive (but often mutually compatible) regulatory enforcement and compliance strategies (1) advice and persuasion (2) rules and deterrence (3) criteria strategies (4) responsive regulation (5) smart regulation (6) risk-based regulation and (7) meta-regulation. He purposefully omits just desserts, restorative justice and really responsive regulations for reasons he explains. Neil Gunningham, “Enforcing Environmental Regulation (2011) 23:2 J Env Law 169 at 174. Online: <<https://academic.oup.com/jel/article/23/2/169/426247>>.

⁵⁵⁸ *Responsive Regulation: Transcending the Deregulation Debate*, *supra* note 10.

⁵⁵⁹ *Ibid.*

⁵⁶⁰ John Braithwaite, “Restorative justice and responsive regulation: the question of evidence” RegNet Research Paper No. 2014/51 at 1, online:<http://johnbraithwaite.com/wp-content/uploads/2016/04/2014_Restorative-Justice-and-Responsive-Regulation.pdf>.

⁵⁶¹ John Braithwaite, “Minimally Sufficient Deterrence” (2018) 47(1) *Crime and Jus* 69 at 73 online: <www-journals-uchicago-edu.ezproxy.lib.ucalgary.ca/doi/pdfplus/10.1086/696043>.

“involves the setting of standards within a rule, it often entails some kind of licensing process to screen entry to an activity”⁵⁶² Punishment is dealt out until compliance is achieved.⁵⁶³ One reaction to dissatisfaction with the effectiveness of command and control, at least in commercial settings, was the shift to deregulation or market-based solutions.⁵⁶⁴ A second reaction was the belief that the state is simply mishandling command and control and that the solution is more strict enforcement along with stiffer penalties.⁵⁶⁵ A third reaction, and the one which led to the development of responsive regulation, was that “social life was just far too complex to be regulated by a blunt instrument like command and control.”⁵⁶⁶ This reaction, of course, aligns well with a law and society approach. Even though the complexity of social factors might mean we won’t understand how they matter or what the effect will be if they are ignored, we still acknowledge that they exist and that we need empirical research to learn more. For those people thinking about regulating behavior, the center of gravity shifts from law to society.

Professor Braithwaite asserts that the following nine principles set out in his 2010 reformulation of responsive regulation convey its essence:⁵⁶⁷

⁵⁶² Baldwin, Cage and Lodge, *Understanding Regulation*, *supra* note 18 at 106.

⁵⁶³ The main criticisms of command and control are that regulators can be prone to capture, that it is overly legalistic and inflexible, that setting standards can require data that may not be available and that enforcement can be too expensive. *Ibid* at 106.

⁵⁶⁴ Professor Richard Johnstone, “Rethinking Responsive Regulation”, Safe Work Australia (13 October 2014) (YouTube video) online: <www.youtube.com/watch?v=6RBU32pljGk> at 2:00 minutes. The push for deregulation and the shift to market-based solutions coincides with the rise of neoliberalism in the 1980s. See the discussion of neoliberalism in section 2.6 above.

⁵⁶⁵ Johnstone, *ibid*.

⁵⁶⁶ *Ibid* at 2:45.

⁵⁶⁷ Braithwaite 2010, *supra* note 10 at 476. Richard Johnstone, *supra* note 564 at 27:40 states that between 1992 and 2010, John Braithwaite moved from a “tit for tat” formulation of responsive regulation to a restorative justice formulation. Johnstone sees this as a major change. Tit for tat is based on microeconomic game theory. The regulator begins with an attitude of trust or an assumption of virtue, expecting cooperation. There is always a background threat of escalation. If the regulatee does not comply, the regulator switches to the next most coercive strategy it has available. If the regulatee begins to comply, the regulator immediately returns to a more forgiving strategy. The regulator’s approach at each stage tracks the behavior of the regulatee. Under the later restorative justice formulation, escalation is never threatened because it would destroy the relationship between the parties. The regulator emphasizes the need for cooperation and capacity building. Any threats come from the external legal system, not the regulator’s field staff who deal face to face with the regulatee.

- (1) Think in context without imposing a preconceived theory;⁵⁶⁸
- (2) Listen actively;⁵⁶⁹
- (3) Engage those who resist with fairness;⁵⁷⁰
- (4) Praise those who show commitment;⁵⁷¹
- (5) Signal that you prefer to achieve outcomes by support and education to build capacity;⁵⁷²
- (6) Signal, but do not threaten, a range of sanctions to which you can escalate;⁵⁷³
- (7) Network pyramidal governance by engaging wider networks of partners as you move up a pyramid;⁵⁷⁴
- (8) Elicit active responsibility (responsibility for making outcomes better in the future) resorting to passive responsibility (holding actors responsible for past actions) when active responsibility fails;⁵⁷⁵
- (9) Learn and evaluate how well and at what cost outcomes have been achieved.⁵⁷⁶

⁵⁶⁸ *Ibid* at 490. The main points are: Don't be dogmatic, even about responsive regulation, flexibility far beyond the choice of sanctions is needed, be responsive to contextual insight, use different responses for different players if necessary, sometimes abolishing the entire industry is the best regulatory response, history is important, things change over time and so must regulatory responses.

⁵⁶⁹ *Ibid* at 493. The main points are: Regulators should listen actively - structure dialogue that gives voice to stakeholders, settles agreed outcomes and how to monitor them, builds commitment by helping actors find their own motivation to improve and communicates firm resolve to stick with a problem until it is fixed. The relationships that come from using a restorative justice model result in greater communication and therefore greater knowledge about things that might be going wrong at the street level. Listening is the key to understanding. Braithwaite suggests a responsive regulator should use methods akin to motivational interviewing. He also suggests that those engaged in harmful noncompliance are usually not committed to law breaking, instead they are ambivalent and have "drifted into techniques of neutralization that soften the moral bind of law" (*Ibid* at 499).

⁵⁷⁰ *Ibid* at 500. The main points are: show regulatees respect by construing their resistance as an opportunity to learn how to improve regulatory design. Resistance is easier to deal with than disengagement. Many empathetic attempts at engagement will fail, providing opportunity to show regulatees that the regulator is prepared move to tougher sanctions.

⁵⁷¹ *Ibid* at 502. The main points are: no tool is cheaper to use than praise, use praise to support innovation and nurture motivation to continuously improve. Leaders who the regulator praises will positively influence laggards.

⁵⁷² *Ibid* at 504. The main points are: punishing on one issue and praising on another issue may be the best response.

⁵⁷³ *Ibid*. The main points are: signal that the sanctions at the top of the pyramid are formidable and are used when necessary, though only as a last resort. The pyramid contains a paradox - having tougher sanctions available means that you probably won't need them. The strengths of one tool compensate for the weaknesses of another. Be transparent about the pyramid, involve regulatees in creating it.

⁵⁷⁴ *Ibid* at 507. The main points are: society has an interest in the protection offered by the regulator. Sometimes other partners will be better positioned to call a regulatee to account. Involving partners creates good intelligence.

⁵⁷⁵ *Ibid* at 510. The main points are: Braithwaite is suggesting shifting from a fault-based system to a system based on restorative justice, He says "No principle of responsive regulation has more radical implications for the design of legal systems." (*Ibid*.)

⁵⁷⁶ *Ibid* at 512. The main points are: lessons learned should be communicated broadly. Braithwaite points out that where assessment occurs it is often shallow and that there is an almost complete lack of randomized control testing in law.

The “presumptive preference” of responsive regulation is to try dialogue first, even for serious crimes.⁵⁷⁷ It assumes as a starting point that the law to be enforced is just – it will not help a regulator choose what the correct goals for regulation are. Braithwaite makes the point that “if it is a law of doubtful justice, we can expect the dialogue to be mainly about the justice of the law.”⁵⁷⁸

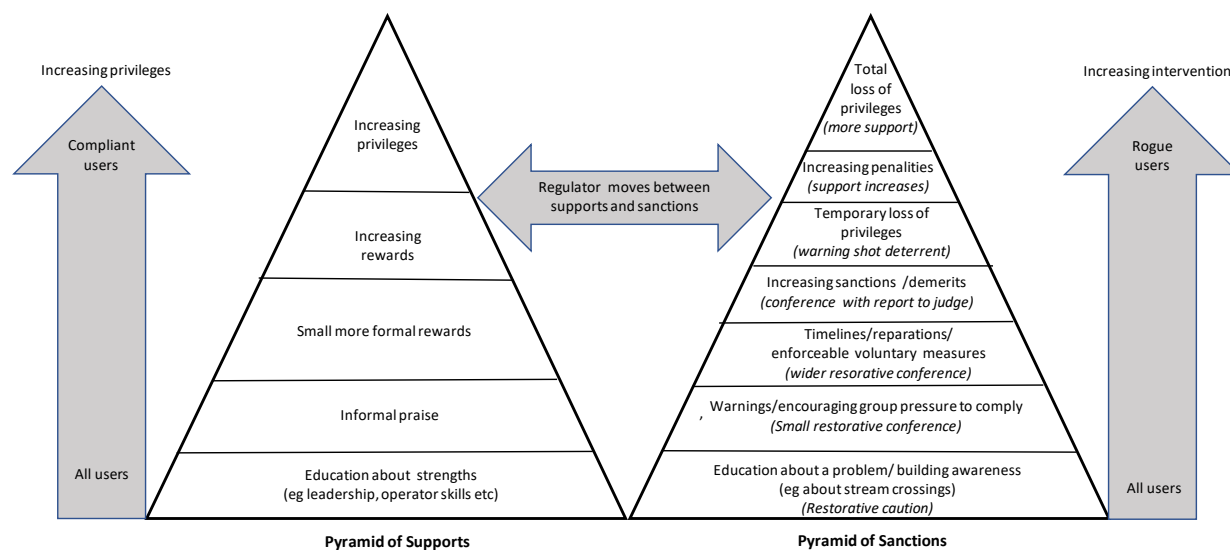
Thinking in context and being responsive to it first requires developing an understanding of the context. The ‘responsive’ in responsive regulation means that to encourage compliance the regulator should respond to moves made by the regulated party and that the response should be based on an understanding of the context in which regulation is to be applied. Understanding context means understanding the environment and communities within which regulation is taking place and the actors within those communities.⁵⁷⁹ The need to understand context creates a link between responsive regulation and law and society. The methods of law and society can provide the basis for understanding the context in which responsive regulation will take place.

⁵⁷⁷ Braithwaite, “Minimally Sufficient Deterrence”, *supra* note 561 at 77. Like all presumptions, it can be overruled if the circumstances of a crime present compelling reasons for doing so.

⁵⁷⁸ John Braithwaite, *Restorative Justice and Responsive Regulation* (Oxford: Oxford University Press, 2002) at 30. Braithwaite has also said “a law, or its interpretation, may be of doubtful justice, in which case we can expect dialogue to be mainly about the justice of the law.” (emphasis added) Braithwaite, “Minimally Sufficient Deterrence”, *supra* note 561 at 77. Braithwaite includes methods of enforcement in ‘interpretation’, using examples of excessive police force and racism. *Ibid.*

⁵⁷⁹ Australian National University, “The limits of responsive regulation” (interview with John Braithwaite) (10 November 2014), online: You Tube <www.youtube.com/watch?v=etgNG8HIXRc> at 00h:25m.

Figure 4 Pyramids of supports and sanctions⁵⁸⁰



Key to responsive regulation is the idea of parallel pyramids of supports and sanctions. The pyramids can be conceived in different ways for different regulatory problems and can describe complex regulatory systems.⁵⁸¹ They do not provide a strict system of rules but are, Braithwaite says, “[a] useful heuristic.”⁵⁸² When non-compliant behavior is observed, the regulators first choice should be to move up the pyramid of supports, helping to grow the knowledge and strengths of the regulated party so that they become more willing and able to regulate themselves in the future⁵⁸³. When this approach does not solve the specific problem, the regulator moves to the pyramid of sanctions, usually starting at the bottom with restorative, communication-based approaches and only reluctantly escalating to punitive sanctions. The

⁵⁸⁰ Adapted from Braithwaite 2010, *supra* note 10 at 482 and John Braithwaite, “Minimally Sufficient Deterrence”, *supra* note 561. The sanctions and supports listed are for illustrative purposes only and are not based on current practice.

⁵⁸¹ A pyramid could show regulatory strategies for an entire industry, with self-regulation at the base, moving up through enforced self-regulation to command and control regulation at the peak. See Braithwaite 1992, *supra* note 10 at 39.

⁵⁸² Braithwaite 2010, *supra* note 10 at 492. In describing the pyramids this way Braithwaite is acknowledging that regulators must be aware of context and that “normatively justified responsiveness to context at times requires us to go straight to the peak of a pyramid”. *Ibid* at 493. Starting at the bottom of the pyramid is a presumption, not a rule.

⁵⁸³ Education is a critical component of responsive regulation and is shown as part of both supports and sanctions.

regulator is free to (and should) move back and forth between supports and sanctions to deal with different parts of the problem. A critical presumption is that it is always better to start with and return to dialogue. If sanctions escalate and compliance is achieved, the regulator should move back down the pyramid as quickly and as far as possible.

6.2 Summary of the Alberta context for off highway vehicle regulation

Thinking in context, as Braithwaite's first principle requires, demands a deep level of understanding of many interrelated factors. The physical, regulatory, social and economic context of Alberta OHV use, harm and control was mapped in chapters four and five above. Some of the main findings can be summarized as:

- Science confirms that headwater areas are critically important for a variety of reasons.⁵⁸⁴
- The science confirming the many types of harm caused by OHV use is well developed.⁵⁸⁵ As is the case in other areas of environmental regulation, occasional lack of certainty as to the exact threshold of harm (knowing exactly how much activity on a landscape is too much) is sometimes used as an argument against regulation. This is the opposite result from that intended by the precautionary principle.
- The current rules around OHV operation on public land are complex and exist within an even more complex web of laws, rules, regulations, strategies, regional plans, sub-regional plans, management plans and policies related to public land use in Alberta.⁵⁸⁶
- There are countervailing economic and social benefits of OHV use.⁵⁸⁷

⁵⁸⁴ Section 4.1, *supra*.

⁵⁸⁵ Sections 4.1 and 4.2, *supra*.

⁵⁸⁶ Section 4.5, *supra*. It has been suggested that all laws regarding OHV use should be consolidated into one dedicated statute. See Driedzic, *supra* note 6 at 99.

⁵⁸⁷ Sections 5.1-5.4, *supra*.

- The number of OHV users is rising and the land available to them to ride is not. OHV users will continue riding even if their numbers rise.⁵⁸⁸ Despite rising numbers, OHV riding is an activity which only a small percentage of Albertans participate in.⁵⁸⁹
- Recent survey evidence shows that Albertans give a high priority to caring for the environment and that most Albertans are in favor of tighter OHV regulation.⁵⁹⁰
- As has been the case in other jurisdictions, the views of different groups are highly polarised, and views even vary within groups.⁵⁹¹ A high level of mistrust makes communication difficult.
- Very few non-profit organizations with an interest in watershed protection have taken a public position regarding OHV regulation.⁵⁹² This may indicate that OHV supporters have significant political power in Alberta. Whether that is the case has not been studied.
- Freedom is an important value in Alberta, as it is in all liberal democracies.⁵⁹³
- Enforcement is difficult because of the vast areas of land involved and the nature of the activity.⁵⁹⁴
- Some education, such as the “Wheels Out of Water” and “Know Before You Go” campaigns, is already being done by the regulators. No research into the effectiveness of any general education measures could be located.

Social factors which may play a role but for which no research could be located include the impact of demographic factors such as gender, income, political affiliation, education, age,

⁵⁸⁸ Section 5.5, *supra*.

⁵⁸⁹ Section 5.8, *supra*.

⁵⁹⁰ *Ibid*.

⁵⁹¹ Sections 5.1, 5.6, 5.8 and 5.9, *supra*.

⁵⁹² Section 5.9, *supra*.

⁵⁹³ Section 2.6, *supra*.

⁵⁹⁴ Section 4.6, *supra*.

ethnicity and place of residence.⁵⁹⁵ They include the level of knowledge of understanding legal processes generally and of OHV regulation in particular in all the different groups that make up the public.⁵⁹⁶ They include the impact of social media.⁵⁹⁷ They include the attitudes and beliefs of members of groups that use public land, both about conservation and about the purposes of public land. Those attitudes and beliefs lead to the “inherent tension between the public, who wish to pursue traditional freedom of access to public land, and governments that are legislatively mandated to protect the lands under their jurisdiction.”⁵⁹⁸ The views of all of the various stakeholders as to how the problem will be solved (and even whether there is a problem

⁵⁹⁵ Section 3.3.6, *supra*.

⁵⁹⁶ There has been very little research into the level of general legal knowledge of Canadians. Research is more extensive in Britain where the English and Welsh Civil and Social Justice Panel Survey is conducted biannually. A recent report describing the results of that survey stated “A growing number of studies of the public’s understanding of law point to a substantial knowledge deficit”. Pascoe Pleasence, Nigel J. Balmer and Catrina Denvir, “How People Understand and Interact with the Law”, (June, 2015) online: The Legal Education Foundation <www.thelegaleducationfoundation.org/report/how-people-understand-and-interact-with-the-law> at 26. The authors also state that “legal reality and the public’s perception of legality are each coherent and distinct, with the latter fueled and entrenched by attitudes and social norms. One consequence of this is that erroneous beliefs are likely to prove stubborn to dislodge.” *Ibid* at iii.

⁵⁹⁷ Much of the discussion about off highway vehicle use and regulation in Alberta takes place on Facebook pages put up by formal and informal OHV user groups or by other interested groups. Some of these pages include The Alberta Off Highway Vehicle Association (www.facebook.com/Alberta-Off-Highway-Vehicle-Association-332048513495867/); The Bighorn Heritage ATV Society (online: <www.facebook.com/bighornatv/>); The Coalition of Albertans for Public Land Access (online: www.facebook.com/CoalitionofAlbertans/) and This is My Nordegg – Advocating for Continued Public Land Use Zone (online:<www.facebook.com/groups/462816510578276/>). The Facebook page titled Damaged Alberta Terrain and Environment (online: <www.facebook.com/DATEDamagedalbertaterrain/>) records photographs of damaged terrain. The Crowsnest Journal Facebook page deals with issues in the Oldman watershed generally but often includes conversations about OHV use. (online: <www.facebook.com/thecrowsnestjournal/>) as does the page hosted by the Alberta Backcountry Hunters and Anglers (online: <www.facebook.com/groups/AlbertaBackcountryHunters/>). Reviewing comments made on some of these pages reveals the depth of the animosity between groups.

No research could be found regarding the impact of social media on values and preferences of users of public land. For a discussion of how social media use triggers and amplifies moral outrage, see M. Crockett, “Moral outrage in the digital age”, (2017)1 *Nature Human Behavior* 769, DOI:<[10.1038/s41562-017-0213-3](https://doi.org/10.1038/s41562-017-0213-3)>.

⁵⁹⁸ Rachele L. Haddock and Michael S. Quinn, “An assessment of public engagement for access management planning in southwestern Alberta, Canada” (2015) *J Env Planning and Mgmt*, online: <<http://dx.doi.org/10.1080/09640568.2015.1063481>> 1 at 2, citing L.D.S. Matthews and Michael S. Quinn “Access Management and Planning for Recreation in Southeastern British Columbia.” (2003), Paper presented at Access Management: Policy to Practice, Calgary, March 18-19, 2003.

to be solved) are heavily influenced by their values and their perspectives, which are understudied.⁵⁹⁹

Freidman's three clusters of factors that result in a law having impact raise further areas which could be studied.⁶⁰⁰ The first cluster, rewards and punishments, raises question such as "How do OHV users respond to different rewards and punishments?" and "Do more severe punishments result in greater compliance or is there a point where increasing the penalty makes no further difference?"⁶⁰¹ The second cluster is peer pressure. Questions include "Where does peer pressure to comply come from" and "What messages are being given?"⁶⁰² The third cluster is morality, broadly defined as "a grab bag of various inner attitudes and moral issues, including what we call conscience."⁶⁰³ Are there shared core values between OHV users and other users of the backcountry?⁶⁰⁴ Do OHV users think they are being treated fairly, i.e. that they are receiving the benefits from society that they feel they are entitled to and that the rules are created and

⁵⁹⁹ Haddock and Quinn, *ibid*, referring to R.B. Hull, D.P. Robertson, and A. Kendra (2001) "Public Understandings About Nature: A Case Study of Local Knowledge About 'Natural' Forest Conditions" 14 Soc and Nat Res 325; Martin Nie, "Drivers of Natural Resource-Based Political Conflict." 36 Policy Sciences 307 and Sam Burns, "A Civic Conversation About Public Lands Developing Community Governance." (2001) 13 J of Sust Forestry 271.

⁶⁰⁰ Friedman, *Impact*, *supra* note 13.

⁶⁰¹ *Ibid*, chapters 5 and 6. Other questions could include: How do OHV users respond to general deterrence measures such as advertising the existence of enforcement in an area? Are warnings just as effective as charges? Are there differences between different user categories (for example by age)? Do users break the law because of a lack of knowledge, because they don't believe the law is fair or because they just don't think they will get caught? Do users make an explicit calculation about the odds of getting caught (as game theory would have us believe) or is non-compliance more often an impulsive choice? How important is the overall level of enforcement in an area to the decisions of individual users about whether they will comply? Can we identify the characteristics of people who will never comply, no matter what measures are used?

⁶⁰² *Ibid*, chapter 7. Other questions could include: Does it happen formally or informally? Who do operators who do not belong to clubs listen to? What has to be done to influence the influencers? How can negative peer pressure best be counteracted? Are the 'teachable' OHV users influenced by social media? What is the impact of the adversarial nature of the debate on the cohesiveness of the OHV community?

⁶⁰³ *Ibid* at 188.

⁶⁰⁴ *Ibid*, chapter 8.

enforced fairly and if not, why not?⁶⁰⁵ How do OHV users think about the law? Are they generally supportive of it or do they see it as a threat?⁶⁰⁶

Responsive regulation and a law and society approach invite us to make these inquiries and to follow them up with empirical research in the context of OHV use on Crown land in Alberta headwater areas. With these contextual factors in mind, both what is known and what is not known, we can turn to the possible applications of responsive regulation posited at the beginning of the chapter.

6.3 Responsive regulation of OHV use and harm in the most sensitive headwater areas

Somewhat paradoxically, the most sensitive areas may present the simplest case. Responsive regulation, Braithwaite tells us, requires that regulators not be “dogmatic about any theory, including responsive regulation itself”.⁶⁰⁷ Regulators should allow the possibility that occasionally the risks associated with an activity and the challenges of regulating it are too great. Responsive regulation tells us that sometimes the proper regulatory response is the elimination of the industry or activity:

In some contexts, abolition of the entire industry is the best regulatory response, as with . . . the nuclear and chemical weapons industries, the land mines industry, the gambling and casino industry, the global pedophilia trade, the market in slaves and the market in certain illicit drugs.⁶⁰⁸

⁶⁰⁵ Fairness is closely related to the concepts of procedural and distributive justice. See The Hon Justice Brian J Preston SC “The effectiveness of the law in providing access to environmental justice: an introduction” in Paul Martin et al, eds, *The Search for Environmental Justice* (Cheltenham, UK: Edward Elgar Publishing Ltd, 2015) 1.

⁶⁰⁶ Friedman, *Impact*, *supra* note 10 at 209, citing Patricia Ewick and Susan Silbey, *The Common Place of Law: Stories from Everyday Life* (Chicago: U of Chicago Press, 1998).

⁶⁰⁷ Braithwaite 2010, *supra* note 10 at 490.

⁶⁰⁸ *Ibid* at 492. Braithwaite does not answer the question of what the minimum content of responsive regulation is. If by being responsive to the entire context leads a regulator to decide that they should opt out of responsive regulation altogether, can they still be said to be applying a responsive regulation approach? It seems reasonable to suggest that before we can say responsive regulation is being used, there should be some application of the pyramids of support and sanctions. The flexibility of the approach leads to some uncertainty about when it is being used.

Society places high value on headwater areas. An unacceptable level of harm from OHV use and linear disturbances such as trails is proven. For the most sensitive areas, risk of harm will outweigh any social or economic benefits associated with allowing use. Thinking in context, looking at the social, political, economic and ecological factors should lead us to the conclusion that for the most critical habitat headwater areas, there is no solution other than a total ban, akin to abolishing the industry. Responsive regulation must look to science to answer the question of which areas should be subject to a total ban. The necessary decisions are fundamentally ecological, not legal or social and should be guided by the precautionary principal.⁶⁰⁹

A law based on incorrect or incomplete scientific analysis could be thought to be unjust. Responsive regulation will not, on its own, tell a regulator whether the law is fair, just or the correct response. But being responsive to social context will keep regulators mindful of what should be done so that affected parties are more likely to accept the laws as legitimate.

Consistent with many of the traditional approaches to law discussed in Chapter 2 and the law and society approach discussed in Chapter 3, Braithwaite recognizes that “When regulation is seen as more legitimate and more procedurally fair, compliance with the law is more likely.”⁶¹⁰ The principles of responsive regulation can therefore help frame the debate, even if the activity is to be partially banned.

⁶⁰⁹ Research into how to most effectively persuade people of the correctness of scientific fact is beyond the scope of this thesis but see the works cited at n. 528, *supra*.

⁶¹⁰ Braithwaite 2010, *supra* note 10 at 486.

When a total ban is imposed across an area, enforcement is simplified. Access points and trails can be closed. Using a command and control approach is likely the most efficient means to ensure compliance.⁶¹¹

6.4 Responsive regulation at the local level through a restorative justice model

Few people argue that OHVs should be banned completely in Alberta. It is an activity that is enjoyed by a significant minority of Albertans. When confined to less ecologically sensitive areas and carried out in a responsible manner, ecological impact can be reduced. The goal does not necessarily have to be the complete eliminating of all impact. A more difficult enforcement case is presented where use is to be allowed, subject to rules, which is the system in place currently for many areas.

Responsive regulation is closely associated with restorative justice, again largely due to the influence of John Braithwaite on the field.⁶¹² Restorative justice is a group of techniques with which focus on repairing harm by bringing offenders and victims together and involving the community in the process.⁶¹³ Restorative justice offers one example of how responsive regulation could be used in the regulation of OHV operation.⁶¹⁴ The goal of restorative justice is to reduce unwanted behavior. The focus shifts from the offender to the crime, which is dealt with in a wholistic way. Proponents of restorative justice believe the approach will result in long-term

⁶¹¹ It would still be possible to use a responsive regulation approach. But it would seem that escalating up and down pyramids of sanctions and supports is not the most efficient way to obtain compliance with rules that are clear and simple for a defined area.

⁶¹² See John Braithwaite, “Restorative justice and responsive regulation: the question of evidence”, *supra* note 560; John Braithwaite, “Minimally Sufficient Deterrence”, *supra* note 561 and John Braithwaite, *Restorative Justice and Responsive Regulation*, *supra* note 578.

⁶¹³ The Alberta Restorative Justice Association states on its website that “Restorative justice in the context of the justice system is a way of looking at crime. It is a response to crime that focuses on addressing the harm suffered by victims, holding offenders accountable for the harm they have caused and collectively dealing with the consequences of the crime. Depending on the harm caused, restorative justice may involve the victim, the offender, their social networks, justice agencies, and all those impacted by the crime.” Online: <www.arja.ca/what-is-restorative-justice>.

⁶¹⁴ It is important to remember that responsive regulation is not itself a fixed regulatory technique.

changed behavior, with corresponding benefits to society. An outline of how restorative justice could be used is as follows:⁶¹⁵

- The regulator shows an intention to progressively escalate enforcement. The sanctions become more and more severe if an offender does not comply with expectations. The stages of escalation are not fixed but are adjusted as circumstances warrant. One possible series of escalations is set out in Figure 4.⁶¹⁶ Braithwaite's first principle requires the regulator to be flexible and use different responses for different players if necessary, choosing the responses that work best and changing them if necessary.⁶¹⁷ A key restorative justice technique is the use of "conferences" where the offender is brought together with victims to discuss the effects of the crime and how amends can be made. Conferences are more challenging for crimes with no specific victim.
- For OHV related crimes, representative members of society could play the role of victim. The quality of the conference is essential to the success of restorative justice and badly managed conferences can make things worse rather than better.⁶¹⁸ When dealing with the offender, especially at the conferences, Braithwaite's principles two (listen actively),⁶¹⁹ three (engage those who resist with fairness),⁶²⁰ four (praise those who show commitment),⁶²¹ and five (emphasize support and education)⁶²² must be applied.

⁶¹⁵ The outline is based on the crime prevention meta-strategy presented by John Braithwaite in "Minimally Sufficient Deterrence", *supra* note 561 at 73.

⁶¹⁶ See the italicized entries in the pyramid of sanctions in Figure 4 above.

⁶¹⁷ See note 568, *supra*.

⁶¹⁸ See John Braithwaite, "Restorative justice and responsive regulation: the question of evidence", *supra* note 560 at 3.

⁶¹⁹ See note 569, *supra*.

⁶²⁰ See note 570, *supra*.

⁶²¹ See note 571, *supra*.

⁶²² See note 572, *supra*.

- All subsequent offences for this offender are consistently detected. This requires more advanced enforcement techniques than those currently used.⁶²³ One possibility is requiring the use of a GPS tracking device on an OHV operated by anyone who has been charged with an offence within a prior period of time. The offender will understand that if he re-offends, he will be caught. Other potential offenders will observe what is happening and realize that they too will be caught if they offend. Offenders and potential offenders must be aware that the regulator has a range of sanctions at its disposal (principal seven).⁶²⁴
- As sanctions increase, so does social support, even at the highest levels of the pyramid. The community of peers is involved, using a combination of careful shaming, encouragement of pride, and education to change the offenders behavior (principal seven).⁶²⁵
- The unrepentant offender is kept off balance, not knowing what will happen if he does not comply.⁶²⁶
- Related to the previous point, deterrence must be dynamic. The goal is to minimize defiance, which can exceed deterrence. The means to accomplish this is to always keep the threat of escalation up the pyramid in the background. Explicit threats will increase defiance⁶²⁷ (principles six and eight).⁶²⁸

⁶²³ Privacy concerns might be raised. See Katrina Fischer Kuh, “Environmental Privacy” (2015) 1 Utah LR.

⁶²⁴ See note 573, *supra*.

⁶²⁵ See note 574, *supra*. Using shame as a tool to encourage compliance has diminishing returns. Shaming can quickly lead to a reaction of defiance. See Braithwaite, “Minimally Sufficient Deterrence”, *supra* note 561 at 70.

⁶²⁶ Braithwaite draws on the Roman metaphor of the “Sword of Damocles”, which hangs by a single horse hair above a person’s head, keeping them in a sense of ever-present peril. *Ibid* at 89.

⁶²⁷ *Ibid* at 93.

⁶²⁸ See note 575, *supra*.

- The community, including other OHV operators and representatives of user groups, must engage with the offender. There is again a balance between eliciting shame and encouraging pride in changed behavior. The offender must always see a way forward (principle seven).⁶²⁹
- Expectations of general deterrence of other potential offenders should be modest. There should be only a small number of offenders who escalate to the high end of the sanctions pyramid, smaller than the number of offenders who would suffer punishment under a command and control system.⁶³⁰ Understand whether there is deterrence, whether the correct strategies have been chosen and what the costs have been requires an emphasis on evaluation. The success of responsive regulation and restorative justice depends upon outcomes (good or bad) being communicated to potential offenders, but also to other regulators and academics so effective practices can be duplicated and ineffective practices avoided (principle nine).⁶³¹

For true criminal offences, using a restorative justice approach would require a radical revisioning of how society views justice. It may be challenging to successfully make the case that we should move away from a system based more or less completely on punitive retribution.⁶³² Breaches of the rules which directly govern OHV operation are not, however, usually going to be true criminal offences. They will be almost exclusively public welfare

⁶²⁹ See note 574, *supra*.

⁶³⁰ *Ibid* at 110.

⁶³¹ See note 576, *supra*. In addition to contextual evaluation (which he says often requires nothing more than systematic record keeping), Braithwaite recommends randomized control testing (which is common in most scientific research but not in empirical legal research) and “triple loop learning” through which results are communicated across an organization and then between organization. See Braithwaite 2010, *supra*, note 10 at 512.

⁶³² See generally John Braithwaite and Philip Pettit, *Not Just Deserts: A Republican Theory of Criminal Justice* (Oxford: Clarendon Press, 1990), Online: <<http://johnbraithwaite.com/wp-content/uploads/2016/06/Not-Just-Deserts-A-Republican.pdf>>.

offences, and most would be absolute liability offences.⁶³³ For public welfare offences, restorative justice may be more acceptable to members of society than it would be for crimes to which greater blame is attached because of the intention (the mental element) and moral blameworthiness associated with the latter.⁶³⁴

It would also be possible to proceed more slowly and test discreet elements of a restorative justice approach which might complement the existing approach. For example, restorative justice conferences could be used to provide advice to judges on sentencing of offenders.⁶³⁵ Responsive regulation and restorative justice are not necessarily “all or nothing” approaches. Individual elements can be tested, alone or in combinations and the results measured.⁶³⁶ Elements which could be tested include whether the offender admits guilt, whether there is an identifiable victim and whether there is a pattern of offending.

⁶³³ In *R. v. Sault Ste Marie* [1978] 2 S.C.R. 1299 Dickson J. (as he then was) delineated three general types of offence which exist under Canadian law. True criminal offences are those which for conviction requires proof of both *mens rea* (the mental element or guilty mind) and the *actus reus* (the physical element or prohibited act). At 1309 Dickson J. states “Where the offence is criminal, the Crown must establish a mental element, namely, that the accused who committed the prohibited act did so intentionally or recklessly, with knowledge of the facts constituting the offence, or with wilful blindness toward them.” True criminal offences may be distinguished from public welfare offences, which are of two types. Absolute liability offences are those which, for conviction, no mental element at all need be proven against the accused and against which the accused does not have the option of arguing that all reasonable care was taken to avoid committing the offence. Strict liability offences lie between the other two categories. These are (Dickson J. states at 1326), “Offences in which there is no necessity for the prosecution to prove the existence of *mens rea*; the doing of the prohibited act *prima facie* imports the offence, leaving it open to the accused to avoid liability by proving that he took all reasonable care.”

⁶³⁴ I am not suggesting that public welfare offences are trivial.

⁶³⁵ This approach is currently available in Alberta for youth criminal justice matters. See the Alberta Justice and Solicitor General website online: <www.solgps.alberta.ca/programs_and_services/correctional_services/young_offenders/youth_justice_committees/Pages/default.aspx>.

⁶³⁶ Elements that Braithwaite suggests need field testing, especially in combinations, include proffering of praise, eliciting pride, eliciting trust, building self-efficacy, open communication, engagement of third parties, proffering procedural justice or restorative justice, reintegrative shaming, movement in tit-for-tat fashion between levels of a pyramid and projections of deterrence from the peak of a pyramid. See Braithwaite, “Restorative justice and responsive regulation: the question of evidence”, *supra*, note 560 at 17.

6.5 Criticisms of responsive regulation

Some criticisms of the responsive regulation approach are relevant to how it should be used in the context of OHV regulation.⁶³⁷ One such criticism is that the approach assumes that a “binary regulator-regulatee relationship” exists.⁶³⁸ In such a relationship, the regulator and the regulated party have perfect knowledge of what the other side is doing and the strategy they are following. This knowledge allows them to react rationally. In the current OHV context, regulatees are highly dispersed and may only have indirect and intermittent communication with the regulator. Several regulatory agencies operate independently. OHV operators have limited opportunities for communication. The lack of a close ongoing relationship between each OHV operator and each regulator could lead to misunderstandings about why escalation is taking place, among other things. Braithwaite’s solution to this problem is for regular repeated interactions between regulator and regulatee to be contrived “where the most strategic opportunities for improvement are identified”.⁶³⁹

Another criticism relates to the fairness of applying a flexible approach to enforcement.⁶⁴⁰ Regulating individual OHV users in this way would be open to criticisms of favoritism and to corruption. It would also be difficult for users to understand what the consequences of non-compliant behavior are.

A third criticism is that “responsive regulation requires a discretionary competence to make judgements beyond the wisdom of the average street-level regulator”. Braithwaite’s

⁶³⁷ Criticisms of the approach generally are discussed in Baldwin et al, *supra* note 18 at 260 and n5.

⁶³⁸ *Ibid* at 260.

⁶³⁹ Braithwaite, 2010, *supra* note 10 at 520.

⁶⁴⁰ Baldwin et al, *supra* note 18 at 264.

response is that the nine principles are really just common sense, akin to the rules of good parenting.⁶⁴¹

The most obvious criticism is the high cost of dealing with individual law breakers in such a “high touch” manner. An escalating tit-for-tat strategy may be a waste of precious enforcement resources.⁶⁴² OHV offences related to vehicle operation take place in remote places. Most activity goes unpoliced because of the vast areas involved. Policing is currently done by multiple agencies. An offender who happens to get caught may not be seen again, especially by the same enforcement official. Enforcement resources have never been sufficient. Escalating up and down pyramids of sanctions and rewards for individual users would require significantly greater enforcement resources than have been available.

⁶⁴¹ Braithwaite 2010, *supra* note 10 at 518.

⁶⁴² Baldwin et al, *supra* note 18 at 261.

Chapter Seven: Conclusions and Recommendations

In his 2016 paper titled “Restorative justice and responsive regulation: the question of evidence”, John Braithwaite tackles the question “But does it work?”⁶⁴³ His answer is that the evidence shows that both can work, but that the evidence is less certain about what it takes to make them consistently effective.⁶⁴⁴ He also concludes that evaluation is complex. Some of the complexity comes from the fact that both restorative justice and responsive regulation are meta-strategies, not strategies in themselves. When trying to compare results of evaluations, a “heterogeneity problem” occurs. At the initial stage, all that can be evaluated is whether the strategy that was chosen made a difference. The more important question is whether the correct strategy or combination of strategies was chosen.

The research question posed at the beginning of this thesis was “Can (and should) responsive regulation be used to guide regulation of the behavior of OHV operators on Crown land in headwater regions of Alberta?” The answer to the first question (Can it be used?) is yes. There is nothing about the nature of the regulatory problem that makes responsive regulation impossible. The answer to the second question (Should it be used?) is, I submit, not as clear. The question of whether it works to “stop using a strategy when it fails and . . . replace it with another that the evidence and the contextual diagnosis suggests is more like to work.”, is, as Braithwaite says, tautological.⁶⁴⁵ Responsive regulation asks us to commit to more than more than this, however. It asks us to accept that choosing a strategy that allows moving up and down pyramids of sanctions and supports will be more effective at reducing negative slippage than continuing to use a command and control approach. Whether that is true will depend upon the

⁶⁴³ Braithwaite, “Restorative justice and responsive regulation: the question of evidence”, *supra*, note 560.

⁶⁴⁴ *Ibid* at 18.

⁶⁴⁵ *Ibid* at 21.

strategies chosen and the resources available. Research from other contexts shows responsive regulation and restorative justice can be effective at reducing harmful non-compliance while encouraging long-term change in the behavior of offenders.⁶⁴⁶ It is not possible to say with certainty, in advance, whether they would be more effective than current methods of regulating OHV use.

I conclude, based on the review of responsive regulation literature contained herein, that responsive regulation cannot assist with the threshold question of which geographic areas should be subject to a total ban. Answering that question should be left to scientists.

Based upon the limited review of the Alberta context of OHV regulation conducted herein, I conclude that the existing system of command and control regulation is appropriate for high risk, closed areas where OHV use is completely prohibited.

For lower risk areas where OHV use will be allowed, I conclude that using elements of a restorative justice approach is possible and, based on results of restorative justice initiatives in other contexts, doing so may have benefits for society. Responsive regulation and restorative justice are both meta-strategies, so the proper question is whether the individual strategies which are chosen will work. Answering that question requires choosing strategies, field testing them and evaluating them both in terms of results and costs. Testing possible strategies on a limited basis, perhaps only for certain offences and areas, would be a low risk approach with potentially great benefit and is therefore recommended.

⁶⁴⁶ See generally the literature reviewed in Braithwaite, *ibid.*

Appendix 1: Default rules for OHV use on various land types in Alberta

Designation of land	Approximate area	Rules re: OHVs
Private Land:		
Farms and ranches	210,000 km ² total ⁶⁴⁷ 96,315 km ² cropped ⁶⁴⁸	With permission of owner
Alberta Conservation Association	809 km ²	Not allowed
Nature Conservancy of Canada	947 km ²	Not allowed
Ducks Unlimited Canada	404 km ²	Not allowed
Federal public land		
National Parks	63, 138 km ²	Not allowed
Indian reservations	8,128 km ²	On roads the <i>Traffic Safety Act</i> applies.
Provincial public land		
Provincial parks	2,214 km ²	Designated trails only
Wildland Provincial Parks	17,314 km ²	On designated trails in some parks
Wilmore Wilderness Park	4,597 km ²	Not allowed
Section 7 lands	Unknown	Treated as Parks, Wildland Provincial Parks or Wilderness Parks.
Provincial recreation areas	879 km ²	Designated trails
Provincial wilderness areas	1,010 km ²	Not allowed
Ecological reserves	268 km ²	Not allowed
Natural areas	1,300 km ²	Not prohibited but restricted
Heritage Rangelands	120 km ²	Depends on the management plan for the area.
Agricultural public land	20,000 km ²	With permission of leaseholder
Public land use zones	11,200 km ² (as of 2017)	Varies. Restricted to official trails where allowed (other than Maclean Creek PLUZ). Additional restrictions by OHV size, sometimes by date.
Vacant public land with no disposition	unknown	Allowed (subject to complex rules which may remove access)
Municipal land	3,948.85 km ²	Varies with bylaws

⁶⁴⁷ 52.1 million acres stated at Statistics Canada Census of Agriculture 2006 online: <www.statcan.gc.ca/ca-ra2006/analysis-analyses/alberta-eng.htm#r1>.

⁶⁴⁸ *Ibid.* 23.8 million acres cited.

Appendix 2: Publicized positions of Alberta NGOs regarding OHV regulation

Organization	Publicized official position?	Comments
WPACs		
Athabasca Watershed Council	no	<ul style="list-style-type: none"> • State of the Watershed reports - four phases 2011, 2012, 2012 and 2014 • No mention of OHVs, reference to stream crossings (all types) and population growth as pressures
Battle River Watershed Alliance	no	<ul style="list-style-type: none"> • State of the Watershed report published in 2011 does not mention of OHV use.
Beaver River Watershed Alliance	no	<ul style="list-style-type: none"> • No State of the Watershed report found
Bow River Basin Council	no	<ul style="list-style-type: none"> • First State of the Bow Report written in 1994; Recognized as WPAC in 2004; State of the Watershed/Basin reports in 2005, 2010; Watershed Management Plan Phase 1 – 2008 • 2010 report mentions OHV use as a source of water quality degradation for Fish Creek (page 31) and motorized recreation as a challenge in the Ghost River area (page 17)
Lesser Slave Watershed Council	no	State of the Watershed report - 2010
Mighty Peace Watershed Alliance	no	State of the Watershed Report - 2015
Milk River Watershed Council	no	State of the Watershed Report - 2008
North Saskatchewan Watershed Alliance	no	State of the Watershed Report - 2005
Oldman Watershed Council	no	State of the Watershed Report - 2010
Red Deer River Watershed Alliance	no	State of the Watershed Report - 2009 – page 789
South East Alberta Watershed Alliance	no	

ENGOs/Conservation Organizations		
Alberta Conservation Association ⁶⁴⁹	no	<ul style="list-style-type: none"> • No OHV use is allowed on ACA land
Alberta Fish and Game Association	yes	<ul style="list-style-type: none"> • policy supports allowing the use of OHVs to retrieve killed big-game animals under certain conditions. The policy encourages riders to minimize any harm to the environment and to avoid offending the “wishes, comfort and safety of others”.⁶⁵⁰ • Have published a letter supporting use of OHV’s on designated trails in the Castle region but not “unrestricted, destructive use of OHV’s”.⁶⁵¹ • Foot access only on AFGA properties
Alberta Land Stewardship Centre	no	

⁶⁴⁹ The Alberta Conservation Association is a non-profit organization and a registered charity. It is also a “delegated authority organization”, receiving most of its powers and funding from the Alberta Government under a Memorandum of Understanding described online at < <http://www.ab-conservation.com/about/memorandum-of-understanding/>>.

⁶⁵⁰ The Alberta Fish and Game Association Policy regarding OHVs as at April 2016 was:

6.7 Off-Road Highway Vehicles

- 6.7.1 The Alberta Fish & Game Association believes a person should be allowed to use an Off-Road Highway Vehicle (OHV) at any time to retrieve a killed big game animal by the most direct route possible and be allowed to bring an encased or broken down firearm and/or bow and arrows with him/her for that purpose. Exceptions would be in certain areas identified in access management plans.
- 6.7.2 The Alberta Fish & Game Association encourages that an Off-Road Highway Vehicle (OHV) operator will make considerations of the environment when using an OHV so as to minimize any possible damage or to avoid damaging the environment if at all possible.
- 6.7.3 The Alberta Fish & Game Association encourages that an Off-Road Highway Vehicle (OHV) operator will consider the wishes, comfort and safety of others when using an OHV and will not operate the OHV in such a manner as to offend anyone in a purposeful manner.
- 6.7.4 The Alberta Fish & Game Association (AFGA) recommends that the Government experiment with the provision of special permits to physically disabled individuals that would allow those individuals to hunt and use their firearms and/or bows and arrows from an Off-Road Highway Vehicle (OHV). AFGA supports that these OHV permits should only be given to paraplegics and functional low-level quadriplegics with appropriate medical documentation.

(provided in an email from Martin Sharren, AFGA Executive Director, April 11, 2016.)

⁶⁵¹ Alberta Fish and Game Association, Letter to Minister Shannon Phillips, (June 11, 2018), online: < www.afga.org/pdf/L-2018-06-11-Castle.pdf>.

Alberta Wilderness Association	yes	<ul style="list-style-type: none"> The AWA coordinated a communique to government dated December 4, 2015⁶⁵² signed by 57 individuals and on behalf of 10 organizations. The main points of the document were endorsed as AWA policy in April, 2016⁶⁵³
Castle Crown Wilderness Coalition	yes	<ul style="list-style-type: none"> Endorsed AWA communique Position statement on website (Online: <http://ccwc.ab.ca/about/advocacy/>)
CPAWS	yes	<ul style="list-style-type: none"> The Y2Y website (cited below) states that the recommendations made come from CPAWS and Y2Y.
Ducks Unlimited Canada	no	<ul style="list-style-type: none"> No OHV use allowed on DUC land
Nature Canada	no	
Nature Conservancy of Canada	no	<ul style="list-style-type: none"> No OHV use allowed on NCC land
North Saskatchewan Riverkeeper	no	
Southern Alberta Group for the Environment (SAGE)	yes	<ul style="list-style-type: none"> Endorsed AWA communique http://sage-environment.org/?p=20
Trout Unlimited Canada	no	<ul style="list-style-type: none"> focus on practical solutions to reduce harm and restore damaged areas; work with all of the stakeholders that use the Eastern Slopes; provincial government should establish, communicate and enforce rules⁶⁵⁴
Yellowstone to Yukon Conservation Initiative (Y2Y)	yes	<ul style="list-style-type: none"> Endorsed AWA communique Policy stated on website - “Repair and revegetate eroding trails, gullies, soil compaction, mud bogs and other damage caused by motorized off-highway recreation, and provide a limited number of well-

⁶⁵² *Supra* note 30.

⁶⁵³ Online: <<https://albertawilderness.ca/wordpress/wp-content/uploads/2015/10/AWA-PS-OHV-Recreation-1987-2016.pdf>>.

⁶⁵⁴ “OHV Use in Alberta” (February 5, 2016) online:< <http://www.tucanada.org/index.asp?p=2055&vn=409>>.

		engineered vehicle trails outside of parks and other important conservation areas.” ⁶⁵⁵
Watershed Stewardship Groups:		
Ann & Sandy Cross Conservation Area	no	<ul style="list-style-type: none"> Recreational OHV use is not allowed on property, which is designated as a Habitat Conservation Area under Part 1, Schedule 12 of the Alberta <i>Wildlife Regulation</i> AR 143/97.
Crooked Creek Conservancy Society of Athabasca	no	
Drywood Yarrow Conservation Partnership	no	<ul style="list-style-type: none"> No website
Eagle Point Blue Rapids Park Council	no	<ul style="list-style-type: none"> Website has OHV safety and trail ethics information⁶⁵⁶
Elbow River Watershed Partnership	no	<ul style="list-style-type: none"> Elbow River Basin Water Management Plan released 2009⁶⁵⁷
Friends of Fish Creek Provincial Park Society	no	
Friends of Kananaskis Country	no	
Ghost Watershed Alliance Society	yes ⁶⁵⁸	<ul style="list-style-type: none"> State of the Watershed Report – 2018⁶⁵⁹ recognizes OHV use as a cause of increasing impact outside protected areas (page iii, iv), mentions lack of enforcement and education (v), states OHV use increased after Kananaskis country created (47), references throughout to problems caused by OHV use (47, 49, 51, 83, 84, 95, 98, 99, 100, 101, 124, 126, 127, Section 10.4.2, 139, 195, 196
Keepers of the Athabasca	no	State of the Athabasca Watershed Report issued in 2008 (Online: < www.keepersofthewater.ca/files/state2008.pdf >) mentions vehicle damage in the unprotected Richardson Sand Dune area.

⁶⁵⁵ Online: < <https://y2y.net/work/what-hot-projects/alberta-headwaters/new-alberta-headwaters>> under the heading “Celebrate Our Headwaters”.

⁶⁵⁶ Online: < <https://www.epbrparkscouncil.org/activities/off-highway-vehicle-riding/?portfolioCats=3>>.

⁶⁵⁷ Online: < <https://erwp.org/index.php/educational-documents/66-elbow-river-basin-water-management-plan>>.

⁶⁵⁸ The State of the Watershed Plan, after describing the impact of OHVs, simply states “These are serious issues that require attention from the provincial government”. *Ibid* at 133. Several reports posted on the Society’s website recommend restricting OHVs to designated trails. Online: <www.ghostwatershed.ca/GWAS/research-data.html>.

⁶⁵⁹ Online:< www.ghostwatershed.ca/GWAS/ewExternalFiles/GHOSTSOW_FINAL_April2018s.pdf>.

Pigeon Lake Watershed Association	no	Watershed Management Plan published in May, 2018 (Online: < www.plwmp.ca/wp-content/uploads/2018/05/PLWMP_2018_Main_Report_20180504.pdf >)
Sylvan Lake Watershed Stewardship Society	yes	Quiet Enjoyment Initiative Noise Mitigation Action Plan (Online: < https://slwssnews.files.wordpress.com/2014/05/the-quiet-enjoyment-initiative-action-plan.pdf >) deals with noise from boats and OHVs.
Wabamun Watershed Management Council	no	
Waterton Biosphere Reserve Association	no	
Other groups:		
Alberta Native Plant Council	yes	<ul style="list-style-type: none"> • Endorsed AWA communique
Alberta Water Council	no	
Bert Riggall Environmental Foundation	yes	<ul style="list-style-type: none"> • Endorsed AWA communique
Bragg Creek Environmental Coalition	yes	<ul style="list-style-type: none"> • Endorsed AWA communique
Livingstone Landowners Guild	yes	<ul style="list-style-type: none"> • Endorsed AWA communique • Issued separate news release⁶⁶⁰
Stewards of Alberta's Protected Areas Association	yes	<ul style="list-style-type: none"> • Endorsed AWA communique
West Athabasca Bioregional Society	yes	<ul style="list-style-type: none"> • Endorsed AWA communique

⁶⁶⁰ Online: <<https://albertawilderness.ca/wordpress/wp-content/uploads/2016/04/E-Slopes-News-1.pdf>>