Private Property’s Hidden Potential

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Abstract

This thesis argues that the social obligation norm of private property provides a compelling account of the operation of private property within certain environmental management schemes. It further argues that the social obligation norm provides a principled way of explaining why private property can be a useful tool of environmental management. It follows that private property need not be viewed as incompatible with environmental protection. Private property can be, and in fact is being, deployed in creative ways to achieve positive environmental results.

It is argued that the social obligation norm already exists as part of our cultural understanding of private property, as a counter-tradition to the classical liberal account. It focuses on obligations to the community rather than solely on the rights of individuals and suggests that private property is a social institution which entails obligations to the community and makes affirmative demands of property owners. In addressing environmental problems, this observation allows us to focus on our existing traditions of property without forcing us to attempt a complete reconceptualisation of the institution.

The argument is illustrated by reference to the New Zealand quota management system for fish established by the Fisheries Act 1996 and the New Zealand Emissions Trading Scheme established by the Climate Change Response Act 2002. Analysis of the private property rights relied on by these schemes suggests that each regime attempts to employ the positive incentives that flow from ownership, but does so while restricting the scope of that ownership in line with social objectives. This provides evidence that the social obligation norm is present in our current property law and suggests that the norm is an inherent part of the institution of private property. Perhaps more importantly, this analysis suggests that the architects of these schemes have done a very good job of creating
regimes with the potential to achieve their goals while avoiding the pitfalls of private property. This provides a template for the ongoing efforts to reconcile the utility of private property as a tool of environmental management with the fact that it can also be the root cause of environmental problems.

The argument also serves to demonstrate, in concrete terms, that private property is a social institution serving social purposes. The presence of the social obligation norm in both our legal history and current law suggests that classical liberal theory lacks predictive power. This has exciting ramifications for the future of property scholarship generally.

It is concluded that environmental management regimes that rely on private property need not be mistrusted; instead they should be viewed as counter-intuitively positive. The use of property in this sphere also has the potential to further our cultural understanding of private property as entailing both privilege and obligation.
Preface

An alternative title to this thesis could have been Or How I Learned to Stop Worrying and Embrace Property Rights in the Environment. Inspired by one of my supervisor’s love of film, this title would not have been intended as satire, but rather to reflect the journey I have taken in completing this project. It has been a privilege to have had the time to enquire deeply into the use of private property rights as a tool of environmental management and to arrive at a conclusion quite contrary to my initial thoughts on the subject. Of course, this journey would not have been possible without the help of many people whom I wish to thank.

I have been extremely fortunate in my supervisors. Professor Struan Scott was an excellent person to shepherd this thesis through to completion. Your knowledge and comments on doctrinal aspects of property law and structural issues has been invaluable. In addition, you have provided me with great administrative support as well as taking much broader care of my welfare and career. I am very grateful for this. Associate Professor Michael Robertson provided the thesis with a real depth and jurisprudential foundation. I really value your ability to succinctly and beautifully summarise issues. This skill was instrumental in helping me formulate, reframe and articulate my thoughts. Ceri Warnock and Nicola Wheen each brought a vast knowledge of resource management law and theory to the thesis, which has been essential in grounding it in some degree of practical reality. Ceri, I am extremely grateful for your help in getting me from the point where I knew lots but could not ‘see the wood for the trees’, to the point where I could articulate my argument with confidence. Nic, thank you for your enthusiasm and for pushing me to say what I meant, rather than dancing around the issue hoping people would divine my meaning. While the views I express here are my own, this thesis would have been very different, and much poorer, without any one of you. Thank you all so much.
In addition to my supervisors, I am very thankful for all the practical help and support I received from the Faculty of Law at the University of Otago. In particular, thanks go to the Dean, Professor Mark Henaghan and his administrative team, for welcoming me to Otago and for the fantastic opportunities I was provided with during my time there. In particular, I was lucky to learn a lot from the Property Law team: Professor Stuart Anderson; Professor Nicola Peart; Professor Struan Scott; and my fellow tutors. I am also indebted to Kate Thompson and her wonderful team of law librarians.

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I also thank all of my colleagues at the University of Canterbury. In particular, the Dean, Associate Professor Chris Gallavin, for his support and for ensuring I have had sufficient time to write, Professor Liz Toomey for being a wonderful friend and mentor and Professor Karen Scott for her friendship and guidance.

In addition to the wonderful professional and academic support I have received my PhD journey has been made much easier by the support of my friends. In particular, I thank
Sarah Butcher for being an amazing friend. I thank you for your insights and for helping me to keep things in perspective. It has been great to not only share this PhD journey with you, but also to have had kids at roughly the same time. The jury is still out on which is the more difficult! Thanks also to Ruth Molloy for being an excellent sounding board and friend, and to Sandy and Frances Ross (and family) for their fellowship, constant good humour and for filling the role of surrogate parents when necessary.

This journey would not have been possible without the love and support of my family. I thank my parents Karyn France and Steve Hudson for their love and for providing me with such an excellent example of how to approach research and what it means to be an academic. I also want to mention my brother-in-law Richard Souness who completed his PhD in Chemistry at Otago while I was there. I have really valued getting to know you over this period and I look forward to celebrating more of life’s achievements over the coming years. Thanks also to my extended family: Andrew, Judith, Emily, Will, Chloe, Dave and Spencer for listening to my interminable PhD stories and for your valuable practical support, including lots of baby-sitting, which enabled me to spend the hours required to get this project over the line!

Finally, for giving me the encouragement to start this project and the courage to complete it, I thank my amazing wife Rachel and my daughters Annabelle and Anneke. Annabelle, your love of books inspired this book’s opening; Anneke, your recent arrival hastened its conclusion. I love you both so much and am looking forward to having more time to play! Rachel, your constant support, insight, patience and love made this thesis possible. I am astonishingly lucky to have you in my life.

This thesis has been referenced in accordance with the New Zealand Law Style Guide: Second Edition and states the law as at 1 November 2014.
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Introduction
I meant no harm. I most truly did not. But I had to grow bigger. So bigger I got. I biggered my factory. I biggered my roads. I biggered my wagons. I biggered the loads of the Thneeds I shipped out. I was shipping them forth to the South! To the East! To the West! To the North! I went right on biggering... selling more Thneeds. And I biggered my money, which everyone needs ...

And then I got mad. I got terribly mad. I yelled at the Lorax, “Now listen here, Dad! All you do is yap-yap and say, ‘Bad! Bad! Bad! Bad!’ Well, I have my rights, sir, and I’m telling you I intend to go on doing just what I do! And, for your information, you Lorax, I’m figgering On biggering and BIGGERING and BIGGERING and BIGGERING, turning MORE Truffula Trees into Thneeds which everyone, EVERYONE, EVERYONE needs!” And at that very moment, we heard a loud whack! From outside in the fields came a sickening smack of an axe on a tree. Then we heard the tree fall. The very last Truffula Tree of them all

**Introduction**

*The Lorax* by Dr Seuss recounts the tragic demise of a pastoral paradise; the clearing of the Truffula Trees, the exodus of Brown Bar-ba-loots, Swomee Sawns and Humming Fish, and the eventual departure of the Lorax (a somewhat fusty, but nevertheless endearing, ecologist). The story was first published at the dawn of the modern environmental movement 50 years ago, and since then it has taught generations of children about the environmental destruction that can result from unconstrained greed.¹ At the heart of the story is the Once-ler whose unsustainable desire to sell increasing numbers of multi-purpose garments called Thneeds eventually leads to the harvest of the last Truffula Tree, the ruination of the once verdant landscape and the failure of the Once-ler’s business.

The brilliance of this allegory is its memorable demonstration of the negative environmental consequences that can flow from unconstrained human industry and the presumption that individuals can do what they want with their own private property. This observation has played a key role in the development of environmental law over the last 50 years.

It is somewhat surprising, therefore, that over the same time period society has seen the development of a number of environmental management tools that completely rely on the institution of private property. Indeed, private property has achieved prominence as a primary tool for addressing issues of environmental overuse. In economic and legal theory Garret Hardin is credited with first suggesting this approach in his now ubiquitous article “The Tragedy of the Commons”.\(^2\) In essence, the theory suggests that by simply defining and enforcing private property rights in a resource, and letting the resulting market function freely, all environmental problems will eventually be solved. The foremost examples of the practical application of this theory are schemes that employ “tradeable environmental allowances”.\(^3\) Examples of these regimes can be seen across a diverse range of resources, from emissions trading schemes and transferable fishing quota to water markets and wetland credit trading.\(^4\)

Notwithstanding the increased application of this theory to practice, when I began this project I was extremely sceptical about the idea that the institution of private property had any place in the management of natural resources. Having grown up on a diet of books such as *The Lorax* it seemed odd to me that the solution to environmental problems would be trusted to the very institution that is often credited with creating those problems in the

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\(^2\) Garrett Hardin “The Tragedy of the Commons” (1968) 162 Science 1243.

\(^3\) Carol M Rose “Expanding the Choices for the Global Commons: Comparing Newfangled Tradable Allowance Schemes to Old-Fashioned Common Property Regimes” (1999) 10 DELPF 45 at 51.

first place. To my mind, commodifying the environment by reducing aspects of it to private property seemed like the ultimate, and illegitimate, triumph of the neoliberal project that has dominated the political discourse over the course of my lifetime. I started with the presumption that “market-based” approaches to environmental management were not an appropriate model for achieving goals such as protection, conservation and sustainability. As I began to explore the literature, however, I was unsettled to discover that it is now generally accepted that private property does have a place in the panoply of tools employed to help manage and conserve natural resources. What was also abundantly clear, however, was that this support was not absolute. A large number of scholars hedged their approval with a number of very significant caveats.\(^5\)

The source of this scholarly discomfort stems from the allegory so beautifully captured by Dr Seuss. It is incontrovertible that the operation of private property within our society (and in particular, the idea that we can do what we want with what we own) can result in significantly negative consequences for the environment. Of course, this idea was not novel to Dr Seuss; his genius was in managing to present it in a way that has maintained a mainstream cultural resonance. On a more scholarly level, Aldo Leopold made essentially the same point in 1948 in his seminal work *A Sand County Almanac*. He begins his work by noting:\(^6\)

> Conservation is getting nowhere because it is incompatible with our Abrahamic concept of land. We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the aesthetic harvest it is capable, under science, of contributing to culture.

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\(^6\) Aldo Leopold *A Sand County Almanac and Sketches Here and There* (Oxford University Press, Oxford, 1949) at viii.
Later, when developing his idea of a “land ethic” Leopold addresses our idea of property:\(^7\)

When god-like Odysseus returned from the wars in Troy, he hanged all on one rope a dozen slave-girls of his household, whom he suspected of misbehavior during his absence. This hanging involved no question of propriety. The girls were property. The disposal of property was then, as now, a matter of expediency, not of right and wrong … There is as yet no ethic dealing with man’s relation to land and to the animals and plants which grow upon it. Land, like Odysseus’ slave-girls, is still property. The land relation is still strictly economic, entailing privileges but no obligations.

The idea that private property entails privilege but no obligation is a key driver of the concerns surrounding the application of private property to environmental problems. On a theoretical level scholars have demonstrated that the danger stems from our culturally dominant idea of the institution, which is firmly grounded in the classical liberal tradition. According to classical liberal theory, private property provides a small, but sovereign, island of one’s own, within which one should be able to do as one pleases.\(^8\) Private property is seen as sacrosanct and immunises its holder from outside interference. As observed by Leopold, Dr Seuss and many others, a direct result of the strength of private property rights and the protections granted to them under the classical liberal paradigm is that they enable the sorts of behaviour that can lead to extensive environmental harm.\(^9\)

The Once-ler learnt this lesson the hard way. Nevertheless, as I shall explore, private property is integral to the way in which society enables individual autonomy and the ability for individuals to live well-led lives.\(^10\) Moreover, as a result of property’s genius in the way that it motivates individuals to look after what they own, it can play a very positive role in addressing problems of environmental overuse.\(^11\) This is particularly so in relation to large

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\(^7\) At 167 – 168.
\(^8\) Charles A Reich “The New Property” (1964) 73 Yale Law Journal 733.
or diffuse resources where, as Hardin observed, the absence of ownership can be a primary cause of environmental overuse.

Consequently, as a number of scholars have observed, the problem is not with private property itself, but rather with how we understand private property as an institution.\textsuperscript{12} They suggest that in order to resolve the dichotomy between private property’s utility as a tool of environmental management and the fact that it can also be the root cause of environmental problems, we must move our understanding of the institution so that private property can promote a sustainable relationship between humans and the environment on which we depend.

In responding to this challenge many scholars have called for a recalibration of private property. They argue that we must move away from the classical liberal idea of property as privileging individual self-interest, to an idea of property that serves the interests of the community more generally. As I will explore, several different options for achieving this goal have been posited, all of which seek to find a way to reconceive, re-envision, or reinvent private property in a way that will ensure it is characterised by both entitlement and obligation.\textsuperscript{13} In calling for what is essentially a revolution in our societal approach to property law, this literature is effectively advocating the creation of an entirely new institution. However, I believe that this approach fails to consider our tradition of property law in sufficient detail. If one looks more closely, I believe it is possible to discern a counter-tradition within our property theory that has always been present and remains so today. In my view, this tradition recognises an idea of private property that encompasses both rights and obligations. This observation means that we can respond to the challenge currently facing property law without having to invent a new institution.

\textsuperscript{12} Taylor and Grinlinton, above n 9, at 5.
\textsuperscript{13} At 5 – 6.
While this counter-tradition is of ancient provenance, it has only been considered in detail since the mid-1980s. Although referred to by several names, it has been coined the “social obligation norm” of property by one prominent proponent;¹⁴ a term I shall adopt. In essence, the social obligation norm of property suggests that the goals society expects to be fulfilled by a private property regime are primarily social, not individual. It recognises that humans are social creatures whose individual autonomy is enabled by their social nature and the communities in which they live. On this approach, the core purpose of private property is to secure sufficient property to individuals in order to allow them to flourish. Only if the individual can flourish, can autonomous participation in a well functioning society be enabled.¹⁵ This fact tempers the scope of the individual’s ability to use his or her property solely as he or she wishes and recognises that sometimes individuals owe obligations to the community in relation to the resources they control. In contrast to the classical liberal tenet that society as a whole will benefit through the collection of decisions made by individuals in their own dedicated self-interest, the social obligation norm maintains that it does not necessarily follow that social good will always flow from a narrow view of self-interest. Sometimes resource use which is good for everyone may run counter to an individual’s interest. This means that property rights are inherently relational and sometimes an owner will have obligations to the community. In some circumstances, the collective community interest may take priority over the private

interests of the individual. Consequently, property holders may have obligations that reflect the broader interest of the community.\textsuperscript{16}

While the view of private property as a norm of social obligation has been somewhat eclipsed by the ascendance of the classical liberal worldview over the last three centuries, I argue that, as a theory, it has greater predictive power than its classical liberal counterpart. Although it is still somewhat hidden, I think the presence of this idea of private property is evidenced by the way that the institution actually operates within society. Very rarely, if ever, can one point to a pure example of the property rights envisaged by classical liberal theory. Moreover, although classical liberal theory lies at the heart of the literature advocating private property as a tool of environmental management, when one closely considers the practical application of this theory, it is evident that a very different idea of private property is being employed. This observation leads to my ultimate thesis, which is that the social obligation norm provides a principled way of explaining why private property can be a useful tool of environmental management and of accounting for how property actually works within such schemes.

This observation is important for a number of reasons. Perhaps most obviously, it helps to explain how tradeable environmental allowance regimes actually operate in practice. When analysed closely the private property rights created under these regimes are exceedingly limited and do not reflect the “strong” or “unattenuated” rights advocated by many theorists.\textsuperscript{17} I argue that the social obligation norm of property helps to explain the structure and limitations placed on these rights. It also helps to explain why, notwithstanding the absence of strong property rights, these sorts of regimes can be quite successful (at least on some levels and if well implemented).

\textsuperscript{16}Alexander and Peñalver, above n 10.
\textsuperscript{17}Louis De Alessi “Private Property Rights as the Basis for Free Market Environmentalism” in Peter J Hill and Roger E Meiners (eds) \textit{Who Owns the Environment?} (Littlefield, Oxford, 1998).
Moreover, as noted, this observation helps to address the current oversight in the literature. If the challenge is to find a way to conceive of private property as entailing both rights and obligations, the social obligation norm provides an exciting avenue for further exploration.

Finally, I consider my thesis also reveals a deeper truth about the institution of private property. It serves to demonstrate, in concrete terms, that private property is a social institution serving social purposes. This fact helps to dispel the myth that the sole purpose of private property is to satisfy individual preferences and protect the individual from governmental interference. In turn, this suggests that classical liberal theory lacks predictive power. In my view, classical liberal purity is a myth; it simply does not exist. Although it may be possible to point to specific instances where the classical liberal version of private property seems present, if we look a little closer, we will inevitably see that the right, although posited as strong and unattenuated, is restricted (at least to some extent) by prevailing social interests. Consequently, I argue that there will always be an intermingling of goals when we examine the role of private property in society. Recognising and emphasising the broader social aspect of private property may provide a fruitful avenue for developing a better understanding of how this fundamental construct actually operates.

Of course, in demonstrating the validity of my thesis I have a number of burdens to discharge and it is useful to outline how I propose to do this. Due the complexity of the regimes that use private property to manage natural resources I have restricted myself to two primary illustrations: the quota management system for fish established under the Fisheries Act 1996 and the New Zealand Emissions Trading Scheme created by the Climate Change Response Act 2002. These are both New Zealand based examples of tradeable environmental allowance regimes. Although there are further examples of these types of regimes across different jurisdictions (some of which I will touch on) I have
chosen these two schemes partly because New Zealand is the jurisdiction in which I live and write, but also because New Zealand has a reputation for adopting private property based regimes that are relatively pure from a theoretical perspective. Therefore, it is likely that if a close analysis of these regimes indicates private property does not operate within them in the way predicted by classical liberal theory, the same will be true of other jurisdictions. I also note, in passing, that New Zealand’s Resource Management Act 1991 will not figure prominently in the analysis. Although the Resource Management Act is New Zealand’s primary source of rules regarding environmental management, it was not expressly enacted with the goal of employing private property to manage the environment and is not an example of a tradeable environmental allowance regime aimed at resolving the tragedy of the commons. Although aspects of the Resource Management Act allow for the use of economic instruments these have not been particularly well developed making it unsuitable for extensive analysis in this thesis.

In order to guide the discussion I have divided the thesis into four parts, each comprised of a number of smaller chapters.

**Part one:** The goal of part one will be to outline why many scholars and policy makers now accept that private property has a role to play in environmental management. It is important to begin with this discussion as it both outlines the fundamental theory underpinning this area of the law and lays the groundwork for the next part of the analysis, which will focus on the discomfort and concern many scholars have expressed regarding the use of private property to manage natural resources.

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19 See, for example, the Resource Management Act 1991, ss 134 – 137 which deal with the transferability of certain types of resource consents.
Chapter one will begin by focusing on Hardin’s metaphor of the tragedy of the commons,\(^{20}\) which identifies in plain terms the two primary responses the community can take in addressing problems of environmental overuse. On one hand is direct governmental regulation (often referred to as “command-and-control” regulation), and on the other hand is the use of private property. These are not the only approaches to environmental management, but they are certainly the two most commonly used since the dawn of modern environmental management 50 years ago.

Hardin’s metaphor has had enduring power and even today frames almost all discussions regarding the appropriate approach to environmental management. In chapter two I will discuss how environmental management has historically been characterised by a heavy focus on command-and-control regulation, but that perceived problems with this approach led scholars and policy makers to experiment with Hardin’s alternative proposal; private property. In order to demonstrate why this shift occurred it is necessary to consider the economic and legal theory underpinning private property’s attractiveness in this sphere. In turn, this will enable an introduction to the instruments that have been used to put this theory into practice. In particular, I will outline the theory underpinning the “cap-and-trade” or “tradeable environmental allowance” regimes that are the focus of this thesis and introduce the quota management system and the New Zealand Emissions Trading Scheme. At this point it will also be necessary to briefly establish that the tradeable environmental allowances created by cap-and-trade schemes are, in fact, examples of private property.

Having delved into the theory, this section will finish in chapter three by tracing the impetus behind the explosion of interest and experiment with private property based tools

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\(^{20}\) Hardin, above n 2.
of environmental management over the last 30 years. In particular, I wish to note the correlation between this and the broader “neoliberal” project that has characterised so much of social and political life since the early 1980s.

**Part two:** While many scholars accept that private property has its place in environmental management, some also harbour significant doubts. Private property retains a dangerous reputation in relation to environmental problems and support for it is not absolute. The aim of this part is to outline these key concerns, which have been heavily influenced by the operation of the classical liberal paradigm.

Therefore, this part begins in chapter four by outlining the basis for concern. This starts with a discussion of classical liberal theory with an emphasis on the importance of private property to the ideal of autonomy through individual preference satisfaction. It will then explore the predominant expectation in the literature that to avoid the tragedy of the commons the property rights employed should be unattenuated (that is, complete beyond the ability for direct political interference).\(^{21}\)

This discussion will provide a solid basis for the balance of part two in chapter five which considers the particular concerns some scholars have about using private property to manage natural resources, how scholars have responded to those reservations and what I see as the inherent oversight in those responses. The broad point was summarised by Leopold when he noted that our culturally dominant idea of private property is often the key source of environmental destruction. Consequently, many scholars suggest that it is perilous to trust the solution to environmental problems to the very institution that was the root cause of those problems in the first instance.

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The second part of chapter five will consider the literature that responds to the need to balance the dichotomy between private property’s utility as a tool of environmental management with its potential for harm. This literature calls for a reconceptualisation of private property, suggesting that the primary task is to reformulate our idea of private property so that environmental protection becomes part of the body of property law itself.

Part three: In part three I address the oversight in this literature by arguing that there is an existing counter-tradition in our property law which emphasises that private property is at heart a social institution characterised by both rights and obligations. I suggest that this idea of property, as a norm of social obligation, provides a powerful approach to resolving the current dichotomy facing this area of the law. Moreover, I suggest that in contrast with classical liberal theory, the social obligation norm offers a more compelling explanation of the way that private property actually operates within society generally.

In this part I will explore the work of a number of scholars who have recognised this counter-tradition. I will begin in chapter six by looking at some of the early work exploring this alternative view of private property, which recognised that the classical liberal idea of property is a relatively recent arrival on the scene of property jurisprudence and political theory. This literature observes that our societal conception of property is plural, which stems from the different and disparate conceptions of property that have informed our historical jurisprudential practices. This is an important point because, as I argue, this tradition remains within the foundations of private property as an institution today.

In chapter seven I will consider the literature that examines the presence of a social obligation norm of property within our current traditions. A number of scholars have

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23. Foster and Bonilla, above n 15, at 1004.
identified this point and many have attempted to develop various normative accounts of the way social obligation is recognised and catered for with the institution of private property. I will adopt an idea of property developed by Alexander and Peñalver in which private property is seen as a norm of social obligation aimed at promoting human flourishing. They suggest that the “common good” is best achieved when individuals have the resources necessary to flourish and their idea of the social obligation norm provides a compelling explanation of the way that private property actually operates within society generally, and in relation to tradeable environmental allowance regimes in particular.

I will conclude this discussion by considering some situations where this idea of property is present within the modern legal tradition, such as social welfare law, the law of landlord and tenant, the compulsory acquisition of property by the state, heritage and cultural protection laws, and almost every example of environmental regulation.

**Part four:** Having considered the contours of the social obligation norm I demonstrate that the social obligation norm of property provides a principled way of accounting for how private property actually works within the regimes of environmental management that rely on it.

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Chapter eight involves an introduction to two tradeable environmental allowance regimes; New Zealand’s quota management system for the management of its fisheries and the New Zealand Emissions Trading Scheme which was established to assist New Zealand to discharge its international obligations to reduce greenhouse gas emissions in order to help mitigate climate change. The second part of chapter eight introduces a framework for considering the strength of the rights contained in quota and emissions units.

This analysis is undertaken in chapters nine and ten with the goal of demonstrating that neither scheme contains strong rights as predicted by the theory. Chapter nine concentrates on those characteristics of property rights which are demonstrably weak in relation to both quota and emissions units. In chapter ten I deal with those characteristics that appear to indicate strong property rights. However, I argue that, properly understood, these characteristics are also indicative of a weak right.

I suggest that social obligation theory explains the divergence between theory and practice. Consequently, in chapter eleven I will discuss the presence of the social obligation norm within the private property utilised by the quota management system and the New Zealand Emissions Trading Scheme. In addition, I will argue that the application of this theory provides a practically and morally superior way of explaining private property’s operation more broadly. I will conclude that although private property can indeed be the root cause of many ecological ills, when governments use private property in an attempt to avoid those ills, they actually use an idea of private property that serves the explicitly social goal of conserving the environment for the benefit of everybody. As a result, within these regimes we see the state mediating the tension between the individual and the community. I suggest that the operation of private property within these schemes provides concrete evidence that property is, at heart, a social institution.
Moreover, I argue that this observation helps to fill the current oversight in the literature on property rights and the environment. It suggests that private property need not be viewed as incompatible with environmental protection, but that it can, and in fact is, being deployed in creative ways that act to achieve positive environmental results. This, in turn, demonstrates the validity of my ultimate claim, that the social obligation norm provides a principled basis for justifying the use of private property as a tool of environmental management and provides an accurate way of predicting how the private property employed by these regimes will operate in practice.

**Conclusion:** In the final section of my thesis, I will briefly set out the conclusions I draw from my analysis, outline in broad terms what I consider the key ramifications to be, and suggest the ways in which my theories could be developed further in future. In essence, I argue that tradeable environmental allowance regimes need not necessarily be mistrusted; instead, they should be viewed as counter-intuitively positive. Governments employing these tools are doing a good job of balancing the tension between the utility of private property and its potential to cause environmental damage. In doing so, I argue, they are employing an idea of private property best explained by the social obligation norm.

I argue that these sorts of environmental schemes demonstrate that our understanding of private property is already able to respond to the ecological challenges we face. As this idea of property already exists I suggest that it provides a promising way to resolve the reservations articulated by property scholars without having to completely rewrite our understanding of private property. Instead we should recognise that private property has always been characterised by obligation in addition to entitlement and exploit the possibilities this presents. Moreover, my thesis also has ramifications for our theoretical understanding of private property more generally. It suggests that the classical liberal approach to property is a mirage. When closely considered all property rights are likely to
be subject to underlying social interests. These interests may impose obligations on property holders regarding the use of their property in many, if not all, circumstances.

Finally, and to return full circle to the opening stage of this introduction, the broad lesson we can take from books such as *The Lorax* and *A Sand Country Almanac* is that, as a community, we need to learn to mediate the tension between the idea that if we own it, we can do what we like with it, and the fact that many uses of property have negative environmental consequences. “Unless” is the last message from the Lorax. The Once-ler eventually discerns that this means that the status-quo will remain: “UNLESS someone like you cares a whole awful lot, nothing is going to get better. It’s not”.27 This is a deep-seated cultural problem that we must face if we truly want to address the environmental problems we are confronted with. My hope is that my thesis provides an approach which may assist us to change our cultural perception of private property from one that sanctions behaviour likely to lead to negative environmental results to one that promotes environmentally sustainable conduct; to lead us all to caring “a whole awful lot”.

Part One

The Attraction of Private Property as a Tool of Environmental Management
Chapter One: The Tragedy of the Commons

When a resource is accessible to all, unmanaged and unowned by any one individual, humans tend to consume it indiscriminately, with the aim of promoting their own advancement. The consequences can be catastrophic and are usually characterised by overuse and neglect, which eventually leads to ruin.¹ This observation was one of the key observations of Garrett Hardin’s now ubiquitous article “The Tragedy of the Commons”,² and the metaphor he used to deliver his message has become a focal point for discussions regarding environmental management. In particular, many commentaries discussing private property and the management of natural resources begin with a discussion of his article; this one is no exception.

It is useful to consider the article in some detail not only because it forms the foundation of nearly all discussions in this area of the law, but also because there are some very good reasons why Hardin’s metaphor has such enduring appeal. In particular, the power of Hardin’s allegory stems from the way he managed to concisely illustrate the environmental problems presented when common, or open access, resources collide with unconstrained human industry driven only by considerations of self-interest. Moreover, Hardin managed to frame the approach for almost all subsequent discussions regarding the appropriate approach to environmental management by identifying the two primary tools that can be used to address the tragedy: “command-and-control” regulation on one hand and private property on the other.

In this brief introductory chapter I aim to explore Hardin’s article and outline the metaphor for which it is so famous. This leads to a discussion of the lessons that can be

¹ Carol M Rose “The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems” (1998) 83 Minn L R 129 at 129.
² Garrett Hardin “The Tragedy of the Commons” (1968) 162 Science 1243.
drawn from Hardin’s observations and some of the primary criticisms that have been levelled at those observations. Overall, the goal is to set the stage for the remainder of the discussion in the first part of the thesis, which explains why it is now generally accepted that private property has a role to play in environmental management.

I. The Tragedy of the Commons

In “The Tragedy of the Commons” Hardin’s primary concern was the unfettered “freedom to breed”. His article was aimed at demonstrating that there is no technical solution to the problem of over-population. In his view, over-population could not be solved through a simple change in the “techniques of the natural sciences”. However, his broader point was that even if humans make great technological progress, because of the way we behave it is inevitable that resources existing in an open access commons will be destroyed. It is the illustration of this point that has become an enduring metaphor; what Hardin called the “tragedy of freedom in a commons”. Here Hardin was equating tragedy with its classical sense of the “remorseless working of things” or “the inevitableness of destiny”.

Due to its importance in illustrating the key predicament at work in relation to many environmental problems, it is useful to outline this metaphor in some detail. As Hardin

4 Hardin, above n 2, at 1243.
5 An “open access resource” refers to a resource characterised by the absence of well-defined property rights. Access to the resource will be unregulated and “free and open to everyone”. See David Feeny and others “The Tragedy of the Commons: Twenty-Two Years Later” (1990) 18 Human Ecology 1 at 4. It can be contrasted with a “common property regime” in which the relevant resource is owned in common. This may look like private property from the outside and common property from within. See Elinor Ostrom Governing the Commons: The Evolution of Institutions for Collective Action (Cambridge University Press, Cambridge, 1990) and Carol M Rose Property and Persuasion: Essays on the History, Theory, and Rhetoric of Ownership (Westview Press, Boulder (Colorado), 1994) at 292.
7 Hardin, above n 2, at 1244.
instructed, picture a pasture open to all on which a large group of people graze cattle. Each farmer will try to keep as many cattle as possible on the commons seeking to maximise his or her gain. Providing the number of cattle remains below the limit of the pasture’s ability to support that level of use, the grass will have time to recover in perpetuity. However, as each farmer adds an additional cow to his or her herd, he or she gets the full benefit of that additional cow, bearing only a small fraction of the cost. The remaining costs of any overgrazing that might occur are borne by the other cattle farmers. Consequently, it remains rational to keep adding additional animals. It follows that, because he or she only accounts for a small part of the total cost, each farmer continues to add cattle to the pasture until the total number of cattle exceeds the number the pasture can safely accommodate and the pasture is destroyed.

Carol Rose is a scholar who has written extensively on property law and related issues of environmental management. In her view, the tragedy will unfold whenever it would be in everybody’s best interest to look after the resource, but because nobody owns it, each person has a direct incentive to take what they can now and “let the devil take the hindmost”. As Hardin noted: “Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the common. Freedom in a commons brings ruin to all.”

A similar analysis, described in economic literature as an $n$-person prisoners’ dilemma, can be applied to all kinds of over-hunting and over-fishing scenarios, air and water pollution, and indeed the whole range of environmental problems. In fact, the power of Hardin’s

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8 Hasnas, above n 6, at 96.
10 Rose, above n 3, at 46.
11 Hardin, above n 2, at 1244.
12 Rose, above n 2, at 46.
parable is, at least in part, attributable to the fact that it forms the basis of nearly all environmental problems. For a concrete practical example we can look to over-fishing, which is a classic illustration of the tragedy. Fisheries are a paradigmatic example of an open access commons. It is difficult to exclude individuals from fish, particularly those species that live in oceans, through either physical or legal means. Moreover, the benefits consumed by one person are subtracted from the benefits available to others. As more individuals enter the fishery, those already present are no longer able to acquire the same share of the fish they may have expected to take in the past. In order to maintain their investment returns, individuals begin to race to take more fish before others take them. As fishers compete to catch the available fish they take more fish than the fishery can support, which leads to overfishing. They are also likely to over-capitalise their vessels which leads to over-capacity and general economically inefficiency. A relentless tragedy rolls on resulting in negative consequences for the fishery, the related ecosystem and for those who rely on the fishery for either their sustenance or livelihood.

Moreover, the metaphor is useful as it provides a practical demonstration of one of the key precepts of modern economics and, more generally, the importance of private property in this area. Modern economics argues that the reduction of unowned objects to private property is a good thing because private property rights bring wealth and peace. As will be discussed in chapter four, the roots of this idea can be traced to the initial stages of what is now termed the “classical liberal” worldview. In particular, some classical

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13 Sinden, above n 9, at 546.
16 At 1145.
17 Carol M Rose “Given-ness and Gift: Property and the Quest for Environmental Ethics” (1994) 24 Evnl L 1 at 4.
justifications for the institution of private property,\textsuperscript{18} suggest that an owner acquires property by being the first one to expend labour on it, for example by capturing it or by picking it up. This story suggests that by following the “rule of capture” humans employed the institution of private property to move effortlessly from life in the wilderness to life as prosperous farmers.\textsuperscript{19} Private property was essential to this narrative and Hardin’s metaphor reinforces it by suggesting that in a commons, and with the absence of defined property rights, the rampant application of the rule of capture turns into a horror story. Every actor will grab as much as he or she can, fearing that if they do not others might get there first. Consequently, through a number of small decisions, made by individuals in their own self-interest, the resource is wasted, even though it might be in everybody’s best interests to look after it. Fisheries are likely to fail and air become polluted.\textsuperscript{20}

It should be noted that Hardin’s observation was not new. Hardin himself based his work on at least two earlier articles\textsuperscript{21} (and a pamphlet from 1833)\textsuperscript{22} and scholars have recognised for centuries that the nature, extent and allocation of private property rights can affect rates of resource depletion and degradation.\textsuperscript{23} Indeed, in the fourth century BC Aristotle observed that whatever is common to the greatest number has the least care bestowed on it.\textsuperscript{24} However, Hardin’s article, which coincided with a growing awareness of environmental issues, managed to capture the imagination of a generation of scholars. It has been a fixture of the literature and popular culture ever since.

\textsuperscript{18} John Locke \textit{Two Treatises on Government} 1689 (Cambridge University Press, Cambridge, 1988).
\textsuperscript{19} See Rose, above n 17, at 4-5; Rose, above n 5, at 26; and Carol M Rose “Possession as the Origin of Property” (1985) 52 University of Chicago Law Review 73.
\textsuperscript{20} Rose, above n 17, at 6.
\textsuperscript{22} Hardin, above n 2, at 1244.
A. Lessons from the tragedy of the commons

Commentators have suggested that at least three lessons can be drawn from Hardin’s article. The first is Hardin’s famous observation, outlined above, that holding valuable resources in common presents a collective action problem leading to ruin.

The second lesson is that the tragedy cannot be avoided by appeals to the consciences of those exploiting the resource. Hardin thought that an appeal to conscience would be futile because people react in very different ways to any plea to act against their own interests. Some will respond to such requests more readily than others. Those that do not respond are likely to expand their use of the resource thereby gaining a competitive advantage over their more conscientious counterparts. Over time, this competitive advantage would work to force the more conscientious from the commons. Hardin applied this analysis to over-population, reasoning that over the long term, via a process of natural selection, an appeal to conscience for people to have fewer children would eventually work toward the elimination of conscience from the race. Those who heeded the call and had fewer children would also have fewer children likely to heed the call and so forth. Eventually this would result in those who had a less conscientious demeanour occupying the field; their children would follow suit.

Although this argument was raised in the context of over-population (and is somewhat spurious) Hardin considered that it would apply equally to any instance in which society requests an individual to refrain from exploiting the commons. Moreover, an appeal to conscience demonstrates the inexorable workings of human nature and the tragedy. Even

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25 Hasnas, above n 6, at 95.
26 At 96.
27 Hardin, above n 2, at 1246.
28 Hasnas, above n 6, at 97.
29 Hardin, above n 2, at 1246.
an insightful and principled person who recognised the approaching tragedy is unlikely to stand idly by and watch his or her competitors steal the advantage. Consequently, he or she would be unlikely to give up the opportunity of adding one more animal to his or her herd. If he or she were to do so, another person is likely to exploit the opportunity making the gesture futile. Forbearance would be irrational.\textsuperscript{30} Unfortunately, as an aside, it can be noted that current international debates regarding global responses to climate change tend to reinforce Hardin’s rather pessimistic assessment.

The third lesson that can be drawn from Hardin’s piece is his claim that the only solution to the tragedy is to restrict access to the commons.\textsuperscript{31} In many respects this is the corollary to his point that appeals to individual conscience are likely to be futile. He argued that the only social arrangements that produce responsible behaviour are those that use coercion of some sort. Hardin suggested two ways to restrict access to a resource. These are, private property and coercion through regulation.\textsuperscript{32}

A private property solution essentially involves privatising the commons. This entails giving some form of ownership interest to those using the resource.\textsuperscript{33} If an individual has a privatised portion of a former common it is assumed that they will reap a 100 per cent benefit of using that resource. However, they will also bear 100 per cent of the cost of doing so. Consequently, in relation to Hardin’s metaphor the burden of deciding to add any additional animals to the pasture is borne by the farmer in question who will have to bear the cost of any permanent damage to the pasture. It follows that it would not be in an

\textsuperscript{30} Cole, above n 23, at 6.

\textsuperscript{31} At 6.

\textsuperscript{32} Hardin, above n 2, at 1247. Although Hardin did not expressly state that these were the only possible solutions in his original article, he did later emphasise his view that they were the only two viable solutions: Garrett Hardin “Political Requirements for Preserving Our Common Heritage” in Howard P Brokaw (ed) \textit{Wildlife in America: Contributions to an Understanding for American Wildlife and its Conservation} (Council on Environmental Quality, Washington, 1978). See also Rose, above n 3, at 47 citing William Ophuls and Stephen A Boyan \textit{Ecology and the Politics of Scarcity Revisited: the Unravelling of the American Dream} (W H Freeman, New York, 1992) at 189.

\textsuperscript{33} Hasnas, above n 6, at 98.
individual’s rational self-interest to exceed the carrying capacity of his or her portion of the former commons. Theoretically, a rational farmer would use the pasture, but not to the point of exhaustion. This hypothesis rests on a further assumption, that the farmer can enforce his or her decision not to add additional animals. The ability to enforce this decision flows as a direct consequence of the operation of private property as an institution, and in particular the characteristic of exclusivity. In essence, exclusivity denotes the extent to which the owner of a resource can enjoy its use while remaining free from interference. The more a right is subject to interference, the less exclusive it is. The right to exclude is considered essential to private property because it protects secure possession, by forbidding the use or acquisition of the resource by others. Moreover, exclusivity is seen as central to the ability of an owner to control the benefits of resource use, as the owner’s interest in property is reflected by his or her interest in exclusively determining how a thing is to be used. Thus, private property enables the foresighted farmer to determine the number of animals grazing on his or her portion of the former commons. It also enables the farmer to enforce that decision against others, for example by recourse to the law of torts in the event “foreign” cattle invade that farmer’s land. As a result, nobody else would be able to come along and exploit the farmer’s decision not to add additional animals. As opposed to a commons regime, the farmer’s gesture in reducing the number of grazing animals is no longer rendered futile. Although the point will be explored in detail in chapter four it is useful to pause and emphasise that the ability to exclude others and control the benefits of resource use form central planks of the justification for private

38 Cole, above n 23, at 7.
property under the classical liberal approach. These factors allow for the presumption that owners can do what they wish with anything they own, protected from interference from others (especially the state). However, as I will explore below, while these factors may explain many of the benefits of using private property to solve the tragedy of the commons, many scholars have observed that they also enable the type of individual behaviour that can result in environmental harm.

Hardin’s alternative solution to the tragedy of the common was regulation, or as Hardin termed it, “mutual coercion mutually agreed upon”. This point is often overlooked by the literature discussing his work and precisely what Hardin meant here is not carefully developed within his article, which is unsurprising (and forgivable) given Hardin was a biologist, not a lawyer. Hardin explicitly refers to the criminal law and governmental taxation but does not go beyond this. Ostensibly, regulation could be external (such as government regulation) or internal (such as self-regulation by the farmers themselves). External, or government regulation suggests that individuals can only be kept from re-enacting the tragedy through the direct command of the state. Self-regulation could encompass the appeals to conscience that Hardin does consider, but could also be taken to include other self-regulatory behaviour such as forbearing from acting in a particular way because of peer or community pressure or approbation. It is a weakness of Hardin’s essay that he does not explore ideas of self-regulation and the role of social mores more fully. As is noted below, Elinor Ostrom and her colleagues have explored in great detail a number

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41 Hardin, above n 2, at 1247.
42 Cole, above n 23, at 7.
43 Rose, above n 17, at 9.
of successful common property regimes, all of which involve self-regulation of one kind or another.\textsuperscript{44}

Hardin does assess regulatory solutions against privatisation and, as noted above, expresses some skepticism about the long-term utility of appeals to conscience. However, in relation to government regulation Hardin appears reasonably agnostic. He seems to express scepticism about the efficacy of private property rights in some circumstances and seems to emphasise the need for a democratic choice of “mutual coercion” through governmental regulation in others.\textsuperscript{45} In the environmental sphere this sort of regulation is generally known by the name “command-and-control regulation”. This will be discussed in greater detail in chapter two, but essentially, a regulator (typically the government) specifies rules of conduct to protect the environment. The government upholds these rules through the use of the state’s coercive power.\textsuperscript{46} It is interesting to note that in the forty years since Hardin’s article was published, other commentators (such as a disciple of Hardin’s, William Ophuls) have politicised the command-and-control version of “coercion” into the concept of the governmental “Leviathan”\textsuperscript{47} in reference to Thomas Hobbes’ work \textit{Leviathan or The Matter, Forme and Power of a Common Wealth Ecclesiasticall and Civil}.\textsuperscript{48} This work, written during the English civil war, argues for a social contract and rule by an absolute sovereign (who Hobbes compares with the sea monster of the Old Testament). In essence, Hobbes argued that chaos and civil war could only be averted by strong central government. Applied to the tragedy of the commons Ophuls suggests that when resources are scarce

\begin{thebibliography}{9}
\bibitem{44}See Ostrom, above n 5; and Elinor Ostrom and others (eds) \textit{The Drama of the Commons} (National Academy Press, Washington, 2002).
\bibitem{46}Benjamin J Richardson “Economic Instruments and Sustainable Management in New Zealand” (1998) 10 Journal of Environmental Law 21 at 23.
\bibitem{47}Rose, above n 3, at 46 – 47 citing Ophuls, above n 32.
\end{thebibliography}
the state must make allocations in order to avoid conflicts.\textsuperscript{49} It is easy to see how Hardin’s reference to coercion can be coupled with this idea of the Leviathan, even if that was not his intention.

Although command-and-control regulation is, and has been, the most dominant form of environmental management, the idea of the government as Leviathan has its detractors (particularly amongst those influenced by classical liberalism).\textsuperscript{50} Hardin clearly had some sympathy for a solution based on governmental coercion. He expressed scepticism about the efficacy of private property rights in some circumstances and seemed to suggest that the Western concept of private property tends to favour the emission of pollution. He noted the example of a factory owner on the bank of a stream, who might have difficulty seeing why he or she does not have the right to muddy the waters flowing past his or her door.\textsuperscript{51} Perhaps unsurprisingly, however, on the whole Hardin’s metaphor has usually been deployed by economic theorists, linked to the absence of ownership and used to reinforce the claim that institutions naturally evolve toward a state of private ownership.\textsuperscript{52}

B. Criticism of Hardin’s metaphor

Although Hardin’s metaphor and his suggestions for avoiding the tragedy have endured, they have not escaped criticism.\textsuperscript{53} The primary criticism has focused on Hardin’s failure to draw a distinction between open access resources and common property resources.\textsuperscript{54} An open access resource is one that is free and open to anyone. It is characterised by the

\begin{thebibliography}{99}
\bibitem{49} Rose, above n 3, at 47.
\bibitem{50} See generally Terry L. Anderson and Donald R. Leal \textit{Free Market Environmentalism} (Westview Press, Boulder (Colorado), 1991).
\bibitem{51} Hardin, above n 2, at 1245.
\bibitem{52} Rieser, above n 45, at 398.
\bibitem{53} Christine Stewart \textit{Legislating for Property Rights in Fisheries} (Development Law Service of the Food and Agriculture Organization of the United Nations Legal Office, Rome, 2004) at 4.
\bibitem{54} See Cole, above 23, at 15; Feeny, above n 5; and Ostrom, above n 5.
\end{thebibliography}
absence of well-defined property rights and a lack of regulation. In contrast, a common property regime places the entire stock of a resource under exclusive “community” management. Although the members of a community may treat the resource as a commons, the rest of the world is excluded. To those looking in from outside the community the resource looks like private property. In essence, although Hardin discussed ‘the commons’ there are, in fact, a number of different types of commons. While his analysis might be valid for true open access resources, it is not clear that will apply to situations where property is held in common.

The limits of Hardin’s analysis can be demonstrated by the fact that the “tragedy” is not always inevitable in situations of common property. It has been well illustrated that there was no “tragedy of the commons” in the historic grazing areas of medieval Europe. In fact, the medieval commons was a very stable form of resource management, which lasted for many centuries. For example, the Swiss alpine-village of Törbel has maintained a communally owned forest and pasture for centuries. Among other things, the community decided that villagers would have the right to graze cattle on the alpine-slopes during summer. However, no villager was allowed to graze more cattle during summer than they could provide for during winter. This rule was set in 1517 and remains in force. The Nobel laureate Elinor Ostrom suggests that this common property regime has been a successful way for the community to maintain the productivity of the alpine-pasture for centuries. It also demonstrates that the tragedy of the commons is not always a forgone

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55 Feeny, above n 5, at 4.
56 Rose, above n 3, at 48.
57 Ostrom, above n 5; and Ostrom, above n 44.
58 Susan Jane Buck Cox “No Tragedy of the Commons” (1985) 7 Envtl Ethics 49.
59 Rose, above n 3, at 48.
60 Ostrom, above n 5, at 62.
62 Ostrom, above n 5, at 61.
conclusion. In fact, as Rose suggests, the commons need not be tragic but can be “comedic, in the classical sense of a story with a happy outcome” and can often be observed in historic, or customary, legal doctrines. For example, some communities claim a customary right to hold periodic dances on a particular piece of land. These can be customs that the courts will uphold over a landowner’s objections. Within the community, the more people who participate in a dance, the higher the value to each participant. Each added dancer brings new opportunities to “vary partners and share the excitement”. This is a situation that results in the reverse of the tragedy of the commons; it is a comedy where “the more the merrier”. Arguably, Hardin’s analysis is not appropriate for these sorts of situations.

While Hardin’s failure to draw a distinction between open access resources and common property resources has some power, other scholars have dismissed this criticism noting that it is clear from the context that Hardin’s article is aimed at the issue of open access resources and suggesting the issue is merely one of semantics. Overall, the criticism is useful as it suggests that while Hardin’s analysis may be valid the scope of its application might not be large. It should also be noted that, as Rose observes, tragedies in relation to open access resources are also not inevitable. The “Comedy of the Commons” is not restricted to common property resources and can also arise in relation to open access resources such as roads or waterways, which, when used for commerce, have infinite returns to scale.

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64 At 767.
65 At 768.
66 Cole, above n 23, at 15.
67 Rose, above n 63, at 711.
68 At 723.
A related criticism is that Hardin has been accused of preferring private or state ownership to the common ownership he does not expressly consider.\textsuperscript{69} However, Hardin’s analysis simply calls for the creation of property rights where none previously existed. It does not suggest in whom those rights should be vested. They could be vested in private individuals, the state, or in a common property regime.\textsuperscript{70} The work of Ostrom and her colleagues is also important in this context. Ostrom “vigorously attacked” the notion that the only solutions to the tragedy of the commons are private property or governmental regulation.\textsuperscript{71} Her work, among other things, examined a number of different common property regimes throughout the world, seeking to predict the circumstances under which open access resource problems might be solved and to identify the characteristics of a successful common property regime.\textsuperscript{72} She urged scholars and policy-makers to pay attention to the large numbers of informal limited commons throughout the world.\textsuperscript{73} She also demonstrated that private property and markets are not the unavoidable institutional response to the tragedy of the commons.\textsuperscript{74}

Perhaps a stronger criticism of Hardin’s suggestions is related to broader criticisms of classical liberal economic theory, particularly in its more recent “neoliberal” incarnation. Hardin assumes that rational private owners would not knowingly overexploit their resource. However, as is well recognised, this assumption is dubious. People often behave in ways that are irrational. Indeed, people have often done what Hardin suggests they will not. Even under strict economic theory, there can be occasions where it is rational to

\textsuperscript{69} Feeny, above n 5, at 7.
\textsuperscript{70} Cole, above 23, at 7.
\textsuperscript{71} Rose, above n 3, at 47. See also Ostrom, above n 5.
\textsuperscript{72} See Ostrom, above n 5; and Ostrom, above n 44.
\textsuperscript{73} Rose, above n 1, at 143.
\textsuperscript{74} Rieser, above n 45, at 402.
exhaust, not preserve, a resource.\textsuperscript{75} This observation lies at the heart of some of the misgivings surrounding the use of private property in environmental management that were noted in the introduction and will be explored further in part two.

A final observation, which is not a direct criticism of Hardin’s work, but is nevertheless related, is the rich literature observing that too much private property can be as dangerous as too little. Michael Heller is the scholar who has done the most to demonstrate the problem of too much property. He is credited with developing the idea of the “tragedy of the anticommons”, although he attributes other scholars with invention of the term.\textsuperscript{76} The anticommons can be understood as the mirror image of the commons. Within the commons many owners each have the privilege to use a resource. No-one has the ability to exclude anyone else. Where there are too many users the resource can be over-exploited; the tragedy of the commons. In an anticommons many users each have the ability to exclude others from a scarce resource, but no one user has the privilege of use. Where too many users have the right of exclusion resources can be underused. It may occur when the initial rights granted in a resource are fractured, widely held and not grouped into cohesive bundles.\textsuperscript{77}

\textsuperscript{75} Cole, above n 23, at 16.
\textsuperscript{77} Heller uses the empty storefronts of Moscow as his paradigmatic example. Under communism, storefronts were notoriously empty. Although storefronts were privatised in the early 1990s many storefronts remained empty, while thousands of metal kiosks, filled with goods, appeared abruptly on the street in front of the empty stores. In querying this phenomenon Heller observed that during the transition from communism to a market economy the newly established government had simply created new property rights based on the pre-existing socialist use rights in the storefronts. These rights were extremely fragmented with different people holding different “ownership” rights: owners, users, regulators (of which there were at least six), and those tasked with using and disposing of property formally owned “by the people” (the “balance sheet holders”) were often different (sometimes multiple) people. Consequently, in relation to any given store, numerous parties had overlapping “ownership” interests. Given many of the rights were shared all of the “owners” had to agree between themselves to exercise any of their “ownership” rights. Almost any use of the storefront required the agreement of multiple parties, any one of whom could block the others from exercising their rights. By comparison by the early 1990s anyone wishing to run a street kiosk could easily acquire an informal right to set up a commercial outlet on the street. At an earlier stage in the transition from communist to market economy kiosks had also suffered from an anticommons but kiosk owners got around
Once an anticommons has emerged it is very difficult to untangle as markets or government can have great difficulty in assembling rights into useable bundles.\(^{78}\) After initial entitlements are set, institutions and interests coalesce around them, with the result that the path to usable private property may be blocked and scarce resources may be wasted. Moreover, if governments generate an anticommons through the creation of private property rights it may be difficult for them to redefine the rights without either paying compensation or suffering a blow to their credibility.\(^{79}\) For example, Heller points to the problems faced by the Japanese city of Kobe following its devastating earthquake in 1995. Following World War II Japanese real estate law was restructured by the Japanese government in a way that functioned to divide interests in land into thousands of very small holdings. This was particularly true in Kobe: “In one block of Kobe, over 300 renters, lessees, landowners, and subletters own often-overlapping claims, and each one must agree before rebuilding can go forward.”\(^{80}\) It enabled a single angry tenant to block urban renewal. Many did so. The result was that while resources in undivided state ownership such as highways were quickly rebuilt much of the city remained rubble for years. In New Zealand we can speculate that similar issues underpin some of the problems surrounding the use and enjoyment of Māori freehold land.\(^{81}\)

Heller’s key message is that we should be careful about how we use private property because too much of it can lead to gridlock and the underuse of resources. Moreover, due

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\(^{78}\) See for example the movie/documentary: Christiane Büchner Perestroika: Reconstruction of a Flat (Perestroika - Umbau einer Wohnung) (Buechner Filmproduktion GbR, Cologne, 2008).

\(^{79}\) Heller, above n 77, at 687.

\(^{80}\) At 684.

\(^{81}\) In particular, the inability of the owners of Māori Freehold Land under Te Ture Whenua Maori Act 1993 to develop their land is at least partially attributable to the fact that restrictions around alienation and the operation of succession rules have resulted in pieces of land with multiple owners (sometimes numbering in the thousands).
to the nature of private property, once the anticommons has emerged, you are likely to be stuck with it. With regard to environmental resources the phenomenon of the anticommons indicates that solving the tragedy of the commons by employing private property may not be as trouble free as Hardin’s essay suggests.

C. The importance of the tragedy of the commons

Hardin’s “The Tragedy of the Commons” paints a particularly vivid picture of the problems that can accompany resources that do not belong to anyone in particular. Because nobody owns them, people treat them as though they belong to everyone and tend to use them as they wish with no thought to the consequences. Moreover, no one will expend energy today on caring for things that may be taken away by someone else tomorrow. Regrettably, it is in everyone’s individual interest to take what one can and ignore what may happen later. A tragic wasteland is likely to be the result with resources exhausted and unlikely to be replenished.82

While Hardin’s concern was the problem of over-population, his use of a metaphor set against the backdrop of an archetypal rural setting, so closely aligned with cultural perceptions of “the environment”, immediately captures one’s imagination. It is unsurprising that since its publication it has inspired both approbation and criticism from the scholarly community and popular culture. In particular, it is extremely useful as a starting point for any discussion regarding how the task of environmental management can be approached. Hardin sketched in simple terms the two most practical alternatives and, accordingly, framed what has been an ongoing discussion. As will become evident, the tragedy of the commons is central to nearly all the literature that discusses both the theoretical underpinnings of private property’s attractiveness in this sphere and also the

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misgivings many scholars have expressed about the widespread use of private property based tools of environmental management.

Hardin’s discussion tells us that private property provides a possible way to approach solving the tragedy. In order to further the aim of this part of the thesis and demonstrate why it is now generally accepted that private property has a role to play in environmental management, it is now necessary to consider how, in practice, the two alternatives modes of environmental management proposed by Hardin have been employed. Historically, and particularly in the 40 years since Hardin’s article was first published, there has been a heavy emphasis on command-and-control regulation. The overwhelming preponderance of environmental management is in this form and is something we are all quite familiar with. However, over the last quarter of the 20th century command-and-control regulation became the subject of increased criticism both for its practical application and its philosophical underpinnings. These criticisms spurred scholars and policy makers to experiment with Hardin’s alternative, private property. Exactly why this shift occurred is the subject matter of chapter two. Chapter two also considers the precise nature and form of tradeable environmental allowances, the instruments adopted to employ Hardin’s private property vision and the primary subject of this thesis.
Chapter Two: The Development of Private Property Regimes to Manage Natural Resources

Hardin’s “Tragedy of the Commons” was a seminal contribution to the ongoing discussion about appropriate responses to environmental degradation. It does not, however, explain why private property came to be seen as a possible, and for some, a desirable, tool of environmental management. This chapter aims to further this discussion by focusing on a range of different, although related, points.

To begin, I explore the historical background to modern environmental law and, in particular, its traditional focus on “command and control” regulation. Experiments with private property occurred primarily in response to perceived problems with command and control regulation. Understanding the criticisms of this sort of regulation helps to illustrate why private property began to be seriously considered as an attractive alternative.

However, simply identifying the apparent deficits of command and control regulation does not explain why private property provides a different way to approach these issues. In order to demonstrate precisely why private property is a viable option, I will consider the legal and economic theory supporting private property’s use as a solution to the tragedy of the commons and introduce some of the different types of instrument that can be used to achieve the application of this theory in practice. These instruments can be roughly grouped under the rubric “market based” incentives to control environmental problems. Although there are number of different types of market based tool, it is the “cap-and-trade” or “tradeable environmental allowance” regimes that are the most reliant on private property, and which I focus on here. This discussion also allows me to briefly introduce the New Zealand quota management system and the New Zealand Emissions Trading

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1 Garrett Hardin “The Tragedy of the Commons” (1968) 162 Science 1243.
Scheme. Finally, although to this point I have discussed tradeable environmental allowances as though they are definitely private property, the literature on the matter is not settled. For a number of reasons the issue is not necessarily always clear-cut. Because I consider that tradeable environmental allowances are private property, and this premise underpins my thesis, the chapter will conclude with a discussion of why the issue is problematic and the reasons that led to my conclusion.

I. A Short History of Environmental Regulation

In 1971 the American ecologist Barry Commoner formulated what he termed his “Four Laws of Ecology” the fourth of which states:²

There is no such thing as a free lunch … In ecology, as in economics, the law is intended to warn that every gain is won at some cost … Because the global ecosystem is an interconnected whole, anything extracted from it by human effort must be replaced. Payment of this price cannot be avoided; it can only be delayed.

Commoner is identifying a key problem for society, the unavoidable fact that many socially beneficial functions have some adverse environmental consequences.³ How to deal with these consequences, to “pay the price” as Commoner would put it, has been a primary task confronting environmentalists, lawyers, policy makers and the general public for the last several decades. Our comfortable existence is predicated on consumption; to maintain our commodious lifestyle we need easy access to cheap energy and the goods produced with

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it. The basic problem for environmental law is how to constrain and channel adverse human impacts on natural resources.

It is difficult (and probably unhelpful) to assess exactly when the seeds of the modern approach to environmental management were planted. It may have been with the publication of Aldo Leopold’s *A Sand Country Almanac* in the late 1940s. It may have been the picture of the “Earth rise” taken by William Anders during the Apollo 8 mission in December 1968. It may have been Earth Day 1970, or Hardin’s “Tragedy of the Commons”; the list of potential candidates is long. Regardless of its exact origins, by the early 1970s there was an increasing awareness of the many unpleasant ecological side effects of the modern, industrialised, society. By 1971 Barry Commoner had formulated his four laws of ecology. By 1972 Christopher Stone was querying whether trees should have standing (and whether natural objects should be provided with legal rights). It was clear that the modern environmental debate had been triggered. This is an ongoing, rich and varied dialogue that spans many disciplines, has taken many forms and can be extremely emotive.

This is not to say, however, that environmental concerns have been the sole preserve of late 20th century consciences. Indeed, there have been attempts to control the effects of human existence for centuries. The common law of tort dates to the 12th century, and can

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5 Carol M Rose “Environmental Law Grows up (More or Less), and What Science Can Do to Help” (2005) 9 Lewis & Clark L. Rev. 273 at 276.
7 National Aeronautics and Space Administration “Celebrate Apollo: Exploring the Moon, Discovering Earth” <www.nasa.gov>.
8 Jennifer Caldwell *An Ecological Approach to Environmental Law* (Legal Research Foundation Inc Auckland, 1988) at 9.
11 Caldwell, above n 8, at 3.
sometimes provide a remedy for adverse environmental effects, providing, of course, that the plaintiff can demonstrate a substantial injury in economic terms. This, in turn, requires a complicated balancing act considering the gravity of the harm to the plaintiff against the utility of the defendant’s activities. The limits inherent in nuisance and the other common law torts, however, significantly restricted their ability to be a useful tool for managing the environment, especially where there is no clear or direct causative effect on a particular plaintiff. As a result, state attempts at intervention in environmental management began very early in our legal history. Densely populated London, for example, put restraints on burning sea coal as early as the 13th century. The penalty for contravention was death. While the 20th century saw a rapid expansion in environmental legislation and the first comprehensive regimes for environmental management, it is anachronistic to assume that these were the first attempts to deal with environmental concerns through law. Indeed, the industrial revolution resulted in some seriously adverse environmental consequences, which led to a number of private and public statutes to address issues of public health and pollution.

While these early pollution control measures indicate that there has been a concern with the effects of human existence for a very long time, it has only been over the last 50 years that “environmental” concerns have become a central feature of the social and legal landscape. By the late 1960s the Western world was entering the final stage of a generation of virtually uninterrupted growth. Between 1950 and 1973 the industrial output of Western nations more than quadrupled. The consequence of this was a massive surge in demand

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12 Hamilton Dewey, above n 9.
16 The Alkali Act 1863 (UK) 26 & 27 Vict c 124 is an early and excellent example.
for all types of raw materials, a general disregard for careful conservation and an extreme increase in consumer demand.\(^\text{17}\)

Although most of the literature discussing the rise of the environmental movement focuses on the American experience, New Zealand was by no means immune from the growing environmental consciousness. The post-war boom in New Zealand saw a rapidly rising population and the corresponding need for greater production. This resulted in increased energy demand, the increased use of fertilizers and pesticides, and the increased use of primary resources such as fish and forests.\(^\text{18}\) However, it was not until the fourth Labour government that there was any comprehensive new approach to environmental management.\(^\text{19}\) The Labour Party’s 1984 election policy sought to give expression to new attitudes towards the determination of resource use, conservation and the allocation of resources. The aim of the policy was to implement an integrated strategy for conservation and development and to emphasise sustainable resource use, social justice, responsibility to future generations and the protection of New Zealand’s natural heritage. The Environment Act 1986\(^\text{20}\) and the Conservation Act 1987\(^\text{21}\) were two important pieces of legislation to arise out of these new policies, which introduced a radically new approach to environmental administration in New Zealand. Among other things, they provided for the establishment of the Ministry of the Environment, the Department of Conservation and the Parliamentary Commissioner for the Environment. Later legislative developments included the Resource Management Act 1991.\(^\text{22}\)

\(^{17}\) Caldwell, above n 8, at 9.

\(^{18}\) At 9.

\(^{19}\) For an interesting discussion of New Zealand’s response to the ecological crises see Caldwell, above n 8, at 12 – 16.


The burgeoning environmental awareness over this time was not confined to recognition of major environmental issues. It was accompanied by a more general scrutiny of existing decision making processes and institutions concerned with planning and resource management.\(^{23}\) As the 1981 OECD report on Environmental Policies in New Zealand stated:\(^{24}\)

During the 1960’s, it became evident in many countries that Governments and their bureaucracies, by virtue of their very structure, were proving incapable of dealing with a growing number of the problems which confronted them … Environment was one of those issues. During the late 1960’s and early 1970’s a number of Governments initiated a search for new types of organisation or a new set of institutional arrangements to handle environmental problems. In most Governments there was a need to create a new capability for high level environmental policy advice and coordination, sensitive to overall government objections and priorities but freed from the constraints and conflicts of sectoral responsibilities.

A. Early legislative responses and the development of “command and control” regulatory regimes

The first wave of what can loosely be termed modern environmental law began to be enacted in the United States during the late 1960s and early 1970s,\(^{25}\) although there had been tentative efforts prior to this.\(^{26}\) The enactments, of which the National Environmental Policy Act 1969 (US)\(^{27}\) is a good example, were in response to what has been termed the “ecological crisis”. This crisis was characterised by air pollution, water pollution, soil depletion, problems arising from the storage of hazardous and toxic

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\(^{23}\) Caldwell, above n 8, at 13.


\(^{26}\) Rose, above n 5, at 277.

\(^{27}\) National Environmental Policy Act 42 USC § 4321.
chemicals, pesticide use, and more general natural resource depletion.\textsuperscript{28} These early legislative efforts were not only in response to the embryonic environmental awareness, but also to the consequent demands suddenly being placed on common law tort remedies and older statutes that were not created for environmental protection purposes and were not well suited to the demands of the new ecological consciousness.\textsuperscript{29}

These early legislative provisions adopted a number of different measures to protect the environment.\textsuperscript{30} However, they were simplistic in nature and design. Generally, the provisions imposed restrictions and conditions on activities.\textsuperscript{31} Initially, the designs followed the template established by public health and safety regulations. Certain activities, harmful to people and the environment were proscribed or made to meet certain standards.\textsuperscript{32} As the legislative approach evolved different sorts of provisions were adopted, which eventually resulted in the “command and control” system.\textsuperscript{33} The regulator, typically a government, specifies rules of conduct to protect the environment and enforces what are often termed “uniform standards” by deploying its coercive power. The “command” refers to the imposition of the standards that must be observed. The “control” signifies that sanctions will be imposed for non-compliance.\textsuperscript{34} Resource consents, environmental impact assessment procedures, and various types of environmental planning instruments are central features of this sort of environmental regulatory system.\textsuperscript{35}

\begin{itemize}
\item \textsuperscript{28} Caldwell, above n 8, at 10.
\item \textsuperscript{29} Hamilton Dewey, above n 9.
\item \textsuperscript{30} McKinstry, above n 25, at 152.
\item \textsuperscript{31} Rowena Maguire and Angela Phillips “The Role of Property Law in Environmental Management: An Examination of Environmental Markets” (2011) 28 Environmental and Planning Law Journal 215 at 216.
\item \textsuperscript{32} Klaus Bosselmann “Environmental Justice v Deregulation? Themes of an Environmental Law Conference in Auckland” (1998) 2 New Zealand Journal of Environmental Law 209 at 211.
\item \textsuperscript{33} McKinstry, above n 25, at 154.
\item \textsuperscript{34} Robert Baldwin and Martin Cave Understanding Regulation: Theory, Strategy, and Practice (2nd ed, Oxford University Press, Oxford, 2011).
\item \textsuperscript{35} Benjamin J Richardson “Economic Instruments and Sustainable Management in New Zealand” (1998) 10 Journal of Environmental Law 21 at 23.
\end{itemize}
The “command and control” system of environmental regulation has now become the dominant means for managing the use of the environment and its resources in Western societies. In most countries it remains the primary tool for environmental management. More generally, because these sorts of management mechanisms involve setting standards and prescribing punishments, they involve lots of rules or regulations, hence commentators tend to refer to these sorts of environmental management mechanisms by the overarching term “regulatory”. While I adopt the terms “regulation” and “regulatory” in preference to “command and control” it is important to note that there is no single accepted definition of these terms.

Before considering some of the primary criticisms surrounding regulatory regimes of environmental management it is useful to outline how they tend to be employed in various areas of environmental management. In particular, it is instructive to consider three types of resource use (air pollution, fisheries and water) that have moved away from “command and control” to the use of private property.

Air pollution of all sorts, whether it is in the form of foul fumes from a factory, or in the more ephemeral form of greenhouse gases, has long been a subject of environmental regulation. In regulating this form of pollution regulators tend to adopt standards that specify how much of a given pollutant can be emitted over a given unit of time. All sources of pollution within the category are then required to achieve compliance with this standard unless granted some sort of dispensation. If a source does not achieve compliance with the standard it will face penalties. In many instances standards are fixed

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36 At 23.
38 For example the ancient sea coal laws noted above.
on the basis of the degree of control that can be achieved using existing technology.\textsuperscript{39} Regulators may also adopt technical standards for the construction or location of buildings.\textsuperscript{40} It should be noted that similar architecture is also used for other types of pollution such as industrial waste or agricultural effluent.

As touched upon in chapter one, the problem of over-fishing can be a classic example of the tragedy of the commons. It is also another area which has historically looked to regulation as an attempted solution. Regulatory systems to control fishing tend to adopt a number of measures to control the fishing effort, rather than attempting to control how many fish are caught. Regulations can seek to limit the number of people fishing (through the use of permits or licences), or the efficiency of the fishing effort through rules controlling the type of gear that is used, the length of the “open” season and the size of vessels.\textsuperscript{41} Again, there are penalties for contravention.

Both the consumptive and in-stream use of rivers, lakes and other bodies of fresh water have called for various forms of regulation for centuries.\textsuperscript{42} Given the nature of water and its historical importance, it is perhaps unsurprising that regulatory regimes for water tend to be much more complicated than those for pollution or fish. A good example is Australia, where access to water has always been both incredibly important and extremely contentious. In the early days of the Australian colony water law was governed by the common law. The common law had two different schemes allowing access to water. The first applied to surface water flowing in a river, the second to all other types of water. For surface water in a river “riparian” rights were restricted to those who occupied land

\begin{footnotes}
\footnote{McKinstry, above n 25, at 153.}
\footnote{Richard Barnes Property Rights and Natural Resources (Hart Publishing, Oxford and Portland (Oregon), 2009) at 317.}
\footnote{See Carol M Rose “Energy and Efficiency in the Realignment of Common-Law Water Rights” (1990) 19 JLS 261.}
\end{footnotes}
immediately next to the river, although in some instances these occupiers owed duties to those further downstream. In relation to all other sorts of water, the owner of the land on which the water rested had an unrestricted right to access the water. These common law rules were based upon policy considerations stemming from 19th century England. However, because it was unsuited to the environmental conditions found in Australia, the goal of rapid settlement and the desire for multiple uses of water, riparian law was subject to statutory modification from an early stage and administrative arrangements for the use of water developed over the course of the 20th century. By the 1970s the key features, of what is essentially a regulatory regime for Australian water, were statutory riparian rights for certain uses; water rights in irrigation schemes; and licences and permits specifying when, and how much, water could be taken. Since the 1970s water law in Australia has gone through several major reforms, and in recent decades has developed a complicated system of water management underpinned by a number of key elements. Importantly, two of these elements include the recognition of water entitlements that are distinct from land title and the tradeability of those property rights.

B. Criticisms of “command and control” regulatory regimes

Although regulatory regimes have clearly had some success (and remain the predominant form of environmental regulation) legal scholars in the United States began to criticise the use of regulations to manage the environment as early as the 1970s. At the heart of their criticisms were complaints about the efficiency, legitimacy, and effectiveness of these

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44 At 17.
46 Rose, above n 5, at 279.
regulations. These criticisms continue today, although I must stress that the validity of them is not universally accepted.

In essence, regulations taking the form of uniform standards are said to ignore the opportunity costs of environmental protection. They also disregard the individual circumstances of the resource user, and they do not achieve environmental protection on a lowest cost basis. Moreover, they fail to provide any (or adequate) incentives for improving performance. There is no reward for a party who complies with environmental restrictions, let alone those who go beyond the minimum compliance requirements. Accordingly, regulation is said to hinder innovation and increase transaction costs.

Extraction, production, investment and allocation decisions are made in ways that are unlikely to maximise the economic value of the resource or the value of conserving it. Consequently, some argue that regulatory regimes impose very significant costs on society including indirect costs through decreases in productivity, technological innovation and market competition. In addition, conventional regulatory measures may not be sufficiently proactive. For example, while it is possible for a government to prohibit landholders from damaging their properties by clearing vegetation, the government cannot readily coerce a landholder into undertaking specific activities (such as planting trees).

A concrete example of these problems is provided by fisheries, a paradigmatic example of an open access resource with a predisposition to gravitate towards a tragedy of the commons. In attempting to avoid the tragedy a regulatory regime can take a number of

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49 Maguire and Phillips, above n 31, at 217.
50 Libecap, above n 47, at 132.
51 Latin, above n 48, at 1268.
52 Richardson, above n 35, at 23.
approaches. Two of the most common approaches involve imposing either input or output controls on the fishery.\textsuperscript{53} Input controls attempt to manage the fishing effort by, for example, seeking to limit the number of people fishing, or the efficiency of the fishing effort, rather than controlling how many fish are caught. Regulations under an input control scheme can include gear restrictions, closed season and vessel size restrictions. Measures can be implemented individually or cumulatively. In contrast, output controls attempt to place direct limits on the amount of fish caught in a fishery, for example by imposing bag limits and monitoring the total allowable landing tonnage of fish.\textsuperscript{54}

Internationally, input controls are currently the dominant form of regulatory management for fish.\textsuperscript{55} The problem with the input control approach, however, is that if the rules are applied one at a time they will often fail as fishers react by focusing their efforts into areas that are not subject to restrictions. For example, closed seasons typically result in increased effort, using better equipment, during the open season.\textsuperscript{56} The United States halibut fishery was once open for harvesting eight months of the year, but was eventually reduced to a few days twice a year. During the very short open season 5,000 boats would leave port aiming to catch as much as they could in that brief period. Unsurprisingly, some boats caught much more than they could hold. The result was that boats sank and dead (or dying) fish were thrown back into the sea. This very limited season tended to lead to perverse results.\textsuperscript{57}

When regulatory measures are combined cumulatively they can have some success, however, the result tends to be very complex and unwieldy. The regulations can be

\textsuperscript{53} Kevern L Cochrane (ed) \textit{A Fishery Manager's Guidebook: Management Measures and Their Application} (Food and Agriculture Organization of the United Nations, Rome, 2002) at chapter 4.

\textsuperscript{54} At chapter 4 2.1.

\textsuperscript{55} Barnes, above n 41, at 317.

\textsuperscript{56} At 317.

difficult to enforce and may lead to a very inefficient fishing industry. A further consideration is that these measures offer no incentive to fishers to decrease their share of the catch. This leads to over-fishing. Licences allowing access to the fish can suffer from similar deficiencies. If fishing fleet capacity is limited by the number of available licences then effort may be channelled into larger vessels. If vessel size is limited, more effective fishing gear may be used, and so on.\(^{58}\) A race for the fish still exists.

Common to all these regulations is the fact that fish in their natural state remain in an open access common pool and the incentives to over-exploit the resource remain. The tragedy of the commons continues.\(^{59}\) As a consequence, regulations must be continually updated as economic forces drive the participants to exploit more and more of the resources for themselves.\(^{60}\) Human ingenuity knows no bounds and under a regulatory regime individual self-interest drives the individual to catch as many fish as possible before someone else steals the advantage, rather than focusing on preserving the resource. This is quite “rational” behaviour, especially where a large capital investment is at stake.

More generally, criticisms of regulatory regimes are not limited to economists and those who favour private property based approaches to natural resource management. Conservationists have also criticised conventional regulation, identifying monitoring and enforcement as being weak under these approaches. For example, the use of conventional regulation has not been an effective strategy for conserving biodiversity, discouraging land clearing or changing the behaviour patterns of private landholders.\(^{61}\) Conversely, while the criticisms of regulatory regimes are manifold, not all commentators share these views.

\(^{58}\) Barnes, above n 41, at 318.

\(^{59}\) At 318.


Many have noted that regulation can be relatively efficient and flexible. Restrictions may be limited to what is strictly necessary to ensure environmental goals are met. If there is adequate monitoring and enforcement, regulation can also provide a measure of certainty as to the results that should be achieved.62

II. An Overview of the Development of Private Property Based Tools of Environmental Management

A. A short history of private property based tools of environmental management

Regardless of whether one was an advocate of regulatory regimes or a proponent of the various criticisms of them, there was broad academic agreement that the plethora of statutes that were created during the first wave of environmental regulation in the 1970s were complicated, contradictory and often overwhelming for all parties.63 Although critics differed on the various suggestions for improvement there was widespread agreement that some alternative was preferable.64

A claim that began to gather increasing traction during the 1970s and 1980s was that rather than regulation, the same goals could be better achieved by providing the regulated entity with incentives to change behaviour, but letting it decide how, when and where, to change.65 In line with Hardin’s speculation on the tragedy of the commons these incentives could be achieved by creating a private property right in the resource. For example, government could cap the use of a resource at an overall amount compatible with an

62 Richardson, above n 35, at 23.
64 Latin, above n 48, at 1270.
environmental imperative. Once this was achieved, the total capped amount could be divided into units convenient for individual resource users. Users could then purchase or trade for the number of units they need at a price set by market demand.\textsuperscript{66} For this reason private property based approaches to natural resource management are sometimes referred to as “market mimicking” approaches. Theoretically, by mimicking the operation of a market, environmental goals could be achieved, the tragedy avoided, costs reduced and greater flexibility and incentives provided to effected parties to behave in a sustainable way.\textsuperscript{67} Early works suggested programmes for general pollution and air pollution\textsuperscript{68} and later for resources such as water and fish.\textsuperscript{69}

The idea of using private property based tools to harness the power of economic incentives to control environmental problems was not a new one.\textsuperscript{70} The intellectual history dates back to at least the 1930s when the British economist Arthur Pigou suggested that incentive-based environmental policies, specifically an emissions fee (or the imposition of a tax), would be a way to internalise the environmental costs of pollution into decisions made by private individuals.\textsuperscript{71}

However, the person who is most commonly attributed with laying the conceptual groundwork for the idea is the economist and Nobel laureate Ronald Coase,\textsuperscript{72} despite the fact that Coase’s work does not directly address this issue. In 1960 Coase wrote an article

\begin{footnotes}
\item[66] Rose, above n 5, at 282.
\item[69] FT Christy Fisherman Quotas: A Tentative Suggestion for Domestic Management (Law of the Sea Institute, University of Rhode Island, 1973) cited in Richard Barnes Property Rights and Natural Resources (Hart Publishing, Oxford and Portland (Oregon), 2009) at 323.
\item[70] James E Krier “The Tragedy of the Commons, Part Two” (1992) 15 Harv J L & Pub Pol'y 325.
\item[71] At 325. See also AG Pigou The Economics of Welfare (Macmillan and Co, London, 1920).
\end{footnotes}
considering the problem of what economists call “externalities” (although Coase did not use this term). Drawing from a number of English legal cases and statutes Coase illustrated his belief that legal rules are only justified by reference to a cost benefit analysis. He observed that nuisances that are often regarded as being the fault of one party are better seen as symmetric conflicts between the interests of the two parties. If there were no costs of completing a transaction, legal rules would be irrelevant to the maximisation of production. However, as there are costs of bargaining and information gathering in the real world, legal rules are justified to the extent of their ability to allocate rights to the most efficient right-bearer. Coase employed a simple example, remarkably similar to Hardin’s, to illustrate his point. He pointed to a farmer whose crops are being damaged by neighbouring farmer’s wandering cattle. Coase suggested that the basic problem here was the absence of private property rights over the resources in question; there was no law specifying whether the first farmer had the right to be free from harm or whether the second farmer had the right to allow his cattle to wander as they pleased. Coase demonstrated that once private property rights were assigned, efficient outputs of cattle and crops would result and that it did not matter, from an allocative perspective, whether the relevant private property rights were assigned to the first farmer or the second.

Before Coase, economists had accepted Pigou’s idea that if, say, a cattle farmer’s cows destroy her neighbouring farmer’s crops, the government should stop the first farmer from letting her cattle roam free or should at least tax her for doing so. Otherwise, believed economists, the cattle would continue to destroy crops because the farmer would have no incentive to stop them. However, Coase pointed out that if the farmer had no legal liability

73 Coase, above n 72.
74 Coase, above n 72.
for destroying the other farmer’s crops, and if transaction costs were zero, ‘farmer one’
could come to a mutually beneficial agreement with ‘farmer two’ under which farmer one
paid farmer two to cut back on cultivating crops on her land. A mutually beneficial bargain
would happen, argued Coase, if the damage from additional cattle exceeded the farmer’s
net returns on these cattle. If the courts were asked to intervene the only thing that would
be affected would be the wealth of each farmer; the number of cattle and the amount of
crop damage, he argued, would be the same. Of course, because transaction costs are
never zero and are sometimes very high, courts are still needed to adjudicate between
farmers. Coase’s key insight was not that private property rights could be traded in a
market, but that an efficient outcome could be had regardless of the party to whom the
property rights were assigned. This idea came to be known as the Coase theorem and was
seized upon by economics, legal scholars and others as the central message of Coase’s
work (although Coase himself disagreed with this assessment of his central message).

Although Coase’s work did not directly address environmental protection (the bulk of his
work actually examined the efficient allocation of radio frequencies) his work was quickly
applied to the environmental sector. If one accepts Coase’s reasoning the phenomenon of
pollution can be viewed as a simple fact of production. Turning the emission of pollution
into a well-defined and transferable legal right (i.e. a private property right) enables the
market, rather than the state, to play the key role in regulating the environmental effects of
production. Consequently, Coase’s analysis can be used to support the argument that
environmental regulation can be achieved by creating private property rights to discharge

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77 The Concise Encyclopedia of Economics, above n 76.
78 Medema, above n 75, at 4.
79 The Concise Encyclopedia of Economics, above n 76.
pollution, limiting the number of rights created, and then allowing the rights to be freely traded.\textsuperscript{81} Moreover, Coase’s approach neatly sidesteps issues of distribution as the ability to trade theoretically means that the resources should flow to those who “value” them the most (although distributional issues tend to be very important to those who will be affected by any changes in entitlements).\textsuperscript{82}

Hardin’s discussion of the tragedy of the commons and Coase’s suggestions helped to inspire a large body of literature that is still being added to today. In effect this literature proposes various different theories about the optimal solution to the allocation of resources in various open access commons.\textsuperscript{83} It outlines the theoretical foundation for a range of different kinds of trading schemes including the private property based “tradeable environmental allowance”\textsuperscript{84} responses to the tragedy of the commons that I focus on in this thesis.\textsuperscript{85}

What is particularly interesting is just how early in the history of the modern environmental movement discussion of these tools began. In relation to air pollution, for example, emissions trading was identified as an alternative to environmental regulation in the work of Crocker\textsuperscript{86} and Dales\textsuperscript{87} during the late 1960s and early 1970s. These scholars are generally credited with being the first to propose that the government set a cap on air pollution emissions and let the market determine the degree of change at individual

\textsuperscript{81} At 447.
\textsuperscript{83} Bogojević, above n 80, at 447.
\textsuperscript{84} This term, coined by Carol Rose, is a useful generic term to describe the sorts of instruments created when private property rights are employed to manage natural resources. See Carol M Rose “Expanding the Choices for the Global Commons: Comparing Newfangled Tradable Allowance Schemes to Old-Fashioned Common Property Regimes” (1999) 10 DELPF 45 at 51.
\textsuperscript{86} Crocker, above n 85.
\textsuperscript{87} Dales, above n 85.
facilities and the price of pollution, rather than having the government set the price through an emissions fee.\textsuperscript{88} It is interesting to note that neither Crocker nor Dales credited Coase in their work, although they both later conceded that Coase’s work had an impact on their thinking.\textsuperscript{89} However, it was at least another 15 years before the first large-scale attempt at putting this theory into practice.

B. Early examples of private property based tools of environmental management

Iceland was the first country to experiment with a private property based, market mimicking, approach to environmental management when it began to introduce private property rights based fisheries management in the late 1970s.\textsuperscript{90} However, it was not until the 1980s that a comprehensive system of individual transferable quotas was introduced.\textsuperscript{91} This move was made as a result of growing concerns over the depletion of cod stock, despite the introduction of total allowable catches for cod, effort restrictions on individual vessels and attempts to prevent new vessels entering the fishing fleet.\textsuperscript{92} After consideration and consultation by the Icelandic Ministry of Fisheries it was decided to manage cod and other important species by way of a quota system.\textsuperscript{93} Between 1984 and 1991 management involved the allocation of an individual quota with some limited degree of transferability.\textsuperscript{94} After various refinements, by 1991 Iceland had placed all commercial fisheries under a complete system of fully transferable individual quotas.\textsuperscript{95} There seems to be some suggestion that the Icelandic approach has achieved its goals, particularly its economic

\textsuperscript{88} Burtraw and Evans, above n 65, at 61.
\textsuperscript{89} Medema, above n 75, at 9.
\textsuperscript{90} Barnes, above n 41, at 351.
\textsuperscript{91} Elly K J Gudmundsdottir “Iceland: Legal Challenge for the Fisheries Quota System” (1999) 14 International Journal of Marine and Coastal Law 309 at 310
\textsuperscript{92} Barnes, above n 41, at 351.
\textsuperscript{93} Gudmundsdottir, above n 91, at 310.
\textsuperscript{94} Einar Eythórsson “Theory and practice of ITQs in Iceland” (1996) 20 Marine Policy 269 at 270.
\textsuperscript{95} Barnes, above n 41, at 351.
goals, although it has also had success in terms of replenishing and maintaining fish stocks, such as the herring fishery.\textsuperscript{96}

New Zealand was another early adopter of rights based fishing. A history of New Zealand’s move to a quota management system is included in chapter eight. At this stage, only a few brief observations are necessary. By 1986 New Zealand had adopted a quota management system that covered nearly all commercially exploited species in both its inshore and deepwater fisheries.\textsuperscript{97} The objectives of the quota management system are to prevent over-fishing and to improve the economic efficiency of the fishing industry.\textsuperscript{98} Although the move towards rights based fishing had begun under the Muldoon-led National government, the full-scale embrace of the quota management system occurred under the fourth Labour government led by Lange.\textsuperscript{99} This was in line with that government’s economic policy, which was rooted in classical (or “neoclassic”) liberal economic theory with its twin emphasis on the “free market” and the decreased role of the state. Since its introduction New Zealand has pursued a strong policy of private property based fisheries management.\textsuperscript{100}

However, notwithstanding the academic theory, it is not likely that the New Zealand or Icelandic innovators were specifically thinking in terms of the creation of “private property

\textsuperscript{97} Barnes, above n 41, at 358.
\textsuperscript{99} In 1984 the incumbent National Party (led by Robert Muldoon) was defeated in a snap election by the New Zealand Labour Party (led by David Lange). The Labour Party's manifesto included a promise to liberalise the economy by increasing the reliance on markets to regulate resource decisions and to rely less on government intervention. Led by the Finance Minister Roger Douglas this government proceeded to make a large number of very significant changes to the economy, which were heavily influenced by neoliberal economic thinking. (See Brian Easton \textit{The Commercialisation of New Zealand} (Auckland University Press, Auckland, 1997)).
\textsuperscript{100} Barnes, above n 41, at 358.
rights” (albeit that is what they created). Rather, the administrators who introduced the schemes were trying to improve the existing managerial regime. They were looking for schemes with greater enforceability, more revenue for government and a smaller need for a costly government presence. More generally, in addition to political ideology, it is likely that this regulatory design was also being driven by a desire to find successful ways to approach extremely complex environmental problems often characterised by a multitude of resource users or polluters. Moreover, we can speculate that in relation to fisheries a wholesale change in approach was perhaps made easier in Iceland and New Zealand because in both countries the domestic fishing industry was in the process of expanding into the widened territorial sea.

However, the United States appears to have been more explicit in its adoption of private property rights as a method of regulating the use of natural resources. It was not until 1990 and amendments to the Clean Air Act that private property rights and the concept of pollution trading became a significant part of the American legal landscape. The 1990 Clean Air Act Amendments were an effort to control sulphur dioxide emissions from power plants in order to reduce the incidence of “acid rain”. The amendments created an emissions trading programme that set a cap on emissions of sulphur dioxide from power plants in the eastern half of the United States and allowed trading of a limited number of emissions credits in an effort to reduce acid rain. The programme was very successful and achieved marked reductions in emissions of sulphur dioxide. One of the other benefits was

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103 Scott, above n 101, at 111.
104 Clean Air Act 42 USC § 7401.
the cost of the programme, which turned out to be far lower than the United States Congress had anticipated when considering the legislation.\footnote{105 McKinstry, above n 25, at 155.}

Following the success of the cap and trade programme for sulphur dioxide the United States expanded trading to include other air pollutants and resources, including: general air pollution, nitrogen oxides, greenhouse gases, and water pollutants.\footnote{106 At 156.} Proponents of tradable environmental allowances have spread the idea to other areas, including matters of global environmental concern.\footnote{107 Rose, above n 84, at 51} Some have even proposed trading regimes for wildlife habitat.\footnote{108 Rose, above n 5, at 283.} Known as “biodiversity offsetting” it allows a developer to destroy habitat A so long as he or she pays for restoration or creation of equivalent or better habitat B. This idea has become an advanced environmental tool, particularly in Australia, Germany and the United States.\footnote{109 See Heidi Wittmer and Haripriya Gundimeda The Economics of Ecosystems and Biodiversity in Local and Regional Policy and Management (Taylor and Francis, Hoboken, 2012) and Ricardo Bayon, Nathaniel Carroll and Jessica Fox Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems (Taylor and Francis, Hoboken, 2012).} New Zealand is in the early stages of developing a framework that may eventually allow for the trading of biodiversity offsets.\footnote{110 Ministry for the Environment Proposed National Policy Statement on Indigenous Biodiversity: Evaluation under section 32 of the Resource Management Act 1991 (Ministry for the Environment, Wellington, 2011).}

C. **The wide range of market based environmental management tools**

Although the focus of this thesis is on private property based tools of environmental management, it is necessary to note that there are actually a number of tools that are not “regulatory” and that provide “economic incentives” for individuals to change their behaviour, but which do not rely on private property. Various factions promote different types of instrument as the best way to approach environmental regulation and there is an ongoing and controversial debate surrounding what exactly constitutes a “market based”
or “economic instrument”. They include environmental taxes, charges, subsidies and marketable rights-based measures, but also more indirect policy tools like privatisation of publically owned environmental assets, government purchasing policies, environmental labelling or certification of management practices.\textsuperscript{111}

Although there is a wide spectrum of market mechanisms to choose from (each with a different degree of efficiency) the two main economic instruments are price based measures, and private property based measures, such as tradeable environmental allowances. Price based measures use taxes to persuade polluters or resource users to reduce their discharges or resource consumption. The private property based measures considered in this thesis establish tradable rights to use natural resources or to emit pollutants within a pre-determined level.\textsuperscript{112}

\section*{D. Tradeable environmental allowances – “cap and trade” regimes}

Of course, one of the most prominent approaches for coping with the problem of rationing access to the commons involves the use of tradeable rights, “allowances” or “permits”.\textsuperscript{113} These address the commons problem by rationing access to the resources and privatising the resulting access rights.\textsuperscript{114} It is useful at this juncture to outline the theory and operation of these tools in a little more detail.

In general, “tradeable permit” programmes fit into one of two relatively similar categories: a “credit programme” or a “cap and trade” programme. In a credit programme an individual baseline (say for pollution) is established for each user. Any reduction achieved

\begin{itemize}
\item \textsuperscript{111} Bosselmann, above n 32, at 216.
\item \textsuperscript{112} Tom Tietenberg “Tradeable Permits in Principle and Practice” (2006) 14 Penn State Environmental Law Review 251.
\item \textsuperscript{113} At 251.
\item \textsuperscript{114} Tom Tietenberg “The Tradable Permits Approach to Protecting the Commons: What have we Learned?” in Elinor Ostrom and others (eds) \textit{The Drama of the Commons} (National Academy Press, Washington, 2002) at 197.
\end{itemize}
by the individual polluter beyond the baseline is certified as a tradeable credit. This “credit” can then be traded with other polluters. This is the private property right at the heart of the regime and it provides the incentive for each polluter to reduce their pollution as much as possible. In this sort of scheme, the baseline for the pollution is established by looking to traditional technology-based standards.\(^{115}\) The user who reduces his or her consumption below the legal requirement and has the difference certified as a credit can then trade the “credit” to others who have been unable or unwilling to meet the legal requirements.

In a cap and trade programme, by comparison, “allowances” rather than “credits” can be traded.\(^{116}\) A total resource access limit (the “cap”) is defined. The cap is set at an overall amount that is considered to be compatible with health, welfare or environmental imperatives.\(^{117}\) The total capped amount is then divided into units that are convenient for individual resource users. These units are the private property rights that underpin the operation of the regime as a whole. As it is private property, this “allowance” can then be traded amongst users (the “trade”). Individuals can purchase or trade for the number of units that they need, at a price set by market demand. Compliance is established by simply comparing actual use with the assigned cap as adjusted by any acquired or sold permits.\(^{118}\) Theoretically, the initial idea of an upper cap derives from a direct focus on environmental quality rather than on specific behaviours or activities. As a result, even at the trading stage, cap and trade programmes are more or less indifferent to individual behaviour.\(^{119}\)

The basic premise is the creation of a competitive economic market for access to the

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115 Tietenberg, above n 112, at 265.
116 Tietenberg, above n 114, at 204.
117 Rose, above n 5, at 282.
118 Tietenberg, above n 112, at 265.
119 Rose, above n 5, at 282.
resource. This is accomplished by limiting access to the resource but allowing resource users to buy and sell their rights to the resource.\(^{120}\)

Internationally, both credit programmes and cap and trade regimes have been used to manage air pollution and water. Conversely, incentive driven fisheries management regimes are of the cap and trade variety.\(^{121}\) As noted above, following Rose’s lead, this thesis refers to the rights created by “cap and trade” as “tradeable environmental allowances”.\(^{122}\) This is a useful short-hand for these individual entitlements and, in general, I will focus on schemes that employ these rights as they tend to best demonstrate the use of private property as a mechanism for environmental management.

In particular, as noted, I will be closely considering the New Zealand quota management system for its fisheries and the New Zealand Emissions Trading Scheme (NZ ETS). Although I go into detail about these schemes in chapter eight, it is useful, to briefly introduce these schemes in the context of this discussion. They are both examples of the cap and trade approach. In essence, under the quota management system various fish stocks subject to the regime are allocated a “total allowable commercial catch” which is set at a level that ought to ensure the physical and economic health of the stock and also caters for other recreational and customary users. Each individual transferable quota itself represents a one-hundred-millionth share of the total allowable commercial catch. Each individual quota is, theoretically, allocated in perpetuity and transferable. In contrast, the NZ ETS is designed so that each participant must both monitor and report their emissions of various greenhouse gases. The participant must then surrender to the Crown one “emissions unit” (of which there are different qualifying sorts) for each tonne of emissions

\(^{120}\) Neal D Black “Balancing the Advantages of Individual Transferable Quotas Against Their Redistributive Effects: The Case of Alliance Against IFQs v Brown” (1997) 9 Geo Int’l Envt’l L Rev 727 at 729.

\(^{121}\) Tietenberg, above n 114, at 204.

\(^{122}\) Rose, above n 84, at 51.
they have made over the relevant compliance period.\footnote{123} This unit is the private property right created (or adopted from the Kyoto Protocol) by the NZ ETS to achieve its purpose. Failure to surrender sufficient emissions units is met with both criminal and financial sanctions. As with fishing quota emissions units are, theoretically, perpetual and transferable. Although the NZ ETS does not have a specific “cap” as such, it was originally designed to operate under the global cap created by the Kyoto Protocol. This enabled New Zealand’s overall emissions to rise, providing New Zealand offset those increases by investing in reductions overseas though the use of the Kyoto Protocol’s flexibility mechanisms.\footnote{124}

\section*{E. The theoretical attractions of tradeable environmental allowances}

Essentially, the attraction of tradeable environmental allowance regimes is that they provide the regulated entity with incentives to change behaviour, but leave it up to the entity to decide how, when and where to do so.\footnote{125} At the heart of any tradeable environmental allowance approach to environmental regulation is the concept of using private property to avoid the tragedy of the commons. Basically, private property reassures everybody using a piece of the commons that their rights will be protected; no one person can just take things at will from others. In turn, this encourages individuals to invest in, and trade, resources, rather than dissipating their time and effort (and the resources) in fighting over the resource or by attempting to be the first to grab the most.\footnote{126}

\begin{footnotesize}
\footnote{123} Alastair Cameron “New Zealand Emissions Trading Scheme” in Alastair Cameron (ed) \textit{Climate Change Law and Policy in New Zealand} (Lexis NZ Limited, Wellington, 2011) at 252. Although, due to the extension of the transitional measures, participants in the NZ ETS from non-forestry sectors are only required to surrender one emission unit for every two tonnes of emissions they produce. See the Climate Change Response Act 2002 ss 63 and 63A.
\footnote{124} At 245.
\footnote{125} Burtraw and Evans, above n 65, at 60.
\footnote{126} Rose, above n 42, at 262.
\end{footnotesize}
Consequently, well-defined private property rights are a central feature of any market-based system of natural resource management.

Tradeable environmental allowances are attractive as a solution to the tragedy of the commons because it is thought that private property rights create an incentive to use a resource in a way that rationally secures long-term sustainability. The theory is that the ability to transfer rights or interest should eventually lead to a state of equilibrium. Underpinning this theory is the assumption that markets are a more efficient allocator of resources than traditional regulatory regimes because they operate with voluntary participation and decentralised coordination. The benefits of using tradeable environmental allowances to manage the environment can be summarised as including: providing environmental protection at a minimum cost; generating incentives for ongoing environmental improvement; giving more flexibility and thereby promoting a wider range of responses from producers and consumers; providing a source of government revenue; and directly promoting the economically efficient allocation of scarce resources.

Overall, tradeable environmental allowances are said to be efficient and flexible. A person can choose to pay to pollute, or to use a particular resource, or can choose not to pollute, or not use a resource, whichever is cheaper. This flexibility theoretically allows for reduction in environmental impact to be achieved at the lowest cost. It is also argued that people can be encouraged to invest in ways to reduce consumption by putting a cost

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128 Merrill, above n 39.
129 Richardson, above n 35.
130 At 21.
on resource use. In economic terms, the use of tradeable environmental allowances increases the internalisation of costs and reduces negative externalities.\textsuperscript{131}

In essence, a key attraction of tradable environmental allowances is the expectation that giving individuals and firms the flexibility to trade allowances will lead to a distribution of reductions that minimises the overall compliance cost of meeting the cap.\textsuperscript{132} In relation to pollution, for example, flexibility is achieved because the regimes allow for individuals to use any pollution-reduction method that suits them.

Libecap notes that there are multiple advantages of tradable environmental allowances including flexibility, cost-savings, information generation, and better alignment of incentives for conservation or investment in the resource. He also argues, along with many others, that the more complete (or stronger) private property rights are, the more the private and social benefits of resource use are meshed, eliminating externalities and the losses of the common pool.\textsuperscript{133} This is a crucial point because it is one of the key sources of discomfort surrounding the use of these tools. Moreover, it is important because, as I aim to demonstrate using the New Zealand quota management system and the NZ ETS, when one closely considers the regimes that have flowed from the application of this theory to practice it is very difficult to find an example of these “strong” private property rights in practice. Identifying and explaining this theoretical disjunction is a key burden of this thesis.

However, by far the most prevalent argument made for tradeable environmental allowances is cost effectiveness. Basically, they encourage cost-effective pollution control by allowing those with high costs of pollution reduction to pay to clean up lower cost

\textsuperscript{131} Redgwell, above n 3.
\textsuperscript{132} Maguire and Phillips, above n 31, at 217.
\textsuperscript{133} Libecap, above n 47.
ones. The structure of the NZ ETS and its reliance on offsetting New Zealand’s emissions by paying for reductions to occur overseas is an excellent example of this. Tradeable environmental allowances allow industries to make cost savings by tailoring their own means of reducing pollution. This can be contrasted with traditional regulation that tends to specify strict limits on things such as the use of fuels or the adoption of particular control technologies at facilities. Thus, advocates argue that these tools are able to achieve better environmental improvements than traditional regulation, at a lower cost.

Tradeable environmental allowances also decentralise decision making to individuals and companies, who supposedly have more information on how to solve problems such as air pollution than central government authorities. This may also encourage innovation and the development of alternative technology. A further potential advantage is the possibility that they may generate income for government, and promote economically efficient allocation of scarce resources.

There are, however, two caveats to these observations. Although they can achieve cost efficient results, tradeable environmental allowance regimes can be very expensive to set up and run. For that reason they do not necessarily lend themselves to use for all resources. Moreover, although many accept that tradeable environmental allowance can deliver positive results this view is not universally shared. Indeed, even those who accept they have a place in environmental management tend to suggest that in order to be

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134 Rose, above n 5, at 82.
135 Richardson, above n 63, at 434.
137 Richardson, above n 35, at 24.
successful they should be used in combination with a wide range of different environmental tools.140

III. Tradeable Environmental Allowances are Private Property

Thus far, I have been proceeding on the premise that tradeable environmental allowances are private property. However, before going any further I must pause and acknowledge that this position is somewhat contestable, although I consider it is correct. While there is an extensive literature on tradeable environmental allowances, their purpose and the design of the regimes that might employ them, the task of considering the exact legal nature of tradeable environmental allowances has been somewhat neglected. In particular, the question of whether tradeable environmental allowances are actually private property has not been definitively answered in the literature,141 although I consider there cannot be much doubt that, generally speaking, they are.

From a practical perspective, the lack of clarity surrounding whether tradeable environmental allowances are private property is important because the legal classification of these allowances will have real implications for the holders of these rights. In the absence of any statutory guidance, the relatively simple question of whether a tradeable environmental allowance is tangible or intangible property will have an impact in relation to: the property torts, the law of equity, securities law, insolvency law, governmental confiscation, regulatory adjustment and the rules regarding liability, not to mention taxation and accounting treatment.142

140 Gunningham, above n 102, at 179.
While I do not aim to resolve all of these questions in this thesis it is necessary to spend some time outlining why I consider tradeable environmental allowances are examples of private property. As noted in the introduction, I also want to explore the importance of this observation for both environmental law and the law of private property more generally. Of course, if I am correct, then my thesis should also be able to identify ways to go about resolving some of the problems that flow from literature's lack of specificity in this respect.

Although I recognise there is a genuine debate in this area, for the purposes of this thesis I propose to take a robust approach and maintain that tradeable environmental allowances are private property. I take a three-pronged approach to justifying this position. Firstly, when the issue is considered in the literature, scholars generally conclude that tradeable environmental allowances are a form of property, although the precise parameters that accompany it are the subject of debate. Secondly, it appears that courts are mostly quite willing to conclude that tradeable environmental allowances are private property. Finally, one of the major questions about the nature of tradeable environmental allowances stems from the level of control that government maintains over these kinds of regimes. I think that this can be accounted for under existing theories of private property. In particular, the government’s control over tradeable environmental allowances can be explained by my overall thesis regarding the inherently social nature of private property and the obligations that accompany it. This point tends to address some of the major concerns underpinning those who hesitate to acknowledge tradeable environmental allowances as private property.
A. The reasons underlying the lack of consensus on the nature of tradeable environmental allowances

On the whole, the literature does not directly address the question of the nature of tradeable environmental allowances. Partly, the problems in this area stem from the fact that trying to provide an authoritative account of private property itself has been described as a “Sisyphean task” that has engaged scholars throughout history. Indeed, no complete theory of private property currently exists and in my view is probably impossible. However, to a larger degree the problems stem from a philosophical divergence at the heart of this area of the law. As I have touched on above, on one hand, many advocates of property as a solution to the tragedy of the commons have consistently argued that tradeable environmental allowances should be treated as secure private property rights. Secure rights should achieve the desired environmental results by protecting the incentives of individuals to invest in the relevant resource. However, if rights are insecure, or at risk of confiscation this could undermine the entire process. Many others have just as consistently argued that the air, water and fish belong to the people and, as a matter of ethics, should not become private property. On this view, no end could justify the transfer of a community right into a private one.

Moreover, the structure of tradable environmental allowance regimes tend to reserve to governments a degree of ongoing control that can be somewhat difficult to reconcile with classical liberal account of private property. Unlike traditional forms of privatisation, the tradeable environmental allowance approach does not remove the government’s ultimate

143 Barnes, above n 41, at 14.
145 Tietenberg, above n 112, at 267.
control over the resource and its conservation. A crucial point to note about the markets employed by these schemes is that the use of a particular resource, or the maximum level of pollution, is determined by an administrative body. Once created and initially allocated, the market then works to allocate the rights to pollute or consume among the market participants. The environmental goal remains the prerogative of policymakers, but once the cap is set, it is argued that market based approaches provide a cost-effective way to achieve that target. Given this structure, some scholars have noted that in some respects the creation of a tradeable environmental allowance can be seen as an extension of the government’s traditional regulatory role in relation to environmental resources. To this end, some scholars have queried whether tradeable environmental allowances are in fact examples of private property, or something else.

This tension has driven the architects of many tradable environmental allowances regimes to be either gloriously unspecific or tortuously contradictory regarding the precise nature of the rights existing at their heart. The New Zealand quota management system and the NZ ETS are both excellent examples of the first as neither contains an express statement outlining the legal character of individual tradeable quota or emissions units. A brilliant example of the latter can be seen in the United States' sulphur dioxide emissions trading scheme.

This regime attempts to create “adequately” (as opposed to completely) secure rights, while trying to make clear that permits are not private property rights. Section 403(f) of the 1990 Amendments to the Clean Air Act (US) carefully defines the legal nature of emission allowances under the sulphur dioxide trading programme, stating that: “An allowance

146 Marvin, above n 60, at 1160.
147 Garry, above n 67, at 42.
148 Burtraw and Evans, above n 65, at 61.
under this title is a limited authorization to emit sulfur dioxide … Such allowance does not constitute a property right.” It does, however, go on to state that: “… [A]llowances, once allocated to a person by the Administrator, may be received, held, and temporarily or permanently transferred in accordance with this subchapter.” Thus, while expressly disclaiming private property in allowances the Act also confers on its holder many of the characteristics one would expect to accompany a private property right.  

It seems likely that this is to both avoid consequences stemming from the “taking clause” in the Fifth Amendment to the United States Constitution, and also to ensure that administrators have not given up their ability to change the requirements of the regime as the need arises (although they are still expected to refrain from arbitrarily confiscating rights). In particular this approach would mean these was no need to pay compensation in the event of a change to the scheme, which would be required if the allowances reflected an unambiguous private property right. However, it is interesting to note that the only existing case that comes close to directly considering the meaning of this statutory language seems to suggest that while an allowance may not represent a private property as between its holder and the state, it may well contain various elements of private property between its holder and other third parties.

As Teitenberg notes the Clear Air Act’s approach represents “… a somewhat uneasy compromise, but it seems to have worked.” However, it is unsatisfactory from a doctrinal property law viewpoint, particularly given the theory underpinning Hardin’s

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150 Tietenberg, above n 114, at 205.
152 At 10222.
153 Tietenberg, above n 114, at 205.
154 See the discussion of Ormet Corp v Ohio Power Co 207 F 3d 687, 30 ELR 20457 (4th Cir 1996) in Gehring and Streck, above n 151.
155 Tietenberg, above n 96, at 267.
solution to the tragedy of the commons is dialectical regulation on one hand, or private property on the other. It is not surprising, therefore, that a number of scholars have attempted to find a way to account for some of the tensions inherent in these rights.

**B. The scholarly approach to the issue**

It is useful to begin with the literature stemming from the United States as it tends to be the most closely concerned with tradeable environmental allowances, before turning to consider discussion from New Zealand and Australia (which tend to discuss the appropriate proprietary treatment of a wide range of rights from “permits” and “licences” to tradeable environmental allowances).

Daniel Cole approaches the question of the legal nature of tradeable environmental allowances by conceptualising all government regulation as simply another species of property regime. In his view government regulation of environmental problems is an assertion of public property rights in the resource at issue.\(^\text{156}\) Simply put, he argues that the central problem of the tragedy of the commons is how to control access. Control suggests the assertion or assignment of private or public rights over resources that would otherwise be open access.\(^\text{157}\)

Adopting a Hofeldian approach to rights, Cole notes that a regulation imposes a \textit{private duty} with the respect to the use of a resource and, in doing so, creates a coexistent \textit{public right} of enforcement.\(^\text{158}\) As a result, Cole maintains that all environmental regulations, be they command and control or economic, involve tacit assertions of public or state property rights in natural resources.\(^\text{159}\) With command and control, the state asserts public property

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\(^{157}\) Cole, above n 14, at ix.

\(^{158}\) At ix.

\(^{159}\) At 29.
When creating tradeable environmental allowances the state imposes a combination of public and private rights. It first creates public property out of a previously unowned good; it then turns that right into a private property right.\footnote{Mattieu Wemaere, Charlotte Streck and Thiago Chagas “Legal Ownership and Nature of Kyoto Units and EU Allowances” in David Freestone and Charlotte Streck (eds) \textit{Legal Aspects of Carbon Trading: Kyoto, Copenhagen and Beyond} (Oxford University Press, Oxford 2009) at 39.} The state has a choice of regulatory instruments and management systems. But the state’s choice of instrument will inevitably be property based given the fact that all solutions to the tragedy of the commons involve the use individual (private), common, or public (state) property rights.\footnote{At 38.} Therefore, on Cole’s approach all solutions to the tragedy of the commons involve creating property in previously unowned resources.\footnote{Cole, above n 14, at 17.} The choice is not whether, but which, property based approach should be adopted.\footnote{At 17.} It follows then that all tradeable emissions allowances must be viewed as “property” of some description.

Conversely, Amy Sinden suggests that tradeable environmental allowances, rather than being a species of property, are really a species of regulation.\footnote{Sinden, above n 156.} She begins her argument by noting that as our lifestyle depends on resource exploitation (which is accompanied by pollution and consumption) the central question for environmental policy is “how much” resource exploitation is appropriate. Environmental law is seeking to identify and achieve this balance point. In Western societies the “how much” question is often answered by “markets”. The “invisible hand” of the market “magically” determines how many flat-screen televisions or vegetables we need through countless individual transactions. She notes that it is therefore no surprise that, in relation to the open access commons it is suggested that the “how much” question should be left to the market; not government regulation. If one creates private property in the resource the market will sort out how
much of it we will use. However, Sinden argues that discussion of private property regimes
and markets being an alternative to government regulation is actually a mirage.\footnote{At 538.}

She suggests that schemes such as water markets and emissions trading do not actually use
“markets” to solve the central problem of resource over-exploitation. She maintains that
these schemes are mischaracterised as privatisation solutions, because they rely on the
government to answer the “how much” question.\footnote{At 538.} As the state continues to play a
fundamental role in setting the limits of resource use there can be no true market in the
economic sense. While the regime may achieve a degree of allocative efficiency in relation
to a predetermined level of pollution, it cannot achieve any productive efficiency. A true
market would be able to achieve both.\footnote{At 570.} Within the created regime the demand for an
emission allowance or a fishing quota is not related to what individuals desire or are willing
to pay. Any demand will always be a function of where the government has set the overall
cap. The corporations which emit greenhouses gases have no individual desire to reduce
pollution. Indeed, in the absence of government instruction they would be unlikely to do
so. They are required to pay depending on how many allowances they have been allocated
and how many they will need to acquire to comply with the regulatory requirements.\footnote{At 571.} The
allocative demand is therefore correlated to an artificial demand curve. It is not related to
individual preference, but to the desire to avoid the coercive power of the state.
Consequently, the balance achieved by the market does not reflect the real value of the
resource to society. It does not indicate the cost of the harm caused by resource over-
exploitation or the amount of money that society would be prepared to pay to avoid that
outcome. The only thing that it does is reflect the level of the cap which is set by the

\footnote{At 538.}
\footnote{At 538.}
\footnote{At 570.}
\footnote{At 571.}
government. It follows, she suggests, that tradeable emissions allowances are, in reality, a form of government regulation and should be categorised as such. In essence, here Sinden is arguing that these schemes are actually market mechanisms rather than markets. They function to emulate market-like processes such as trade, incentives and efficiency in order to achieve environmental goals. However, it is also important to note that Sinden does accept that the tradeable environmental allowances themselves do represent property rights “of a sort”. While it seems somewhat contradictory to both accept that these tools use property rights “of a sort” while also arguing that they do not reflect a “privatisation solution to the tragedy of the commons” towards the end of her article Sinden discusses her deeper concern. She notes that while characterising tradeable environmental allowances as a privatisation could be seen as simply a matter of semantics, she is concerned that such an approach might have significant consequences for the broader debate. It suggests that such a solution is, in fact possible, and lends credence to some of the more extreme classical liberal views on environmental management such as those advocated by “free market environmentalists”. While I agree with that concern, I do not think the solution is to deny that tradeable environmental allowances regimes privatise access to the commons. Rather, I think that a more promising approach is to revisit our understanding of private property as an institution. A point I develop over the course of this thesis is that recognition of private property’s fundamental social role helps to explain the level of government involvement in, and oversight of, many different examples of private property, and in particular, tradeable environmental allowances. It certainly helps to

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169 At 572.
170 At 566.
171 At 567.
172 At 567.
173 At 584.
address the fact that in these regimes the government, and not the players in the market, answer the “how much” question.

In contrast to both Cole and Sinden, Carol Rose takes a very different approach. She argues that private property has always been one of the primary ways in which humans have sought to avoid the tragedy of the commons.\(^\text{174}\) In relation to tradeable environmental allowances (a term she coined) she notes that as an environmental management tool they transform access to a resource by dividing it into a fixed number of units which each individual user must acquire through purchase or trade. As a result “… resource use becomes in effect a kind of private property that must be acquired through purchase and trade”.\(^\text{175}\) She stresses that it is the “property-like” characteristics of tradeable environmental allowances that are “at the heart of their attractiveness”.\(^\text{176}\) The whole purpose of these tools is to harness the attractive aspects of private property and ensure that those resource users who are confronted with the requirement to purchase access to the resource “will husband resources carefully and will undertake conservation or innovation to substitute for their now expensive resource use”.\(^\text{177}\) However, Rose also notes that tradeable environmental allowances do not exactly match the argument raised by Hardin and furthered by Ophuls that the solution to the tragedy of the commons lies with either private property or the Leviathan. Rather, she suggests that tradeable environmental allowances in effect combine the two approaches; this recognises that they are created by the state, but are traded in the market alongside other goods and services.\(^\text{178}\)

\(^\text{174}\) Carol M. Rose “The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems” (1998) 83 Minn L. R 129 at 129.

\(^\text{175}\) At 235.

\(^\text{176}\) At 235.

\(^\text{177}\) At 236.

\(^\text{178}\) At 236.
Following the lead of Richard Stewart\textsuperscript{179} Rose terms this type of private property “hybrid property”.\textsuperscript{180} Her goal in doing so seems to be to recognise that tradeable environmental allowances owe their existence to the state, although she is quick to point out that this is also true for a large amount of “normal property” such as intellectual property and corporate securities.\textsuperscript{181} She goes on to stress that, when this type of tool is used in relation to environmental resources “needless to say, all these schemes reflect a standard idea of property: that is, property rights can encourage careful resource management and conservation, including investment in pollution reduction methods”.\textsuperscript{182} It is important to note that Rose’s goal in identifying tradeable environmental allowances as a form of “hybrid-property” is not to deny that these tools are a form of private property, but rather to acknowledge that they can only exist where governments have the ability to create the rights, define maximum levels of use, allocate rights in the first instance, record transactions and actually enforce the rights that have been created. Moreover, this governmental involvement is not negative. Those who hold the rights benefit from the information and accountability that accompanies the governmental decision-making as well as the inevitable external scrutiny of this government behaviour.\textsuperscript{183} In my view, Rose is not arguing that this degree of institutional support vitiates the nature of tradeable environmental allowances as private property rights. Rather she is correctly identifying the role of the state in their creation. Moreover, as she later observes, a number of concerns about using the language of private property in relation to these tools stems from the “rhetoric and mentality of entitlement” that often accompanies it.\textsuperscript{184} As will be explored in chapter four private property is useful in the sphere of environmental management.

\textsuperscript{179} Richard Stewart “Privprop, Regprop, and Beyond” (1990) 13 Harv J L & Pub Pol’y 91 at 93.
\textsuperscript{180} Rose, above n 174, at 164.
\textsuperscript{181} At 164.
\textsuperscript{182} At 166.
\textsuperscript{183} At 167.
\textsuperscript{184} At 171.
precisely because it enlists our self-interest. However, there is a risk that by creating property rights in a natural resources we may focus our attention on what we own, and ignore other aspects of the ecosystem.\footnote{At 171.} This sort of concern clearly underpinned the Clear Air Act’s careful substitution of the word “allowance” for “property” as mentioned above. Overall, in my view, notwithstanding her use of a specialised term (“hybrid-property”) Rose clearly considers tradeable environmental allowances are private property. Indeed, their attraction as a solution to the tragedy of the commons stems from the very benefits that private property is said to provide individuals and society. Indeed, in comparing them with the commons property regimes considered by Ostrom she notes that:\footnote{Rose, above n 175, at 236 (emphasis added).}

… both types of regime are fundamentally property regimes – individual property in the case of TEAs, common property in the case of CBMRs [community-based management regimes for common property]; in neither case are resources open to the world at large, but are rather treated as the domain of their respective individual or common owners.

Finally, it should be noted that other American academics are also comfortable discussing tradeable environmental allowances as private property rights. For example, the work of the free market environmentalists starts from this presumption (although they also suggest these regimes do not go far enough).\footnote{See for example, Terry L Anderson and Donald R Leal \textit{Free Market Environmentalism} (Westview Pres, Boulder (Colorado), 1991); and Terry L Anderson and Donald R Leal \textit{Free Market Environmentalism: Revised Edition} (Palgrave, New York, 2001).}

New Zealand generally tends to accept tradeable environmental allowances are property of a sort. For example, Barton has considered some of the difficulties that attach to property rights created by statute. His focus is on resources that are publically owned, but where
rights to them (“whether called licence, permits, or something similar”) are conferred on individuals by government via statute. He terms these rights “statutory permits”, noting that occasionally courts are required to determine whether such a right has the “character of property” or a particular characteristic of property. It should be noted that Barton limits his discussion of individual transferable quota and emissions units to the observation that “even where the establishment of tradeable property rights is plainly an important element of the policy design, we may see little real legislative effort going into the definition of licence rights”. It appears that Barton is considering a class of tools that is broader than the more specifically private property orientated tradeable environmental allowances I consider in this thesis. For example, he considers cases related to resource consents under the Resource Management Act 1991 (which the legislation states are “neither real nor personal property”) and a petroleum permit under the Petroleum (Submerged Lands) Act 1967 (Cth). While resource consents are a mechanism aimed at avoiding the tragedy of the commons (and there is an issue around what form of property they are), they are dissimilar to the tradeable environmental allowances I consider in this thesis. While a resource consent may be traded in some limited circumstances they are a more

189 At 83.
190 In another piece of writing that lays the groundwork for the primary article cited here Barton notes “… the diversity of situations where the courts may have to develop this law. Are rights to take resources, such as water or geothermal fluid, different in respect of property law ideas from rights like land use consents, which do not? And what about rights to occupy space, such as coastal permits. It is desirable that the law evolve in a way that minimizes complexity – the same approach for all kinds of resource consent; but … this may not be easy.” See Barry Barton “The Nature of Resource Consents: Statutory Permits or Property Rights” (2009) NZLS Intensive: Environmental Law: National Issues 51 at 77.
192 In my view, petroleum permits focus on royalties rather than being structured around private property.
193 The tradeability of resource consents is governed by ss 134 – 138 of the Resource Management Act 1991. They are not tradeable in the usual sense of that term although they may be transferred in some circumstances. For example, a land-use or sub-division consent which attaches to a particular piece of land may be transferred between various owners or occupiers of that land. Likewise water and coastal permits may be transferred subject to various restrictions. Generally, these restrictions include a prohibition on the holder of the permit transferring their interest to another site unless a rule in a plan allows for this.
general tool than either quota or emissions units, which are private property rights created in particular resources in order to establish a market in those resources. Thus, Barton’s analysis encompasses a wider remit than the tradeable environmental allowances considered by this thesis and he does not set out to determine whether tradeable environmental allowances (or other related tools) are private property. Rather he seeks to determine whether the law provides a clear indication about how it will determine what, if any, attributes of property attach to a permit or licence granted under statute (which may include a tradeable environmental allowance regime). He reviews the approach of courts across Australia, Canada, England and New Zealand concluding that the case law is not producing a consistent doctrinal approach to answering the question. He finishes by arguing that the law should be encouraged to develop in a way that will protect the private rights of individuals “inter partes” providing there is no important public policy point in dispute. However, he is careful to point out that ideas of property can have “dangerous strength in environmental and natural resource law”.

Overall, Barton’s point seems to be neutral regarding whether the broad class of rights created by statute should be considered private property or not, and more concerned with how to determine what characteristics of private property should attach to each right in any given set of circumstances. His primary focus seems to be driven by the more general concerns raised by scholars regarding the privileged conceptions that can accompany private property, which are in turn driven by the dominant understanding of the institution in our society. Some of these concerns can be addressed by the idea at the heart of this thesis, that private property is a social institution aimed at broader considerations than narrow self-interest. This perhaps points the way to government being far more explicit in

194 Barton, above n 188, at 88.
195 At 99.
the language they use in constructing these rights. This is an observation I return to but at this point it should be noted my analysis has the potential to address the primary concern underpinning Barton’s analysis.

David Grinlinton has also looked at these issues noting that “property” is one of the most difficult legal ideas to define and that rights such as tradeable environmental allowances and other similar sorts of tools go “far beyond” traditional ideas of private property. In his view, these “quasi-property” rights are examples of regulatory invention that illustrates property’s dynamic nature. He takes the approach that property rights are a collection of “enforceable rights and correlate obligations relating to the exclusive (or nonexclusive) possession of, access to, ability to deal with, and or ability to use land (private or public) or some other defined natural resource”. He goes on to note his view that individual transferable quota under the Fisheries Act 1996 are a hybrid form of a property right. He reaches a similar conclusion in relation to emission units under the NZ ETS which he states “represent a new form of private property right in the nature of a reverse nonexclusive profit a prendre in the right to emit GHGs into the atmosphere”.

It is also worth noting that similar exercises have been carried out by Australian academics who are particularly concerned with identifying whether market-based rights are “property” for the purposes of s 51(xxi) of the Commonwealth of Australia Constitution Act 1900, which empowers the Commonwealth to make laws with respect to “the

197 At 281 (emphasis in the original).
198 At 298.
199 At 300.
acquisition of property on just terms.” Lee Godden, one of the foremost Australian scholars in this area, certainly appears to proceed on the assumption that these new forms of rights are property rights when she notes that:

By contrast to the physically-referenced concept of property at common law, one of the significant trends of market environmentalism has been the need to articulate new dimensions of property rights. These emerging property rights do not pertain so directly to physical orientations, even though these ‘rights’ may be claimed as furthering the sustainability of the environment and natural resources … Generally speaking, the emerging property ‘rights’ are created by statute, even though such statutes may employ a terminology derived from traditional property law schema. Thus, the new property in common pool resources such as water rights, biodiversity credits, carbon credits and ecosystem ‘services’ are created by legislation … in order for the market-based strategy to be implemented within an existing legal system.

In querying whether property is necessary in managing common pool resources Godden also makes the telling point that the economic models underpinning the new approaches to resource management are predicated on market exchange and that the character of fungibility is “critical as it allows resources to be made transferable, and ultimately, the subject of transactions.” As she stresses: “In other words, property rights function in the market. This fact is often glossed over by lawyers in conceptualizing property and obscured by theoretical analyses, although acutely highlighted by the identification of private property with efficiency parameters in many classical economic models.”

Although she concludes that it follows that the property rights employed by market based

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202 At 419.

203 At 419.
environmental management regimes typically comprise a form of “ownership” predicated on market exchange, the tenor of her work suggests she accepts such rights are a form of property even if she is unwilling to directly correlate these new rights to historical ideas of what constitutes private property. Again, however, I suggest that at least some of the caveats here can be dispatched by my overall thesis.

C. What do the courts think?

Support for my conclusion that tradeable environmental allowances are private property can also be drawn from the vast preponderance of the case law. Generally speaking, courts seem quite happy to accept that these rights are private property, albeit subject to some restrictions and qualifications. Two examples will suffice, although there are others.204 The

204 For further examples where the courts have been prepared to accept that tradeable environmental allowances (or tools in a similar vein, but not grounded in the idea of private property as a solution to the tragedy of the commons) are private property see:

**United Kingdom:** In re Rae [1995] BCC 102 (Ch) involving a question regarding whether various fishing vessel licences were “entitlements” for the purpose of bankruptcy legislation. This depended on whether the licence as an “entitlement” was property within the meaning of the Insolvency Act 1986 (UK). Held: the recognised entitlement came within the words of s 436 of the Insolvency Act ‘and every description of interest, whether present or future or vested or contingent, arising out of, or incidental to property’, namely the vessels. In re Celtic Extraction Ltd [2001] Ch 475 (CA) involved a waste disposal licence. Celtic went into liquidation. The liquidator wanted to disclaim the waste disposal licence as onerous. Licences could be transferred subject to approval of the relevant authority. Held: A waste management licence came within the definition of “property” contained in section 436 of the Insolvency Act 1986 (UK). See also Swift v Dairywise Farms Ltd [2000] 1 WLR 1177 (Ch) involving a question regarding “milk quota” which could be held and conveyed, had commercial value and could be the subject matter of a trust, leading to the conclusion it was property within the definition of s 436 of the Insolvency Act 1986.

**Australia:** Neawrest Mining (WA) v Commonwealth (1997) 190 CLR 513 concerned 25 mineral leases under the Mining Act 1980 (NT). The Commonwealth Government extended the Kakadu National Park to include the leased areas. Held: leases were a sort of property and the Commonwealth could not acquire them without compensation. Compare: Commonwealth v WMC Resources (1998) 194 CLR concerning petroleum permits on the continental shelf. The High Court avoided the issue of whether the permits were “property” by determining that even if they were, they were inherently subject to modification or diminution by later Commonwealth statute and there had been no “acquisition of property” under the Constitution. Moreover, as the permits were located on the continental shelf they were not carved out of the Crown’s radical title. See also Pennington v McGovern (1987) 45 SASR 27 Austell v Commissioner of State Taxation (1989) 89 ATC 4905 (WA) and, in particular, Kelly v Kelly (1990) 92 ALR 74 (SA) which held that an abalone “authority” issued under the South Australian Managed Fisheries Regulations 1971 (SA) and attached to a particular boat was capable of constituting partnership property. However, compare Harper v Minister for Sea Fisheries & Others (1969) 168 CLR 314 where the High Court appears to have withdrawn from its formerly clear position that transferable fishing rights are property. It involved consideration of the essential nature of the right granted under a system of proportional quota system. Held: that given the
first is in relation to individual transferable quota under the New Zealand quota management and the second relates to emission units under the European Union Emissions Trading Scheme.

Legislature had excluded the public by granting licences to take abalone to a limited number of people, the right those individuals enjoyed resembled a common law right of piscary; a kind of profit à pendre. See the discussion of later cases that have reconciled these approaches in Christine Stewart Legislat ing for Property Rights in Fisheries (Development Law Service of the Food and Agriculture Organization of the United Nations Legal Office, 2004) at 162 – 163. For the most recent discussion of these issues by the High Court of Australia see ICM Agriculture Pty Ltd v Commonwealth [2009] HCA 51; (2009) 240 CLR 140 where the High Court was required to decide whether the replacement of bore water licences granted under an early statutory scheme by aquifer access licences under a later scheme constituted an acquisition of property for the purposes of the Commonwealth Constitution. The court was divided with six judges responding that the replacement of the bore licences did not constitute an “acquisition” for the purposes of s 51(xxxi) of the Constitution. Of these six, however, three considered that the bore licences were some species of property, but said no more, and three held it was unnecessary to determine the issue. Heydon J, in dissent, was in no doubt both that the licences were property and that they had been acquired without just compensation. For a discussion see Fisher “Water law, the High Court and Techniques of Judicial Reasoning”, above n 199; and Hepburn “Statutory Verification of Water Rights: The ‘Insuperable’ Difficulties of Propertising Water Entitlements”, above n 199.

Canada: Saulnier v Royal Bank of Canada (2008) 298 DLR (4th) 193 (SCC) addressed whether a commercial fishing licence under the Fisheries Act of Canada constituted ‘property’ available to a trustee in bankruptcy, or to a creditor who had registered a general security agreement under the PPSA. Bankrupt argued that the licence was merely a privilege to do that which would otherwise be illegal and therefore did not pass to either person. Binnie J noted that the question was one of statutory interpretation – not one of property in the abstract. The Supreme Court of Canada (“SCC”) outlined three approaches: Traditional Property Approach (traditional indicia of property); The Regulatory Approach (licences property if the regulatory authority was obliged to grant a renewal showing licence more than transitory or ephemeral) (SCC decided this approach was of limited value); The Commercial Realities Approach (are licences commonly exchanged for value (SCC there is no necessary connection between proprietary statutes and commercial value). Decided that one must look to the substance of what was conferred and there was a reasonable analogy to rights considered at common law to be property. See the discussion in Barton, above n 188.


It does not mean the permit is not a tradeable asset, or incapable of protections against predators. It does not for legal purposes have the ordinary status of realty or personality. But I would take some convincing that the effect of the provision would be to prevent a party A, claiming a beneficial interest under a permit held by B, from claiming those rights as against a knowing transferee, C. If the rights exist, they can be protected. If they do not, because of s 92(1) then no harm is done. And nor does that provision prevent an action for interference with contractual relations being brought, in a qualifying jurisdiction, against C.
New Zealand Federation of Commercial Fishermen v Minister of Fisheries\(^{205}\) was a case about a Ministerial decision to reduce the amount of snapper that could be caught in a quota management area at the top of the North Island. The Minister determined that the catch should be reduced by about 39 per cent in an attempt to replenish the stock of snapper, which was under stress.\(^{206}\) A number of groups objected to this decision and brought a judicial review, arguing among many other things, that the Minister had failed to take into account a legislative intention to create “strong property rights” in the individual transferable quota in question.\(^{207}\) One of the key preliminary arguments the High Court and Court of Appeal were confronted with was whether individual transferable quota were, in fact, property. This needed to be determined in order to address the primary submission, which was that the rights created were so strong as to prohibit governmental interference with them.

Both courts accepted that individual transferable quota are property. In the High Court McGechan J accepted “without difficulty” that individual transferable quota constituted a form of property right, albeit one with peculiar characteristics and qualifications.\(^{208}\) He stressed that the property right, even if qualified, is a very important one. He noted that it is a key element of commercial fishing operations and is sought after and leased for considerable sums. In the Court of Appeal, Tipping J held that:\(^{209}\)

> While acknowledging the extensive arguments which we heard on the property rights point, we consider the answer is quite straightforward. While quota are undoubtedly a species of property and a valuable one at that, the rights inherent in that property are not absolute. They are subject to the provisions of the legislation

\(^{205}\) New Zealand Federation of Commercial Fishermen v Minister of Fisheries HC Wellington CP 237/95, 24 April 1997; New Zealand Federation of Commercial Fishermen v Minister of Fisheries CA82/97, 22 July 1997.


\(^{207}\) New Zealand Federation of Commercial Fishermen v Minister of Fisheries HC Wellington CP 237/95, 24 April 1997 at 8.

\(^{208}\) At 90.

\(^{209}\) New Zealand Federation of Commercial Fishermen v Minister of Fisheries CA82/97, 22 July 1997 16.
establishing them. That legislation contains the capacity for quota to be reduced. If such a reduction is otherwise lawfully made, the fact that quota are a “property right” … cannot save them from reduction. That would be to deny an incident integral to the property concerned.

The full importance of this decision is discussed in chapter ten but for now it serves as a useful illustration of the propensity of the courts to accept that tradeable environmental allowances, such as individual transferable quota, are property rights, albeit with some peculiarities. Neither court had to work very hard to come to this conclusion. It is also useful to note that New Zealand Federation of Commercial Fishermen v Minister of Fisheries is only one of a number of cases that have recognised from the outset that individual transferable quota is a species of private property.

Similar sentiments are evident in the context of the European Union Emissions Trading Scheme and the case of Armstrong DLW GMBH v Winnington Networks Ltd. This case involved a question regarding liability for loss suffered as the result of a trade involving stolen carbon credits worth over €250,000. The fraudsters had used a fraudulent email to obtain the username and password to Armstrong’s account in the German Greenhouse

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210 A review of the relevant case law suggests that from the outset New Zealand courts have recognised that individual transferable quota is a species of private property right. The courts made a tentative start in Jensen v Director General of Agriculture and Fisheries CA313/91, 16 September 1992 where Cooke P accepted that individual transferable quota were “valuable assets”. The next case to consider the issue, Cooper v Attorney General [1996] 3 NZLR 480 went further and accepted that individual transferable quota are private property rights. Other cases have reached similar conclusions. See Matiriki Ltd v Deadman & Lees CA15/99, 2 September 1999 where the Court of Appeal was asked to determine the ownership of a fishing permit, catch history and “catch history benefits” on the basis of pleadings grounded in estoppel and constructive trust. Although the Court of Appeal sent the matter back to the High Court for further determinations on questions of fact, the language used throughout the judgement discloses a settled acceptance of individual transferable quota as property. The issue was not whether quota could be property, but rather whether the estoppel had arisen or the constructive trust had been created (see also Stewart, above n 203, at 158). In Karei Trust v Wallace and Cooper Engineering (Lyttelton) Ltd [2000] 1 NZLR 401 the Court of Appeal, in discussing an action in rem against forfeited fishing vessels, treated forfeited quota as property in a manner similar to vessels and fishing equipment (see the discussion at [54]). In Antonis Trawling Co Ltd v Smith [2003] 2 NZLR 23 Baragwanath J, for the Court of Appeal, noted at [5] that: “The root of title is the issue under the quota management system (the QMS) of individual transferable quota (ITQ) which is a statutory chose in action comprising a fraction of the total of exclusive rights to fish commercial a particular species of fish …”. Baragwanath J does not elaborate on this description. He does not appear to be adding anything further to our understanding of quota that has already been articulated in cases such as Commercial Fishermen Inc v Minister of Fisheries. Rather, he appears to be simply recognising that quota is a form of personal property and the only way in which to enforce the rights or claims arising from it is by way of proceedings.

211 See Armstrong DLW GMBH v Winnington Networks Ltd [2012] 3 All ER 425.
Gas Emissions Trading Registry. They then approached another company (Winnington Ltd) and sold the credits to them, duly transferring the units into Winnington’s account at the UK Greenhouse Gas Emissions Trading Registry. Winnington, who it was accepted was not a party to the fraud, traded them onto another party on the same day. At issue in the case was which of the two parties (Armstrong or Winnington) should bear the loss of the fraud perpetrated by the third party.\(^{212}\) For my purposes here, however, the point to take is that that there was “no dispute between the parties that EUAs [the emissions units in question] are capable of constituting, and do constitute, property as a matter of law”.\(^{213}\) The judge does not quibble with that assessment, noting that “What is in issue, however, is their precise nature and characterisation as property”.\(^{214}\) As noted in chapter ten resolution of this issue would have a decisive impact on resolution of the dispute and in particular whether the law of restitution or equity provided an avenue for Armstrong to get relief.

D. A general observation

I also draw support for my conclusion from the fact that much of our normal “property” owes its existence and management to legislation and regulation.\(^{215}\) For example, intellectual property law is almost completely dependant on statute and corporate securities have little existence outside of the regime set up to manage them.\(^{216}\) Moreover, until 2008 the ownership of “freehold” land depended on the medieval statute Quia Emptores\(^{217}\) and today the transfer of land under the Torrens systems depends on the fiction of a Crown grant carried out under the Land Transfer Act 1951. It is the act of registration that creates

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\(^{212}\) This case is also discussed in chapter ten as it is primarily useful as an example how courts might go about resolving these sorts of disputes and in particular the likelihood they will adopt techniques associated with traditional property law.

\(^{213}\) Armstrong DLW GMBH v Winnington Networks Ltd [2012] 3 All ER 425 at [40].

\(^{214}\) At [40].

\(^{215}\) Rose, above n 174, at 166.

\(^{216}\) At 166.

\(^{217}\) See Barton, above n 188, at 93 and the Property Law Act 2007, s 365.
an individual’s title to land. This is made explicit by Barwick CJ in *Breksvar v Wall*[^218] where he noted:[^219]

> The Torrens system of registered title of which the Act is a form is not a system of registration of title but a system of title by registration. That which the certificate of title describes is not the title which the registered proprietor formerly had, or which but for registration would have had. The title it certifies is not historical or derivative. It is the title which registration itself has vested in the proprietor.

Indeed, it is an interesting fact that some of the angst surrounding whether it is appropriate to employ private property as form of natural resource management has obscured the fact that private property often has its genesis in statute and regulation.

### E. Tradeable environmental allowances are private property

As will be evident, I reach the conclusion that tradeable environmental allowances are private property on the basis that the preponderance of the literature and case law accepts that they are private property. Moreover, as will be evident when I analyse the New Zealand quota management system and NZ ETS in detail, at the heart of both regimes is an exclusive right, albeit one that is limited in the uses to which it can be put.

Although I accept that there is a degree of discomfort about the statutory origins of tradable environmental allowances and the language used to create them, I think this can be explained by the more general concerns surrounding the use of private property as a tool of environmental management. Creating an ambiguous right allows governments to side-step some of these concerns. Given the current dominance of the classical liberal view of property there is a risk, as we will consider below, that if a right is narrowly and concretely defined it may be difficult to cancel, or change these rights.[^220] This could lead to perverse environmental outcomes that defeat the very object of these regimes. However,

[^218]: *Breksvar v Wall* (1971) 126 CLR 376.
[^219]: At 385 – 386.
[^220]: Wemaere, Streck and Chagas, above n 160, at 53.
in my view, this is to underestimate the capacities of private property. If private property is recognised as a socially contingent institution then a number of the objections to “interference” with private property rights fall away. I argue that if it is necessary to change the contours of a tradeable environmental allowance in the social interest, private property is able to cater for this. It does so by imposing obligations on property holders to accept this type of modification (in addition to conferring the entitlements that are so commonly associated with the institution). Indeed, I think that the reality of this observation is borne out by the structure of the New Zealand quota management system and NZ ETS. Both of these regimes utilise private property in a way that imposes both rights and obligations in order to ensure the flexibility necessary to achieve the desired environmental results. If I am correct, recognition of this reality may enable governments to be far more explicit in the legislative language they use when creating these rights.

IV. Conclusion

In many respects the attractions of tradeable environmental allowances can only be understood by comparing their operation to traditional regulation. Tradeable environmental allowances are attractive because they offer a degree of flexibility and cost-efficiency that is very difficult to achieve using conventional regulation. On a theoretical level these benefits flow as a direct result of the reliance on private property. Private property gives resource holders the option to pay to use the resource or to pollute. Conversely, it gives them the option to not pay, and therefore not pollute or use a resource. Importantly, it also encourages them to invest in novel ways to reduce their consumption so that they can sell their excess rights to those who are less successful in finding ways to do things better. Overall, private property’s genius is in the way that it motivates people to expend effort on and invest in resources. It can capture the self-
interest of individuals and encourage them to husband and care for the resources they own in a way that regulation cannot. Regulation is as likely to engender resentment, distrust and the desire to circumvent it at any cost, than an acknowledgment that resource conservation can be better for everyone in the long run.

Having outlined the theoretical attractions of tradeable environmental allowances and some of the historical reasons leading to their establishment, in chapter three I turn to consider the ideological reasons underpinning the explosion of interest and experimentation with private property based tools of environmental management over the last 30 years. This will complete part one and my discussion of why many scholars and policy makers now accept that private property has a role to play in environmental management.
Chapter Three: The Ascendance of Private Property Regimes to Manage Natural Resources

In exploring the ideological impulses driving the increased interest in private property as a tool of resource management this chapter highlights the important contribution of neoliberal ideals. However, I suggest that in practice it is not the classical liberal concept of private property that underpins these environmental regimes, but rather one that is grounded in theories of social obligation. As a result the ideas of classical liberalism, and its “new” reincarnation, will provide a constant counterpoint as I develop my thesis.

However, although neoliberalism has played a very important role in the progression of environmental management, there have been broader changes to environmental management over the last five decades that have contributed to private property’s attraction.¹ One should guard against the temptation to discuss modern developments in environmental law in absolute terms.

I. The Importance of Neoliberalism to Private Property Based Resource Management

A. An outline of neoliberal theory

The importance of neoliberal ideology to private property based resource management cannot be overstated. Over the last half of the 20th century it has had a profound impact on approaches to natural resource management and, as with many other areas of political and social life, neoliberalism has been a key driver of many of the changes to the way resources are managed. Given neoliberalism’s focus on individual autonomy, deregulation

and free markets it has had a particularly strong influence on many modern approaches to natural resource management. Private property is, after all, crucial to any capitalist market be it “free” or “regulated”.  

The history of the neoliberal movement is more complicated than is often recognised and the ambit of the concept is widely contested. Indeed, “neoliberalism” is often used as simple short-hand for some of the seriously negative consequences of globalisation and the periodic financial crises experienced over the course of the last century. However, notwithstanding the diverse range of criticisms levelled at it, as an ideological phenomenon neoliberalism has had a very important part to play in shaping the current political and economic landscape. While this is not the forum to traverse the history of the movement in detail, it is necessary to make some brief comments.

Essentially, the rise of neoliberalism was incremental, arguably beginning before or during World War II. Over the balance of the century a set of guiding principles, forming the core of the neoliberal project, was established. By the mid-1980s there had been a dramatic shift in political thinking away from a general reliance on the state as best manager of the economy, towards a widespread acceptance of the power and utility of “free markets”. Indeed, as is generally well recognised, neoliberalism is characterised by a number of simple beliefs. For example, one key tenet of neoliberalism is that “strong property rights and private contract are the best means to increase overall welfare, with the sole

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5 For an excellent and fascinating history see Steadman-Jones, above n 4.
7 Steadman-Jones, above n 4, at 5.
justification for “political intervention” being to “correct market failures”\textsuperscript{8}. This informs another central idea of neoliberalism; that market transactions create efficiencies and, in turn, structure society in the best way. Moreover, neoliberalism suggests that these “strong property rights”\textsuperscript{9} are the best mechanism by which to protect the freedom and dignity of individuals. This reinforces the idea that a system regulated by the market is likely to provide the best social order possible. Overall, neoliberalism maintains that political alternatives which are not centred on the use of markets, are likely to be unsuccessful (the fall of communism often cited as evidence confirming this belief).\textsuperscript{10} Thus, some describe the key tenets of neoliberalism as monetarism, deregulation and the use of “free-markets”,\textsuperscript{11} and a restricted role for the state.

It is important to recognise that, as its name suggests, neoliberalism is, in many respects simply a return to, or revision of, classical liberalism.\textsuperscript{12} As will be discussed in detail in chapter four, the central claim of classical liberalism is that the “best” social, political and economic order can only be achieved through the free choices of rational actors seeking to promote their own interests.\textsuperscript{13} Moreover, one of the central themes of classical liberalism is that strong private property rights structure social relations in the “best” way\textsuperscript{14} and encourage an ordered and cohesive society.\textsuperscript{15} Private property is crucial as it is said to

\textsuperscript{8} Grewal and Purdy, above n 3.
\textsuperscript{9} I will discuss the idea of “strong property rights” in greater detail in chapter four.
\textsuperscript{10} Grewal and Purdy, above n 3, at 3.
\textsuperscript{11} B Jessop “Liberalism, Neoliberalism, and Urban Governance: A State-Theoretical Perspective” (2002) 34 Antipode 452 at 455. Although the term “free market” is often used, the reality is that the term is something of a misnomer. The reality is that no market is ever likely to be truly “free” in the sense that it requires no governmental regulation in order to operate. (See Charles E Lindblom The Market System: What it is, How it Works, and What to Make of it (Yale University Press, New Haven, 2001).
\textsuperscript{12} Jessop, above n 11, at 455.
\textsuperscript{13} At 452.
\textsuperscript{14} Joan Williams “The Rhetoric of Property” (1998) 83 Iowa Law Review 277 at 300.
\textsuperscript{15} Emily Sherwin “Two-and Three-Dimensional Property Rights” (1997) 29 Arizona State Law Journal 1075 at 1083.
protect autonomy, check the powers of government and is central to the market whose “rising tide will raise all ships”.

With the advent of neoliberalism there has been a resurgent interest in the classical liberal account of private property and the role it can play in ordering social relations. In particular, the importance of private property’s role as a check on the powers of government has had a deep resonance with neoliberalism. Neoliberalism generally advocates for government which is as small and constrained as possible. It suggests that the state should have very limited powers of economic and social intervention, with the overarching goal always being to maximise economic and individual freedom.

These ideas have had a profound effect in a range of areas. Environmental management is no exception. Before assessing the way in which neoliberal ideas have influenced environmental policy, it is necessary to pause and stress that at a domestic level, New Zealand has been actively involved in the expansion and application of neoliberal thought. The most notorious examples are the “Rogernomic” policies adopted in the 1980s by the fourth Labour government under Prime Minister David Lange and his Finance Minister Roger Douglas. However, successive governments of all political persuasions have followed similar policies of market reform which have included periods of deregulation, privatisation, free trade and limited government. Indeed, in many quarters New Zealand has garnered a reputation for being subject to a “great experiment” in relation to the implementation of these ideas. Moreover, New Zealand has often pursued a policy of implementing neoliberal policies in a very pure form. Certainly some of the changes

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16 Williams, above n 14, at 300.
17 Jessop, above n 11, at 454.
19 Brian Easton The Commercialisation of New Zealand (Auckland University Press, Auckland, 1997).
implemented in New Zealand went far further than the changes under the Thatcher government in the United Kingdom or the Reagan administration in the United States.

B. Neoliberalism’s impact on private property based environmental management

New Zealand’s “trail-blazing” approach to some neoliberal ideas can be seen in our approach to natural resource management. This is particularly well demonstrated by the New Zealand Emissions Trading Scheme and the quota management system for fish but is also evident in, for example, the decentralised approach of the Resource Management Act 1991.

Although these regimes are indigenous to New Zealand they serve to demonstrate that international theories of environmental management were not immune from the changes happening throughout the political and economic spectrum over this period. As already outlined, over the last 40 to 50 years there have been marked changes to natural resource regulation and governance. While a number of these changes have been driven by practical dissatisfaction with the operation of the existing regimes, they have also been influenced by neoliberal philosophy. Clearly, one of the areas in which neoliberal thought has had a profound impact is in the sphere of tradeable environmental allowances and the use of private property as a tool of environmental management.22

Consequently, the history of private property tools of natural resource management is integrally linked to the combination of dissatisfaction with direct regulation and the evolution of neoliberal philosophy. The progression has been neatly captured by Sinden,

22 Gunningham, above n 1, at 179.
who notes that the dissatisfaction with direct regulation reflected the general and growing
distrust of government that has characterised large parts of the political spectrum over the
last several decades. She notes that when the first wave of environmental laws were
enacted society was generally confident about the government’s ability to resolve
problems. Regulatory regimes seemed like a self-evident approach. However (at least in the
United States but probably more generally) attitudes towards government quickly began to
shift:\(^\text{23}\)

It’s a familiar litany: first the Vietnam War and then Watergate began to slowly eat
away at the considerable reserves of idealism and faith in government that had
been stockpiled during the previous decade, when the New Deal, victory over
fascism in World War II and the post-war economic expansion had all seemed to
testify to the competence and effectiveness of the federal government. Then
Reagan declared government the enemy and began to systematically defund and
dismantle it. And when the Berlin Wall fell in 1989, the collapse of communism in
the Soviet Block was read as decisive proof of the superiority of free markets to
other forms of social organisation.

Sinden’s statement highlights many of the historical reasons neoliberalism rose to
prominence as a political ideal. She goes on to note that now we are in the 21st century it
is clear that “Government is out; the free market is in”.\(^\text{24}\) Rose has echoed these
sentiments, noting that one of the lessons we have taken from the collapse of the Soviet
Union and other authoritarian socialist regimes is that modern economies do not, and
should not, rely on direct, centralised, government control.\(^\text{25}\) As a result, Rose notes that
particularly during the 1990s, despite marked scepticism about property within large parts
of the environmental movement, there was an astonishing burst of property thinking in
environmental law.\(^\text{26}\)

\(^{23}\) Amy Sinden “The Tragedy of the Commons and the Myth of a Private Property Solution” (2007) 78 U
Colo L Rev 533 at 535.
\(^{24}\) At 535.
\(^{25}\) Carol M Rose “The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and
Ecosystems” (1998) 83 Minn L R 129 at 130.
\(^{26}\) At 163.
In many respects this phenomenon can be seen as a correlate of the dialectic set up by Hardin. Hardin concluded that the tragedy had only two possible cures: coercion on the one side, or private property on the other. Other scholars politicised the idea of coercion and the regulatory regimes that apply it in practice, characterising them as the embodiment of the Leviathan.\textsuperscript{27} On this view the direct and central command of the state is key to governing the individual’s relationship with natural resources and managing their use.\textsuperscript{28} Of course, in the light of the collapse of the communist bloc and the corresponding ascendance of the neoliberal state, the philosophy underlying the idea of the Leviathan\textsuperscript{29} became increasingly suspect. It is no surprise then, that many commentators began to suggest that if market values are to be embedded in all aspects of economic, social and political life, the environment should be no exception. This idea was directly in line with Hardin’s private property solution, the work of scholars such as Coase\textsuperscript{30} and the general observation that highly regulated economics were at a significant disadvantage compared with less regulated economies. A market in environmental goods would provide the necessary incentives and flexibility to solve environmental problems efficiently and for the least cost.\textsuperscript{31}

All of these developments, Rose suggests, eventuated in a culture in which “property and its close companion, contract, at least in theory have all but swept away command and

\textsuperscript{28} At 47.
\textsuperscript{29} The idea that chaos and civil war can only be averted by a strong central Government operating under a social contract (see Thomas Hobbes \textit{Leviathan, or, The Matter, Forme, & Power of a Common-Wealth Ecclesiastical and Civill} (Printed for Andrew Crooke, London, 1651)).
control as a device for managing natural resources”.

While this may be an overstatement as government regulation still forms by far the largest class of instruments aimed at environmental regulation, her statement does capture the general trend. It also helps to illustrate the ideological reasons for the increased interest shown in private property, and in particular as a tool of natural resource management.

Other scholars have sketched similar theories about the reasons private property became attractive. These also tend to echo the central trends of neoliberal thought. For example, Bosselmann has usefully outlined a more general theory about the move in environmental management from regulatory regimes to those involving private property. He notes that traditionally environmental law and policy can be seen as a reflection of the economic agenda. When national economies were highly regulated, environmental policy appeared as a regulatory system. In deregulating national economies, states have embraced markets and the incentives they provide. Thus, while the advent of regulatory environmental law in the 1970s and the development of more comprehensive approaches in the 1980s saw a degree of success, the move towards market driven economies created a range of conflicts. There was a perception that regulation served to hamper innovation. Moreover, regulatory intervention in the environment seemed to clash with the emerging ideals of neoliberalism and capitalism. In an environment where central planning had met its demise and state borders were weakening, regulation appeared archaic.

Bosselmann is careful to point out, however, that it would be naïve to believe that the move to neoliberal ideology was the only motivating factor behind the move to new modes of “deregulated” environmental management. He stresses that the complex nature of environmental problems and the

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32 Rose, above n 25, at 130.
34 At 211.
deficits of traditional regulation also had a role to play in the changes we have seen in the last decades. This is a point I will return to below.

Academics and governmental policy makers are not the only ones interested in private property and economic instruments. The last several decades have seen a growing interest in and adoption of neoliberal ideas across many different sorts of institutions. For example, some international institutions have advocated the use of private property and markets to achieve environmental goals. Since as early as the 1970s the Organisation for Economic Cooperation and Development (OECD) has been a leading proponent of private property based instruments as a means of achieving environmental policy.\textsuperscript{35} The OECD has defined these sorts of “economic tools” as “instruments that affect costs and benefits of alternative actions open to economic agents, with the effect of influencing behaviour in a way favourable to the environment.”\textsuperscript{36} Other international bodies, such as the United Nations have also advocated the use of property based instruments in relation to environmental regulation. Principle 16 of the United Nations Conference on Environment and Development’s \textit{Rio Declaration on Environment and Development} states:\textsuperscript{37}

\textit{National authorities should endeavour to promote internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.}

Again, these directives are clearly grounded in neoliberal economic and political philosophy. They help to demonstrate my central point in this chapter; that neoliberal ideology has been a key driver of the interest in, and creation of, private property based regimes of natural resource management.

\textsuperscript{36} At 22 citing Organisation for Economic Cooperation and Development (OECD) \textit{Environmental Policy: How to Apply Economic Instruments} (OECD, Paris, 1991) at 10.
C. A note of caution

Although much of the literature advocating the use of private property to manage natural resources appears to paint the choice as simply between either regulation or private property, the reality is far more complicated than this. This point is well demonstrated in the work of Ostrom but is also true when one looks more broadly at modern approaches to environmental management. In particular, although neoliberalism has had an important role to play in fashioning modern approaches to environmental management the result has not been a situation in which private property is always seen as the “first best” approach to solving environmental problems. While a number of scholars continue to maintain that strict private property based, free market, regimes are always the best approach to managing environmental problems, the general consensus is that private property based regimes operate best as one part of a suite of tools for environmental management.

Gunningham has termed this approach “Smart Regulation” noting that:

The central normative argument of Smart Regulation is that, in the majority of circumstances, the use of multiple rather than single policy instruments, and a broader range of regulatory actors can and should be used to produce better regulation than single instrument or single party approaches.

Of course, private property based regimes of resource management are a key policy instrument but they are only one of a range of tools we can employ to successfully confront environmental challenges. Indeed, as both the New Zealand emissions trading

38 See discussion above in chapter one at I.B.
39 Indeed, it would be “simplistic” to assume that neoliberal ideology has been the only motivating factor behind changes in environmental management. See Klaus Bosselmann and Benjamin J Richardson “Introduction: New Challenges for Environmental Law and Policy” in Klaus Bosselman and Benjamin J Richardson (eds) Environmental Justice and Market Mechanisms: Key Challenges for Environmental Law and Policy (Kluwer Law International, London, 1999) at 3.
41 Gunningham, above n 1.
42 At 200.
scheme and the quota management system demonstrate, it is possible to have a private property based tool of environmental management co-existing with other, more traditional, regulatory tools. The reality is that sometimes successful environmental management will require a combination of different sorts of tools even if this can be doctrinally challenging.

Moreover, it is also now generally accepted that regimes such as the New Zealand emissions trading scheme or New Zealand’s quota management system for fish require a huge amount of regulation in order to operate. Although they employ the institution of private property and allocate private property rights to resource users, they are completely dependent on the state for the legislation creating the regime and regulating its operation. As Rose notes, these regimes involve “a fancy form of a property right, and like many other kinds of property, they offer opportunities for efficient resource management and mutually beneficial trades. But in the end, even fancy property needs good cops.” This point, however, is not limited to markets in environmental goods, but is now recognised by many to be true of all markets. As Grewal and Purdy have recently acknowledged:

The very idea of the “market” – who owns what, what they may do with it, how they may contract with others – has no operational content without a series of prior political decisions that define and allocate economic rights, such as property and the power to contract, which in turn depend upon relatively widespread popular legitimation of one kind or another.

However, notwithstanding the reality that successful environmental management is complicated and requires a multi-pronged approach, neoliberalism’s preoccupation with

44 Gunningham, above n 1, at 208.
45 At 181.
private property and markets has had an enormous impact on environmental regulation and property based resource management in particular.

II. Conclusion

The development of environmental management regimes built around private property was gradual and a number of factors played a role. In part it was driven by dissatisfaction with the efficacy and rigidity of direct regulation, but it was also strongly motivated by the ascendance of neoliberal thought. The increased acceptance of neoliberal thought was, in turn, driven by general disillusionment with central government control which was reinforced by the fall of communism. For many, private property based approaches to environmental management have appeared to be a natural partner to the move towards economic deregulation, privatisation and the promotion of efficient resource allocation via markets that has been so much of the political landscape over the last 30 years. Governments, having moved towards market-orientated economies, have looked to property solutions for a variety of social issues. Environmental problems are an excellent example of this trend. These ideological developments, along with the more practical reasons outlined in chapter two, have both played a role in the advent (and ascendance) of private property as a tool of environmental management.

Drawing attention to the correlation between the rise of neoliberal theory and the experimentation with private property as a resource management tool, has been an important part of my goal in part one. This connection helps to explain why many scholars and policy makers now accept that private property has a role to play in environmental management. It is important to explicitly outline the correlation between theory and

48 Richardson, above n 35, at 24.
49 Richardson, above n 43, at 433.
50 Rose, above n 25, at 130.
practice because as this thesis progresses it will become clear that while the development of tradable environmental allowances was ostensibly underpinned by the neoliberal shift and the ideals of classical liberalism, these theories are not reflected in reality. This is important to my overall thesis; that an alternative approach to private property, as a norm of social obligation, provides a much more satisfying account of the benefits of using private property as a tool of environmental management and explains how property actually works within these schemes.

In the last three chapters I have explored the theory underpinning the use of private property as a tool of environmental management and discussed the reasons why it is now widely accepted that private property does have a place in environmental management. Equipped with this knowledge I will now turn to the discomfort many scholars have expressed regarding the use of private property to manage natural resources. Although many now accept the utility of private property, it is often tempered by deep reservations. These concerns have led a number of scholars to suggest that our idea of private property needs complete reformulation in order to successfully play a role in natural resource management.\textsuperscript{51} While I disagree with this, part two will explore these concerns and the reasons for them.

\textsuperscript{51} Prue Taylor and David Grinlinton (eds) \textit{Property Rights and Sustainability: The Evolution of Property Rights to Meet Ecological Challenges} (Martinus Nijhoff Publishers, Leiden (Netherlands) and Boston, 2011).
Part Two

Reservations Regarding Private Property as a Tool of Environmental Management
Chapter Four: The Basis for Concern: The Classical Liberal Worldview and its Idea of Private Property

I. Introduction

This chapter provides the basis for understanding scholars’ concerns about using private property to solve environmental problems by outlining the contours of the classical liberal tradition. In particular, it considers the importance of private property to the classical liberal ideal of autonomy through individual preference satisfaction. It then moves to focus specifically on the application of classical liberal theory to environmental management, including the concept of “strong” private property rights. This discussion is essential because the concerns expressed by scholars in this sphere are exacerbated by the fact that the literature calls for “strong” or “absolute” private property rights in order to provide the necessary incentives for innovation and resource conservation that will lead to a resolution of the tragedy of the commons.1

II. Classical Liberal Theory

The history of classical liberal theory has been well covered by others2 and I do not intended to traverse it in detail here. Rather, I want to focus on the classical liberal approach to private property which is commonly accepted to be the dominant inspiration for the bulk of contemporary conceptions of private property.3

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Before considering the place of private property in the classical liberal worldview it is important to briefly consider some of the key themes of classical liberalism. At the heart of classical liberal thought is a question regarding the way in which humans organise themselves and flourish under continuing circumstances of scarcity.\(^4\) This question itself arises because of “the self-interest of human beings whose aggressive tendencies make law necessary for the creation and preservation of social order”.\(^5\) Classical liberalism seeks to explain what the appropriate content of that law is and how it can be best achieved. In responding, classical liberalism holds to a number of principles that ought to result in the ideal political and social order.\(^6\) In essence, these principles are: respect for the autonomy of the individual, belief in a system of strong property rights, and adherence to a system of voluntary exchange.

The most important of these principles is the idea that people should be able to exercise exclusive control over both their own person and their property. In other words, they should have individual autonomy, freedom, or liberty, which should be protected from invasion by other individuals and the state.\(^7\) This idea forms the central normative claim of classical liberalism. It is suggested that the ideal political and social order can only be achieved by respecting the autonomy, freedom or liberty of the individual. This claim is predicated on the basis that the individual is presumed to be the best judge of their own preferences and that by allowing them the ability to satisfy those preferences, greater cooperation and better outcomes will be achieved than in a system which does not allow for autonomy.\(^8\) In other words, on a practical and ethical level, the liberty and freedom of

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\(^5\) At viii.

\(^6\) At viii.

\(^7\) At vi.

\(^8\) At ix.
the individual ought to take priority over any social or political alternative. Only in this way can humans successfully flourish under conditions of scarcity. Consequently, classical liberalism maintains that individuals should be free to behave as they wish, providing only that they do not behave in a way that will interfere with the rights of others or harm them in any way.

Of course, this focus on autonomy results in a preoccupation with the proper relationship between individuals and communities. The role and ambit of state power is a particular concern and classical liberalism maintains that by privileging individual autonomy the appropriate balance between the state and the individual can be maintained. This is a vital point that I will return to shortly.

In practice, the autonomy promoted by classical liberalism is guaranteed by the second and third principles of classical liberalism. These are a belief in the importance of strong private property rights, and a system of voluntary exchange. Private property rights figure prominently in the classical liberal project because it is maintained that private property (and in particular the idea of exclusivity at the heart of private property) serves as the main institution that governs the boundaries between public and private, and limits the extent to which the state can interfere with individual autonomy. Voluntary exchange is necessary because it allows individuals to choose the people with whom they will trade and on what terms. It facilitates freedom by enabling individuals to decide whether to save,

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9 Smith, above n 2, at 2.
11 At 2.
12 See the discussion in chapter eight.
invest or dispose of their property and also allows individuals to enter into contracts to sell their labour.\textsuperscript{14}

In essence then, classical liberalism concerns itself with the establishment of a society in which the individual’s freedom and autonomy is protected.\textsuperscript{15} Liberty is the normative starting point and any restrictions on it must be justified. Individuals should be free to choose how they expend their energies and how they live life without outside interference.\textsuperscript{16} In turn, freedom will ensure that social relations are structured in the best way.

### A. Classical liberal theory and its approach to private property

It is crucial to recognise that in order to achieve this freedom, classical liberalism requires that the individual must have access to, and control over, at least some resources.\textsuperscript{17} Consequently, private property is very closely connected with the classical liberal project and private property occupies a special place in classical liberal thought.\textsuperscript{18} Indeed, private property’s importance to classical liberalism cannot be overstated. Classical liberalism maintains that private property is central in protecting autonomy, is a check on the powers of government and is crucial to the market, which will act to ensure that aggregate social wealth increases.\textsuperscript{19}

Essentially the classical liberal premise is that strong private property rights structure social relations in the best way\textsuperscript{20} and encourage an ordered and cohesive society.\textsuperscript{21} This view

\textsuperscript{14} Epstein, above n 4, at ix.
\textsuperscript{15} Babie, above n 3, at 531.
\textsuperscript{16} At 531.
\textsuperscript{17} At 531.
\textsuperscript{18} Emily Sherwin “Two-and Three-Dimensional Property Rights” (1997) 29 Arizona State Law Journal 1075 at 1083.
\textsuperscript{19} Joan Williams “The Rhetoric of Property” (1998) 83 Iowa Law Review 277 at 300.
\textsuperscript{20} At 300.
springs from what classical liberalism sees as a certain genius in the way that private property motivates people to exert effort on, and invest in, resources. According to the traditional story of classical liberal thought, humans are, at heart, lazy and unwilling to work. However, private property is a great motivator and enables every individual owner to harvest the rewards that careful husbandry of resources produces, just as the owner would suffer the losses from laziness or poor management. Thus, private property makes owners far more likely to exercise assiduousness and care in relation to the things that they own. By harnessing their self-interest, it induces people to labour and to enjoy the rewards of that labour. Moreover, private property makes it clear who owns what, which allows owners to easily trade with each other rather than expending time and energy arguing about the distribution of resources. Trade also enables owners to ascertain what goods and serves are most popular, so they can put time into producing things that others want. Specialising in a particular area of production means an individual’s labour becomes ever more valuable and encourages other people to join in. Property also encourages individuals to monitor the behaviour of others because if others misbehave the value of everybody’s property will diminish. Thus, a private property regime can be seen as enlisting the self-interest of individuals to achieve a self-regulatory system.

The ultimate attraction and goal of a private property regime is to satisfy individual preferences. Not only does this motivate people to look after their individual interests, but it reflects the classical liberal notion of the public good as the sum or combination of individual preferences in society. In essence private property allows us to all grow richer

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21 Sherwin, above n 18, at 1083.
because it creates more of what we want.\textsuperscript{25} As Rose notes, “… the allure of property is that it enhances wealth, both personal and social”.\textsuperscript{26} In turn, this allows people to participate in the moral and political aspects of society and also gives them independence within these spheres.\textsuperscript{27} Hence, we return to the central normative claim of classical liberalism, which is that a social and economic system based on private property and maximising individual preference is the only way to ensure individuals are truly free.

It follows that private property and liberty are intimately related. Private property can be seen as the legal mechanism by which individuals can exercise and enjoy free choice over how they wish to use resources and live their lives, that is, to satisfy their own preference.\textsuperscript{28} It allows the individual to be free to choose how they expend their energies and live life without outside interference. Moreover, classical liberalism sees private property as central in confining the powers of the state as it demarcates the zone between public and private and insulates the individual from uncompensated expropriation.\textsuperscript{29}

Classical liberalism suggests that private property should be an absolute right. It is a right that should only be limited by the rights of others and the public interest in a very restrictive sense (normally restricted to the duty not to harm others).\textsuperscript{30} Charles Reich, for example, noted that:

\begin{quote}
The institution called property guards the troubled boundary between individual man and the state … Property draws a circle around the activities of each private individual or organization. Within that circle, the owner has a greater degree of
\end{quote}

\textsuperscript{25} At 54.
\textsuperscript{26} Rose, above n 23, at 329.
\textsuperscript{27} Richard Barnes \textit{Property Rights and Natural Resources} (Hart Publishing, Oxford and Portland (Oregon), 2009) at 37.
\textsuperscript{28} Babie, above n 3, at 531.
freedom than without. Outside, he must justify or explain his actions, and show his authority. Within, he is master, and the state must explain and justify any interference ... Thus, property performs the function of maintaining independence, dignity and pluralism in society by creating zones within which the majority has to yield to the owner.\footnote{Charles A Reich “The New Property” (1964) 73 Yale Law Journal 733 at 733, 771.}

Later Reich stresses that the individual should possess, and property should provide, “a small but sovereign island of [one’s] own.”\footnote{Margaret Jane Radin Reinterpreting Property (University of Chicago Press, Chicago and London, 1993) at 130 citing Reich, above n 31, at 774.} The idea that property is an island is a key feature of classical liberal thought. Within the shores of your island you can do what you wish, no matter how unwise or counterproductive (providing you do not hurt anyone else).\footnote{At 130.}

On this view of private property, holders of property rights should be at liberty to use, dispose or enjoy the benefits of their property in any manner they think fit. Private property, it is maintained, is absolutely essential for individual autonomy.\footnote{Foster and Bonilla, above n 30, at 1003.} But of course, this autonomy can only be achieved if other people are prevented from invading the island. It follows that a further crucial aspect of the classical liberal idea of property are the negative duties that are placed on other individuals and the state. Other people, and the state, should not act in a way that will adversely affect an individual’s property rights.

In summary, classical liberalism argues that private property rights structure social relations in the best way and encourage an ordered and cohesive society.\footnote{Sherwin, above n 18, at 1083.} Although there are a range of different philosophical viewpoints that serve to explain the foundations of classical liberalism and its approach to private property,\footnote{Unfortunately I do not have time to consider these in detail. However, in summary, the classical liberal tradition has a noble lineage and can trace its genesis back to the work of luminaries such as Adam Smith and John Locke, amongst many others. The sources of liberal philosophy are manifold and in some respects these different sources in reality reach the same conclusion by staring at different points. In particular, the ideas of both Locke and Bentham (who in some respects are diametrically opposed) occupy a central place in}
property is necessary to secure autonomy, to check the powers of government and to facilitate voluntary exchanges in a free market. Private property and classical liberalism are, therefore, inextricably linked. Indeed, some have argued that there is, in fact, no difference between liberty and property and that they are in some senses the same thing (or perhaps different sides of the same coin). It follows that, according to the classical liberal story, the more things that become property the better, and we should be aiming for the universalisation of property. All resources should be individual private property because in this way the greatest number of individual preferences can be satisfied.

the substrata of classical liberal thought. Locke's labour theory of property suggests that property is a natural right. Property rights can be created by expending labour on a resource and exist without the intervention of law (Jeremy Waldron The Rule of Law and the Measure of Property (Cambridge University Press, Cambridge, 2012) at 13). The appropriate function of the legal system is to simply recognise and accommodate the property rights that already exist. Consequently, property rights precede government and, therefore, are not susceptible to government intervention (Jonnette Watson Hamilton and Nigel Bankes “Different Views of the Cathedral: The Literature on Property Law Theory in Aileen McHarg et al (eds) Property and the Law in Energy and Natural Resources (Oxford University Press, Oxford, 2010) at 47). Classical liberal scholars make much of this, deploying the argument to defend individuals from state encroachment on property rights. The state does not create property rights and ought not to interfere with them. Instead the state should be seen as having been created in order to protect individuals’ property rights and its role should be limited to this purpose. Rarely is the state entitled to alter private property rights in the process of governance (Robertson, above n 29, at 241). Conversely, Bentham's utilitarian approach reaches the same conclusion, albeit by a very different route (Robertson, above n 29, at 241). In Bentham's view a society that safeguards property is wealthy. A wealthy society can satisfy more individual wants than a society that does not protect property (Rose, above n 23, at 330). If society provides a well-secured regime of property then individuals can retain all of the returns from their hard work. This will encourage them to greater efforts to discover more resources and make them more valuable (Carol M Rose “Property Rights, Regulatory Regimes and the New Takings Jurisprudence - an Evolutionary Approach” (1989) 57 Tennessee Law Review 577 at 583 [Evolutionary Approach]). Indeed, private property is a requirement in providing the incentives necessary for people to husband and develop resources (Robertson, above n 29, at 241). Without private property individuals would also be unable to trade resources. Trade allows resources to go to those who value them the most. This makes the overall happiness of society greater (Rose, Evolutionary Approach, at 583). Moreover, private property deters the waste of resources by making sure that the person using the resource is also responsible for the cost of misuse and helps set levels of production (Sherwin, above n 18, at 1083). One of Bentham's key contentions was that any redistribution of property or changes to property rules by the state would damage property's productive incentives (Robertson, above n 29, at 241). Even if some people were to benefit from a change in property rules it was likely that the overall effect of any changes would be to decrease confidence in the system overall; that which looks secure today may not look secure tomorrow.

37 Williams, above n 19, at 300.
39 Rose, above n 22, at 131. However, as Rose notes there are many reasons why economists might disagree with the idea that everything should be turned into property. The chief amongst these is that property regimes can be very expensive to implement and maintain. There is a correlation between the circumstances in which we would wish to have a property regime and scarcity. There is no point in maintaining a property regime when there is an abundance of everything as there are unlikely to be disputes that need to be settled and there is little reason for investment in the resource.
Although much of this story can be contested, the idea of preference satisfaction as the primary goal of a property regime lies at the heart of classical liberal thinking. Moreover, the point is also of critical importance to resource management schemes based on private property. As was discussed in chapter one the classical liberal idea of private property ostensibly lies at the heart of any private property based solution to the tragedy of the commons. By privatising the commons the rational foresighted farmer will bear 100 per cent of the benefit of using the commons but will also bear 100 per cent of the cost of doing so. Thus, he or she has an incentive to use the commons, but not to the point of exhaustion. This incentive is provided by the owner’s ability to control the benefits of resource use that provides this incentive. In turn, the perception that the owner should be able to control resources use clearly stems from the classical liberal idea that the individual should be able to do what they wish with what they own, protected from external interference (particularly from the state).\(^{40}\) This is a point I consider in greater detail in the second part of this chapter.

A final point I wish to note about the classical liberal worldview and its approach to private property is the fact that it is not simply a philosophical viewpoint advocated by a group of scholars. Classical liberal thought has had a very important practical influence on the structure of modern life. For example, as Epstein notes:\(^{41}\)

This basic system of liberty and property helps to explain many of the common features of everyday life: why people marry, start businesses, join firms, or sell real estate. It also explains the common prohibitions against trespass, fraud, defamation, imprisonment and the like.

\(^{40}\) Reich, above n 31.

\(^{41}\) Epstein, above n 4, at ix.
B. A note of caution

While it is true that classical liberalism has had a profound impact on modern society, the claims of classical liberalism are not universally accepted. While many classical liberal scholars believe that strong private property rights structure social relations in the best way and encourage an ordered and cohesive society, the argument is not as compelling as it might seem. A key problem is that classical liberalism does not really explain why only private property can facilitate individual freedom. If some other form of distributive method could also ensure that an individual’s material needs were met, then freedom could still be achieved without the need to resort to private property.

III. The Application of Classical Liberal Theory to Environmental Management and the Call for “Strong” Private Property Rights.

Although I argue that the classical liberal idea of private property does not accurately reflect reality, there is no doubt that it has inspired the bulk of the literature advocating tradeable environmental allowances. Moreover, in line with the classical liberal tradition this literature does not simply advocate private property rights, but rather what the theory describes as “strong”, “absolute” or “unattenuated” private property rights. In essence, the argument is that in solving the tragedy of the commons, the private property rights employed should be complete and strong enough to repel any attempts at direct political interference. The balance of this chapter will consider the classical liberal idea of a

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42 Smith, above n 2, at 217.
43 Williams, above n 19, at 300.
44 Sherwin, above n 18, 1083.
45 A number of further criticisms will be discussed in chapter five.
46 Barnes, above n 27, at 37.
47 At 37.
48 See in particular chapter eleven.
49 Martin and Verbeek, above n 2, at 3.
“strong” private property right and its influence on tradeable environmental allowance theory. This is important for two reasons. Firstly, it will aid an understanding of why many scholars accept private property has a place in resource management, but nevertheless harbour some serious reservations. Secondly, when the private property rights at the heart of tradeable environmental allowances regimes are closely considered, they do not reflect this theory. In particular, the private property rights actually employed by these regimes do not reflect the “strong” rights the literature maintains are essential. I argue that the social obligation norm of property I advocate explains why we do not see absolute private property at use in these regimes, and provides a principled way to understand the operation of private property in these regimes, as well as an explanation of why the regimes can be successful in managing natural resources. Demonstrating these points will be the burden of parts three and four of the thesis. For the moment, however, I want to consider the call for “strong” private property rights in more detail.

This section has two aims. To begin with, it will build upon the discussion of classical liberal theory in the first part of the chapter, primarily by considering the influence of this worldview on the literature advocating private property rights as an environmental management tool. It will stress the concept at the heart of this literature, which is not just a simple call for private property rights, but actually a call for what classical liberal scholars refer to as “strong” or “absolute” private property rights. This section will begin with an examination of why “strong” private property rights are seen as attractive, followed by a review of the literature that calls for such rights. This is important as it helps highlight the basis for many scholars’ concerns around using private property to manage the
environment. This will primarily focus on the work of the “free market environmentalists”, although works outside this rubric will also be considered.

Of course, this analysis begs the question of what exactly scholars mean when they call for “strong” property rights. Considering this will be the second aim of this section. For the most part, the literature is gloriously unspecific on this point. In order to tease out what we might expect a strong property right to look like, it is necessary to explore the classical liberal idea of private property in a little more detail. Primarily, this part will introduce and consider the three powers of what is known as the “liberal triad” (the owner’s powers of possession, use and disposition) and the work of Richard Epstein. This discussion will also lay the foundation for the analysis of New Zealand’s emissions trading scheme and quota management system that I undertake in chapters nine and ten.

A. Why “strong” private property rights are attractive

In order to place the literature which calls for “strong” private property rights in resource management in some context, I want to begin by spending a little time considering precisely why “strong” private property rights are seen as attractive, even crucial, in this sphere.

To briefly recap, many scholars consider that because the tragedy of the commons occurs as a direct result of inadequately specified property rights, the solution to the tragedy simply involves completely specifying private property rights. In “completely specifying” the private property right, however, it is evident from the literature that the right should be immune from any sort of interference, be it political or otherwise. This claim flows from

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51 Epstein is recognised as the preeminent scholar in this area.
52 Martin and Verheek, above n 1, at 2.
the assertion that because owners are motivated by the expectation of future returns, the higher the likelihood of future returns, the higher the incentive to the owner to care for their property. It is suggested that only an unattenuated right will provide the necessary incentives for innovation and resource conservation. Moreover, in order to maintain these incentives owners must be confident of their ability to control access to the resource by those who have no rights and also to limit the pool of other people entitled to use the resource (which will have the effect of increasing the value of the resource). Consequently, the holder of a property right has a vested interest in strong legal mechanisms that will both protect and extend their rights and guarantee or protect the expectation of future returns. Of course, this is in line with classical liberal theory discussed in the earlier part of this chapter. Consequently, when one considers the literature on tradeable environmental allowances it is unsurprising that its proponents are advocates of what they term “strong” private property regimes.

Moreover, scholars argue that a strong private property right will be both secure and simple. Both of these characteristics are necessary if a tradeable environmental allowance is to operate effectively. The right must be secure because this enables the holder to rely on the right and to plan for the future. Any uncertainty regarding the right will seriously compromise the quality of the private property right and, in particular, its economic value. Ideally, the right should not be subject to conditions that would reduce the ability of the holder to deal freely with the property. The holder should not be concerned that the right is vulnerable and that their investment could be taken away or changed capriciously.

53 At 3.
54 At 3.
55 Barnes, above n 27, at 3.
57 Barnes, above n 27, at 327.
Any concern in this respect is likely to have a detrimental effect on incentives. An unsecure and tenuous right is also likely to prevent long-term interests from emerging. There is no point in taking a long-term view of investment if one is concerned that the right could disappear at any time, or change at short notice. Any concerns in this respect may have the perverse effect of creating an incentive for the right holder to ignore the long-term consequences of their resource use and instead encourage the owned to use the resource in a profligate manner in the short-term, which would tend to work against the very purpose for adopting this type of management tool in the first place.\textsuperscript{58} If the rights are not secure, the result is likely to be contrary to the desired outcome and the tragedy of the commons will not be solved; it will likely be exacerbated.\textsuperscript{59}

A strong right will also be simple. Simplicity is necessary because it enables rights to be more or less fungible and allows future owners to know what they are getting. As the rights are designed to be traded, their structure must be simple, otherwise there will be difficulties in marketing them. The more a tradeable environmental allowance is hemmed in with regulatory restrictions the more its security and marketability will be undermined.\textsuperscript{60}

At a general level, many scholars see strong, secure and simple rights as essential for the commercial market, although the reality is that many functioning markets are underpinned by property rights which are extremely complicated indeed. However, scholars argue that the various players in the market need to be able to get together and bargain. This relies on simple rights that are easy to understand.\textsuperscript{61} This is suggested to be particularly acute in relation to environmental markets, where it is absolutely essential to get the incentives

\textsuperscript{58} At 327.
\textsuperscript{59} Martin and Verbeek, above n 1, 3.
\textsuperscript{60} Rose, above n 56, at 242.
right. The more complicated and insecure the property right is, the less likely it is that anyone will be interested in investing in it. A right that is completely insecure will have a market value of, or close to, zero. If this is the case there will be no market, or the market will dry up. 62 As De Alessi notes:63

How well the market works ... depends on the extent to which the economic system rests on private property rights. Because private rights tie the welfare of individuals to the value consequences of their choices, they provide decision makers with the incentive to take these consequences into account by cooperating with others and specializing in those productive activities in which they have a comparative advantage; exchanging commodities with other individuals, so that each party ends up with a preferred consumption basket; and discovering new opportunities for gain, including technological and institutional innovations. The weaker the limits on private rights, including the limits imposed by government ownership and regulation, the stronger are individual’s incentives to increase their welfare through cooperation with others rather than through rent-seeking activities; and the better the market works.

Of course these comments, and the desire for strong and simple property rights, dovetail nicely with the general classical liberal claim about private property and its usefulness as an institution. It also makes it clear why private property, and strong private property at that, is seen as a desirable solution to the tragedy of the commons. The reasoning essentially runs that, inter alia, the stronger the property right the greater the incentive to manage the resource; the greater the desire to protect the capital it represents; the greater the likelihood all players will self-police the property (and therefore the common); and, overall, the greater the efficiency.64 It is also evident that the call for strong property rights corresponds closely with the general claim of classical liberal economics that economic growth and societal prosperity requires the protection of private property. Economists suggest that when we look at economies around the world we can see that high levels of production and productivity correspond closely with extensive, well-defined and well-


64 Barnes, above n 27, at 9.
enforced property rights. On the other hand, where property rights are poor or missing, the corresponding economic activity is generally severely depressed. These claims have driven the neoliberal ideas of state deregulation and privatisation that have been ascendant in the last 30 years. The general neoliberal claim about economic policy is that deregulation, privatisation and strong secure private property rights are the cures for all ills.

In many respects the call for private property based mechanisms for environmental regulation stands at the apogee of this trend. For example, many economists have stressed that privatisation of fish stocks is not simply a side effect of individual transferable quota, it is the most important part of quota management regimes. As Eythórsson notes, for many economists privatisation is seen as a great vision. Citing (and translating) an article by Árnason (written in Icelandic), he states:

ITQs are a part of one of the great institutional changes of our times; the enclosure and privatization of the common resources of the ocean. These are now mostly the exclusive property of the coastal states of the world. Will we see continued development of property to the individual or firm level, with harvesting rights becoming indisputably and irrevocably private property?

The theory is that the environment can, via the market, be controlled with little or no state intervention.

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65 R Árnason “Property Rights as a Means of Economic Organization” (paper presented at the FishRights99 Conference, Fremantle, Western Australia, 1999) at 14.
66 As discussed in chapter three. See also Barry Barton and others “Conclusions” in Barry Barton and others (eds) Regulation Energy and Natural Resources (Oxford University Press, Oxford 2006) at 415.
67 This idea sometimes referred to as the “post-Cold-War Washington Consensus”. For more details see James Boyle “The Second Enclosure Movement and the Construction of the Public Domain” (2003) 66 Law and Contemporary Problems 33 at 41.
68 Barton, above n 66, at 415.
70 It is important to note that Árnason is being a bit too strong here. The United Nations Convention on the Law of the Sea 1833 UNTS 3 (opened for signature on 10 December 1982, entered into force on 16 November 1994) (UNCLOS) only applies within each state’s Exclusive Economic Zone (see UNCLOS Part V and VII and, in particular Article 89 which states “No State may validly purport to subject any part of the high seas to its sovereignty.”). It follows that the “oceans” are not now the exclusive property of the coastal states of the world. Large parts of the High Seas are not “owned” by anybody. His broad point, however, remains important.
Of course, “the free market” and the information, price signals, incentives, efficiency and growth it can provide is totally dependent on formal private property rights. It is important to stress that the literature suggests that simple “property rights” are not enough. “Strong” private property rights are seen as necessary to achieve efficient results and to fuel growth.\(^1\) Other classes of property, such as common property, are seen as unable to achieve these outcomes. Consequently, private property and privatisation are advocated in all sectors of economic and social life. Moreover, a well-functioning free market in which the state has no role is thought to be a crucial component of efficient economic management because, it is maintained, state intervention in the economy will always result in negative outcomes.

This argument is not new. During the “enclosure movements”\(^2\) of the 15th to 19th centuries strong private property rights were introduced in order to avoid the supposed tragedies of overuse and underinvestment on the actual common. Although the enclosure movement was an unmitigated disaster for much of the population, the commonly accepted truth is that transferring common land into the hands of a smaller number of owners actually did achieve the goal of encouraging investment and ensuring that resources were being put to their “best” (i.e. highest value) use.\(^2\) Applying the general modern view of the enclosure movement to modern trends within economics and environmental law Boyle has noted (with a more than a little irony) “… “Everyone” knows that a commons is by definition tragic, and that the logic of enclosure is as true today as it was in the fifteenth century. Private property saves lives.”\(^3\)

In essence, scholars have consistently suggested that if private property is good, more private property must be better. Consequently, they maintain that the total privatisation of


\(^2\) Although it would appear that economic history does not necessarily support this claim. See James Boyle “Cultural Environmentalism and Beyond” (2007) 70 Law and Contemporary Problems 5.

\(^3\) Boyle, above n 67, at 36.
all natural resources would result in the optimal level of environmental protection.\textsuperscript{74} Moreover, tools such as tradeable environmental allowances should employ secure and strong private property rights, because it is via this mechanism that incentives to invest in the resource are protected. If a right is insecure, or subject to the risk of confiscation, then the whole process, and reason for using property in the first place will be undermined.\textsuperscript{75}

\textbf{B. The literature; with a focus on “free market environmentalism”}

Having briefly explained why “strong” private property rights are seen as necessary for tradeable environmental allowance regimes, it is now necessary to review in more depth the literature that contains this call for strong private property rights.

Although much of the literature calling for the establishment of property rights and market mechanisms to manage natural resources only dates from the mid-to-late 1980s, there are early examples which were canvassed in chapter two. By way of a very brief re-cap, the intellectual history really begins in 1968 with Hardin and the authors he cites. It includes the work of Coase\textsuperscript{76} and the work of Dales, Crocker and to some extent, Demsetz.\textsuperscript{77} However, there was other early work in this area that preceded Hardin and in many

\begin{itemize}
\item\textsuperscript{74} Cole, above n 62, 117.
\item\textsuperscript{75} Tom Tietenberg “Tradable Permits in Principle and Practice” (2006) 14 Penn State Environmental Law Review 251 at 267.
\item\textsuperscript{76} For example, R H Coase “The Problem of Social Cost” (1960) 3 Journal of Law and Economics 1. Although it cannot be claim that the Coase theorem per se drove the development of economic approaches to managing natural resources it does appear true that it engaged the interest of economists and lawyers in the possibility of market based solutions to environmental problems. See Steven G Medema “Of Coase and Carbon: The Coase Theorem in Environmental Economics, 1960 – 1979” (20 December 2011) SSRN <http://www.ssrn.com/> at 2. Moreover, in extending Coase's original analysis some scholars have observed that more desirable outcomes occur in regimes where property rights are better specified that in regimes where property rights are poorly specified. The successful specification of property rights is one that provides incentives that encourage self-interested decision makers to make decisions that increase the value of resources. See Seth W Norton “Property Rights, the Environment and Economic Well-Being” in Peter J Hill and Roger E Meiners (eds) Who Owns the Environment? (Rowman & Littlefield Publishers Inc, Oxford, 1998) at 40.
\end{itemize}
respects went further in advocating private property as a solution to environmental problems. In general, much of this early work proceeds from the classical liberal assumption that it is desirable to have a society based on individual choice and that the primary goal of society is to satisfy or carry out individual preferences, which will make everybody richer.\textsuperscript{78} Full, strong property rights were needed to achieve this, and to solve environmental problems along the way.\textsuperscript{79} Of course, the economists and lawyers advocating these tools meant the Western notion of private property, meaning exclusive, individualised and tradeable property rights. Anything else, in their view, was not property.\textsuperscript{80} For example, as Medema notes, referring to an early (1962)\textsuperscript{81} example of scholars linking economics to environmental solutions:\textsuperscript{82}

Like Coase, Milliman located the externality problem in the absence of property rights over the resources in question: “In general, the solution to a technological spillover problem is to expand the scale of decision-making to correspond with the effects of the action. Very often this can be done by coordinating fragmented property rights as in the case of unitization of oil pools and ground water basins. An incomplete definition of property rights is usually at the heart of the matter.” As a result, he said, “Changes in these property rights either to make them more specific or to enlarge the scale of action, are often called for”.

Over time, the literature developed and increasingly recognised the promise of market-based instruments as a tool of environmental management. In a well-recognised passage from the early 1980s Ackerman and Stewart outlined the four things they thought necessary to create a functioning environmental market for pollution rights:\textsuperscript{83}

First, the agency must estimate how much pollution is presently permitted by law in each watershed and each air quality region. Second, it must run a system of fair and efficient auctions in which polluters can regularly buy rights for limited terms. Third, it must run an efficient title registry in each region that will allow buyers and
sellers to transfer rights in a legally effective way. Fourth, it must consistently penalize polluters who discharge more than their permitted amounts. And that’s that.

Although Ackerman and Stewart do not elaborate on the nature of the “rights” they are discussing it is clear from their broader discussion that they mean private property rights.

During the mid-to-late 1980s and 1990s authors began to be much more specific. This is particularly obvious in the early 1990s privatisation proposals of the “free market environmentalists”. This literature specifically argues for regimes of natural resource management based on the free market and strong private property rights. It is clearly the logical extension of earlier works in the area and can be seen as part of the broader trend among legal and economic scholars to advocate the use of market mechanisms to deal with problems previously considered to be in the realm of pure law or morality. Although it was controversial then, and remains so today, in no area is the call for strong property rights to solve environmental problems more evident than the literature of free market environmentalism. The free market environmentalists imagine that the solution to nearly every conceivable problem is the perfection of private property rights and the diminution (or exclusion) of governmental intervention.

However, before outlining the theory of free market environmentalism it is necessary to sound a note of caution. In many respects the arguments of the free market environmentalists are a perversion of the original intent of Hardin and Coase. The idea that one could use private property to manage natural resources happened well before neoliberal economics and free market advocates became involved. It is important to note that free market environmentalism has not always dominated the theory. In many respects

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84 Carol M Rose “Expanding the Choices for the Global Commons: Comparing Newfangled Tradable Allowance Schemes to Old-Fashioned Common Property Regimes” (1999) 10 DELPF 45 at 51.
it represents the extreme end of a continuum and there are many shades of grey. For example, Ackerman and Stewart in the early 1980s were of the view that the first step in creating a functioning environmental market for pollution rights is for some governmental agency to estimate how much pollution should be permitted.\(^{87}\) The free market environmentalists would take the more extreme view that the market should be the sole determiner of such questions. However, free market environmentalism serves as an excellent illustration of the call for strong property rights to solve environmental problems and this is a call which is common to much of the literature; not simply free market environmentalism.

Free market environmentalists claim that positive environmental results can be achieved as long as private property rights in natural resources are well-defined and protected by the normal liability rules. Indeed, they claim that by the magic of the market it should be possible for all negative environmental externalities to be internalised, thus alleviating the necessity of outside intervention.\(^{88}\) By extension, the introduction of tradeable rights or permits should allow resource ownership to flow to those who value the resource most highly, without the need for external interference. In turn, this should ensure that the resource is being put to its most efficient use. By virtue of the use of private property the state’s coercive, regulatory power can be entrusted to the market. Again, this is a classic application of the ideas of Hardin and Coase and the claim that problems of overuse are generally driven by poorly defined property rights.\(^{89}\) In essence, and in accordance with the classical liberal worldview, it is claimed that private property holders are the people in the best position to deal with environmental management and to achieve positive outcomes.

\(^{87}\) Ackerman and Stewart, above n 83, 184.


\(^{89}\) At 416.
The paradigmatic book expounding the free market environmental project is Terry Anderson and Donald Leal’s *Free Market Environmentalism*. The book begins by noting that many people see free markets and the environment as incompatible and that free market environmentalism is often seen as an oxymoron. Even “free marketers” argue that while the market might be the best way to allocate resources, this is not true of the environment. The environment is too important and unique to be “allocated on the basis of profits.” However, in their view, the market and the environment are connected in a positive way and their book is explicitly aimed at challenging the perception that direct regulation is the only way to address environmental problems.

Crucially, they stress the importance of private property to their thesis:

> At the heart of free market environmentalism is a system of well-specified property rights to natural resources. Whether these rights are held by individuals, corporation, non-profit environmental groups, or communal groups, a discipline is imposed on resource users because the wealth of the owner of the property right is at stake if bad decisions are made. Of course, the further a decision maker is removed from this discipline – as he is when there is political control – the less likely it is that good resource stewardship will result. Moreover, if well-specified property rights are transferable, owners must not only consider their own values, they must also consider what others are willing to pay.

“Well-specified” private property rights are important because if property rights are ill-defined they cannot be exchanged for other property rights. Moreover, if property rights are not transferable there will be impediments to an owner taking full advantage of the potential for gains made through trade. In addition they stress that property rights must be defendable in order to avoid conflict and to allow owners to prohibit incompatible uses.

Thus, in summary they state:

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90 Anderson and Leal, above n 50.
91 At 1.
92 At 3.
93 At 3.
94 At 20. It is useful to cite parts of this in full.
Free market environmentalism presupposes well-specified rights to take actions with respect to specific resources. If those rights cannot be measured, monitored, and marketed, then there is little possibility for exchange … Free market environmentalism emphasizes the importance of market processes in determining optimal amounts of resource use. Only when rights are well-defined, enforced and transferable will self-interested individuals confront the trade-offs inherent in a world of scarcity.

Again, this view owes much to the classical liberal worldview and Anderson and Leal clearly ground their work in assumptions regarding human behaviour, in particular the importance of self-interest and preference satisfaction. They note that while individuals may be able to put aside their own self-interest in some circumstances, good intentions alone are insufficient to produce good results. Drawing on the evolutionary theories of Charles Darwin, Anderson and Leal argue that just as a species that successfully fills a niche is rewarded with survival, increased wealth will reward the owners that successfully (i.e. efficiently) manage their resources: “Profits link self-interest with good resource management by attracting entrepreneurs to open niches. If bad decisions are being made, then a niche will be open.”

Moreover, good stewardship also relies on good information. They maintain that it is individual property owners who are best placed, and with the most direct incentives, to

The key, therefore, to effective markets in general and free market environmentalism in particular is the establishment of well-specified and transferable property rights. When a conservation group purchases a conservation easement on a parcel of land, the exchange requires that property rights be well defined, enforced and transferable. The physical attributes of the resources must be specified in a clear and concise manner; they must be measurable … If property rights to resources cannot be defined, then they obviously cannot be exchanged for other property rights … Property rights also must be defendable. A rectangular survey may define surface rights to land, but conflicts are inevitable if there is no way to defend the boundaries and prevent other incompatible uses. Barbed wire provided an inexpensive way to defend property rights on the western frontier; locks and chains do the same for parked bicycles. But enforcing one’s rights to peace and quiet by “fencing out” sound waves may be much more difficult, as will keeping other people’s hazardous wastes out of a ground water supply. Whenever the use of property cannot be monitored or enforced, conflicts are inevitable and trades are impossible. … Finally, property rights must be transferable. In contrast to the costs of measuring and monitoring resource uses, which are mainly determined by the physical nature of the property and technology, the ability to change is determined largely by the legal environment. Although well-defined and enforced rights allow the owner to enjoy the benefits of using his property, legal restrictions on the sale of that property preclude the potential for gains and trade.

95 At 21 – 22.
96 At 4.
obtain good information about their resources. Overall individuals, rather than centralised bureaucracies, are in a superior position to manage natural resources.\textsuperscript{97}

Anderson and Leal’s core proposal, drawn from the economic theory, is to set up an expansive system of well-specified property rights in natural resources. Rather than simply suggest that there should be improvements to the existing regimes of property in land and water, or advocating a broader reliance on market based techniques for environmental management, they would go very much further. They advocate comprehensive reform that would substitute free market environmentalism for almost all regulatory regimes. They suggest that free markets would be the best way to manage nearly all natural resources including wild life, recreation areas, the oceans and the atmosphere.\textsuperscript{98}

Anderson and Leal believe that positive environmental management is a result of the private bargaining conducted between private property owners. They argue, strongly, that market mechanisms produce better results than regulation in all cases. The market is the best solution to environmental problems because it will produce better information through pricings and incentives. It will create greater environmental awareness via the individual wealth created by economic growth, and moreover, it will enhance liberty through market exchange.\textsuperscript{99} Clearly, this is in keeping with general classical liberal economic theory and can be seen as the intellectual succession of Coase.\textsuperscript{100}

\begin{footnotesize}
\begin{enumerate}
\item At 5.
\item Anderson and Leal, above n 50; at and James E. Krier “The Tragedy of the Commons, Part Two” (1992) 15 Harv J L & Pub Pol’y 325 at 328.
\item Blumm, above n 99, at 374.
\end{enumerate}
\end{footnotesize}
In summary, Anderson and Leal are advocates of a “leave it to the market” approach. If private property rights are completely specified, if all resources are privately owned with strong property rights, then all market failures and externalities will be eliminated. The socially optimal level of environmental use should be reached through the complete specification of private property rights, costless negotiation and privately ordered bargaining.

We can see similar sentiments in other works exploring these themes. For example, in later works, Donald Leal (writing independently of Anderson) has reiterated the call for clear property rights. Recently, in the context of marine fisheries, he has noted that while there have been a number of technological advances achieved in relation to land based agriculture, the same cannot be said of ocean fishing. “Little has been done”, he suggests, “to increase the sea’s natural fish production” and refers to a “vast literature” that attributes the difference in technological development between land and sea to private property rights. He notes that in simple terms, private property rights are the formal or informal rules regarding resource use, ownership and transfer. They must, however, encompass much more than this in order to facilitate efficient production and better stewardship: “Specifically, property rights must be well-defined, enforceable, transferable and durable.”

Again, Leal appears almost “disarmingly confident” that if governments just define clear property rights and the holders of the right bargain freely, Coasian principles will be

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103 At ix.
104 Jacques, above n 99, at 207.
engaged and the most efficient allocation of resources will follow.\textsuperscript{105} For example, he notes that because property rights in wild ocean fish stocks are not yet a reality, this fishery will continue to operate under conditions that will lead to the tragedy of the commons leading to over-fishing and over-capitalisation. He argues: “As with other natural resources, the ideal approach is to establish well-defined, enforceable, and transferable property rights in the resource itself.”\textsuperscript{106}

Although Leal considers that individual transferable quota are not perfect and do not go as far as he would wish, he accepts that they are, overall, tending to prove quite effective at addressing problems of overfishing and overcapitalisation. However, he stresses that the closer individual transferable quota are to full property rights, the stronger the incentive for fishers to conserve the resource.\textsuperscript{107} Overall, he maintains that we should not dismiss the possibility of establishing property rights in the fish stock itself because “the more secure the property rights, the healthier fish populations and fishing communities will be”.\textsuperscript{108}

Another commentator on marine fisheries, Hannesson, similarly suggests that the basic problem faced by ocean fisheries flows from the weakness, or absence, of private property rights.\textsuperscript{109} Of course, it follows that the most basic way to remedy this would be to establish

\textsuperscript{105} At 207.
\textsuperscript{106} Leal, above n 102, at xi.
\textsuperscript{107} Donald R Leal “Fencing the Fishery: A Primer on Rights-Based Fishing” in Donald R Leal (ed) Evolving Property Rights in Marine Fisheries (Rowman & Littlefield Publishers Inc, Oxford, 2005) at 9. Indeed, he cites New Zealand’s ITQ as an excellent example: “In New Zealand, where ITQs are property rights and not privileges revocable by government without compensation, fishers in a number of ITQ fisheries are taking an active role in enhancing productivity.” As will be discussed below, Leal’s analysis of New Zealand’s quota management scheme is somewhat contestable.
\textsuperscript{108} At 20.
ownership rights to the fish stocks themselves. His colleague, Gissurarson believes much the same, noting that:110

In general, the closer fishing rights are to private property rights, with their durability, security, transferability, and exclusivity, the better they will work. What is important is to try and enclose the fish stocks – to take them into custody and to identify as custodians individuals and associations who have a direct interest in their long-term profitability.

He emphasises that the difficulties in generating a general acceptance of the individual transferable quota system in Iceland are, at least in part, attributable to a failure on the part of policy makers to spell out that the best solution to the problem of over-fishing is the application of private property rights to either quota or fish stock. In his view, it would be desirable to implement political and systemic changes in Iceland that would lead to a more general acceptance of the idea of the individual transferable quota system and that would facilitate the development of stronger and more clearly defined property rights in fisheries.111

As is evident from these last citations, advocacy of free market environmentalism has not been restricted to a handful of scholars. In literature on fisheries, for example, many commentators tend to stress the inevitability of a Lockean, classical liberal, self-interested conception of private property. This trend was noted by Macinko and Bromley who, citing three different authors, noted that the literature:112

… provides a glimpse of this institutional inevitability. “[A]n ITQ [is] a private property right, an instrument for extending the institution of property from land to the sea.” Or, “ITQs are part of the great institutional changes of our times: the enclosure and privatization of the common resources of the ocean.” And, finally: “My exact point is that we are not trying anything new on the fishery. What we are trying to say is ‘let’s let the fishery be like every other industry in our capitalist economy.’ We’re going to create property rights. That’s all, that’s it.”

111 Gissurarson, above n 110; and Leal, above n 102.
112 Macinko and Bromley, above n 71, at 652 (emphasis in original) (references omitted).
In an article written in 1989 Hahn and Hester looked at the then extant (and embryonic) emissions trading scheme the United States Environmental Protection Agency (EPA) had put in place for air pollutants. The EPA had been experimenting with emissions trading since the late 1970s. Hahn and Hester noted that one of the great disappointments with the scheme was the fact that a working market had not developed. They attributed this to uncertainty surrounding the nature and value of the private property rights created. In their opinion, the lack of clearly quantified private property rights meant entities did not have an incentive to achieve surplus emission reductions, and therefore had no incentive to participate in trading. Overall, they observed a general confusion regarding the nature, and distribution, of these private property rights. On one hand, they noted, the regulator had adopted a defined set of property rights and placed some minimum restrictions on their use. Conversely, the regulator had (in response to criticisms from environmentalists) failed to fully define the property rights in a way that would help to resolve uncertainties regarding their use. The result was to award the rights an uncertain and inferior status. This uncertainty, combined with conflicts regarding the definition of the rights, were the core reasons why a well-functioning market had not eventuated. Although they do not say so explicitly, it is clear from their discussion that they considered any uncertainties inherent in the property rights should be resolved by adopting clearly quantified, strong, property rights.

In a similar context, in relation to the 1990 amendments to the Clean Air Act (which established the United States sulphur dioxide trading programme) Dennis noted that for a

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115 At 117.
116 At 143.
robust market in allowances to develop, the property rights must be sufficiently protected to make investment worthwhile.\textsuperscript{117} She suggested that the degree to which private property interests in the “allowances” were created would affect the ability of the Act to tackle sulphur dioxide emissions and the resulting acid rain. In her view, Congress had not intended the allowances to be private property rights and this created a number of problems. One problem was that the market could be frustrated. Another problem was that because the rights were ambiguous the regulator might be pressured into treating the allowances as private property rights in a way that was not intended by the legislation. This could potentially lead to regulatory inability to act.\textsuperscript{118} Paradoxically, Dennis’s suggested solution to both of these problems was to modify the allowances so that they were recognised as strong property rights. This could be achieved by granting them for a specified time, thereby making them more certain. At the end of the term the regulator would be able to make any necessary changes to the regime. In the interim, however, a strong and sacrosanct property right would exist in the allowances, facilitating the market and the overall efficacy of the scheme.\textsuperscript{119}

In the Canadian context, Brubaker argued that it was long past time for the responsibility for natural resource management to be shifted away from the regulatory state and back to individuals. She considered that such a shift could be best accomplished by strengthening property rights and “by assigning property rights to resources now being squandered by governments”.\textsuperscript{120} In support of this thesis she noted, citing the Gospel of St John\textsuperscript{121} inter

\textsuperscript{117} Dennis, above n 113, at 1105.
\textsuperscript{118} At 1137.
\textsuperscript{119} At 1143.
\textsuperscript{120} Elizabeth Brubaker Property Rights in the Defence of Nature (Earthscan, London and Toronto, 1995) at 161-162.
\textsuperscript{121} The Gospel According to John, Chapter 10, Verses 11 – 13 (Good News Bible (Australian Edition, The Bible Society in Australia Incorporated, Canberra, 1988)):
11: … the good shepherd … is willing to die for the sheep.
12: When the hired man, who is not a shepherd and does not own the sheep, sees a wolf coming, he leaves the sheep and runs away; so the wolf scatters them.
that ownership does not simply facilitate stewardship, secure property rights actually promote stewardship. Individual, corporate or community owners have incentives to maximise the value of the resources that they own. Investment, conservation and efficient use are in the owners’ self-interest because they will reap the rewards. Although she conceded that property rights cannot always be clearly assigned, she claimed that the more precisely property rights are defined, and the greater the extent to which they can be assigned to specific people or groups, the better the environment will fare.

Similarly, when outlining the general call for free market environmentalism De Alessi notes that the argument is always that the focus ought to be on finding institutions that tie individual self-interest to solving environmental problems. In his view, private property is the link because private property is the cornerstone of all free market solutions. Private property provides the right to form voluntary contracts and allows for a range of cooperative arrangements. Environmental problems typically arise when property rights are not fully private and transaction costs are substantial. As a result there is a strong case for adopting simple rules to solve society’s manifest economic and environmental problems. These simple rules have at their heart a system of private property, voluntary exchange and free markets. Such an approach ties the welfare of individuals to the solution of environmental problems in a way that is economically, ethically and morally superior to other approaches as it rests on voluntary choices made by free individuals.

Libecap is another who has noted the manifold advantages of using strong private property rights as a tool of environmental management, including lowered costs,

13: The hired man runs away because he is only a hired man and does not care about the sheep.

122 Brubaker, above n 120, at 209.
123 De Alessi, above n 63, at 27 – 30.
124 At 30.
information generation, high value use, and the alignment of incentives for both conservation and investment. He has recently suggested that:

The more complete are property rights, the more the private and social net benefits of resource use are meshed, eliminating externalities and the losses of the common pool. Furthermore, when agents are owners of some part of the greater rents from reducing the externality, they have greater incentives to comply to police one another, and potentially, invest in the stock.

We can also see that the promotion of strong private property rights has permeated international institutions. For example a report of the Secretariat to the Convention on Biological Diversity suggests that:

It is well established that the existence of complete, exclusive, enforceable and transferable property rights is a prerequisite for the efficient management of natural resources. This is because rights must be complete and exclusive to avoid disputes over boundaries and access. They must be enforceable to prevent others from usurping them and they must be transferable. The effect of incomplete property rights shows up most clearly in the lack of incentive to invest in conservation and sustainable land uses.

C. Summary and general observations

In essence, the common call has been for the creation of strong or complete private property rights in natural resources. This has been justified because of a belief that strong rights are necessary for investment, economic growth, and the general functioning of the market. The argument is that where private property rights are well-defined, enforceable and transferable, the tragedy of the commons will be solved and the market will produce

efficient results. As a result we should recognise private property rights in all natural resources in all circumstances as the best solution to the tragedy of the commons.\textsuperscript{128}

Although the more extreme views of the free market environmentalists have been somewhat tempered over the last 20 years\textsuperscript{129} there remains an abiding concern amongst some economists about the strength and security of the private property rights deployed in the resource management sphere. For example, in a recent article Grainger and Costello note that the evidence they collected suggests that the use of private property as a tool of management has increased both economic and environmental performance. They argue that the debate has shifted from a discussion about the usefulness or appropriateness of the private property approach to arguments about the best sort of design.\textsuperscript{130} Overall, their research suggests that the particular design of a regime will have a marked effect on the security, and therefore utility, of the associated right. They begin their argument by noting that there appears to be a correlation between the strength of the private property right in a resource and its economic value, before suggesting that limits on ownership, transferability and temporal control over resources will affect the economic value of the resource and the corresponding behaviour of the resource holder. From this standpoint they hesitantly assert that one appropriate deduction may be that the weaker the private property right, the weaker the incentive to invest and husband a resource.\textsuperscript{131} Grainger and Castello appear to conclude that weak property rights actually decrease incentives for good stewardship and consequently are limited in their ability to address commons problems. Of course, this is a somewhat circular argument that is founded on the premise that strong property rights provide the greatest incentive to invent in resources; the very point they

\textsuperscript{128} Sinden, above n 99, at 595.

\textsuperscript{129} A point that will be discussed in greater detail below.


\textsuperscript{131} At 21.
were trying to prove. Nevertheless, contestable as it is, it stands as an example of the literature.

It should also be noted, that many of those who advocate a private property approach to environmental management do not enthusiastically embrace the idea of tradeable environmental allowances because they “still require a political determination of the level of pollution that will be allowed.”

There is a degree of discomfort about any transferable property right where the environmental goal is set by the government and not the marketplace. Many argue that in an ideal world the level of pollution should be set by individual bargains between private individuals. Of course, in rebutting this, many scholars have observed that creating these new forms of tradeable property actually requires an immense amount of governmental and legislative infrastructure.

It is, therefore, theoretically and practically impossible to leave the answers to these questions to be determined solely by individual self-interested bargaining.

Moreover, as I aim to demonstrate in this thesis, in practice the private property rights used by tradeable environmental allowance regimes are actually quite weak in the sense that the holder of the right does not benefit from the full complement of the general characteristics of ownership (such as the right to fully alienate or manage the property).

Moreover, although they employ relatively “weak” property rights, these regimes actually appear to work well.

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132 Anderson and Leal, Above n 50, at 147.
133 Blumm, above n 99, at 382.
135 Barnes, above n 27, at 8. Moreover, until recently the economics literature tended to describe property rights in absolute, black and white terms, something was either private property and privately owned, or it was in an open access commons. It was rare for there to be any acceptance that there is, or could be, many distinctions between property rights. The early literature prescribing private ownership as a solution to environmental problems followed this view. More recent scholarship, particularly by Ostrom has proved the fallacy of this approach. See Elinor Ostrom Governing the Commons: The Evolution of Institutions for Collective Action (Cambridge University Press, Cambridge, 1990; and Elinor Ostrom and others (eds) The Drama of the Commons (National Academy Press, Washington, 2002).
My thesis suggests that when governments have created tradeable environmental allowances regimes it is not surprising that they have not heeded the call for unattenuated property rights. However, while this thesis maintains that the limited private property rights we see in many tradeable environmental allowances is in fact positive, many commentators have responded to this trend by calling for the property rights to be strengthened.\(^{136}\) Indeed, for a free market environmentalist the fact that tradeable environmental allowances have not yet reached the stage of being full and strong property rights is simply evidence that the regimes that have been created, and the laws underpinning them, are defective. The law should recognise a full unattenuated property right.\(^{137}\) The literature also discloses the fervent hope that tradeable environmental allowances, given they are subject to such weakness, are simply a step along the way to outright privatisation and the recognition of complete, full and strong liberal property rights in natural resources. For example, Anthony Scott has stressed that tradeable environmental allowances, such as individual transferable quota, are really just the first stage of a larger project. There is a degree of relish in the literature that observes that technology may one day enable us to recognise rights in the actual fish themselves.\(^{138}\)

\(^{136}\) Barnes, above n 27, at 8. By way of a general example, a number of the countries that experimented with major privatisation programmes during the 1980s and 1990s did not reap the expected benefits. In Russia and Latin America, for example, mass privatisation resulted in significant economic and social problems including corruption, theft of assets, inequality, mass unemployment and disappointing performance. In response there has tended to be two reactions. The first is to query whether the theory underlying privatisation is actually correct. The second, adopted by the most influential and enthusiastic supporters of privatisation is to argue that if privatisation does not produce the desired results it is because the property rights are not clearly defined and effectively enforced. In other words, the property rights are not strong enough. Thus, there is no flaw in the theory, but rather the absence of effective property rights. See David M Kotz “Ownership, Property Rights and Economic Performance: Theory and Practice in the USA and other Countries” (paper presented at the Ownership and Property Rights: Theory and Practice, Beijing, 2006).

\(^{137}\) Driesen, above n 86, at 7.

IV. What is Actually Meant by “Strong” Property Rights?

Of course, the obvious question that follows on from this discussion is what do all of these legal and economic theorists actually mean when they talk about “strong” property rights? It is clear why they think that a “strong” right is important, but they are not very specific about the details. For example, Anderson and Leal do not go much further than observing that the solution to environmental problems is the recognition of well-defined, enforceable and transferable private property rights.

In the balance of this chapter I want to consider what scholars actually mean when they call for “strong” property rights. This is an important discussion, not only because it helps to explain the concepts at the heart of the literature we have been looking at, but also because it provides an important context for the concerns that many scholars have about using private property as a tool of resource management. Moreover, it will become very important when I undertake my analysis of New Zealand’s emissions trading scheme and quota management system in chapters nine and ten. I argue that the private property rights used by these schemes do not reflect the “strong” right predicted by the theory, which is a crucial point for my argument that there is an alternative view of private property at work in these schemes. Demonstrating this point, however, requires some sort of metric by which to measure the strength of a private property right. I will outline precisely how I indeed to do this in chapter eight before the analysis, but for now it is necessary to lay the ground work by exploring precisely what characteristics a strong private property right could be expected to have.
Once again, the classical liberal theory of private property is central. The theme was brilliantly captured by Charles Reich\textsuperscript{139} when he suggested that private property functions to protect and maintain the independence and dignity of the owner from the majority. Private property ought to provide its owner with an island within which he or she is master.\textsuperscript{140} It follows that if something is called private property, the owner has the right to use and control that resource, with (almost) no restrictions.\textsuperscript{141} It is in the idea of a right to use and control a resource with no restrictions that we begin to get a glimpse of what scholars are talking about when they refer to “strong” property rights.

However, it is possible to take this observation further. Many have noted that the classical liberal conception of private property can be seen as consisting of a “bundle” of legal rights or relations.\textsuperscript{142} At a minimum this bundle must consist of what is coined the “liberal triad” of possession, use, and disposition.\textsuperscript{143} As Waldron notes:\textsuperscript{144}

\textsuperscript{139} Noted above at II.A.
\textsuperscript{140} Reich, above n 31.
\textsuperscript{141} Godden, above n 88, at 414.
\textsuperscript{142} Space does not allow for a full treatment of the “bundle of rights” idea of property. This is an almost ubiquitous view of property, within which the “bundle” can be seen as a collection of legal rights or relations regarding the control of goods and resources. Each legal right or relation is one “stick” of a bundle that, taken as a whole, constitutes property. The classic exposition of the bundle of rights metaphor is found in Honoré’s 1960s essay Ownership (AM Honoré “Ownership” in AG Guest (ed) Oxford Essays in Jurisprudence a Collaborative Work (Oxford University Press, London, 1961)). In this essay Honoré attempted to identify the basic or standard incidents of ownership that would occur in relation to an item of property. Honoré stressed that he was discussing only those incidents of property that would apply to the person who has the “greatest interest in a thing admitted by a mature legal system”, in other words, the “liberal concept of full individual ownership”. Although these incidents are often referred to, it is useful to repeat them: the right to possess, the right to use, the right to manage, the right to the income of the thing, the right to capital, the right to security, the rights or incidents of transmissibility and absence of term, the prohibition against harmful use, liability to execution, and the incident of residuarity. Honoré was suggesting that if ownership is defined as the “greatest possible interest in a thing which a mature system of law recognises” then, in relation to a particular thing, we would expect to see all of the incidents listed. If all the incidents were present we could safely say that the “thing” was “owned” and was therefore “property”. Each incident, or stick, taken in the aggregate would constitute property. It follows that the removal or addition of a “stick” to the bundle may help us to determine whether an item is property or not. This conception of property is not without its critics. See for example, Hamilton and Bankes, above n 6; Daniel B Klein and John Robinson “Property: A Bundle of Rights? Prologue to the Property Symposium” (2011) 8 Econ Journal Watch 193; and Henry E Smith “Property is Not Just a Bundle of Rights” (2011) 8 Econ Journal Watch 279.
\textsuperscript{143} Babie, above n 3, at 532
\textsuperscript{144} Waldron, above n 36, at 66. Although Waldron goes on to stress that not all sticks of the bundle apply to all forms of property. For example, a bond or security cannot be “used” in the normal sense of the word,
No one in the modern debate about property needs to be told that, from a legal point of view, ownership is not a single right but comprises a bundle of rights, of various Hohfeldian shapes and various sizes. An owner of land characteristically has the privilege of using the land, the right that others not come on it or use it without his permission, the power to alienate it completely through gift or sale, or in part or for a period by leasing it, the liability to have it seized by creditors in the event of unpaid debt or bankruptcy, and so on.

Consequently, in many respects the classical liberal conception of private property is actually a conglomerate of several sub-rights, indicia, or powers, each of which must be present in order to have a full, complete, or strong private property right. Thus, in a crude sense, what people such as Anderson and Leal mean when they call for strong property rights can be summarised as “full-blooded ownership”. It follows that full-blooded ownership is present when the property holder has complete rights of possession, use and transfer; otherwise known as the “liberal triad”.

It is useful to use the archetype of land as an example. When a person owns land in line with the liberal triad, we would expect that person to have the exclusive possession of that land, to have the power to use and manage the land, the power to transfer or alienate the land and the power to take the income or rent from its use. As Scott notes, legal and economic scholars argue: “… a standard right is complete when it gives its holder healthy doses of all of these three powers. Rights that people say have ‘incomplete’, ‘deficient’, or ‘attenuated’ powers may permit or even induce feeble or destructive economic performance from their holder.”

The American liberal scholar Richard Epstein has perhaps best expounded the importance of these powers. Epstein is well recognised as the most forceful modern adherent to the idea of “absolute” property rights. Working from an explicitly classical liberal position he

\[\text{(145 Radin, above n 32, at 120.)}\]
\[\text{(146 Martin and Verbeek, above n 1, at 2.)}\]
\[\text{(147 Scott, above n 138, at 5.)}\]
supports a system of property rights and rules which reflect the classical liberal idea of absolute, or strong, property rights coupled with laissez-faire free markets. Perhaps Epstein’s most famous statements on this point come from his work on the issue of “takings” under the American Constitution.  

In this work Epstein never fully outlines or articulates his conception of private property. However, his statement that “Ownership in a given thing consists in a set of rights of infinite duration, good against the rest of the world: with three separate incidents: possession, use and disposition” gives a good flavour of how he would characterise a strong and absolute private property right. This is reinforced by a latter comment that “The conception of property includes the exclusive rights of possession, use and disposition”. Throughout the book he elaborates on these three incidents of private property by noting that the conception of possession embraces the absolute right to exclude; the right of use includes any use or non-use providing it is not a nuisance; and, stresses free alienation with regard to disposition because of its importance to the classical liberal idea of freedom of contract and market ordering. 

Central to Epstein’s view of property is his strictness regarding what a private property right gives its holder. He considers that a private property right has no degrees or gradation. He maintains that property rights are incapable of fragmentation. Consequently,

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148 See Richard A Epstein *Takings: Private Property and the Power of Eminent Domain* (Harvard University Press, Cambridge (Mass) and London, 1985) but also Richard A Epstein *Simple Rules for a Complex World* (Harvard University Press, Cambridge (Mass), 1995). Although Epstein was writing in the context of the Fifth and Fourteenth amendments to the United States Constitution it is important to note that he did not restrict his interpretation of the meaning of property to its occurrence in that document only. As Radin notes, in this sort of Constitutional discussion “… the entire classical liberal conception of property is the obvious, objective meaning of the word property”. For Epstein, applying the provisions of the Constitution to practical cases is simply a matter of reading the document together with our knowledge of the concept of private “property”. Therefore, in his view, the Courts can rely on the timeless and objective meaning of the word property, and need not grapple with historical intention. (See Radin, above n 32, at 122.)

149 Epstein *Takings*, above n 148, at 59.

150 At 304.

151 At 58-73 referred to in Radin, above n 32, at 121-120.
the partial weakening of one aspect of ownership is a taking of private property, even when there is no effect on the other aspects. Moreover, if you hold a property right then you also hold all of the rights and protections that accompany it. Consequently, Epstein would not draw a distinction between a house, or a book, a share, or a tradeable environmental allowance. As Radin notes, for Epstein “Property is property is property”.

Overall, Epstein argues that any legislative restriction of one of the indicia of private property is a taking under the eminent domain clause of the American Constitution. However, Epstein does accept some limitations of the exclusive rights of an owner, such as the requirement that you cannot use your property to harm others.

Moreover, Epstein considers that private property rights have legal standing apart from the state. They are not simply gifts from the state to the individual. Property rights should not rest on the premise that the state can give or take away these rights as it sees fit. This view clearly owes much to the Lockean position that property rights precede government, although it seems Epstein would also justify property on utilitarian grounds (i.e. in line with Bentham) because of the benefits property brings to economic efficiency

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153 Radin, above n 32, at 104.
154 At 122.
155 Waldron, above n 36, at 26 – 27.
156 At 26 – 27.
157 This view of property has its roots in the works of Locke who argued that property was a natural right. (see the discussion at footnote 36) Locke’s philosophy has had enduring appeal both because it is instinctively attractive, but also because it can be used to demonstrate that in a liberal democracy, property rights exist prior to the establishment of government and are, therefore, less vulnerable to state interference. (Barton, above n 152, at 376).
158 Waldron, above n 36, at 26 – 27.
159 In contrast to Locke, Bentham did not focus on a universal “natural right” to property. Bentham’s work fits within general utilitarian justifications for property suggesting that private property can be justified only by considering the advantages that it provides as an institution (Sherwin, above n 18, at 1082.) If the institution increases the happiness or welfare of society then this will justify the private control of resources (and therefore private property) (Waldron, above n 2, at 6.) This was certainly the view of Bentham who argued that property rights are created by the law to serve social ends. Property rights serve various
and welfare. Generally, however, Epstein’s scholarship clearly fits within the classical liberal literature that considers that property has a central and pre-political meaning. The meaning of property is sufficiently clear and precise so as to dictate, in practice, legal rules and outcomes. Epstein believes that “… there is a conception of property that is the concept of property”.

Moreover, Epstein stresses that his conception of property and the categorisation of the sub-rights, or powers, of which it is comprised is not a new one. In support of this, he points to Roman texts that discuss the *ius possendi, utendi* and *abutendi*. He also observes that the liberal triad is present in the incidents of property that Blackstone refers to in his famous account of property rights:

There is nothing which so generally strikes the imagination, and engages the affections of man-kind, as the right of property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe.

In particular he refers to Blackstone’s earlier comment: “The third absolute right, inherent in every Englishman, is that of property, which consists in the free use, enjoyment, and economic and political functions and it is these, not natural rights, that provide the contours of, and justification for, the institution (Sherwin, above n 18, at 1082.) Indeed, Bentham was biting in his criticisms of the natural rights theories noting at one point: “Natural rights is simple nonsense; natural and imprescriptible rights, rhetorical nonsense, - nonsense upon stilts.” (Jeremy Bentham *Anarchical Fallacies; Being an Examination of the Declarations of Rights Issued During the French Revolution* (1843) at 53 cited in Waldron, above n 2, at 16.) For Bentham property was a creation of the law: “Property and law are born together, and die together. Before laws were made there was no property; take away laws, and property ceases.” Jeremy Bentham *The Theory of Legislation* (CK Ogden ed, Harcourt, Brace and Company, 1931) cited in Abraham Bell and Gideon Parchomovsky “A Theory of Property” (2005) 90 Cornell Law Review 531 at 543.)

Radin, above n 32, at 99. It is useful to note here that those who advocate a Lockean view of private property and those who subscribe to Benthamite utilitarianism essentially arrive at the same point, albeit by different means. As Robertson notes for both strands of classical liberal thought “Property should be understood as belonging in the private zone where its owner decides how the asset is to be used. The state has a legitimate role in the separate public zone, but that role will only rarely require it to interfere with private property rights.” (Robertson, above n 29, at 241).

160 Radin, above n 32, at 99 – 100.


disposal of all his acquisition, without any control or diminution, save only by the laws of
the land."\(^{164}\)

Another scholar who expounds a vision of absolute private property based on the liberal
triad is Richard Posner, bastion of the Law and Economics movement. Posner is an
advocate of universal commodification. In outlining his reasons for taking this position he
has noted:\(^{165}\)

> If every valuable (meaning scarce as well as desired) resource were owned by
someone (universalilty), if ownership connoted the unqualified power to exclude
everybody else from using the resource (exclusivity) as well as to use it oneself, and
if ownership rights were freely transferable, or as lawyers say alienable
(transferability), value would be maximized.

Both Epstein and Posner can be seen as sitting firmly in the sphere of the classical liberal
resurgence of neoliberalism in the closing stages of the 20th century. Key to this world
view as outlined in chapter three are concepts of limited government, unregulated free
markets, and the sanctity of private property.\(^{166}\)

Similarly, many right-wing American think-tanks also emphasise the same liberal triad of
powers. For example, Steven Eagle, an author for the Libertarian think-tank the Cato
Institute and a professor at George Mason University, stresses the importance of property
as part of America’s founding principles and derides the ways in which private property is
“under attack”. He notes that Americans who own property have found themselves
entangled in a web of regulatory restrictions “imposed in the name of an amorphous
‘public interest’” that have limited what they can do with their property resulting in

\(^{164}\) Book I, Chapter I.


\(^{166}\) Michael Robertson “Property and Privatisation in *RoboCop*” (2008) 4 International Journal of Law in
Context 217 at 217.
“untold personal and financial losses”. In discussing the nature of property he notes that:  

If property rights constitute relations among people that arise through mutual recognition of claims, it remains to be seen just what those claims and relationships are. Here, fortunately, the law has always been quite clear. In essence, the principal rights are the right to exclusive possession, the right to use and enjoy, and the right to dispose of one’s interest through devise, sale, or gift.

In essence Epstein, Posner and Eagle’s views can be seen as sitting within a vein of literature that lauds private property as an institution which is “the guardian of every other right” and is the best way in which individuals can be protected from the encroaches of government. It suggests that providing individual private property holders with the full liberal triad of possession, use and disposition is the best way to enable individual autonomy and the positive social outcomes that accompany it.

In many respects, this literature is really trying to justify the idea that individuals should be able to do what they want with what they own. It seeks to vindicate what remains a powerful cultural attraction to an idea of private property as an absolute right to use at will. This is reinforced by the literature’s reliance on early scholars such as Blackstone and Locke. Despite their resonance in our modern legal tradition, Blackstone’s comments were technically inaccurate (and indeed, he betrays his own doubts in the very next sentences) and, as Bentham observed, there are significant problems with Locke’s natural rights approach to private property.

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170 Godden, above n 88, at 414.
171 Carol M Rose “Canons of Property Talk, or, Blackstone’s Anxiety” (1998) 108 Yale L J 601. For example, the sentences which follow the first quote above disclose Blackstone’s anxiety:
However, as the work of Epstein and Posner indicates, the idea of property as an absolute right remains current in the cultural understanding of private property today.\textsuperscript{173} In a sense, Epstein and Posner are falling into the trap of believing that if people have been saying something for long enough it must be true (or, more cynically, relying on the age of these statements to obscure their own anxieties). However, they are not the only ones to do so. Indeed, as Grey notes in his seminal 1980 article “The Disintegration of Property”:\textsuperscript{174}

Most people, including most specialists in their unprofessional moments, conceive of property as things that are owned by persons. To own property is to have exclusive control of something-to be able to use it as one wishes, to sell it, give it away, leave it idle, or destroy it. Legal restraints on the free use of one’s property are conceived as departures from an ideal conception of full ownership.

People enjoy and expect to be able to exercise their \textit{sole and despotic dominion}.\textsuperscript{175} In essence, one ought to be able to use or dispose of any resource or item of social wealth to the exclusion of all others. Moreover, the owner may exercise these rights in any manner they see fit in order to satisfy their own individual preferences. It is these ideas that inform the classical liberal understanding of a “strong” private property right and gives us some

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And yet there are very few, that will give themselves the trouble to consider the original and foundation of this right. Pleased as we are with the possession, we seem afraid to look back to the means by which it was acquired, as if fearful of some defect in our title; or at best we rest satisfied with the decision of the laws in our favour, without examining the reason or authority upon which those laws have been built. (Blackstone, above n 163, Book II, Chapter I.) As Rose notes, people who read Blackstone’s famous sentence, seldom go on to read the rest of the paragraph. If they did, they would find that in the next few sentences Blackstone sharply qualifies his own statement, and instead expresses great uneasiness about whether people really do have good reasons to respect ownership claims. Blackstone’s unease springs from the uncertainty involved in acquisition: where did those ownership claims come from? As Blackstone observed, people do not like to think about this question too much, because it could result in their own claims being weak or unjustified. (Carol M Rose “The Moral Subject of Property” (2006) 48 Wm & Mary L Rev 1897 at 1904.) This point is also demonstrated by the final clause of the quote from Blackstone above: “… save only by the laws of the land”. This suggests that even in the 18th century there was some recognition that there must be some restrictions placed on the ownership of property. See also David Grinlinton “Property Rights and the Environment” (1996) 4 APLJ 1 at 7.

\textsuperscript{172} See footnote 159 above.

\textsuperscript{173} Grinlinton, above n 171, at 7.


\textsuperscript{175} Carol M Rose “The Comedy of the Commons: Custom, Commerce, and Inherently Public Property” (1986) 53 University of Chicago Law Review 711 at 712.
insight into what the literature is calling for when it claims that absolute private property rights are necessary to avoid the tragedy of the commons.

A. Strong property rights and the common law

Finally, while the meaning of strong or absolute property rights is most easily gleaned from academic literature it is possible to see the same vision of property permeating many common law judicial discussions of property. Generally, the common law criteria of property has rested on a twin emphasis on the assignability of the benefits inherent in a resource (i.e. transferability) with the relative permanence of those benefits when they are not assigned.176

The most commonly cited judicial dictum on what constitutes property comes from a case about whether a wife, deserted by her husband, had a “right” to remain in possession of the family home. The home was owned by her husband and the question was whether the wife’s “right” was strong enough to defeat the interests of a secured third party (a mortgagee).177 In assessing whether the right could be proprietary in nature Lord Wilberforce explained (although he cited no authority for the proposition) that a property right must be “… definable, identifiable by third parties, capable in its nature of assumption by third parties, and to have some degree of permanence or stability.”178 Although using very different language this is not dissimilar to the idea of use, possession, and disposition advocated by Epstein and Posner and others. Certainly, Lord Wilberforce stresses that a property right must be capable of assumption (i.e. be transferable), and have

177 National Provincial Bank Ltd v Ainsworth [1965] AC 1175 at 1247.
178 At 1247-8. Although, as Gray noted this quote appears to be an attempt to both define the essence of property and distinguish property rights from rights founded in tort or contract (or other rights such as human or civil) (Gray, above n 175, at 293). The result, however, is extremely circular. Lord Wilberforce’s dicta suggests that “proprietary rights” are those rights which are assignable to and enforceable against third parties. The rights that are assignable to and enforceable against third parties are, in turn, the rights which are traditionally identified as “proprietary”. As Gray suggests: “property” is “property” because it is “property”.
a degree of permanence (i.e. be able to be possessed for a reasonably long period of time).

It is also possible to infer from the requirement of identification and permanence that the right must be capable of being used.

Likewise, in the Australian context, Blackburn J has expressed similar sentiments, although these more closely align with the language of Posner and Epstein:\(^\text{179}\)

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\text{I think this problem has to be solved by considering the substance of proprietary interests rather than their outward indicia. I think that property, in its many forms, generally implies the right to use or enjoy, the right to exclude others, and the right to alienate. I do not say that all these rights must co-exist before there can be a proprietary interest, or deny that each of them may be subject to qualifications.} \(^\text{180}\)
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Moreover, it is certainly true that the common law tends to be jealous in its protection of private property rights. For example, in the *Minister of Conservation v Maori Land Court*\(^\text{181}\) the High Court noted that:\(^\text{182}\)

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\text{… the common law lends [sic] against derogation of property rights and this is a principle also reflected in the Native Land Court Act 1880. With this starting perspective the onus falls upon the Crown, in this case, to persuade the Court that the ambiguity can be resolved by admissible extrinsic evidence in favour of the narrow construction of the title. If the Crown cannot discharge that burden, then the Court takes that interpretation of the certificate most favourable to the property owner … That is the consequence of applying the policy of the common law against any derogation of property rights. I elaborate upon this perspective, as it is crucial to this analysis. A certificate of title is the principal legal instrument evidencing a right of property. The New Zealand legal system is a common law legal system. The common law protects property rights. Therefore any challenge to the extent of property rights is met with a starting presumption that property rights are not to be read down. It is appropriate to go back to the commentaries of Sir William Blackstone, one of the Justices of the Court of the Common Pleas on the Law of England …}
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This sort of approach permeates many discussions of private property in New Zealand.

For example, the guidelines of the Legislation Advisory Committee note that:\(^\text{183}\)

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\(^{179}\) *Milirrpum v Nabalco Ltd* (1971) FLR 141 at 272. It should be noted this decision was overruled by *Mabo and Others v Queensland (No. 2)* (1992) 175 CLR 1.

\(^{180}\) There is more discussion of this and the limits expressed by Blackburn J below.

\(^{181}\) *Minister of Conservation v Maori Land Court* [2007] 2 NZLR 542. Overturned on appeal.

\(^{182}\) At [102] – [105].
The common law has developed over centuries and is still developing to adapt to changing social conditions. It is organised around a respect for individual dignity and individual possession of property, and the supremacy of Parliament as a source of law … This common law concern for individual rights permeates into the interpretation of statutes passed by Parliament. It affects the perspective of the Courts to the taking away of rights and to a readiness to recognise that new individual rights have been created.

Indeed, the general tenor of the guidelines indicate that the protection of private property is the primary function of both the common law and the judicial interpretation of statutes in New Zealand. This is a well-accepted view, the genesis of which can be traced back at least as far back as Magna Carta. This approach owes much to the underlying structure of classical liberal thought.

Clearly then, there is a close connection between classical liberal ideas regarding property and the idea of a strong or absolute property right. Consequently, when the advocates of a private property solution to environmental problems talk about “strong” private property rights, they are referring to the idea of property as outlined by Epstein and Posner (among others). That is, an absolute right of property in which the liberal triad powers of possession, use and dispossession are all present to the fullest extent possible.

However, it is important to note that while Epstein, Posner and others have a clear vision of which incidents constitute strong private property, many scholars reject this view. For example, it is evident from Blackburn J’s comments above that the Australian Federal Court is unlikely to accept the idea of an absolute property right. Blackburn J explicitly states that it is not necessary to have each of the powers co-existing. Moreover, he suggests that any one of them may be subject to qualifications without interrupting the proprietary nature of the right itself. Indeed, many scholars have observed that there is a gaping chasm

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between the rhetoric of absolute property rights and the practice of significantly limited property rights.  

This thesis is firmly in the camp that rejects the idea of absolute property. Indeed, I argue that in very real respects the idea of absolute ownership reflects a social myth rather than legal or historical truth. Although the classical liberal idea of property has been dominant for the last several centuries, a competing tradition has always existed. While this tradition is less well recognised today it long predates the liberal tradition. This is the idea of private property as serving norms of social obligation, or as Rose describes it, property as propriety. At the heart of this conception of property is the idea that property has a role within society that is political and constitutional, not simply economic. I suggest that it is this vision of property that can be seen at work when tradeable environmental allowance regimes are properly analysed. Although the advocates of the regimes called for the creation of a strong immutable property right, this vision of property has not actually been realised in the design and implementation of these regimes. Rather, we see private property rights in which a large degree of power has been reserved by the state, for the overall benefit of the community.

V. Conclusion

Having outlined the way in which classical liberalism influences the mainstream understanding of private property rights, it is now necessary to turn to the particular concerns that scholars have about using private property to manage natural resources. Unsurprisingly, at the heart of their disquiet is the effect that the classical liberal idea of
private property, and in particular its support of absolute or strong rights, can have on human behaviour and subsequent environmental degradation.
Chapter Five: The Reservations and the Response

I. Introduction

One of the great ironies in this area is the fact that some of the greatest risks associated with using private property to solve the tragedy of the commons arise as a result of the very attributes that make private property so attractive as a solution to the tragedy. On one hand, many scholars accept that private property is a useful tool of environmental management because it has the happy effect of encouraging individuals to look after, invest in and trade the resources they own without the concern that some “saucy intruder” will simply waltz in and take “their” things at will. On the other hand, however, many scholars note that private property itself can be a primary cause of environmental harm. This argument relies on the observation that the classical liberal focus on the individual and its insistence that private property confers rights, but imposes no duties, tends to enable the sorts of behaviour that leads to environmental degradation. Recognition of this predisposition drives scholars’ concerns about the use of private property to manage natural resources and underpins the qualified nature of the support many give to these sorts of regimes.

If tradeable environmental allowances are seen as existing within a tradition of private property that is characterised by simple entitlement, unaccompanied by obligations, they are likely to be traded by individuals for profit, and will not function to distribute either responsibility for a resource or environmental costs. Instead, the wider community and effected ecosystems will bear the environmental costs and responsibilities of natural

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1 Pierson v Post 3 Cai R 175, 2 Am Dec 264 (NY 1805).
resource use. Consequently, in criticising the private property approach to environmental management, scholars have suggested that it is perilous to trust the solution to environmental problems to the very institution that is the root cause of the problems in the first instance.

My goal in this chapter is to carry on from the theoretical discussion in chapter four and explore in greater detail the reservations scholars have about private property based resource management. I will begin by outlining some of the broad concerns scholars have about the relationship between the classical liberal idea of private property and the environment. I will then consider some of the particular concerns scholars have regarding private property based resource management. While there are a range of ethical and moral concerns regarding the use of private property as an environmental management tool, my focus here will be on those anxieties that arise as a specific consequence of the classical

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6 Tom Tietenberg “The Tradable Permits Approach to Protecting the Commons: What have we Learned?” in Elinor Ostrom and others (eds) The Drama of the Commons (National Academy Press, Washington, 2002). For example, in addition to concerns about how the classical liberal idea of private property will work in this sphere, scholars worry about:

- Whether private property regimes will actually work as advertised. For example, under the Kyoto protocol states have agreed to a target for emissions reduction that is supposedly set to reflect ecological necessity. The target is to be achieved for the lowest possible cost, and for that purpose, a market for emissions allowances is established. However, the target was set as the result of political negotiation, not environmental imperatives. This is important because the rationale for trading allowances only makes sense if the cap has been set in an ecologically rational manner. You can trade as many allowances as you wish, but if they are not structured in a way that will result in the reduction of emissions it will be a very expensive waste of time (see Gerd Winter “The Climate is No Commodity: Taking Stock of the Emissions Trading System” (2010) 22 Journal of Environmental Law 1 at 16).

- The ethical considerations that follow the allocation of the wealth associated with these resources. As Tietenberg notes, although private property based approaches to resource management do not necessarily fully privatise resources, they do privatise, at least to some degree, access to and use of those resources. The result of this is that the owners of these rights acquire a right that can be very valuable and consequently accrue a substantial amount of wealth that may not be available to other people (see Tietenberg “The Tradable Permits Approach to Protecting the Commons: What have we Learned?” at 198.) This also raises questions regarding the appropriate initial distribution of these rights that can be very problematic (see Carol M Rose “Liberty, Property, Environmentalism” (2009) 26 Social Philosophy and Policy 1).
liberal paradigm. In responding to these concerns a number of scholars have called for what is, in essence, a revolution in our approach to private property. I will consider several different ideas about the way in which this revolution could be achieved. These all involve suggestions requiring private property concepts to “be systematically and carefully rethought, both at a normative and a technical level, so that they cease to empower harmful activities and instead foster sustainable human-nature interaction”.7 I conclude this section by outlining what I see as a key oversight in this literature.

In my view, all of these suggestions effectively advocate the creation of an entirely new institution. By implicitly accepting the received wisdom that the classical liberal paradigm is the only explanation for the operation of private property, these schemes fail to consider our wider private property law tradition in sufficient detail. My argument is that if we consider our tradition of private property more carefully, it becomes apparent that within that tradition there is, and always has been, a counter-tradition of private property as a norm of social obligation, which recognises both rights and obligations. This observation is crucial to my thesis as it suggests that we already have a method by which we can respond to the ecological challenges we are faced with, without having to create an entirely new idea of private property. By exploring both the concerns with using private property and scholars’ suggested responses, this chapter aims to finalise the groundwork for part three where I explain the idea of private property as a norm of social obligation. This will assist in discharging my overall aim, which is to demonstrate that the social obligation norm not only provides a principled way of explaining why private property can be a useful tool of environmental management, but also accounts for the way property actually works within such schemes.

II. Private Property as a Root Cause of Environmental Problems

The claim that private property can drive very negative environmental consequences is firmly coupled to the operation of the classical liberal approach outlined in chapter four. Scholars have articulated this concern in many different ways. The general tenor of the criticisms is that the classical liberal approach to private property is “misleading, deficient and contributes significantly to environmental harm”.\(^8\) The point was brilliantly captured by Leopold in his classic *A Sand County Almanac*\(^9\) where he noted that our “Abrahamic” concept of land (and by extension private property) was one that entailed privilege but no obligation.\(^10\) It provides rights, but demands no duties. His broad point was that our culturally dominant, classical liberal idea of private property is often the key source of environmental destruction. This is an idea that has been repeated time and again by a diverse range of academics.\(^11\) The conflict between private property and environmental outcomes becomes acute when private property is used as a tool of natural resource management. Ostensibly, the rights required by these regimes are rooted in the classical liberal tradition (although part of my argument is that this is not, in fact, the reality). The essential point is that the self-interest at the heart of the classical liberal worldview encourages the use of resources by the owner, who is not required to give much, or any, thought to the needs of others. As Singer notes, “we are invited to live as if we were the only ones that mattered … we are invited to live as if we were alone.”\(^12\) The direct result of

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\(^8\) Peter Burdon “What is Good Land Use? From Rights to Relationship” (2010) 34 Melbourne University Law Review 708 at 714.
\(^9\) Leopold, above n 3.
\(^10\) At vii and 167 – 168.
\(^11\) For a review see: Taylor and Grinlinton, above n 7.
\(^12\) Joseph William Singer *The Edges of the Field: Lessons on the Obligations of Ownership* (Beacon Press, Boston, 2000) at 3.
the strength of private property under the classical liberal paradigm is that it enables the sorts of behaviour that can lead to extensive environmental harm.\textsuperscript{13}

A number of very influential scholars have explored this idea in some detail, and it is useful to consider some of these arguments. Perhaps unsurprisingly, like the work of Leopold, many of these discussions focus on land, although I suggest that the points remain valid for the full range of natural resources.

Freyfogle argues that many of the law’s central messages about the concept of ownership are “misguided”.\textsuperscript{14} In discussing our relationship with land he argues that our view of what we think it means to own land is at the root cause of many environmental problems: “With its language and heritage the law tells these owners many things, about the land, about what it means to own land, and about the types of things a landowner can rightly do on and to the land”.\textsuperscript{15} In particular, he stresses the law’s role in sending the message that there is a distinction between the people that live on the land and the land itself. This facilitates the classical liberal myth that land is a simple object with no intrinsic worth beyond what it can be used for: “People are the ones who own and dominate, and the land is the thing that is owned and dominated”.\textsuperscript{16} It also allows for land to be divided into lines on a map; so that nature is seen as just a collection of separate parts with no connection. Individual pieces of land lie within the autonomous remit of one particular owner who is encouraged to manage that land with no reference to its relationship with the surrounding land:\textsuperscript{17}

However modest, each land parcel – if not each natural resource – is some owner’s bailiwick or castle, undergirded by resonances and echoes of centuries past. To be sure, legal and social restrictions do exist. But such restrictions are mere exceptions to the presumed independence of the law-endorsed one who commands; the rule

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\textsuperscript{13} Taylor and Grinlinton, above n 7, at 9.
\textsuperscript{15} At 1274.
\textsuperscript{16} At 1274.
\textsuperscript{17} At 1275.
\end{flushright}
we fall back on, the rule that provides the core, is that the owner can, for the most part, do as she likes.

The idea of possession at the heart of private property essentially provides the mechanism to keep other people out and the law indicates that the owner has the right to “use, manage, alter, transfer, or destroy as she sees fit …”. In turn, it becomes clear that private property’s central focus is on regulating relationships between people, it follows that nature and its component parts (i.e. plants and animals) have no intrinsic value and can therefore be “rightly ignore[d]”. At the heart of Freyfogle’s argument is the idea that the boundaries we draw around particular pieces of nature have no meaning when one considers nature overall. These boundaries are pernicious because they reinforce the idea that people are separate from nature. However, the reality is that we all depend on nature’s systems and we need these to be healthy. In contrast, the classical liberal idea of private property rejects the notion that nature, its component parts, and indeed future generations have some moral worth in and of themselves.

In Freyfogle’s view the law of private property will need a “full overhaul” if we truly want the moral worth of nature to be properly recognised. Drawing an analogy with the transition from slavery to emancipation he notes that slavery was able to operate because slaves were property and the law was focused on the rights of the owner. In order to deal with the ecological crises we face he suggests that we will need to learn the same lesson and “stop thinking of nature as our slave”. This will require us to change how we view

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18 At 1275.
19 At 1277.
20 At 1281.
21 At 1281.
22 At 1282.
private property and how that institution relates to nature. This exercise is on-going. In recent work Freyfogle has reiterated his early point noting that:

The private ownership of land has become problematic for many people who care about nature and who worry that we are not living responsibly in it and on it. Too often landowners act in ways that are not ecologically sound. Too often they think only of themselves and the short run and fail to consider the large community of life and future generations. And private property – that is, the legal power that owners possess – seems to shield landowners from meaningful challenge to what they do.

Freyfogle also addresses the classical liberal metaphors of islands, castles, and bailiwicks, noting that these ideas took root in a time when the revolutionary fever of the 17th and 18th centuries was at its height. These tropes helped to reinforce the classical liberal idea that a key purpose of private property is to provide autonomy, liberty and to protect the owner from the greedy clutches of the state. These symbols developed at a time when people did, in fact, live off the land and could retreat to it in times of great difficulty. While those times have now passed, the images still dominate. However, in a contemporary context these ideas can have negative consequences. It allows land holders to retreat behind the walls of their metaphorical castle, using their land in any way they wish, and only focusing on satisfying their own needs and desires. In essence, our cultural heritage promotes the importance of the individual, but this idea can be taken too far and there must be some recognition that we are all parts of a greater whole. That whole needs protection and the classical liberal approach to private property is likely to perpetuate rather than alleviate root causes of environmental harm.

Freyfogle is not alone in his discomfort with the classical liberal paradigm. Sax has made similar observations noting that the conventional view of private property sees


24 Freyfogle, above n 14, at 1284.
environmental resources as detached entities that can be turned into objects of human wealth through hard work and perseverance. Land, for example, is seen as essentially passive; lying there waiting to be picked up and put to good use. Subduing the wilderness and putting it to productive use is a common cultural metaphor for both American and Antipodean settlers. Sax notes that contemporary environmental laws do not adopt a radically different approach to private property from that current in the 18th and 19th centuries. There is certainly no presumption that everything is part of a connected whole. For example, current environmental laws tend to treat rivers, each parcel of land on either side and the air that sits over them as separate entities (although New Zealand’s Resource Management Act 1991 is a notable exception in this regard). In Sax’s view, a key purpose of the law of private property is emphasising and enforcing this separateness.

In a similar vein, Butler has noted that private property law tends to fail to give recognition to the connections between resource use and ecosystem health. In her view, the key problem is that private property subscribes to a “value system” that makes it very difficult to effectively manage the environment. In particular, the key norms of the classical liberal idea of private property, which promote individual control over the needs of the community, have contributed to what she terms a “pathology” which has resulted in “…escalating land and water use, and … ineffective watershed or ecosystem management over the long term.” In her view, the desire to effectively manage natural resources cannot be reconciled with these norms.

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26 At 1444.
At the heart of these norms is the classical liberal preference for individualism and autonomy. This has shaped a range of management and allocation programmes, which by their very nature make it quite difficult for ecological interests to be catered for. Private property (on the classical liberal mould) finds it very difficult to account for values that have long-term implications or that cannot be easily measured.\textsuperscript{28} What usually happens is that private property’s bias tends toward consumptive and private uses rather than uses that would benefit ecosystems and the community more generally. This trend can be seen in American water law, which sees water as a discrete resource that must be allocated and used; “the use-it or-lose-it requirement”.\textsuperscript{29} This has led to over-use of rivers, and the over-development of water fronts at the expense of riparian habitats.\textsuperscript{30} Another consequence of the focus on short-term exploitation for profit is that it disregards the ability of resources to keep producing over the long-term.\textsuperscript{31} The result of focusing on an idea of private property as an absolute right is a general neglect of the rights of others, the environment and the public interest.

A further problem stems from the tendency of classical liberal private property to promote certainty and stability over other considerations. This can conflict with successful ecosystem management. Environmental systems are in a constant state of flux, which cannot be easily reconciled with the stability that would most effectively promote investment and use.\textsuperscript{32} The classical liberal concept of property is not sufficiently flexible to deal with the ever-changing nature of environmental systems.

\textsuperscript{28} At 933.
\textsuperscript{29} Carol M Rose “From H2O to CO2: Lessons of Water Rights for Carbon Trading” (2008) 50 Ariz L Rev 91 at 100.
\textsuperscript{30} Butler, above n 27, at 952.
\textsuperscript{32} Butler, above n 27, at 936.
In addition to outlining the potential of classical liberal private property to cause environmental harm, many scholars have identified specific examples. In relation to the pervasive use of toxic products by industrial land owners, Burdon notes that the general approach is that as long as a product is legal, then it is acceptable. If regulations are weak (or there are none) then landowners have no incentive to do anything other than act in a way that satisfies their own preferences. They can prioritise their own needs (which are likely to be to make a profit) over the needs of the land or the community. Burdon notes that over the last 30 years the global use of pesticides has more than doubled, which has had huge environmental costs. The central problem is that simple choices of particular individuals actually occur within an enormous sphere of interconnected relationships. Burdon notes that “…the spread of these toxins throughout the environment demonstrates in a very tangible way that the choices we make as property owners have consequences that flow beyond our borders and ourselves.”

An excellent and topical illustration of this point has been provided by Babie who points to climate change as a paradigmatic example of the dangers that accompany the classical liberal idea of private property. In his view, human caused climate change is really a private property problem and he maintains it is important to recognise it as such.

He argues that the classical liberal approach to private property enables individuals and corporations to use resources in a way that leads to the emissions of greenhouse gases and climate change. The classical liberal idea of property facilitates the choices we have about how we live our lives; from what we do and where we live, to how we get around. In general these choices are not made with reference to other members of the community. However, our everyday decisions do have an impact on the climate, as the cumulative

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33 Burdon, above n 8, at 715.
34 Babie, above n 5, at 20.
consequences of resource use is the greenhouse effect. To compound this problem, it is not just individual choice that impacts on the environment. Corporations have a role to play too. The choices made by corporations inform the choices available to everyone. It is not possible to buy ‘green’ energy if no corporation is prepared to generate it.\(^{35}\) Private property is the institution that makes these choices possible and, it follows, that the “agenda-setting”\(^{36}\) focus of private property in the classical liberal tradition is a prime culprit for the behaviours that causes climate change.\(^{37}\)

Babie considers that while it is often claimed that creating a private property interest in carbon is the solution to the problem of climate change, it could equally be argued that private property is actually the cause of the problem, because the choice central to the classical liberal conception of private property lies at the centre of human induced climate change.\(^{38}\) He queries the reason why, in the face of overwhelming evidence that humans are a root cause of climate change, we do not change our behaviour. He suggests that the answer is found in the classical liberal idea, held by much of the populace, that private property is essentially an individual and absolute entitlement to a thing. It follows that individuals have an absolute discretion to use their property in any way they wish, without thought to the consequences to others, which has a clear impact on climate change:\(^{39}\)

So long as an individual, when faced directly with a clear and specific choice – car or not, greenhouse gas or not, coal-powered electricity or not – thinks first of themselves, free to choose and suit themselves, to act … without any regard for others and without interference from others, yet believes that this will produce benefit for others, then externalities will inevitably follow … Climate change, then, is a problem made possible by the concept of private property, and made real by its idea.

\(^{35}\) At 21.
\(^{37}\) At 535.
\(^{38}\) At 530.
\(^{39}\) At 542.
He then asks, expressing his scepticism regarding emissions trading, “Is it wise to entrust the solution to the concept that put us here?”. Babie does not go on to provide an answer to his rhetorical question. Rather he suggests that our first task should be to reappraise the classical liberal concept of private property to recognise that the interrelationship of our private property system and the environment is underpinned by our choices, not those of government.

While there are numerous other specific environmental concerns, for my purposes it is enough to focus on the essential objection, which is that classical liberal theory is dominant, and denies the interconnected nature of individuals, the communities in which they are centred, and the environment in which they live. The broad concern is that the classical liberal tradition of private property and the economic systems that follow drive a range of unsustainable and negative environmental behaviours. Classical liberalism is concerned with creating an environment in which individuals are able to live their lives in the way that they wish. It maintains that this is dependent on having control over the resources necessary to this life. Private property, and the liberal triad rights of possession, use and disposition, is the mechanism that provides this control and allows individuals to “set agendas” in a way that will allow them to satisfy their own preferences and desires.

The problem however is that a number of the serious ecological challenges facing the Earth arise as a direct result of this collective human action. In particular, environmental damage often occurs as a direct consequence of the legitimate use of private property.

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40 Babie, above n 5, at 22.
41 At 22.
43 Taylor and Grinlinton, above n 7, at 6.
45 Babie, above n 56, at 532.
46 Babie, above n 5, at 17.
rights in particular resources, with the primary culprit being the very idea of absolute private property that is such a key part of the classical liberal worldview.\textsuperscript{47}

**III. Specific Concerns Regarding Tradeable Environmental Allowances**

Although this is a general objection to the classical liberal idea of private property and applies to any ownership of natural resources, it is a key driver of the concerns that accompany the use of tradeable environmental allowances. While it is accepted by many that tradeable environmental allowances can be a useful tool to address collective action problems such as the tragedy of the commons, there is a real risk that in this sphere especially, the classical liberal idea of property has the potential to run riot. There is marked degree of scepticism that private property, in many respects the institution responsible for environmental degradation, should be entrusted with its remedy.\textsuperscript{48} This scepticism has manifested in a range of particular concerns surrounding private property based regimes of resource management and tradeable environmental allowances. Although these concerns tend to be driven by the general observations regarding the environmental problems that can flow from private property, it is necessary to consider them in more detail. I will start by considering the broad anxiety surrounding private property based resource management and then move on to consider three specific concerns.

The general concern is neatly articulated by Joseph Guth. In his view, while there are a range of practical problems with private property based resource management the most important concern flows from the common law’s approach to resolving conflicts between private owners. In line with the classical liberal world view, the resolution of disputes is

\textsuperscript{47} Taylor and Grinlinton, above n 7, at 8
\textsuperscript{48} Babic, above n 5, at 17.
often achieved in accordance with the current dominant idea of overall social welfare. Because this is so heavily skewed towards the desires of the individual and the encouragement of aggregate wealth, it is extremely difficult for environmental issues to be recognised and catered for. This problem is likely to become acute when private property is expressly employed to resolve environmental problems. In Guth’s view, even privatising the entire Earth would not result in the ecological protection necessary to alleviate the world’s problems: “It would only take us further down the road we are already on, placing ever more of the Earth into private hands while leaving in place the common law’s core conception that the public welfare is promoted by encouraging economic growth.”

Environmental protection is not a necessary consequence of a private property regime. The creation of private property in a resource does not necessarily mean that environmental protection will be the goal (or desired outcome) of the regime. One of the potential problems of using private property to manage natural resources is that while an effective property scheme may be successfully established, the objectives of the regime may approach environmental imperatives with hostility or treat them as insignificant. Rose, for example, uses the gold miners of 19th century California as an illustration. These miners successfully created a set of property rules that governed the resolution of disputes, the size of claims and the consequences of abandonment. However, the private property regime that resulted paid no attention to the environmental impact of their activities. The goal of the regime was to regulate the miners’ relationships with each other and to assist them in avoiding disputes. The environmental results were devastating and remain evident today. Indeed, the suggestion is that the property rules established by the miners actually

50 Rose, above n 6, at 11.
facilitated the environmental damage, by reducing the number of disputes and freeing up the miners to get on with the chase for gold.\textsuperscript{51}

Clearly then, the general objection to using private property as a tool of environmental management results from the broader point that the dominant norms underpinning private property have contributed to negative consequences.\textsuperscript{52} The issue has been well summarised by Butler who, like many other scholars also calls for a reconsideration of our idea of private property: \textsuperscript{53}

> Even if a private property regime is less likely to cause environmental ruin than other regimes, that fact does not address the environmental harms that private property owners have caused. The point is not that private property norms are the sole or primary cause of environmental degradation, but rather that traditional private property norms are biased against environmental quality and ecological integrity, and therefore, are part of the problem. Solving the problem of environmental degradation thus will require some re-examination of private property norms.

While private property has the potential to be a useful and successful tool of resource management, this will not occur if it is allowed to operate along the strict lines of classical liberal thought.

Although I agree with Babie that relying on private property to solve climate change requires careful thought, I also agree with a number of scholars that the problem is not with private property \textit{per se} but rather with how we understand private property as an institution.\textsuperscript{54} Shortly, I will consider some of the work that has considered how private property might be changed so as to better cater for environmental considerations. However, before I do so I want to briefly outline three particular concerns scholars have regarding the use of private property to manage natural resources. To an extent these

\textsuperscript{51} At 12. These rules also laid the groundwork for the current approach to water allocation in the American West. Essentially, the first in time has priority and if the water is not used the entitlement is lost. This scheme can have very serious negative environmental consequences.

\textsuperscript{52} Butler, above n 27, at 952.

\textsuperscript{53} At 966.

\textsuperscript{54} Taylor and Grinlinton, above n 7, at 5.
concerns flow directly from broader anxieties regarding private property. However, they also serve as particular illustrations of the specific problems that can flow from using a classical liberal idea of private property to manage natural resources.

A. A “right to pollute”

One of the primary ways in which this general concern manifests can be seen when one considers emissions trading schemes such as the New Zealand emissions trading scheme (NZ ETS). In essence, the risk is that an entitlement to emit greenhouse gases can be framed as a “right to pollute”. This view of the right arises because, at least on some levels, emissions trading schemes treat greenhouse gas “pollution” as a simple cost of doing business. The whole purpose of these regimes is to establish a system whereby individuals and corporate entities can choose not to pollute, or alternatively, to pay and continue to pollute, whichever is cheaper. Essentially, by establishing a market in private rights to undertake emitting activities, critics say that environmental protection is translated into the dominant language of private property and the classical liberal emphasis on individual autonomy, commodity and trade.

Moreover, critics argue that by creating a “right to pollute” emissions trading schemes actually encourage substitute performance, in the sense that polluters can pay someone else to achieve reductions on their behalf, rather than behaving in an environmentally sustainable way. While overall levels of pollution may be reduced, these schemes can operate to obscure the difficult questions about where and how pollution is occurring and which polluters are actually reducing their environmental impact. Many find this

deplorable, and are concerned that a genuine ecological problem will be translated into a simple exercise of economics.\textsuperscript{59} The risk is that those involved may lose sight of the very real environmental problems at issue and become caught up in the “logic of prices, sale, purchase, registration, transfer and return”.\textsuperscript{60} Thus, the creation of private property rights in natural resources can mean that people no longer place any intrinsic value on the things that have been commodified.\textsuperscript{61} In essence, the purchase of a right to pollute sends the wrong ethical or moral message about the activity of pollution.\textsuperscript{62} It may be seen as permitting the holder of an emissions unit to do something that is wrong simply because he or she has acquired a private property right. There is a risk that the adoption of property-based measures to regulate environmental resources may work against “moral suasion” creating a “climate in which one is not expected to do the right thing unless it is in one’s direct interest to do so”.\textsuperscript{63}

B. The logic of capitalism and the problem of growth

A further specific concern stems from the fact that at the heart of classical liberal thought is a desire for wealth creation; the “rising tide that will lift all boats”.\textsuperscript{64} Indeed, in line with individual preference satisfaction and the role of the market, neoliberal economics suggests that the health of a nation can be measured by assessing its financial wealth, through the gross domestic product (GDP). By measuring changes in GDP the “well-being” of a

\textsuperscript{59} Guerin, above n 55, at 18.
\textsuperscript{60} Winter, above n 6, at 15.
\textsuperscript{61} Rose, above n 57, at 1919.
\textsuperscript{62} At 1919.
\textsuperscript{63} Carol M Rose “Rethinking Environmental Controls: Management Strategies for Common Resources” (1991) Duke Law Journal 1 at 34.
\textsuperscript{64} This phrase is most commonly attributed to President Kennedy in a speech he gave at the dedication of a dam in Arkansas in October 1963. See President J F Kennedy “Remarks at the Dedication of Greers Ferry Dam” (Heber Springs, Arkansas, 3 October 1963).
society can be evaluated. If the GDP of a country is increasing the society will be considered to be growing and therefore successful. If GDP is contracting, the assumption is that the inverse is true, which is likely to have an impact on general economic sentiment, investment and the economy more generally. Thus, capitalism relies on growth. However, critics argue this is not solely because growth realises the desire of increasing aggregate wealth. Growth also tends to obscure the distributional inequalities inherent in the capitalist structure. By giving individuals the perception they are becoming wealthier, or have a real possibility of becoming so, the current economic structure operates to disguise what can be extreme outcomes of social and economic injustice. The uninhibited use of natural resources, facilitated by private property, is seen by many as the foremost way to guarantee economic growth, individual freedom and aggregate social wealth. This idea is sometimes made explicit in political policy.

This ties back into the point that because private property is granted so much legal protection, it allows for, and indeed encourages, the types of behaviour that lead to environmental harm. The problem is that the creation of social wealth is driven by economic growth, and the current economic models have no mechanism to restrict (the essentially ancillary) environmental damage caused by the production that underpins growth. The classical liberal worldview provides no intrinsic duty for individuals to avoid or minimise the environmental impact of their individual private property use.

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67 See for example a policy to explore oil, gas and mineral deposits in order to “…secure our energy supply, build a stronger economy, create higher-paid jobs, and raise living standards for all New Zealanders” (NZ National Party “Energy and Resources Policy” (8 January 2014) NZ National Party <http://www.national.org.nz>).
68 Taylor and Grinlinton, above n 7, at 11.
Moreover, neoliberal economics places no theoretical upper limit on growth.\textsuperscript{69} However, the reality is that in a finite world there are environmental impediments to unconstrained growth.

It follows, scholars argue, that it is extremely short-sighted to recognise private property in resources with the aim of creating markets in them. If an individual has the perception that they can use their private property in any way they wish, it is likely they will do so, and will ignore the ecological reality that resources are finite.\textsuperscript{70} Under current models the “rational” self-interested individual at the heart of the market will be focused on making a profit. This will be encouraged because increasing profit is equated with increasing growth (which of course provides the very incentive that is crucial to avoiding the tragedy of the commons). However, the result is that by focusing on their own self-interest the rational actor is likely to ignore the impact their behaviour may have on others, or on aspects of the environment which are not directly within their sphere of interest.\textsuperscript{71} Thus, while the individual may end up looking after their cows and the bit of the former common on which they graze, they may be disinterested in looking after the stream which meanders its way past other parcels of land and which may carry away effluent and the fertilizers relied on to make the land as productive as possible.

Of course, the conflict becomes acute when tradeable environmental allowances are employed to manage natural resources. The markets created by the establishment of these rights ostensibly rely on classical liberal logic and the desire for continuing growth.\textsuperscript{72} At the

\textsuperscript{69} Guth, above n 49, at 463.


\textsuperscript{71} Bosselmann and Richardson, above n 66, at 6.

\textsuperscript{72} Graham, above n 4, at 159.
heart of the modern economy lies private property rights and various rights to exploit the natural resources necessary to our consumptive lifestyles. As Graham notes:73

To not strive toward greater production and more growth is not only antithetical to current socioeconomic considerations, it is heretical. Given the tension between the growth imperative and environmental protection, markets seem the least likely instrument to effect reform on the order of a paradigm shift.

It follows that there is an inherent conflict between the needs of the environment and the logic of capitalism.74 The central point is that private property, on the classical liberal approach, does nothing to address the underlying values that establish incentives that lead to environmental harm.75 Moreover, although the belief is that GDP measures human welfare, it actually only measures the value of goods and services sold each year. It has no capacity to measure the cost to natural resources or its effect on the health of animal populations or, for that matter, humans.76

C. Path-dependency and problems with flexibility

The final concern I want to discuss centres around what Rose has termed “path dependency”.77 While private property can be a powerful way in which to address the tragedy of the commons, without care it can defeat the purposes for which it is employed. This problem arises because once private property is employed to manage any system of resources (be it natural or otherwise) it brings with it an approach, history and gestalt of its own. When hard cases occur decision makers are, by training and necessity, going to rely on the approach to private property with which they are familiar. In the case of tradeable environmental allowances this is likely to be the classical liberal paradigm of property.

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73 At 161.
74 Alexander, above n 65, at 121.
76 Guth, above n 49, at 463.
77 Rose, above n 6, at 13.
The classical liberal paradigm, however, does not fit comfortably with the purpose for which private property is used to manage environmental resources. The classical liberal paradigm is focused on creating an atmosphere in which the individual is protected and encouraged to trade. Preference satisfaction is seen as the ultimate goal of a property regime. Conversely, using property in the environmental context focuses on a very different objective. It seeks to reserve a portion of the resource from normal commercial pressures in an attempt to secure sustainability and ecological protection.

As Rose notes, where problems become evident after a private property scheme has been adopted it can be extremely difficult to adapt because of prior institutional choice. Private property is a language that comes easily to lawyers and courts and once referred to it can become entrenched. If precedents are set they will guide decisions makers so that they must be either followed, or distinguished, in subsequent cases. Moreover, policy makers will be influenced by both decisions that have been made and predictions regarding the way in which future decision might be reached.

Addressing any conflict between the classical liberal operation of private property and environmental reality is possible but can be extremely difficult. This has the potential to be a real problem in relation to tradeable environmental allowance regimes. In theory, if not practice, a regime of tradeable environmental allowances must restrict the use of a resource to a level that is compatible with the sustainability of the whole complex network.

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80 Rose, above n 6, at 14.
or ecosystem in which the resource is embedded. To achieve the goals of resource conservation, it will also require a large degree of flexibility in order to adjust to changing information and policy priorities. The classical liberal approach to private property and its focus on insulating the desires of the individual from the needs of the community and ecosystem may limit the degree of flexibility available.

While parliamentary sovereignty suggests that, if necessary, any negative path dependency can be alleviated, this relies on a cumbersome political process that is itself long and difficult.\footnote{See the discussion of parliamentary sovereignty at chapter ten I.A.} Although New Zealand has had a reputation for being for being the fastest law maker in the West\footnote{Geoffrey W R Palmer Unbridled Power: An Interpretation of New Zealand’s Constitution and Government (2nd ed, Oxford University Press, Oxford, 1987). Interestingly, Palmer has more recently made the observation that, in his view, since the advent of MMP New Zealand is no longer the fastest law maker in the West (see Rt Hon Sir Geoffrey Palmer “Law Reform and the Law Commission in New Zealand After 20 Years – We Need to Try a Little Harder” (paper presented to the New Zealand Centre for Public Law, Public Office Holder Lecture Series, Victoria University of Wellington, March 2006).} the passage of legislation through Parliament is rarely quick or easy. Moreover, if legislation is particularly controversial it can take a long time to pass; if legislation is uncontroversial it can languish in the House as it may be unlikely to garner votes or generate any political benefit. The concern is adopting private property regimes to manage natural resources will allow the dominance of the classical liberal idea of private property to lead to increasing inflexibility regarding the privatised resources and therefore potentially perverse environmental outcomes. As a tradeable environmental allowance becomes more closely aligned with a strong classical liberal private property right it will become more difficult to cancel, or change, that right,\footnote{Mattieu Wemaere and Charlotte Streck “Legal Ownership and Nature of Kyoto Units and EU Allowances” in David Freestone and Charlotte Streck (eds) Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work (Oxford University Press, Oxford, 2005) at 53.} and the greater the likelihood that it will be taken to have granted their holder an unlimited or absolute degree of control over the resource in question. In any event, given the dominance of the classical liberal approach and its appeal to neoliberal governments the reality is that there may not be any...
political will to change path-dependency. In essence, like ivy growing on an old building, the institution of private property has a dangerous strength,\(^{84}\) creeping onwards, filling in gaps as it goes. In many cases this is useful; providing institutional support in situations where there is no clear or easy answer. However, particularly in relation to environmental resources, this tendency also has the potential to stranglehold flexibility and change.

D. Summary

In summary, the broad concern of scholars regarding the use of private property to manage natural resources is the reality that many of our pressing ecological problems have their roots in the classical liberal worldview and the idea that individuals should aspire to the pursuit of pleasure or happiness (defined as having more).\(^{85}\) The anxiety is, that by employing private property in an attempt to solve the tragedy of the commons, we will perpetuate the idea that natural resources are essentially passive, sitting there waiting for industrious humans to pick them up and put them to work. There is a real concern that using private property in this way will reinforce the idea that resources are individual assets, quite distinct from the ecosystems in which they sit.\(^{86}\) The classical liberal idea of private property repudiates the notion that the community has an intrinsic interest in natural resources.\(^{87}\) Over 60 years ago Leopold attacked this approach to resource management with his discussion of our relationship with land. In his view, we needed to radically change our approach. He maintained that we must establish a “land ethic” that would enable us to “see land as a community to which we belong”. Only in this way could


\(^{87}\) At 88.
we “begin to use [land] with love and respect”, because, “there is no other way for land to survive the impact of mechanized man”. Leopold articulated his land ethic as meaning that “a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community”. The key concern of scholars who accept there is a place for private property in resource management, is that Leopold’s observations have not yet been addressed and that we seem a long way from achieving a land ethic, let alone a broader environmental or ecosystem ethic. There is a real risk that the classical liberal approach to private property, when employed to manage the environment will tend to reinforce old ways of dealing with resources and lead us further from Leopold’s desire, rather than assisting us to achieve it.

The disquiet is not with private property rights in and of themselves, but rather with how we approach private property and what we think it allows us to do. As I have discussed, the current issue facing this area of the law is not whether private property can or should be used to manage natural resources, but rather to determine how private property can be deployed to serve the interests of both the individual and the community. Of course, impeding this discussion is the dominance of the classical liberal vision of private property and its absolute view of exclusive use, disposition, and alienation.

IV. Approaches to Resolving the Dichotomy

Having identified the classical liberal vision of private property as the prime inhibitor to the effective management of natural resources, the task is to find a way in which private

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88 Leopold, above n 3, at viii – ix.
89 At 224 – 225.
90 Alexander, above n 86, at 88.
91 Taylor and Grinlinton, above n 7, at 5.
92 Bosselmann and Richardson, above n 66, at 4.
property rights can “change or evolve in order to better equip society to deal with the ecological challenges of our time”.”\(^\text{94}\) While there may have been a time when the unrestrained use of natural resources was seen as appropriate and as a key source of economic transformation, those days are gone. It is now clear that the good of everybody cannot be ensured through the uninhibited use of private property. The Earth simply cannot sustain such an approach.\(^\text{95}\) It follows that the goal must be to embrace an understanding of private property that does not sanction harmful activities, but instead, encourages sustainable practices.\(^\text{96}\) Achieving this aim would essentially “establish a new paradigm”\(^\text{97}\) for property that would be centred on ensuring the preservation of the environment. In essence, the objective is to achieve a result in which private property serves the twin desires of freedom and prosperity through preference satisfaction in a way that also ensures environmental sustainability.

There is no shortage of people who have called for a reconsideration of the primacy afforded to private property under the classical liberal worldview. Many have observed that there is no fundamental impediment to such a shift.\(^\text{98}\) A popular approach advocates addressing the heart of private property and its justification as an institution in a way that reformulates it to prioritise the common good.\(^\text{99}\) In a similar vein, other scholars suggest articulating a new ethical or moral foundation for private property that would guide its use, inform our law and the functioning of the market, which in turn would reflect our

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\(^{94}\) Taylor and Grinlinton, above n 7, at 1.

\(^{95}\) At 10.

\(^{96}\) At 5.

\(^{97}\) At 5.

\(^{98}\) At 11.

relationship with the environment. Other efforts begin by critiquing society’s dominant metaphors of private property before suggesting that these should be replaced by new metaphors that recognise the relationship between humans and the environment. However, all of these approaches have a common aim to find a way to reshape our idea of private property that will harness its utility as a social institution as well as achieving sustainable environmental outcomes. Indeed, as Bosselmann notes:

Developing a property regime with inherent responsibilities is, in fact, the purpose of environmental law. To the legal profession this may sound overly ambitious, but for any student or scholar of environmental law, changing the dominant logic of individual rights versus collective responsibilities is a key motivation. The discipline of environmental law emerged from the need to stop an exploitative human-nature relationship.

These general examples all fit within a broader theme in the literature which advocates revising our idea of private property so that when we create private property rights in resources we align incentives with conservation goals. These authors argue, either explicitly or implicitly, that property law should be externally overhauled and a new vision of private property substituted with a much expanded, or renewed understanding, of the common good.

There are other common themes in the literature. One approach attempts to reconcile property rights with the growing body of public laws. In many cases this involves imposing legal obligations which restrict an individual’s ability to use their private property. In other words, it suggests property be subjected to an increased amount of state regulation. A different approach is best seen in the work of Ostrom and her colleagues and suggests the

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100 Taylor and Grinlinton, above n 7, at 6.
101 At 6.
102 Bosselmann, above n 99, at 27 (emphasis in the original).
103 Taylor and Grinlinton, above n 7, at 4.
establishment or acknowledgement of common property regimes. While I do not intend to address these ideas in any detail they also seek a reconceptualisation of private property and suggest that the primary task is to reformulate our idea of private property so that environmental protection becomes part of the body of property law itself.

No matter the broad approach or theme I consider that the emphasis on reconceptualising private property fails to take adequate account of the presence of the social obligation norm in our legal tradition. In particular, I consider that those authors who advocate a new formulation of private property should instead look more closely at the current operation of private property in our law. In order to demonstrate the oversight in this literature it is important to give a reasonable overview by briefly outlining several examples. Given the imaginative and hypothetical nature of these musings it is useful to consider them by author, rather than attempting to rationalise the points thematically.

One of the most prominent scholars who has advocated a revision of private property is Freyfogle. In the early 1990s he argued that:

By now we should know that the community of which we are a part includes the soils, waters, plants and animals that live with us on Earth. By now we should know that the land does not belong to use; we belong to it. Our charge is to avoid injury to this enlarged community, and if we can go further, to foster its health and beauty ... This implied obligation of owning the land has long existed. Is it not time for us, by speaking and acting, to make that obligation express?

In articulating his own response Freyfogle has called for what he calls an “ecological constitution”, an idea that has become a theme of his work. He proposes that we should be aiming for a “land-sensitive” legal environment that would move private property away from the dominant images of classical liberal thought (as illustrated by Blackstone’s

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105 Freyfogle, above n 14, at 1297.
106 At 1269.
107 At 1292.
comments regarding sole and despotic dominion). Freyfogle’s desire is that private property is recognised as a dynamic and social institution that reacts to societal needs, arguing that “ownership needs to carry the sense of belonging to a community, with rights of ownership matched by duties to promote the well-being of that community”. In this, Freyfogle expressly echoes Leopold’s call for a land ethic founded on individuals viewing themselves as members of a biotic community. Membership of this community would bring a recognition that obligations are owed to others.

In his early work Freyfogle did not attempt to suggest precisely how such a shift could be achieved, simply noting that it would be the job of the United States Supreme Court to find a way by using the takings clause of the United States Constitution to conceive of private property as an evolving social institution. His expectation was that as “popular understanding” grew through the mechanism of judicial reasoning, there would be an increasing acceptance of the idea that private property’s abilities and limits will always be dependent on context. His hope was that eventually our idea of what it means to own property would change so that, for example, “the owner of a sensitive wetlands [would] hold no power to drain or fill it. This kind of conduct [would] seem naturally wrong, a nuisance or worse, and a legal ban on draining [would] merely implement our shared image of that stewardship.”

In more recent work, Freyfogle has been more explicit. In particular, rather than relying on judicial action, he suggests that it is lawmakers who should be aiming to change the existing norms of property ownership so that they foster new visions of the common

110 Freyfogle, above n 14, at 1293.
111 At 1293.
good. He has outlined a number of ways in which “new definitions of land use harm” could be employed to redefine property rights of landowners so that the natural features of the land are taken into account. He has also suggested methods by which collectively owned parts of nature can be given some degree of special legal status. For example, if water is publically owned then members of the public would have the capacity to insist that private actors are required to avoid acting in a way that results in ecological degradation no matter where the water is located. He suggests that the effect of this special legal status would be to reformulate our idea of private property so that it can change now, and in the future, and that can be transmuted into a new understanding of what rights and obligation land holders have with respect to that land.

Sax is another scholar who has attempted to provide a vision of how property could be reformulated, articulating a goal of an “ecological view of property”. This would not see land as passive and waiting to be put to good use, and would avoid the tendency of classical liberal thought to see land as a fragmented and discrete entity with no relationship to the environment that surrounds it. An ecological view of property would recognise the systems inherent in the land “defined by their function”, and would accept that the land is doing important work, even when it is sitting being “wasted”. For example, a forest does a number of important things, such as soil stability and water filtration, even if it is not being used to grow timber, or being cleared to provide space for more dairy cows. This view of property would restrict development to an appropriate degree, and would also influence the way in which landholders approach and think of their land.

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112 Freyfogle, above n 15, at 57.
113 At 59.
114 Sax, above n 25, at 1442.
115 At 1442.
116 At 1442.
117 At 1442.
118 At 1445.
view, such an approach would have a profound impact on an owner’s sense of entitlement, with less reliance on metaphors of island and castles and more acceptance that property holders owe obligations to protect “natural services”.\textsuperscript{119} In turn this would lead to a greater focus on uses of land that are appropriate to the functions best performed by that land.\textsuperscript{120} In essence Sax urges us to work to develop an “economy of nature” that would work within the laws of nature rather than pursuing our current “transformative economy” which treats natural resources as separate, passive and inert goods waiting to be transmuted into useful human artefacts.\textsuperscript{121}

Guth has also engaged with the need to alter the dominant idea of private property to address ecological problems. He suggests that the task is to “restructure our property laws so that they will define the rights and responsibilities of all landowners both public and private, so as best to serve the public welfare”.\textsuperscript{122} He proposes a new common law rule that would make individuals liable for an “ecological degradation if his or her conduct is a legal cause of an unreasonable ecological threat”.\textsuperscript{123} In essence, he suggests that the law develops a “tort of ecological degradation”,\textsuperscript{124} which would recognise the cumulative environmental impact of numerous small decisions. In other words, where ecological damage has occurred individuals should be held accountable for their acts that have contributed towards the harm.\textsuperscript{125} In order to strengthen the new law he advocates shifting the burden of proof to defendants. In his view, this new tort would have the effect of

\textsuperscript{119} At 1451.
\textsuperscript{120} At 1451.
\textsuperscript{121} At 1142 – 1146.
\textsuperscript{122} Guth, above n 49, at 488.
\textsuperscript{123} At 495.
\textsuperscript{124} At 431.
\textsuperscript{125} At 496.
incorporating a duty of “ecological stewardship”\textsuperscript{126} into our approach to the environment; a duty that would extend to future generations.\textsuperscript{127}

In an article entitled “The Green Alternative to Classical Liberal Property Theory”\textsuperscript{128} Frazier argues that when defining our collective social welfare, we must refer to environmental constraints inherent in the Earth’s systems and recognise that there are social responsibilities accompanying ownership of private property.\textsuperscript{129} He argues that we need to move towards a “Green Property” “which protects the integrity of life-sustaining natural land communities by emphasizing interdependence”.\textsuperscript{130} Frazier acknowledges that like the classical liberal approach, the green approach to property would accept that individuals seek to maximise their own preferences. However, it would differ in the requirement that individuals recognise their place within both land and political communities, and accept that each part of these communities are interdependent. Individuals would also be required to consider how their decisions would impact on the relative health of those communities and the environment in which they reside.\textsuperscript{131}

Taking a radically different approach Engel, having observed that our modern law of property has abandoned the bonds that tie us to the world,\textsuperscript{132} proposed what he terms a “New Covenant” with the Earth. Without attempting to articulate the detailed contours of his theory, he does suggest a range of “evolutionary, ethical and spiritual foundations on

\textsuperscript{126} At 505.
\textsuperscript{127} At 510.
\textsuperscript{128} Frazier, above n 42, at 299.
\textsuperscript{129} At 366.
\textsuperscript{130} At 368.
\textsuperscript{131} At 366.
\textsuperscript{132} The bond that “binds the time passing and flowing to the weather outside, the bond that relates the social sciences to the sciences of the universe, history to geography, law to nature, politics to physics, the bond that allows our language to communicate with must, passive, obscure things – things that, because of our excesses, are recovering voice, presence, activity, light. We can no longer neglect this bond.” J Ronald Engel “Property: Faustian Pact or New Covenant with Earth?\textsuperscript{2}” in David Grinlinton and Prue Taylor (eds) Property Rights and Sustainability: The Evolution of Property Rights to Meet Ecological Challenges (Martinus Nijhoff Publishers, Leiden (Netherlands) and Boston, 2011) at 67.
which a theory might be built”. The aim would be to move our idea of private property (and therefore our property related behaviour) in an environmentally responsible direction. He considers that we need to find a way to impose limits on ourselves and live within the natural restrictions of the Earth: “such new self-imposed moral rules must constitute the foundation for new and revised notions of property – of every human claim or title to use, improve or benefit from the things of this world, tangible and intangible, human and other than human”.

On a more practical level Burdon suggests that a solution to the private property conundrum lies with agrarianism. In his view, agrarian practice provides a way which emphasises relationships (in the sense of connectedness between place, people and ecosystem) and incorporates ideas of ethics and obligation into our practices around land and natural resources. He suggests that following these ideas will provide a structure to develop an idea of private property that can serve modern ecological needs. Essentially, agrarianism is a way of thought that is based around recognition of, and care for the land, in contrast to approaches which prioritise the individual at the expense of land. It recognises that humans are interconnected and rely on the land for survival. It follows that the appropriate use of land should ensure that all people (and future generations) have access to the basic articles for sustenance. Focusing on this idea means the current ownership model with its emphasis on individual choice can be revised: “what is needed is not the abandonment of private property, but an informed shift in what it means to own land”.

133 At 65.
134 At 77.
135 Burdon, above n 8, at 722.
136 At 735.
There is one final point to stress in relation to scholars’ attempts to articulate a new idea of private property that relates specifically to tradeable environmental allowances. In an attempt to reconcile the private property nature of these tools with environmental imperatives, there is an interesting vein of literature that suggests there is some sort of distinct class of property that can be earmarked “statutory property”\textsuperscript{137} and can be seen as “analogous to a bare licence coupled with right to use and/or take whatever natural resources are allowed in the terms of the consent”.\textsuperscript{138} This literature gets around the jurisprudential concerns regarding the use of private property to manage natural resources by suggesting that these entitlements would be solely governed by the shape and content of the legislation that governs them. I have discussed this in chapter two\textsuperscript{139} but stress here that I find this approach unsatisfactory. In my view, statutes have historically created many different forms of private property, such as copyright and patents, which are clearly accepted to be forms of private property. The fee simple owes its existence to statute.\textsuperscript{140} Indeed, the practical reality is that both legislatures and courts define property rights.\textsuperscript{141} The law can create both rights and duties in relation to particular resources regardless of whether the source of the law is common law or legislation and I find it un compelling to argue that the common law should have any degree of “normative precedence”.\textsuperscript{142} It is also quite clear that the private property rights employed by tradeable environmental allowances are not of this earth: the extraterrestrial nature of statutory property in the 21st Century. \textsuperscript{143}


\textsuperscript{138} Grinlinton, above n 31, at 296.

\textsuperscript{139} Chapter two III.B.

\textsuperscript{140} See Quia Emptores (1289–90) (Eng) 18 Edw 1, St 1.

\textsuperscript{141} Horsley, above n 85, at 89.

allowances are private property in the ordinary sense. Moreover, tradeable environmental allowances serve a similar purpose regardless of whether they are being used to manage carbon, fish, or other resources such as wetlands. It is reasonable to expect that similar rights, albeit managing different resources, will behave in roughly equivalent ways. This is particularly true where the right being employed is grounded in private property theory for the purpose of harnessing the benefits that flow from the use of that institution. To say instead that each tradeable environmental allowance is not private property, but rather a more limited statutory licence runs the risk of rendering redundant the key concept lying at the heart of the right; that private property can be used to solve the tragedy of the commons. The primary concern with using private property stems from the classical liberal account and its potential to cause perverse outcomes in the environmental sector. However, as I aim to demonstrate in this thesis, the social obligation counter-tradition ameliorates a number of these concerns and provides a more compelling way to explain how private property operates generally, but in relation to tradeable environmental allowances in particular. If I am correct, then this mitigates the need to suggest that tradeable environmental allowances are not private property but some lesser sort of entitlement.

Although the examples outlined above display a wide range of approaches and ideas, the common theme is an exploration of the way we might go about reshaping our understanding of private property. There are other suggestions I have not mentioned. Each approach attempts to address the environmental problems that private property can cause by shifting the dominant idea of private property from its narrow focus on the individual, to something that recognises the social function of private property. It is crucial to note, however, that all of these hypothetical exercises are driven by the perception that classical liberal thought is the only explanation for the way private property operates within
our legal system. I think this is an extremely important oversight. There are other explanations of private property inherent in our legal tradition, which remain present today.

V. The Lacuna within this Literature

As I have foreshadowed, the literature exploring ways to reconcile the utility of private property as an environmental management tool with its potential to cause environmental harm, suffers from a significant oversight. This omission can be outlined quite briefly. In essence, the literature reviewed above starts with the premise that classical liberalism is the only explanation of private property’s operation in the modern legal system. It then goes on to confront the potential consequences of this by outlining the potential for environmental harm and putting forward proposals for something new. Scholars advocate imposing new, and outside, conditions on our understanding of property. Their proposals tend to adopt the language of revolution, evolution, change, and reconceptualisation.143 The ultimate goal is “a new understanding of ownership, a new vision of private property”.144 They reject the classical liberal idea of private property and seek to replace it with something entirely new and very different. This is unsurprising; the ubiquity and strength of the classical liberal worldview is well recognised. It is not surprising that scholars are attempting to find a way around it. I myself am trying to do the same thing.

However, while I sympathise with these sentiments, clearly Bosselmann is completely correct when he notes that the legal profession may regard any attempt to develop a property regime with intrinsic responsibilities as “overly ambitious”.145 Indeed, I would venture to suggest that the bulk of the legal establishment would meet such a claim with

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143 Taylor and Grinlinton, above n 7.
144 At 2 (emphasis in the original).
145 Bosselmann, above n 99, at 27.
derision. Any attempt to advance a novel and completely new institution in place of one that has developed over centuries faces substantial obstacles. There is a tendency, as Alexander notes, to dismiss ideas such as those advocated above “… as pie-eyed invitations to gather around the campfire and sing ‘This Land is Your Land’ …”.146

The task, however, is not hopeless. Rather, a different approach provides a principled response to these genuine concerns about the use of private property. What the literature fails to do is to consider our tradition of private property in sufficiently broad detail. It appears to have been captured by the myth that classical liberalism provides the only compelling account of private property.147 This is, however, incorrect. Existing within our tradition of private property is an alternative explanation of private property, how it operates, and what it is good for. My thesis suggests that this idea of property, as a norm of social obligation, provides a powerful approach to resolving the dichotomy in the use of private property as a tool of environmental management. I also argue that, in distinction to classical liberal theory, the social obligation norm offers a more compelling explanation of the way that private property actually operates within society generally. It helps to dispel some of the myths surrounding classical liberalism. While I am not naïve enough to believe that my suggestions will have any higher likelihood of displacing the classical liberal hegemony than some of the more fanciful suggestions discussed above, I think that an idea of property inherent in the institution’s past, and remaining present today, is far more likely to provide an acceptable avenue for change than relying on the imposition of something entirely new. Indeed, I consider that the social obligation norm of property already underpins the structure of the NZ ETS and the quota management system under

146 Alexander, above n 86, at 88.
the Fisheries Act 1996 and is also evident in other tradeable environmental allowances regimes. Demonstrating this is the overall burden of my thesis and may provide an exciting solution to the current problem.

In order to develop my argument and respond to the oversight in the literature it is necessary to consider and develop the idea of private property as a norm of social obligation. This will be the primary focus of the next part, part three, of the thesis which will consider the contours of the social obligation norm and the historical and contemporary evidence of its presence.
Part Three

Private Property and Social Obligation
Chapter Six: An Alternative View of Private Property

I. Introduction

At the heart of any analytical discussion of private property law is the question of what we wish our private property regime to achieve.\(^1\) Answering this question is a crucial first step in defining the contours of private property as an institution. Private property regimes and property holdings are not self-evident constructs; they are predicated on choice, either tacit or explicit. As discussed, modern discussions tend to take the view that private property is aimed at maximising individual preference satisfaction. A range of beneficial outcomes is presumed to flow from this overarching goal. However, although this justification for private property is often viewed as ubiquitous, it is not the only aim of our system of private property. Within our Western tradition there are actually two major, but divergent, goals that we expect to be fulfilled by a private property regime. In fact, our tradition of private property law is plural. On one hand we have property as preference satisfaction. On the other hand there is an alternative idea of private property that suggests private property is justified because of its societal importance, rather than its economic function.\(^2\)

On this account (which is known by a number of different names)\(^3\) the primary purpose of private property is to help maintain the proper form of political order. In order to facilitate this, people should have access to the right kind of private property in a sufficient quantity.

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3 For example, as discussed in this chapter, early discussion of the counter-tradition termed it “property as propriety” (see Rose, above n 1) while more recent accounts have termed it “the social obligation norm of property” (see, for example, Gregory S Alexander “The Social-Obligation Norm in American Property Law” (2009) 94 Cornell Law Review 745). However, there have been other attempts to account for the same tradition, which have adopted different nomenclature. See, for example, Lametti’s articulation of a *deon-telas* discussed in chapter seven (David Lametti “The Concept of Property: Relations Through Objects of Social Wealth”(2003) 53 University of Toronto Law Journal 325). More recently, these efforts have been coined “progressive property” (see Eric T Freyfogle “Private Ownership and Human Flourishing: A Critical Review” (2013) SSRN <www.ssrn.com> at 27.
to allow them to participate in a well-functioning society. Crucial to my thesis is the fact that under this tradition holding private property is accompanied by obligations to the community. The account maintains that, in some cases, collective community interests take priority over the private interests of the individual, which may restrain the ways in which individuals can use their property. This observation is important because, in my view, it provides a potential source of support for the reconciliation of private property with environmental management.

This second tradition of private property is much older than the classical liberal conception. However, despite its ancient provenance, scholars have only recently expressly recognised and sought to explain this account of private property, beginning with Rose and Alexander in the early to mid-1990s. As result, in comparison to the classical liberal approach it has a lot of work to do in order to demonstrate its validity and the way it functions as a normative and legal scheme. To this end, in developing my overall thesis I will rely on a recent account of private property and social obligation developed by Alexander and Peñalver. I will outline this incarnation of the social obligation norm in chapter seven.

For the moment, however, my overall goal in this chapter is to begin demonstrating that there is another way to view private property. I will begin by considering some of the early literature that first noted the counter-tradition and began articulating its contours. I will then examine some of the ways in which this idea of private property is evident in our historical, philosophical and jurisprudential practices. This will provide an important

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4 Robertson, above n 2, at 248.
5 Rose, above n 1, at 51.
background to the discussion in chapter seven which focuses on recent theoretical work on “progressive property” and the social obligation norm of property. It will also examine some of the evidence that this idea of private property remains present within our current legal framework.

II. The Genesis of an Alternate View of Private Property: An Introduction to the Social Obligation Norm or ‘Property as Propriety’

Although the classical liberal account of private property tends to be pervasive it is a relatively recent arrival on the scene of property jurisprudence and political theory, with roots going back to the 17th and 18th centuries. However, an idea of property that privileges the community over the individual has existed in our Western historical tradition for much longer, although it is only relatively recently that scholars have discussed it in any detail.

Carol Rose was one of the first scholars to discuss the counter-tradition in any detail. In considering some of the problems posed by the ‘takeings’ clause in the American Constitution she noted that before resolving these problems, it was necessary to consider what a private property right actually includes. However, before even that question can be answered, it is important to address the preliminary question of what a property regime is attempting to achieve. When considering this she notes the dominance of the preference-satisfaction approach to private property, before stressing that this idea of property:

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8 Freyfogle, above n 3, at 27.
10 Rose, above n 1, at 50.
11 At 50.
12 At 51.
... is not the only one available in our Western historical tradition; there is another and far older traditional vision of property as a practical social institution. On this traditional understanding, the implicit aim of the institution of property is to secure to each person that which is “proper” to him or her, in relation to each person’s role in the commonwealth.

Drawing on the entomology of the words “proper” and “appropriate” she terms this alternative conception of private property “property as propriety”. This conception of property differs radically from the classical liberal account in its understanding of what property and property regimes are good for. On this approach private property serves the expressly social purpose of keeping the commonwealth or body politic in good order. In order to facilitate this aim each person or entity should be accorded what is proper or appropriate to him or her. What is ‘proper’ depends on, and is informed by, that which is necessary to keep good order in the commonwealth or body politic.

At the heart of the idea of property as propriety is the idea that private property is the basis for creating and maintaining the proper social order; private property becomes “the private basis for the public good”. Of course, establishing that the purpose of a private property system is to maintain the proper form of social order, the next step is to enquire into the proper form of the social order. For example, much of the scholarship exploring property as proprietary (or as recent scholarship has termed it the ‘social obligation norm’) suggests that the goals we expect to be fulfilled by a private property regime are primarily social, not individual. This scholarship suggests that humans are social creatures and their individual autonomy is enabled by their social nature and the communities in which they live. On this view, the core purpose of private property is to secure to the individual sufficient property to allow them to participate autonomously in a well-functioning society.

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13 At 58 and Robertson, above n 2, at 248.
14 Rose, above n 1, at 58; and Robertson, above n 2, at 248.
15 Alexander, above n 9, at 668. Alexander has written extensively on this topic.
16 Alexander and Peñalver “Introduction”, above n 7, at xxvi.
This fact tempers the scope of the individual’s ability to use his or her property solely as they wish. However, it is important to recognise that the proper form of social order does not necessarily need to be one in which people participate autonomously. Indeed, the proprietarian tradition has been used to justify slave societies.\textsuperscript{17} The overall point, however, is that private property serves the purpose of facilitating the establishment of the proper form of social order, albeit that the precise ambit of that order is contestable and determined through other social mechanisms.

This idea of private property has profound implications for the classical liberal account of private property. It suggests that rather than society as a whole benefiting from a collection of decisions made by individuals in their own dedicated self-interest, social good does not necessarily flow from a narrow view of self-interest.\textsuperscript{18} Sometimes resource use which is good for everyone may run counter to an individual’s interest. This means that property rights are inherently relational and property holders have obligations to the community. In some circumstances, the collective community interest may take priority over the private interests of the individual. We do not have private property to protect individuals from governmental coercion, rather, property serves as the material foundation of the social order that the community agrees is morally, ethically and politically “proper”. I will consider the intricacies and recent topologies of this approach to private property in greater detail in chapter seven. For the moment, however, there are a few broad comments regarding this counter-tradition that should be noted at the outset.

It is essential to realise that the proprietarian idea of social obligation assumes that the idea of the common good can be described in substantive terms. Consequently, it assumes that


not all forms of social organisation are normatively equal. It suggests that some ways of ordering society are morally superior to others.\textsuperscript{19} This is of course an enormously difficult issue. Indeed, no such consensus exists in most, if any, communities. One person’s idea of the proper social order can differ markedly from another’s.\textsuperscript{20} However, although there can be differing views of the proper social order, what property as propriety does maintain is that the proper social order is not necessarily achieved through the spontaneous workings of the market. Indeed, on the proprietarian approach the market and preference satisfaction leave individuals vulnerable to temptation to act out of simple self-interest rather than encouraging people to behave in ways that will serve to maintain the “good” of the entire community.\textsuperscript{21} Property as propriety considers that the core role of property is to be the fixed point for a political and moral way of ordering society rather than simply as a mechanism allowing individuals to satisfy their individual preferences.\textsuperscript{22} This idea is neatly summarised by Robertson who has noted “the system of property arrangements in any society has to be consciously designed to maintain a proper form of political and social order. Such an outcome cannot be left to the blind workings of private market forces alone”.\textsuperscript{23}

This is not to suggest that property as propriety rejects markets as a tool.\textsuperscript{24} The two are not mutually exclusive. The point is that property as propriety rejects the idea that the market should be the sole determiner of the proper social order. There can be many different variations regarding the factors underpinning “free-markets” each resulting in very

\textsuperscript{19} Alexander, above n 9, at 668.
\textsuperscript{20} Alexander, above n 18, at 75. This is an important point that I will return to in detail in chapter seven.
\textsuperscript{21} Alexander, above n 9, at 668.
\textsuperscript{22} Alexander, above n 18, at 75.
\textsuperscript{23} Robertson, above n 2, at 248.
\textsuperscript{24} Alexander, above n 9, at 688.
different outcomes.\textsuperscript{25} Clearly, private property can achieve the goals outlined by the preference satisfaction model (i.e. the individual values of autonomy, liberty, and individual development and expression). Less has been written about the collective or communitarian values that are inherent in private property.\textsuperscript{26} I suggest that these aspects are equally important in understanding the function of private property and how it works in practice.

There are, therefore, two competing traditions at work in the ways that we view private property.\textsuperscript{27} When closely considered we see that the dominant preference satisfying vision of property is constantly unsettled by an often unarticulated influence from a quite divergent understanding of property. Indeed, the image of owners holding private property happily to the exclusion of all others, with no correlative duties is highly misleading. In fact, owners tend to owe many responsibilities to others.\textsuperscript{28} Our societal conception of property is therefore plural. This pluralism stems from the different and disparate conceptions of property that have informed our historical jurisprudential practices.\textsuperscript{29} My thesis is that this counter-tradition remains within the foundations of private property as an institution today. It provides a cogent way of explaining how private property is being deployed to manage natural resources, avoids some of the concerns surrounding private property based resource management, and also teaches us something about private property more generally. However, before I look at modern articulations of property as propriety (most recently referred to as the social obligation norm of property) it is necessary to briefly consider how the counter-tradition manifested itself within historical

\textsuperscript{27} Robertson, above n 2, at 247.
\textsuperscript{28} Alexander, above n 3, at 747.
\textsuperscript{29} Rose, above n 1, at 52.
practice. As noted, the counter-tradition predates classical liberal thought by a very long margin.

III. An overview of Property as Propriety’s Historical Provenance

In demonstrating that property as propriety has a valid provenance it is convenient to survey ancient and medieval approaches to private property before considering how the counter-tradition was reflected in early modern approaches to the institution. What the following examples reveal is that the roots of this tradition can be traced far into our cultural past. This, in turn, suggests that there is a strong foundation for the argument that property as propriety, or as a norm of social obligation, abides within our modern legal landscape. Classical liberalism may have obscured it, but it has not supplanted it completely.

A. The social obligation norm in classical writings

Like so much of modern thought, the roots of the social obligation view of private property can be traced back to the classical writing of the ancients. In particular we can see a tension between the work of Plato and Aristotle that helps to both demonstrate private property’s social function, but also the on-going conflict regarding the overarching purpose of the institution.

On one hand, in the Republic, Plato argues for a regime of common property as a normative mechanism aimed at serving a vision of the common good. Common property would work to remedy the personal evils and injustice brought about as a result of the

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31 Lametti, above n 26, at 7.
immoral practices connected to private property: greed, immoderation and intemperance.\textsuperscript{32}

In his view, happiness would not be associated with property ownership. Those who lived completely in common would be the happiest citizens of all. To the extent Plato allowed for there to be a divergence between citizens on the basis of talent and honour, this was to be limited and set at a maximum of five times the minimum (and guaranteed) allotment to the poorest class.\textsuperscript{33}

On the other hand, Aristotle, in critiquing Plato, argued that what belongs in common has the least care bestowed upon it.\textsuperscript{34} It follows that a common property regime would be unlikely to eliminate the bad effects attributed to private property and would also serve to ameliorate the positive virtues that are fostered by the private ownership of possessions. In Aristotle’s view private property is desirable because it helps to promote the development of human potential and virtue. However, like Plato, Aristotle did have a conception of the common good and he considered private property was crucial to its achievement.

Virtue was a central idea for Aristotle.\textsuperscript{35} He believed that there existed a distinct idea of human life towards which every individual should strive. There were both good and bad ways of living. Those actions that contributed to living the ideal life were ‘right’ and were to be encouraged. Various actions would assist in this project. These were termed “virtues” and were crucial to achieving the ‘ideal life’ (\textit{eudemonia})\textsuperscript{36} and to flourishing in a human way.\textsuperscript{37}

\textsuperscript{32} At 5.
\textsuperscript{33} At 7.
\textsuperscript{34} At 11.
\textsuperscript{35} Alexander, above n 3, at 760.
\textsuperscript{36} Meaning “all round happiness, or human flourishing” see Iseult Honohan \textit{Civic Republicanism} (Routledge, London, 2002) at 19.
\textsuperscript{37} Alexander, above n 3, at 761.
In line with this, Aristotle considered that the normative function of private property was to facilitate and develop virtue. While Aristotle identified a wide range of virtues the two key virtues were moderation and liberality (i.e. being generous). With regard to moderation Aristotle noted that one could only act moderately when private self-contained action (and resources) gave a person the option to be immoderate. Moreover, one could not be generous (that is liberal) if one had no possessions. Property begets generosity, which fosters friendship, which is beneficial for the city. Moderation and liberality could only be fostered by private property, because only private property afforded a means to achieve these ends. As Lametti notes on Aristotle’s worldview:

Since praise and blame attach only to voluntary actions, we therefore need private property to develop those aspects of character tied in some way to options concerning the use of property. This usage must be according to virtue … Through these virtues, we get a clearer sense of how property should be used; virtue dictates how much property we can have, and how we must use it.

Aristotle sought to demonstrate that private property ownership involved duties based on virtue. By doing this Aristotle placed private property in a broader ethical and political setting. Aristotle’s key point can be distilled to the observation that private property plays a central role in how individuals develop. It is a means to an end and exists within a moral and ethical structure.

This suggests a number of points that are important to a modern understanding of private property and which remain central to the social obligation norm, or proprietarian view of property. Private property does not have an unlimited scope and it can be seen as subject to the imperatives of the polity. Moreover, private property serves an explicitly ethical

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38 Lametti, above n 26, at 7.
39 Honohan, above n 36, at 20.
40 Lametti, above n 26, at 13.
41 At 19.
42 At 17.
43 At 21.
purpose, aiming to give people the resources and means to achieve virtue. Humans are neither completely good, nor completely bad. Law, and private property in particular, serve the function of guiding people to adopt positive habits, and set the right priorities by developing the predisposition to act virtuously.\(^{44}\) This resonates strongly with the idea of property as propriety or social obligation. Private property, while private, is meant to serve a greater public and ethical purpose. It should allow people to play their appropriate role within society as a whole.\(^{45}\)

The teachings of St Thomas Aquinas are also illustrative.\(^{46}\) In many respects Aquinas’ teachings can be seen as an extension of Aristotle’s, albeit that they were penned from an explicitly Christian worldview. The most important development made by Aquinas was clarification of the notion that private property as an institution contains both duties and limits. Aquinas was writing at a time when the idea of private property as a ‘natural right’ was beginning to develop. This view suggested that there is something about the acquisition of private property that makes it defensible in light of human nature or the human condition. Aquinas taught that private property holding could be best justified on the basis of natural law, and as such it must conform to both divine law and God’s purpose, which place limits on the ability of man to put goods to use. These limits are informed by general Christian principles and what is good for the community in general. Natural law also informed human-made law and thus imported limitations regarding the ends for which private property could be employed.

Therefore, the use of private property, on the Thomistic model ought to support the ends of virtue and the common good. The Christian virtues included charity, generosity, sharing and stewardship. Aquinas deployed these virtues in a way similar to Aristotle to lay the

\(^{44}\) Honohan, above n 36, at 21 and 26.
\(^{45}\) Lametti, above n 26, at 22.
\(^{46}\) At 22 – 34.
material foundation for the duty of charity or to limit the accumulation of wealth or the practice of usury. The Christian virtues informed the ‘proper’ uses of private property and through them, Aquinas clarified the normative objects of private property and the fact that within property law there are ethical imperatives. These are underpinned by what is now termed ‘Thomistic virtue’ and Aquinas’ view of the proper and good ordering of society.⁴⁷

B. Medieval and early modern Europe

Although the writings of the Ancients maintain a modern resonance and show property was seen as a tool by which the common good could be achieved, Medieval Europe (including Britain) perhaps offers the best concrete example of the idea of property as propriety. While the history of private property within both the common and civil law tradition is open to conjecture⁴⁸ one compelling account argues that before the 17th and 18th centuries, private property was viewed as a key bastion of what was considered proper or “propriety” in nature.⁴⁹ An early example can be seen in the work of the late 16th century French political theorist Jean Bodin. As Rose notes, Bodin was well known in his day and was a staunch monarchist.⁵⁰ Although he supported the King, Bodin maintained that private property was a constraint on monarchic power. Property was necessary for the maintenance and rightful ordering of families which were themselves integral parts of the commonwealth. Rather than associating property with goods that could be traded, Bodin’s idea of property involved ascribing different types of property to different types of roles. Here the family property Bodin was concerned with was almost certainly land and in particular, specific pieces of property associated with a particular

⁴⁷ At 22 – 34.
⁴⁹ Rose, above n 1.
⁵⁰ At 59.
family. The law acknowledged the appropriateness of this land holding and recognised it by placing restrictions on alienation by various family members; in modern terms these family members were essentially treated as trustees for the next generations of their families.\textsuperscript{51}

Although this idea of private property clearly sits uncomfortably with modern sensibilities, there are other manifestations with which we are far more familiar. For example, the rule of primogeniture and the association of land ownership with men is a European rule stretching at least as far back as the Middle Ages (and probably much earlier). The importance of land ownership cannot be understated. The ownership of land, the only “real” property, was accompanied by a measure of hierarchical governing authority.\textsuperscript{52}

Indeed, even modern land law is still underpinned by the doctrine of estates, which is an understanding of the fiction that all land “ownership” flows from the Crown. The doctrine of estates is the great legacy of feudalism to our modern jurisprudence. As Windeyer notes, the feudal relation of lord and tenant was far more than simply a system of land tenure. Formal obligations of service and fealty were imposed on the tenant and duties of protection and defence were imposed on the lord.\textsuperscript{53}

Although it is difficult for us to identify with this attitude we can see how private property on this worldview could ‘properly’ consist of whatever resources one needed to play one’s part in achieving the good order of the broader community. Property as propriety was part of the intellectual

\textsuperscript{51} At 59 citing Jean Bodin \textit{The Six Books of a Commonweale} (Kenneth D McRae (ed), reprint of 1606 English translation, Harvard University Press, Cambridge (Mass), 1962). This idea can also be seen reflected in the doctrine of waste. This is a very old doctrine which sought to balance the interests of a limited owner (such as a life tenant) and the remaindersmen or reversioners. It prevented the limited owner from altering the nature of the land to the prejudice of the remaindersmen or reversioners either through over-exploitation or by allowing the land to fall into a state of decay. The common law of waste was altered by statute in 1267 (see the Statute of Marlborough 1267 (Eng) 52 Hen 3, c 23). This has now been restated and reformed by ss 68 – 70 of the Property Law Act 2007. See GW Hinde, DW McMorland and NR Campbell \textit{Principles of Real Property Law} (2nd ed, LexisNexis NZ Limited, Wellington, 2014) at 142.

\textsuperscript{52} Rose, above n 1, at 59.

\textsuperscript{53} WJV Windeyer \textit{Lectures on Legal History} (2nd ed, The Law Book Company of Australasia, Sydney, 1957) at 41.
world in which most people considered inequality either quite normal, or indeed desirable. There was a hierarchical view of the proper order; the “Great Chain of Being”. As Tillyard notes:\textsuperscript{54}

The chain stretched from the foot of God’s throne to the meanest of inanimate objects. Every speck of creation was a link in the chain, and every link except those at the two extremities was simultaneously bigger and smaller than another: there could be no gap.

Every person had a place in the chain and within that place a person’s private property was fixed.\textsuperscript{55} Thus, at least in theory, the monarch held property in the form of his or her royal domains and ought not to tax his or her subjects as the income from the domains should enable him to “live of his own”.\textsuperscript{56} In order to facilitate this, the monarch ought to have royal property sufficient to enable him or her to exercise his or her role of overall governance. In turn, the members of the aristocracy (or municipalities) had their own lands on which they as sub-rulers needed to maintain the proper order and so on. Thus, the massive landholdings of aristocratic Europe were seen as necessary to enable each aristocrat to play their proper roles in governing society.\textsuperscript{57}

Moreover, where the King’s income failed to cover all of the expenses of governance he had to \textit{ask} his subjects for additional funds. The King could not simply take their property. However, contrary to the tenets of modern ‘takings law’, the prohibition on confiscation was predicated on a very different rationale from the modern preference satisfaction model. Rather than the concern being that by taking his subject’s property the King would depress their industriousness thereby making society overall poorer; the objection was that the King would be taking property that \textit{properly} belonged to his subjects and which enabled

\begin{flushleft}
\textsuperscript{54} EMW Tillyard \textit{The Elizabethan World Picture} (Pimlico, London, 1998) at 33.
\textsuperscript{55} Rose, above n 1, at 59.
\textsuperscript{56} At 60 citing Roger Lockyer \textit{Tudor and Stuart Britain 1471-1714} (Longman, London, 1964) at 27-28.
\textsuperscript{57} Robertson, above n 2, at 248.
\end{flushleft}
them to participate *properly* within society and thereby facilitating the good social order.\(^{58}\) The King needed to be extremely careful not to upset this delicate balance lest he deprive his subjects of the means by which to maintain the proper social order. It is interesting to note that although monarchs had largely deviated from this practice by the 18th century and tended to confiscate property at will, this practice caused a great deal of recrimination and was one of the primary issues leading to the French Revolution.\(^{59}\)

Importantly, it was not only in relation to land that property as propriety can be seen as part of the medieval worldview. For example, the guild system governed large segments of the economy. The members of these monopolies were charged with keeping their enterprises in good rule and order. Moreover, many public offices were considered a form of freehold property. These rights were viewed as private property, and were accompanied by a degree of “proper” authority. This authority was to be exercised as a sort of trust for those one was responsible for governing.\(^{60}\)

### C. American Civic Republicanism

A further example of a property as propriety ethos can be seen in a theory of political governance that was very influential in early American constitutional thinking. The underlying idea of what is called ‘civic republicanism’ was that private property gave individuals independence, which enabled them to exercise the autonomy and judgement necessary for self-rule.\(^{61}\) Civic republicanism builds on the work of a very large number of scholars including Aristotle, Cicero, Machiavelli and Harrington.\(^{62}\) A central concern is the problem of freedom viewed from the fact that humans are unavoidably interdependent. It

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\(^{58}\) Rose, above n 1, at 61.

\(^{59}\) At 61.

\(^{60}\) At 60.

\(^{61}\) At 61.

\(^{62}\) Honohan, above n 36.
suggests that freedom can be achieved by participation in a community that enables collective decision-making regarding the shape and goals of the community. It equates freedom with the ability to participate in government and is highly focused on the idea of the common good of the community. In particular, a successful community, or republic, relied on a number of preconditions. Private property was a central requirement of any republican establishment. In order to participate in the republic citizens needed to be independent in the sense that they did not rely on others for their material requirements. This meant that they required access to private property. However, civic republicanism struggled to account for the corollary that too much property could lead to inequality and corruption, which could be detrimental to the health of the republic.

One of civic republicanism’s primary proponents was Thomas Jefferson. Jefferson explicitly stated his view that property rights are social creations and that society should play a role in controlling them. In this respect, Jefferson’s approach is far removed from the Lockean tradition underpinning classical liberalism. Indeed, in one letter Jefferson, denying the power of one generation to fetter the actions of another, stated “I set out this ground which I suppose to be self evident, ‘that the earth belongs in usufruct to the living’: that the dead have neither powers nor rights over it”. As Alexander notes, the key statement here is reference to ownership of the Earth in terms of usufruct.

The very idea of property rights being usufructuary … placed a considerable distance between the Jeffersonian and the Lockean conceptions of property. Usufructary interests confer only a lifetime right to use; they confer none of the individual sovereignty over resources that fee simple ownership is thought to do in the

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63 At 1.
64 At 6.
65 Alexander, above n 6, at 27.
66 Letter from Thomas Jefferson to James Madison dated the first week of September 1798 cited in Alexander, above n 6, at 26.
67 At 27 (emphasis in original).
Lockean tradition. Such a notion of ownership presupposed an integration of individual and society, private and public.

For Jefferson private property rights were not only social, they were also political and served as the appropriate basis for “republican government”. At the heart of republican thought was a belief that the private interests of individuals could be treated as secondary to the common interests of the community. This idea owed a great deal to classical thought and Aristotle’s approach to virtue discussed above, and meant that the public good could, and should be, the primary aim of government. However, the common good was not the sum total of the individual desires of those living in the community. Rather, it was seen as a positive normative ideal that existed externally, regardless of the makeup of the particular community. Due work and effort would see it achieved.

In order to achieve the common good, it was necessary to have some sort of institution that would enable the members of the community to act virtuously and to behave in a manner that would enable their private needs to be subordinated for the common good of the community. Private property was crucial to this exercise. Because civic republicanism did not draw a bright line between private and public life it did not need to treat private property as the gate keeper or protector of individual autonomy. Rather it saw private property as the means by which to facilitate virtue and achieve the overall public good.

The citizen possesses property in order to be autonomous and autonomy was necessary for him to develop virtue or goodness as an action within the political, social and natural realm or order. He did not possess it in order to engage in trade, exchange or profit; indeed, these activities were hardly compatible with the activities of citizenship.

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68 At 27.
69 At 29.
70 At 29.
71 At 30.
Civic republicans were concerned that if an individual did not have property, they would spend so much time ensuring their own needs that they would be vulnerable to corruption and would not have sufficient time to devote to the common good.

The practical effect of this was that civic republicans treated different forms of private property in different ways. For example, Jefferson, amongst others, clearly privileged the ownership of land over more commercial forms of private property, although he did not reject commerce outright. On the civic republican world view, landed private property facilitated independence, whereas commerce required interdependence and was not, therefore, autonomous. Moreover, the civic republican view of private property was somewhat agnostic as to the accumulation of wealth. It associated property with governance and good order. In the civic republican tradition good order envisaged a degree of equality amongst the ‘citizenship’ (excepting, of course, slaves or women). Great divisions in wealth, however, were a cause for concern as they might damage this equality, and with it the autonomy of some citizens. While Jefferson accepted that there would be a degree of inequality in property holdings, he was very aware that there was a risk that unequal distribution might lead to republican virtue being undermined. This concern underpinned a number of Jefferson’s reforms, including the aspiration that all ‘able-bodied’ citizens be given a small amount of land. Ownership of this land would ensure survival, autonomy and independence. It would enable all citizens to fully participate in the republic.

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73 Rose, above n 1, at 62.
74 Alexander, above n 6, at 32.
75 Rose, above n 1, at 62.
76 Alexander, above n 6, at 34.
77 One of the conflicts within the republican exercise was the extent to which the alienability of this land should be restricted by the state in order to maintain the stability of land ownership. On one hand, philosophers like Harrington (author of The Commonwealth of Oceana 1656) (James Harrington The Commonwealth of Oceana and A System of Politics (JGA Pocock ed, Cambridge University Press, Cambridge,
Within civic republicanism as applied in the early American tradition there was a desire to protect forms of property that would enable and enhance the democratic functioning of the new republic. This is clearly proprietarian rather than liberal in inspiration. Indeed, it is interesting to note Alexander’s point that pre-19th-century American property was heavily regulated. This regulation reflected the propriitarian understanding of property that meant certain activities and resources should not be simply regulated by the market, which could not assure that the proper social order would be maintained. Indeed, the key concern with commerce was that it would tend towards a situation in which land, the basis by which republican virtue could be achieved and maintained, was treated as a simple commodity. State regulation at this time was understood as a moral exercise for the promotion of public happiness in the good society. As Alexander notes:

It was not the rise of commerce alone but the potential for commerce to transform the sociology of property that aroused the Jeffersonian anxiety. The social transformation would change the meaning of freehold land from that of the stable foundation for republican politics to a fluid item of commerce. Further, property would no longer mean a moral and political competent of society, an aspect of virtuous personality, but rather would represent a mere artifact of private life. So transformed, property might become a solvent that dissolves the political bonds of the community.

1992) (see also the discussion of Harrington’s work in Honohan, above n 36) argued that maintaining stability would require on-going collective interference so that those who received land did not use it for speculation. On the other hand, Jefferson, believed that individuals would choose cultivation over speculation if they had the choice and it was, therefore, unnecessary to impose restraints on the transfer of land. This also reflected Jefferson’s broader commitment to individual freedom – a position he never attempted to reconcile with other aspects of the civic republican effort. See Alexander, above n 6, at 41 – 42. Robertson, above n 2, at 249.

At 9.

At 35. Interestingly, a key source of Jefferson’s discomfort was the rise of credit which was based not on tangible property but on the expectation of future payment. His concern was that by treating this sort of obligation as property would disrupt his ideal conception of the appropriate distribution of wealth and would impact on the moral standpoint he was hoping to engender in the community to facilitate his goal of the republic.
IV. Summary

As this analysis demonstrates, the idea of property as propriety has a long pedigree in our legal and jurisprudential history. Despite this, modern scholarly discussion of property as propriety is relatively recent. In this chapter my goal has been to begin to develop the idea of the social obligation norm by looking at the early literature that identified it, and to consider its presence in classical and early modern worldviews. The idea that private property serves an essentially social purpose is not a new one. The articulation of this idea, whether it takes the form of Aristotelian virtue, Thomistic logic, or underpins political systems such as feudalism or civic republicanism, provides the central link for the observation that the idea remains manifest in modern discourse. It can be seen in the value our society places on objects and in the way it allows them to be used. In particular, the idea can be seen in the way that society limits the use of property in some circumstances, and attaches duties to the use of property in others. Consequently, we can see the seeds of the idea of property as propriety, or the social obligation norm, extremely early in the Western tradition.

Property as propriety demonstrates that within our Western tradition there is more than one conception of private property. The historical incidents of the concept help to provide support to the claim that this idea of private property endures. Indeed, although the propretarian literature provides evidence that this counter-tradition has existed in one form or another throughout our private property law history, I also argue that it remains present today. This observation is central to my thesis, and my augment that the social obligation norm provides a principled basis for explaining why, and how, private property can be a useful tool of environmental management. The concerns driven by the classical liberal

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82 Lametti, above n 26, at 34.
approach to private property can be alleviated by recognising that private property actually serves a social purpose which can constrain the manner in which it can be used. The scholars who first identified the idea of property as propriety in our private property law tradition provided the genesis of my argument. Its evolution can be seen in the work of the scholars who have developed normative accounts of the tradition and termed the phrase the social obligation norm of property. This work provides the central theoretical plank on which my thesis relies. This literature will be considered in chapter seven, where I will also seek to illustrate that this idea of private property remains present within the modern legal tradition.
Chapter Seven: The Social Obligation Norm and its Presence in the Modern Legal Tradition

I. Introduction

Property as propriety illustrates that at various times, and in various ways, the owners of private property owe obligations to the communities to which they belong.¹ These obligations have varied across time and space, but they have not disappeared with the ascendance of the classical liberal worldview. Indeed, if anything, these obligations have become more pervasive as our communities have become increasingly interdependent and complicated.² This observation is explored in an increasing body of literature. Conveniently collated under the name “progressive property”,³ this work has begun to seriously reassess the historical and modern operation of private property, beginning with the identification of property as propriety. In essence, this movement rejects the classical liberal notion that at the core of private property is an idea of exclusion aimed at promoting individual autonomy. Instead, it recognises that a social obligation norm is at the heart of private property which imposes varying obligations on owners.⁴ Recognition of the social obligation norm is important because, scholars argue, the norm is inherent in our idea of what it means to own private property. It follows that when the law (in its broadest sense) imposes a restriction in the way an individual can use private property, it is simply identifying a restriction that is already inherent in our idea of ownership. It is not

² At 2.
⁴ Alexander, above n 1, at 2.
imposing an external, and therefore potentially illegitimate, obligation upon an individual’s ‘bundle of rights’.

My goal in this chapter is to explore this literature and the idea of the social obligation norm. A number of scholars have attempted to develop various normative accounts of the way in which social obligation is recognised and catered for, within the institution of private property. I focus on one account in particular; this is an idea of the social obligation norm developed by Alexander and Peñalver which suggests that the basis for the norm is that it enables individuals to flourish. In my view, this explanation of both social obligation and its impact on private property provides a compelling explanation of the way that private property actually operates within society. I find it far more persuasive than classical liberalism and I consider that it has greater predictive power. Moreover, I think that it helps to explain why and how private property can be a successful tool of environmental management. It also provides a mechanism to resolve the essential dichotomy at work in this area of the law; private property’s use as a resource management tool contrasted with its potential to cause great harm.

In addition to considering this account of the social obligation norm I will also use this chapter to briefly consider some examples of the social obligations norm’s operation in the modern legal context. Of course, the primary burden of my thesis is to demonstrate its presence in relation to private property based resource management regimes. This is what I shall seek to do in the remainder of the thesis. However, it is useful to make the point that social obligation theory has a far wider impact than a simple focus on natural resources. I hope to explore this further in future research. For the moment, however, it is necessary to begin by exploring what, precisely, is meant by the social obligation norm.
II. Progressive Property and the Social Obligation Norm

In 2009 a number of scholars jointly published a “Statement of Progressive Property” (the statement”). In it they note that there are a wide range of different values at work in the institution of private property. These values are not solely aimed at the satisfaction of personal preferences. The values also encompass life, physical security, the ability to obtain knowledge, make choices, live happily, acquire wealth and wellbeing and to flourish. These values are plural and they are incommensurable. Moreover, these values inform the morals that underpin decisions society makes regarding what the law ought to recognise as a property interest. It follows, they argue, that we must inevitably make choices about what the ownership of private property entails. However, they stress that these choices cannot be reduced to a single guiding metric that will function in all situations. In making these choices we should exercise our critical judgement and be guided by both context and principle. They conclude:

4. Property confers power. It allocates scarce resources that are necessary for human life, development, and dignity. Because of the equal value of each human being, property laws should promote the ability of each person to obtain the material resources necessary for full social and political participation.

5. Property enables and shapes community life. Property law can render relationships within communities either exploitative and humiliating or liberating and ennobling. Property law should establish the framework for a kind of social life appropriate to a free and democratic society.

While the language has matured significantly, in essence, this manifesto can be seen as a continuation of the observation first made by Rose and Alexander in identifying property as propriety. However, while the statement remains in the tradition of property as propriety, it goes much further than that earlier account. The key observation is that the

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5 Alexander, above n 2. Although the authors use the simple word ‘property’ it seems clear from the context that it would have been more accurate (although more prolix) to use the term ‘private property’.

6 At 744 (numbering in original).
values underpinning private property can result in owners of property owing obligations to
the community generally.\(^7\) Explaining the normative basis of these obligations is a key task
of progressive property scholarship today. As Alexander notes, the obligations themselves
can be grouped under one “theoretical umbrella”,\(^8\) a social obligation norm. The overall
objective of this literature is to articulate a detailed and workable account as the basis for
this social obligation norm and to identify how it works in practice.

III. More Limited Views of Social Obligation

Of course, there are many different ways in which scholars approach this task. While I
advocate a vision of the norm which sees owners as having a range of positive obligations
to the community, there are more limited accounts of social obligation. Indeed, even
classical liberalism’s approach to private property (particularly as encompassed by the law
and economics movement) allows for a degree of social obligation. This is evident in the
idea that owners owe affirmative obligations to their communities on the basis of “free-
rider” problems and “holdouts”.\(^9\) Indeed, there are at least five commonly recognised
market interventions based on the public interest: the regulation of monopolies; the
control of public goods and other externalities; the correction of information deficits;
interventions which address coordination problems (such as public infrastructure or other
endeavours that are difficult and might generate excessive transaction costs); and
addressing exceptional market circumstances such as wartime food rationing.\(^10\) However,
this is a comparatively impoverished version of the social obligation norm because owners
only owe duties to achieve narrowly defined public interests. In each case the state will

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\(^7\) At 743.

\(^8\) Alexander, above n 1, at 2.

Review 745 at 753.

\(^10\) Richard Barnes Property Rights and Natural Resources (Hart Publishing, Oxford and Portland (Oregon), 2009)
at 67.
only intervene when private law mechanisms fail to ensure the outcomes expected of a
market based system. It denies any other obligations, for example, an owner’s obligation to
contribute to the redistribution of wealth done for the sake of equality or welfare.11
Because of this, this version of the social obligation norm can be seen as incomplete and
indeterminate. Alexander finds it normatively unappealing. I agree and add that it fails to
adequately account for a range of ways that private property operates ‘in the real world’.

Other scholars have attempted to articulate a version of the norm which sits somewhere
between classical liberalism’s incomplete explanation and the one I advocate here. For
example, Dagan suggests that one can have an idea of the social obligation norm that
remains classically liberal in character even though it takes the idea of living in a
community more seriously than strict classical liberalism.12 On this view, the community is
important, but only insofar as it contributes to individual preference satisfaction. What
motivates individuals to act as members of the community is the consequence that
individual preferences will be satisfied if one does so. People join and create communities
in order to maximise their personal welfare. However, on this view the community cannot
ask individuals for sacrifices if they are unlikely to remain uncompensated.13 The
justification for the various duties and restrictions placed on property holders becomes an
“average long-term reciprocity of advantage”.14 It becomes acceptable to expect individuals
to make sacrifices for the common good, but only where it can be anticipated that the

11 Alexander, above n 9 at 753.
Property: Values and Institutions (Oxford University Press, Oxford, 2011) at 103-105 and the discussion in
Alexander, above n 9, and Christopher Serkin “Affirmative Constitutional Commitments: The State’s
13 Alexander, above n 9, at 758.
individual will bear no greater burden than his or her peers and that everything will balance out in the long run.\textsuperscript{15}

\textbf{IV. Confining the Scope of my Thesis – A Social Obligation Norm Based on Human Flourishing}

While a number of scholars are working on broader and more fully developed ideas of the social obligation norm,\textsuperscript{16} I do not intend to outline each of these normative accounts, nor do I aim to test the viability of each.\textsuperscript{17} It is not the goal of this thesis to demonstrate the

\textsuperscript{15} Alexander, above n 9 at 760.
\textsuperscript{17} It is, however, useful to briefly outline one other articulation of the norm to give a feel for how the literature is developing:

Lametti (David Lametti “The Concept of Property: Relations Through Objects of Social Wealth” (2003) 53 University of Toronto Law Journal 325) has suggested that private property is at heart a social and contextual phenomenon. It has an intrinsically public dimension because the use of a resource by a single owner changes the pool of social wealth available to others. On this reading, the social aspect of property ought to reflect the collective values of a given society. These values can only be found in a community’s deepest ethical beliefs. These will affect who property is allocated to and the way it is used. In developing his theories Lametti has noted his view that: “...property is a relationship between or among individuals through objects of social wealth” (at 326). Lametti is attempting to articulate the idea that the object of a property right (that is the “thing”) plays a role in the property relationship between individuals. This is clearly an attempt to address Bentham’s criticism of the idea of property as object and to a greater extent Hohfeld’s reduction of the idea of property to \textit{simple in personam} juridical rights. In Lametti’s view the object of property plays an important role in defining the contours of property relationships and the corresponding rights and duties that accompany it:

Private property is a social institution that comprises a variety of contextual relationships among individuals through objects of social wealth and it’s meant to serve a variety of individual and collective purposes. It is characterized by allocating to individual a measure of control over the use and alienation of, some degree of exclusivity in the enjoyment of,
absolute primacy of any particular version of, or basis for, the social obligation norm. Advocating any vision of the social obligation norm requires posing questions regarding the precise form of the proper social order and what particular communities see as constituting the ‘common good’. However, this is a vexed question. A fully developed norm will be highly contestable and there will be many different notions of what it might look like in practice. Indeed, one of the criticisms of progressive property is that we can see multiple conceptions of the proper social order throughout history. At issue are

and some measure of obligation to and responsibilities for scarce and separable objects of social wealth.(at 326)

Thus, in comparison with the dominant rights based approach to property, Lametti’s approach recognises that specific objects of property may carry with them duties of stewardship or obligations to use in a certain manner. Consequently, “the general social goals of private property as an institution, as well as the particular social goals pertaining to a specific resource, are a necessary part of understanding private property” (at 326). Moreover, by identifying a person-thing relationship within property the object itself becomes important and with it, its own attributes and needs. This envisages that different sorts of property can be treated differently, so that shares in a company need not be treated or behave in the same way as a quota to catch fish. How they are treated will depend on the collective values of the society in which they occur.

Lametti articulates the source of this normative account in what he refers to, for want of a better term, as the deon-telos of property. This is a combination of the Greek terms deon (meaning duty or that which binds) and telos (meaning goal or end point). Lametti is seeking to identify the specific duties and responsibilities contained within property norms and their justification. He is also seeking to find a way to incorporate social goals and values within the idea of private property. As Burdon notes the function of the deon-telos is to limit the free choices of individual owners from within the concept of private property itself. It does not rely on any external limitations (or justifications for those limitations), the limitations are inherent to private property itself. The deon-telos acts as an internal moral and ethical limit, limiting the extent to which the individual can act in a preference satisfying way. (Peter Burdon “What is Good Land Use? From Rights to Relationship” (2010) 34 Melbourne University Law Review 708 at 733).

Through an application of the deon-telos norm society can create and maintain a desirable view of the social and political order. It recognises that within property rights are both rights and obligations. Inherent within Lametti’s discussion is a recognition that there may be ethical limitations and imperatives that dictate the amount and types of property that individuals need to facilitate their participation in the proper social order. Not only is the object of property important on Lametti’s account but obligations and duties might apply to specific resources. An individual may have an obligation to preserve a piece of land as a steward. This may go as far as having to take active steps to preserve it. In other cases there may be an obligation to make a particular drug available to the public.

Like a social obligation norm based on human flourishing it is clear this idea could be powerful in the context of environmental law, when it could help to promote the relationship between a resource and its location and place within the broader ecosystem. It also recognises that not all resources should be treated in the same way. Water, carbon and fish may be treated differently from ownership of household appliances or artworks. Rather than solely being a tool of preference satisfaction and utility, property may appropriately serve as a means of exhortation, coordination or coercion.

fundamental questions about what it means to be a member of the community, and the balance between individual and community interests. These questions highlight what it means to be a citizen and to participate in society more generally. Answering these questions poses significant challenges and any answer is likely to change over time. Indeed, these are not really legal questions and answering them is perhaps best left to social scientists or democratic politics.

However, in order to argue that private property does serve a social function, it is necessary to have some understanding of what that function might be. To that end, but also because I consider it presents a particularly compelling argument, I intend to focus on an account that has been developed by Alexander and Peñalver. This account sees the social obligation norm as aimed at promoting human flourishing. Their argument is that the common good is best achieved when individuals have the resources necessary to flourish. I consider that this account not only provides a persuasive explanation of the way that private property operates generally, but that it is particularly relevant to tradeable environmental allowance regimes. Moreover, as classical liberal theory is also aimed at a version of human flourishing (albeit a restricted account), their account allows me to compare like with like.

A. A social obligation norm based on human flourishing

Alexander and Peñalver have observed on a number of occasions that private property rights are inherently relational and owners have a number of responsibilities to both owners and non-owners. Building on Aristotelian notions that to be human is to be both

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social and political they argue that dependency and inter-dependency are intrinsic facets of what it means to be human.\textsuperscript{20} In order to have access to the things that characterise a rewarding and well-lived life each individual must have the resources and skills to flourish. In order to flourish the individual must be able to develop a number of key capacities. Although they candidly admit that the precise capacities necessary for human flourishing can differ greatly between analysts they suggest there are four that are uncontroversial:\textsuperscript{21}

\ldots (1) life, a good we take to include subsidiary goods such as health and security; (2) freedom, which include identity and self-knowledge; (3) practical reason, which Aristotle defined as \enquote{the capacity of deliberating well about what is good and advantageous for oneself}, and (4) what Nussbaum calls \enquote{affiliation}, a good that encompasses subsidiary goods such as social participation, self-respect, and friendship.

The importance of developing these capacities lies in the fact they allow us to make \enquote{meaningful choices among alternative life horizons}.\textsuperscript{22} In order to have the ability to make these choices individuals must be able to distinguish between different alternatives and carefully deliberate the consequences of each. The individual can only develop the capacity to do so by participating in the community and learning from the example of others.\textsuperscript{23} Consequently, membership in society is a prerequisite to flourishing. We are social creatures and are totally dependent on society, which plays a fundamental role in shaping who we are as individuals: \enquote{To put the point even more directly, living within a particular sort of society, a particular web of social relationships, is a necessary condition for humans to develop the distinctively human capacities that allow us to flourish}.\textsuperscript{24} It flows from this that our dependence on the community means we are morally obliged to promote the flourishing of others in the community as well. As Alexander notes: \enquote{My affirmation, as a}

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\begin{enumerate}
\item Alexander, above n 9, at 760. It should be noted however, that strictly speaking, the theory is Aristotelian inspired. It also builds on the work of Kant, Gewirth, Nussbaum and Sen among others. See Alexander, above n 9, 760 – 773.
\item Alexander and Peñalver \textquoteleft{Properties of Community\textquoteright}, above n 16, at 137 – 138.
\item Alexander, above n 20, 762.
\item Alexander and Peñalver \textquoteleft{Properties of Community\textquoteright}, above n 16, at 138.
\item At 135.
\end{enumerate}
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rational moral agent, of flourishing as a good has normative consequences. If I value my own flourishing, then to avoid self-contradiction, I must value the flourishing of others as well.\textsuperscript{25} On a more practical level, the ability to flourish is also dependent on the satisfaction of essential physical needs as well as access to sufficient resources to enable the individual to set priorities without complete dependence on others.\textsuperscript{26}

The ability to make choices between differing life horizons requires a large degree of institutional support. Private property rules are one type of “institutional mechanism” used to further this goal.\textsuperscript{27} If the ability to flourish depends on access to resources, then property rights are inevitably engaged, because it is property rights that help to identify which people have claims against which resources.\textsuperscript{28} Consequently, if both property and community are necessary for humans to flourish then the individual’s obligation to advance the flourishing of other members of the community leads directly to an idea of private property in which the collective community interest may take priority over the private interests of the individual.\textsuperscript{29} Importantly, this empowers the state to make demands of individuals. The state’s power in this respect arises because private property rights already contain the source of the obligation.\textsuperscript{30} The state is simply the modern medium through which the obligation is articulated. Consequently, when we see the state imposing obligations on property owners or limiting what they can do with their property we are not

\begin{footnotesize}
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\item Alexander, above n 9, at 769.
\item Alexander, above n 9, at 749.
\item Crawford, above n 16, at 1096.
\item Carol M. Rose “Property in All the Wrong Places” (2004) 114 Yale L J 991 at 994.
\item Serkin, above n 12, at 2.
\item Alexander and Peñalver note that while it may be possible for communities to provide the necessary capabilities for human flourishing without the need for coercive state intervention, since the advent of modern capitalism this has been beyond the abilities of private, voluntary communities either individually or in cooperation with each other. See Alexander and Peñalver “Properties of Community”, above n 16, at 146.
\end{enumerate}
\end{footnotesize}
seeing an illicit interference with the owner’s private rights because the state is only requiring private owners to uphold their moral (and by extension, legal) obligations.  

The precise parameters of these obligations are extremely contestable. Very broadly, Alexander suggests, “The most general guide I can give is that an owner is morally obliged to provide to the society of which the individual is a member those benefits that the society reasonably regards as necessary for human flourishing”. Accordingly, we would expect the state to act in any case where the ability of members of the community to flourish is threatened. Thus, the goal of the social obligation norm is explicitly redistributive and the state may compel some level of redistribution in order to ensure that all members of the community have access to the resources necessary to participate “at some minimally acceptable level in the social life of the community”. As Alexander recognises “… human flourishing requires distributive justice, the ultimate objective of which is to give people what they need in order to develop the capabilities necessary for living the well-lived life”.

This idea of property means that the boundaries of property will change over time. It also means that the state’s role in regulating property is a “two-way street”. In circumstances where the positive obligations imposed on property owners no longer benefit the community, the state has a responsibility to intervene and change the parameters of ownership. A regulation that is acceptable at one point in time may lose acceptability as the needs of both the community and the property owner change. Indeed, the nature of social obligation theory suggests that any obligations will be socially and culturally contingent and

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31 Serkin, above n 12, at 2.
32 Alexander, above n 9, at 774.
34 Alexander, above n 9, at 768.
35 Serkin, above n 12.
likely to change over time. As a result, the state has an ongoing obligation to assess and, if necessary, alter the balance of rights and obligations in relation to particular objects of property.\textsuperscript{36} However, none of this suggests that the state’s power is limitless. Instead, there are inherent limitations on the state’s power to intervene, which must be assessed by reference to the same morality that enables state intervention. State imposed obligations on property holders will only be justified where those limits are necessary to facilitate human flourishing.\textsuperscript{37}

My argument is that the social obligation theory I advocate provides a more compelling explanation for instances where owners are required to sacrifice their interests than those provided by classical liberal analysis.\textsuperscript{38} Clearly, a conception of property as serving social purposes lies in stark contrast to an account of private property that emphasises individual liberty, and freedom from outside coercion.\textsuperscript{39} Social obligation is a far more dynamic account of property than that based on preference satisfaction, which is expressly static. The state’s role on the classic liberal account is as the neutral enforcer of an unchangeable right, the sole purpose of which is to maintain a particular form of private ordering. In contrast, social obligation theory recognises that not only does the state have an active role in outlining the content of property rights, but that it also acts as the mediator between the rival (but potentially equally valid) demands of individuals and communities. Private property’s social function helps identify that the owner’s obligation to provide benefits to the community necessitates corresponding limitations within private property itself. It explains why owners of property owe obligations and have always owed obligations (albeit that this view has not been systematically developed).

\textsuperscript{36} At 20.
\textsuperscript{37} Alexander and Peñalver “Properties of Community”, above n 16 at 148.
\textsuperscript{38} Foster and Bonilla, above n 16, at 1010.
Overall, the social obligation norm I advocate suggests that at its heart property is extremely complex and serves both private and public functions. Consequently, property is intrinsically plural; it will always reflect the range of values society believes it should serve at any given time. It is up to society’s legal institutions to negotiate the unavoidable and inherent conflicts between these incommensurate values and to define the changing contours of private property over time.\footnote{Foster and Bonilla, above n 16, at 1011.}

This should not, however, be taken as a suggestion that the law should sacrifice certainty to some illusive metric of social justice.\footnote{Gregory S Alexander “The Complex Core of Property” (2009) 94 Cornell Law Review 1063 at 1067.} As Alexander notes, social obligation theory “is not antithetical to property”.\footnote{Alexander, above n 9, at 815.} In the majority of cases it will advocate the respect and protection of private property. It will not justify an encroachment on autonomy in the absence of an equivalently important community interest. While classical liberal theory tends to reify property holders as having rights and others as owing obligations, social obligation theory attempts to balance this claim by recognising that ownership and obligation are intrinsically connected.\footnote{Alexander “Pluralism and Property”, above n 16 at 1023.} Yes, property owners have rights, but they also have duties. This tension is mediated by the community in which individuals participate. Importantly, it acknowledges that there is no innate inconsistency between the legal respect for the “moral autonomy of the individual” and the legal support of “the communities that facilitate human flourishing”.\footnote{Alexander, above n 41, 1067.} It suggests that individual flourishing will lead to a stronger community in both social and economic terms. This is an important point because it directly addresses the individualistic justification for private property provided by liberal theory, which stresses individual freedom and autonomy.\footnote{Crawford, above n 16, 1095.} In contrast,
social obligation suggests that private property is the route to social, economic and individual freedom.

This summarises the theoretical basis for a vision of private property that maintains its primary role is to promote human flourishing. I argue that this account of private property provides an accurate and compelling explanation of how the institution actually operates in our society. On this account property can be seen as a dynamic social construct. Property rights are still to be viewed as the legal rules by which the community governs the use and allocation of resources, but the account accepts that property cannot be understood outside the social context in which it occurs. It is profoundly influenced by the cultural and ideological philosophy of the relevant society. Although some might argue that this view is an affront to individual autonomy, I think that it is persuasive precisely because it recognises that individuals can only flourish with the support of the relationships that surround them. It accepts that interdependence is a fundamental aspect of the human condition. When we closely look at the way private property operates, the idea of a social obligation norm based on human flourishing provides an extremely compelling account. That is why I adopt it in the balance of the thesis and use it to demonstrate the presence of a social obligation norm operating at the heart of tradeable emissions allowance regimes.

V. Modern Legal Examples of the Social Obligation Norm in Practice

Although my focus in this thesis is to demonstrate that the social obligation norm provides a principled way of explaining why private property can be a useful tool of environmental management, my broader goal is to make a more general observation about private property; that it is a social institution serving a social purpose. Its role in society is not

46 Burdon, above n 17, at 731.
nearly as limited as the classical liberal account would have us believe. To this end I want to conclude the discussion in this chapter by considering several examples that indicate the presence of the social obligation idea of private property within the modern legal tradition. This will be the corollary of chapter six which looked for evidence of its presence within the historical tradition. Clearly, the examples used in chapter six are antiquarian and I am not suggesting that a modern account of social obligation would involve, or support, the hierarchical and sexist views of medieval Europe or early America. What I aim to illustrate here is that the counter-tradition evident in those early examples remains present, albeit serving very different normative goals, in a range of laws that touch on private property today. Although I will reserve the bulk of my argument for my analysis in relation to private property based resource management, my hope is that this broader discussion helps ground my claim that private property as a legal tool is a dynamic social construct that serves deep normative and substantive values. In the interests of space I am going to restrict myself to a few general examples, some of which have been inspired by the work of progressive property scholars, while the others are drawn directly from the statute book. I will finish by looking slightly further afield and discussing the presence of the social obligation norm in the constitutional approach to private property of both Germany and South Africa.

A. State confiscation of property

Perhaps the most obvious area in which we can see the social obligation norm at work in the modern legal tradition comes from the enormously controversial issues that arise when the state takes private property for a public purpose. This is a particularly acute issue in the United States where there are constitutional issues surrounding ‘takings’ law, but it is also an issue in New Zealand. While the issue often arises in relation to public works in New
Zealand, it is also a more general issue. There are two primary situations in which the state can confiscate private property. Firstly, the state can fully acquire the property (where the relevant private property is alienated to the state). Alternatively, the state can restrict some, or all, of the purposes to which a piece of private property can be put (this is sometimes known as a ‘regulatory’ taking). Both approaches can be used to demonstrate the social obligation norm at work.

Compulsory alienation of private property by the state

There are many occasions when an owner may be required to sell their property unwillingly, albeit for an objectively set price. Self-evidently, this conflicts with the classical liberal approach whereby no-one should be required to alienate their property unless they wish to. Indeed, in order to rationalise the fact that the state has the power to compulsorily acquire private property, classical liberal scholarship has attempted to argue that the power is justified in circumstances where it is more economically efficient to take property than to leave it with its original owner. The state will be justified in acquiring private property where a transfer will avoid high transaction costs and maximise aggregate wealth, such as acquisition of property in order to overcome monopolies. Similarly, if a private owner can prevent a large infrastructure project by refusing to sell crucial land, a government can appropriately intervene and take that land for an objectively set price. Through this mechanism the state can both complete the project (to the economic advantage of many) but can also do so for the lowest cost (given the state does not have to pay the increasing market cost of the scarce and crucial land). However, as noted above this in fact imports a relatively restricted view of social obligation into classical liberalism which is hard to

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47 See, for example, the Public Works Act 1981.
48 The contemporary debate over the foreshore and seabed is one example.
49 Alexander, above n 9, at 752.
50 At 775.
square with some of its key principles. Indeed, a key tenet of classical liberalism is that the individual should be protected from such a coercive power. Some classical liberal scholars take an extreme view and suggests that under no circumstances should the state be entitled to acquire land. While this may be a desirable vision for some, it does not, however, explain the reality that legislatures and courts in common law countries such as New Zealand and the United States have, notwithstanding their different constitutions, recognised, created and upheld the power of the state to compulsorily acquire private property in some circumstances.

Alexander, however, suggests that social obligation theory provides an alternative, and more satisfying account, to the classical liberal limited reliance on economic efficiency. To continue with the infrastructure example; it is clear that our current society depends on a huge amount of public infrastructure. To a large extent our ability as autonomous individuals to make choices (and the range of those choices) is dependent on the available infrastructure. Indeed, some public infrastructure (such as roads and waterways), when used for commerce, have infinite returns to scale thus exponentially maximising overall social wealth. Because everyone is dependent on the continuing efficacy of this infrastructure in order to flourish, it requires that each individual bear some responsibility for its creation and maintenance.

In essence, the power of the state to compulsorily acquire property reflects a collective judgement that the state is justified in demanding a sacrifice by some, or all, members of

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52 Alexander, above n 9, at 775.
53 Rose uses this example to illustrate her point that in some circumstances “commons” property can be comedic rather than tragic with the more participants the better. See Carol M Rose “The Comedy of the Commons: Custom, Commerce, and Inherently Public Property” (1986) 53 University of Chicago Law Review 711 at 778.
the community in order to satisfy the good of the community more generally.\textsuperscript{54} This is a plain example of the social obligation norm. It recognises that private property is not an institution that functions within a sphere of autonomous absolute power. Private property rights can be diminished or acquired where that is in the best interests of society generally.\textsuperscript{55}

“Regulatory takings” of private property by the state; The Resource Management Act 1991

In the context of the modern regulatory state it is quite common for the government to impose restrictions on the way owners can use their property. In these circumstances, an owner will keep their property but will be prohibited from using it in a way that the community (through the state) considers contrary to the collective interest. In many respects this is by far the most dominant area in which we can see the social obligation norm operating as an important aspect of the modern legal landscape.

Environmental regulations are such a good example of the social obligation norm that it is almost trite to expressly say so. From the point of view of human flourishing, restricting owners’ abilities to use their property indiscriminately in the interests of environmental protection clearly impacts on the ability of individuals to live a good life, or simply physically survive in a changing world.\textsuperscript{56} There are many other potential benefits, such as restricting pollution to improve health and wellbeing, which is a point I will return to when

\textsuperscript{54} Alexander, above n 9, at 776.

\textsuperscript{55} This is not to say, however, that state acquisition of property is not without significant risks of abuse; it is. Acknowledging this risk does not, however, reduce the normative appropriateness of acquisition more generally. There are some egregious examples of the abuse of the takings power scattered throughout the law reports. The most famous example is perhaps the American case of \textit{Kelo v City of New London} 545 US 469 (2005) where land was taken by the state for a private re-development project with many purported economic benefits, not a public purpose. The issue here is not with the power of acquisition in general, but rather the management of the risk of abuse. It is interesting to note that a \textit{Kelo} type case is unlikely under New Zealand law given the power to take private land under the Public Works Act 1981 is limited to \textit{public works}, which are closely defined in s 2. In addition, when the land is no longer required for a public work it must, if possible, be offered back for sale to the person from whom it was acquired or to the successor of that person (s 40). In other cases it is likely that an Act of Parliament with inherent checks and balances would be required (see for example, the discussion of the Canterbury Earthquake Recovery Act 2011 below).

\textsuperscript{56} Alexander, above n 9, at 799.
analysing the NZ ETS and NZ QMS below. However, given I am not focusing on the Resource Management Act 1991 (the RMA) in this thesis, it can serve as an excellent illustration of the broader point. Clearly the RMA empowers communities, be they local, regional or national to impose restrictions on the way people use the resources they own. Indeed, it is an underlying principle of the RMA that decision making is best undertaken by those people who are likely to be directly affected by the results of those decisions.\textsuperscript{57} This underpins the devolution of much of the Act’s decision making authority to local and regional councils, and also reflects the view that community participation is essential to effective resource management. The RMA basically adopts a scheme whereby a landowner is entitled to use their land for any purpose “unless the RMA, or a plan produced under it, limits use on the basis of the environmental effects an activity would cause”.\textsuperscript{58} There are a wide range of activities that district and regional councils will control. For example, I would love to install a wood burner in my living room. However, I am prohibited from doing so under the Canterbury Natural Resources Regional Plan.\textsuperscript{59} Restrictions are legion and vary across the country between communities. The RMA provides a classic example of the way that governmental regulation can impose restrictions on the way in which property owners can use their property.

The RMA also attempts to balance and reconcile the various conflicting desires of the members of the community, both owners and non-owners. Full treatment of this point is beyond the scope of this thesis, however, it does serve to illustrate the way in which private property is a social institution that serves both individual and community purposes. Part 2 of the RMA provides an excellent illustration. Part 2 has been described as the

\textsuperscript{57} Ministry for the Environment \textit{Your Guide to the Resource Management Act} (Ministry for the Environment, Wellington, 2006).
\textsuperscript{58} At 1.5.4.
\textsuperscript{59} See the Canterbury Natural Resources Regional Plan Chapter Three: Air Quality. Policy AQL23 Emissions from enclosed burners in Rangiora Clean Air Zone 1.
“engine room” of the RMA and contains only four sections. Section 5 outlines the purpose of the Act. Sections 6, 7 and 8 provide principles of varying importance that are intended to give guidance as to the way in which the purpose is to be achieved. Section 6 requires that the stated matters of national importance must be recognised and provided for by those making decisions under the Act (although they may not all be relevant in all circumstances). Section 7 requires particular regard be given to the various matters listed therein. Section 8 requires the principles of the Treaty of Waitangi to be taken into

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60 Auckland City Council v John Woolley Trust [2008] NZRMA 260 at [47].

61 Purpose
(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—
(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
(c) avoiding, remediying, or mitigating any adverse effects of activities on the environment.

62 Matters of national importance
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:
(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
(f) the protection of historic heritage from inappropriate subdivision, use, and development:
(g) the protection of protected customary rights.

63 Other matters
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—
(a) kaitiakitanga:
(b) the ethic of stewardship:
(ba) the efficient use and development of natural and physical resources:
(ba) the efficiency of the end use of energy:
(c) the maintenance and enhancement of amenity values:
(d) intrinsic values of ecosystems:
(e) [Repealed]
account. While the precise interpretation of these sections and their relationship with other parts of the RMA pose difficult questions of interpretation, it is clear that no single element has any greater weight than another.

When we look closely at the purpose of the RMA set out in s 5 it is clear that of particular concern are those matters set out in paragraphs (a) to (c) of s 5(2), which are occasionally known as the environmental, or biophysical “bottom lines”, and include references to people and communities using emotive language such as “future generations” and “life-supporting”. Section 5(2)(c) refers to the “environment”, which is defined in s 2, encompasses ecosystems and includes people and communities, amenity values and “the social, economic, aesthetic, and cultural conditions which affect” the other matters stated in the definition. This of course recognises that economic concerns are still relevant. However, they are not determinative.

The RMA is clearly attempting to balance multiple goals, which has been recognised by the Privy Council. Writing for the Board, Lord Cooke has noted that:

[21] Section 5(1) of the RMA declares that the purpose of the Act is to promote the sustainable management of natural and physical resources. But this does not mean that the Act is concerned only with economic considerations. Far from that, it contains many provisions about the protection of the environment, social and economic values, aesthetic and cultural values, and the protection of the natural and physical resources themselves.

(f) maintenance and enhancement of the quality of the environment:
(g) any finite characteristics of natural and physical resources:
(h) the protection of the habitat of trout and salmon:
(i) the effects of climate change:
(j) the benefits to be derived from the use and development of renewable energy.

8 Treaty of Waitangi
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).


See, for example, s 5 which makes it clear that economic factors are just one matter of wellbeing that have to be considered.

cultural wellbeing, heritage sites, and similar matters. The Act has a single broad purpose. Nonetheless, in achieving it, all the authorities concerned are bound by certain requirements …

Although it may upset some resource holders, the RMA is not solely focused on economic factors and the promotion of growth. While economic issues may be to the fore (after all any activity that uses resources is likely to be aimed at an economic goal) if economic interest overruled other considerations, resource consents would generally be granted. This is, however, not the case. Moreover, resource consents are often granted subject to a wide range of conditions. These can be aimed at promoting social and cultural wellbeing and may cause significant costs to the person wanting to exploit a resource, possibly a resource they already own. In my view, the social obligation norm helps to provide principled basis for explaining why this sort of regulation is legitimate. In particular, I consider that these sorts of regulations are best seen as particular legislative articulations of restrictions that are inherent in the idea of private property itself, rather than as externally imposed restrictions based on a different source of public power.

Overall, the classical liberal account of private property has difficulty in explaining why a private owner should lose rights to their resources simply because there are competing public gains (such as sustainability). From the point of view of social obligation, and in particular human flourishing, this is far less problematic. Balancing private use against public gain suggests that members of the community may have to give up some things that the broader community considers should be used (or not used) in a particular way.\(^69\) The RMA helps to reinforce the point that private property carries not only rights and authority, but also responsibilities to the community as a whole.

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B. Social welfare law and policy

Rose observes that on all early proprietarian understandings of property, governance and good order always included a duty of generosity to the community for the sake of the common good. It was understood that those in need should be helped, not reviled. Although generosity was subject to the whims of individual largess there was no question that generosity was a duty of the fortunate. Indeed, it was not until as late as the 19th century with the rise of the classical liberal model that scholars began to argue that generosity to the poor was a bad thing because it risked creating wealth-dissipating incentives.\textsuperscript{70} In essence, this argument suggests that the poor should not be assisted because it simply encourages them to wantonness and makes everyone poorer. Disappointingly, this is an argument that continues today and with which we are very familiar.

However, given the rise and maintenance (to some extent at least) of the modern welfare state, we can see that the purely liberal approach to community management has not triumphed. The simple observation that the community has a responsibility to those in need (met through taxes on one hand and social welfare benefits on the other) demonstrates a basic social obligation norm within modern law. In essence, the suggestion is that, in some circumstances, too little wealth should be seen as a type of community disorder which wealthier citizens have a duty to attempt to alleviate by providing others with the means to escape their situation.\textsuperscript{71} One cannot flourish without access to some resources and the community owes a duty to those without sufficient access to provide them with at least the means of subsistence.

\textsuperscript{70} At 62.
\textsuperscript{71} At 65.
This sort of observation about social welfare benefits has had a degree of resonance with some very important thinking about private property and its role in society. For example, in his prominent article on “The New Property” Reich argues that benefit recipients are part of the body politic and as a result have a rightful claim to hold those benefits as property. It follows that there is a strong argument that it is benefits, viewed as a type of private property, that enable individuals to maintain their autonomy and participate in their proper place within the broader community. If accepted, this clearly fits with Alexander and Peñalver’s theory of human flourishing. It certainly cannot be reconciled with a view of private property as facilitating simply preference satisfaction.

Moreover, the social obligation norm is also evident in the fact that recipients of government benefits often lack complete autonomous control over the private property transferred to them. The state, can and does, place restrictions on the use of this property. This is difficult to reconcile with classical liberalism which would suggest once a person is transferred private property they must be free to deal with it as they wish. If a benefit is property, then how do we explain the fact that the state can withdraw or change benefits at any time, and the fact that the use of a benefit can come with conditions? This degree of insecurity is inconsistent with the classical liberal view of property. For a recent example in New Zealand, we can look to the 2012 changes to social welfare legislation regarding young people. Section 179 of the Social Security Act 1964 states that, with limited exceptions, no payment under a youth support payment can be paid to or on

73 Rose, above n 69, at 65.
74 Alexander “Property as Propriety”, above n 19, at 688.
75 At 688.
76 As inserted by s 24 of the Social Security (Youth Support and Work Focus) Amendment Act 2012.
account of the young person concerned personally. Rather payments are made in a way that will: 77

… enable[] a young person to obtain goods or services from a particular supplier and enables the supplier to obtain payment from the department for the goods or services.

This approach does not mesh at all well with the classical liberal view of property as preference satisfaction. It can, however, be explained by a view of property that allows for the state to regulate private property in line with a particular vision of the public good.

C. Landlord and tenant law

The law of landlord and tenant also illustrates that the social obligation norm is a force in modern property law. United States laws regulating landlords provide an example. This law underwent something of a revolution during the 1960s and 1970s when many long-standing doctrines (which generally favoured landlords) were replaced by rules more favourable to the tenant. 78 Among other things, the new regulations imposed legally binding terms that regulated the relationship between the landlord and tenant. 79 For example, landlords were required to act in order to maintain their buildings in a reasonably habitable condition. 80 The changes were premised on the idea that residential housing should not be seen solely as a marketable asset and subject only to market freedom. Rather, the idea was that housing should be seen as one of the ways in which individuals are enabled to flourish as people and as members of the community. 81 While many courts and legal scholars explained the changes as a shift from feudal property law to property law based on contract, Alexander considers that this view is misleading. Rather, the new rules

77 Social Security Act 1964, s 179(5).
79 Alexander “Property as Propriety”, above n 19, at 687.
80 Alexander, above n 9, at 754.
81 Alexander “Property as Propriety”, above n 19, at 687.
were not consistent with contract law, the idea of private ordering and freedom of contract. In his view, the real change was in how the community saw the purpose of residential housing. A person becomes a tenant in order to have a home and a place in which to belong, not as an investment. Conversely, a landlord’s interest is more strictly financial. By protecting the tenant’s personal interest, the law treats it as outside the usual domain of market ordering governed by bargaining. The new regulations were imposed to protect tenants’ interests (seen as a non-commodity interest) from the potentially undesirable effects of the market.

We can see similar sentiments within New Zealand’s Residential Tenancies Act 1986. Freedom of contract is severely constrained by a number of provisions in this Act, including a prohibition on discrimination under s 12 and limits regarding the amount of bond and number of week’s rent that can be required in advance. In addition, the landlord has a number of statutory responsibilities regarding maintenance and repair under s 45 and there are restrictions on the circumstances when a tenancy can be terminated (see s 50).\textsuperscript{82}

Indeed, the very fact that residential tenancies are treated as different from commercial leases and have their own statutory scheme suggests a societal recognition of the importance of good housing in allowing people the resources necessary to flourish.

D. The Historic Places Act 1993

A further example of the social obligation norm at work within the modern legal context can be seen in the Historic Places Act 1993. The overall aim of this Act was\textsuperscript{83} to protect historical places and buildings. It allowed for restrictions (and sometimes obligations) to be

\textsuperscript{82} It should be noted that tenants also have a number of obligations under the Act. See for example s 40 which requires tenants to, \textit{inter alia}, pay the rent and keep the premises reasonably clean and reasonably tidy.

\textsuperscript{83} As of 19 May 2014 the Historic Places Act 1993 was repealed and replaced by the Heritage New Zealand Pouhere Taonga Act 2014. The new Act streamlines a number of processes and reforms the governance of the New Zealand Historical Places trust, renaming it Heritage New Zealand Pouhere Taonga and bringing it in line with its status as a Crown entity. However, in other respects the regimes operation remains much the same.
placed on the uses to which owners could put their property. The purpose of the Act was to promote the identification, protection, preservation and conservation of New Zealand’s cultural heritage (s 4). In achieving the purpose, all persons exercising functions under the Act were required to recognise that historic places have lasting value in their own right and provide evidence of the origins of New Zealand’s distinct society. These principles suggest private property (land, buildings and historic places) have an important function on a communal and social level. The ethos of the Act was far easier to reconcile with the social obligation norm of property than property as preference satisfaction.\textsuperscript{84}

The scheme of the Act worked to provide four primary mechanisms by which historic places can be protected. The broadest (and weakest) protective mechanism was found in the Register of Historic Places, Historic Areas, Wāhi Tapu and Wāhi Tapu Areas.\textsuperscript{85} The Register was important as it identified and informed owners, the public and government agencies and authorities about significant places of heritage. However, it did not grant any automatic protection or have any regulatory or legal consequences for property owners. Its function seemed to be notification and education. However, other aspects of the Act did provide greater means of preserving historic places. For example, under s 5 the Minister or the New Zealand Historic Places Trust (the Trust) could give notice to a territorial authority requiring them to insert a heritage order into a district or regional plan via s 189 of the Resource Management Act 1991 for the purpose of protecting places of “special interest”. This restricted the sorts of activities that could be undertaken within the protected area. The Trust could also negotiate heritage covenants with the owner of a heritage place (see s 6). These covenants attached to the property’s title and placed conditions and restrictions on use. They were binding on successors in title. Finally, the

\textsuperscript{84} Alexander, above n 9, at 791.

\textsuperscript{85} This has now been replaced by the the Heritage New Zealand List/Rārangi Kōrero. See Heritage New Zealand Pouhere Taonga Act 2014, s 65.
Trust could Gazette archaeological sites (see s 10), which made it unlawful for anyone to destroy, damage or modify the specified site without authority. It is interesting to note that there were also provisions within the Act for it to be a criminal offence to destroy, damage or modify an historic place.\(^{86}\)

This legalisation attempted to balance the interests of the community in preserving New Zealand’s cultural heritage with the interests of individual owners. General areas and archaeological sites could be declared unilaterally subject to the Act. Conversely, heritage covenants were entered into with private owners through a process of negotiation. This clearly recognises the importance of protecting individual ownership from undue state intervention and also contemplates that some owners would do so of their own volition (although it is important to recognise that once a covenant was entered into, it would bind successors in title in accordance with the general law of restrictive covenants). Another example of this balancing exercise occurred when the owner of land subject to a heritage order considered that the value of their property had been adversely affected by the order. Section 198 of the Resource Management Act 1991 (which continues under the new regime)\(^{87}\) empowered the Environment Court to make an order giving the heritage protection authority the option of either withdrawing a heritage order, causing it to be


\(^{87}\) Heritage New Zealand Pouhere Taonga maintains this power. Section 187 of the Resource Management Act 1991 defines a “heritage protection authority” as including “Heritage New Zealand Pouhere Taonga, in so far as it carries out its functions under section 13(1)(i) of the Heritage New Zealand Pouhere Taonga Act 2014”. Section 13(1)(i) states:

\[...\] to act as a heritage protection authority under Part 8 of the Resource Management Act 1991 for the purposes of protecting—

(i) the whole or part of a historic place, historic area, wāhi tūpuna, wāhi tapu, or wāhi tapu area; and

(ii) land surrounding the historic place, historic area, wāhi tūpuna, wāhi tapu, or wāhi tapu area that is reasonably necessary to ensure the protection and reasonable enjoyment of the historic place, historic area, wāhi tūpuna, wāhi tapu, or wāhi tapu area.

In turn, s 189 of the Resource Management Act 1991 allows for a heritage protection authority to give notice to a territorial authority of the requirement for a heritage order for the purpose of protecting:

(a) any place of special interest, character, intrinsic or amenity value or visual appeal, or of special significance to the tangata whenua for spiritual, cultural, or historical reasons; and

(b) such area of land (if any) surrounding that place as is reasonably necessary for the purpose of ensuring the protection and reasonable enjoyment of that place.
removed or taking the land under the Public Works Act 1981. Thus, where the heritage order had an impact on the value of the land, the owner was able to force compulsory purchase (i.e. acquisition) of the land by the heritage protection authority. However, if the heritage protection authority was unwilling to do so, the heritage order would be removed.

The Act was clearly trying to balance both community interests in protecting heritage and the private interests of owners, while also allowing for property owners to recognise the broader community interest in the land they hold. It is evident from the long title to the Act that Parliament made the positive choice that the general public good is served by identifying, protecting, preserving and conserving of New Zealand’s historic and cultural heritage. The rules imposed by the Act recognised the unique character and special role of these buildings and places to the general public, and reinforced that these places serve an important role in reminding the community of its history as well as contributing to the aesthetic pleasure of the landscape generally. Distinctive architectural sites are integral to the community’s identity and it follows, to the identity of its inhabitants. Historic places serve to create a collective memory. If such places are lost then so is our collective historical memory. The recent outcry over the proposed demolition of Christchurch’s severely damaged Anglican Cathedral can be seen as an excellent example of the community’s concern regarding the place of historic places and buildings within society.

The loss of important historic and cultural places can have the potential to destabilise

88 This section can be triggered on application by the owner where he or she has tried, but been unable, to sell the land for a price not less than the market value of the land if it were not subject to a heritage order and the heritage order will render the land in respect of which it applies incapable of reasonable use: Resource Management Act, s 198(1).

89 An Act—
(a) to promote the identification, protection, preservation, and conservation of the historical and cultural heritage of New Zealand; and
(b) to continue the New Zealand Historic Places Trust and the New Zealand Historic Places Board of Trustees with the functions and powers necessary for the full and proper attainment of the objectives of this Act …

society more generally. This can lead to severe political consequences. Consequently, the owner of an historic place assumes obligations (and on one reading, rights) that normal private property owners do not have.

It follows that sometimes the ownership of important pieces of land or other infrastructure can be accompanied by special obligations. These obligations may mean that an owner is restricted in what they can do with their property. It may also mean that they will not be compensated for these restrictions. These duties are very hard to reconcile with the classical liberal view of property. Indeed, with the possible exception of increased land value for everyone in a community due to its historic nature, it is difficult to see a way in which imposing duties on the owners of historic places could lead to greater preference satisfaction. Social obligation theory provides a much more compelling way to account for these situations.

E. Family Protection Act 1955

Until 1900 testamentary disposition in New Zealand was subject to few restrictions and, generally speaking, testators could dispose of their property in any way they wished. However, this was changed by the Testator’s Family Maintenance Act 1900. This Act empowered the (then) Supreme Court to change the terms of a will following death if the Court determined that a testator had failed in his ‘moral obligation’ to his wife or children. This duty is now recorded in the Family Protection Act 1955, although the Act itself provides no guidance as to the content of the duty; Parliament has left this to the courts.

91 Alexander, above n 9, at 795.
93 See Family Protection Act 1955, ss 3(2) and 4.
Essentially, where a testator has not made adequate provision from his or her estate for “the proper maintenance and support” of the person making the application, the court has a discretion to grant relief by redrafting the terms of the will (s 4). In granting relief the court must ask itself if, having regard to all the existing facts and surrounding circumstances, “the testator has been guilty of a manifest breach of that moral duty which a just, but not loving, husband or father owes towards his wife or towards his children”.

Originally, financial need was a prerequisite for relief as the object of the Act was to relieve destitution. However, over the last century a more liberal approach has developed. Today, the court’s approach to the test has been formulated in the context of claims by adult children, although it applies more generally. As Richardson P noted in *Williams v Aucutt*

The test is whether adequate provision has been made for the proper maintenance and support of the claimant. Support is an additional and wider term than maintenance. In using the composite expression, and requiring ‘proper’ maintenance and support, the legislation recognises that a broader approach is required … Support is used in its wider dictionary sense of ‘sustaining, providing comfort’. A child’s path through life is supported not simply by financial provision to meet economic needs and contingencies but also by recognition of belonging to the family and of having been an important part of the overall life of the deceased. Just what provision will constitute proper support … is a matter of judgment in all the circumstances of the particular case. It may take the form of lifetime gifts or a bequest of family possessions precious to its members and often part of the family history. And where there is no economic need it may also be met by a legacy of a moderate amount. On the other hand where the estate comprises the accumulation of the family assets and is more than sufficient to meet other needs, provision so small as to leave a justifiable sense of exclusion from participation in the family estate might not amount to proper support for a family member.

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94 Allardice v Allardice (1909) 29 NZLR 959 at 972-3.
95 Stephens, above n 92.
Over time the range of potential claimants has been expanded and now includes de-facto and civil union partners, and step-children in some circumstances. Unsurprisingly, there has been an on-going debate regarding the appropriate quantum of recognition that should be accorded to various classes of applicants under the Act. I do not intend to look at the intricacies of this in any detail. I simply want to note the scheme and stress that it reflects the importance of the account of private property as a norm of social obligation. It is almost impossible to reconcile this Act with the classical liberal idea of private property as it seriously constrains a testator’s ability to deal with their private property as they wish. If they breach their ‘moral duty’ the court has the power to reopen and amend an otherwise valid will. It is difficult to see how this power can be used after death to indulge preference satisfaction or wealth creation for the testator. In fact, it is more likely to result in wealth dissipation. However, it can be more easily justified on the basis of social obligation. Its original purpose was to alleviate destitution in cases of real hardship. The effect was to throw the burden of familial support onto the testator rather than have that burden fall upon the state, and through it, the community at large. This can be seen as an early example of the modern welfare state and the counter-tradition I am exploring pushing back against the 19th century heyday of classical liberalism. Consequently, the Act can be seen as a legal recognition of an extant moral duty. Moreover, on the modern interpretation of the test we can see that the duty reflects both financial and emotional bonds that a testator owes to his or her family. In order to flourish as humans we need not only access to resources, but also the emotional support that comes from being the member of a community; in this case a member of a family. By controlling a testator’s

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98 See the Family Protection Act 1955, s 3(a).
99 See, for example, the discussion of spouses in Wylie v Wylie (2003) 23 FRNZ 156 and the more general treatment of various claimants in Re Hilton [1997] 2 NZLR 734.
100 Stephens, above n 92.
dispossession of assets on death the law caters for this intrinsic aspect of what it means to flourish.

F. The Christchurch Earthquake Recovery Act 2011

Sometimes, in order to expedite recovery following natural (or manmade) disasters it is necessary for individual private property holdings to be subjected to executive or legislative action. In many respects the powers exercised in these situations are specific instances of the compulsory acquisition and regulatory takings discussed above. However, given these situations tend to arise suddenly and need an almost instantaneous response they serve as an excellent illustration of the way in which the social obligation norm can operate in practice.

A recent and topical example is the Christchurch Earthquake Recovery Act 2011, which was passed under urgency following the February 2011 earthquake in Christchurch. During the passage of the Act it was accepted by all submitters that the exceptional circumstances following the earthquakes justified the need to confer extraordinary powers on the Crown (and relevant Minister). As the Explanatory Note to the Bill indicates, the Act “is founded on the need for community participation in decision-making processes while balancing this against the need for a timely and co-ordinated recovery process”. To this end, the Act confers wide powers on the Minister for Canterbury Earthquake

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101 Where the state is unwilling or able to step in private property holdings can lead to grid lock. See, for example, Heller's discussion of the aftermath of the 1994 Kobe earthquakes. While state owned infrastructure was quickly rebuilt a ‘tragedy of the anticommons’ (where too much property leads to grid lock) caused extensive delays to remediating residential and commercial property. See Michael A Heller “The Tragedy of the Anticommons: Property in the Transition from Marx to Markets” (1998) 111 Harvard Law Review 621 at 684. See also Fowler Developments Ltd v Chief Executive of the Canterbury Earthquake Recovery Authority [2013] NZHC 2173, [2014] 1 NZLR 54 (HC) and Fowler Developments Ltd v Chief Executive of the Canterbury Earthquake Recovery Authority [2013] NZCA 588, [2014] 2 NZLR 587.

102 Independent Fisheries Ltd v Minister for Canterbury Earthquake Recovery [2012] NZHC 1810 at [47].

103 Canterbury Earthquake Recovery Bill 2011, Explanatory Note.
Recovery to make decisions with the goal of expediting the recovery of Christchurch. In particular it overrides the usual RMA procedures in an attempt to minimise red-tape. While it attempts to provide for a degree of community participation, this is comparatively limited.

While full treatment of the Act’s 93 sections is beyond the scope of this thesis, in essence it sets out a template for the rebuild of Christchurch city and the greater Christchurch area. The purpose of the Act is spelt out in s 3. The broad purpose is articulated in s 3(a) and is to provide appropriate measures to ensure that greater Christchurch, councils and communities are able to respond to, and recover from, the impacts of the earthquakes. The Act is not limited to simply restoring Christchurch, but to extending, enhancing and improving it.

One of the key aims of the Act is to provide the framework for the creation and implementation of a Recovery Strategy. In order to implement the Recovery Strategy
and the goals of the Act more generally, the Minister and the Chief Executive of the Canterbury Earthquake Recovery Authority are given some important powers, a number of which have the potential to impact on an individual’s private property. Two examples will serve to illustrate the extent of these powers. Section 53 of the Act provides:

53 Acquiring or disposing of property

(1) The chief executive may, in the name of the Crown, purchase or otherwise acquire, hold, sell, exchange, mortgage, lease, and dispose of land and personal property.

(2) Subsection (3) applies if land acquired by the chief executive is no longer required for that purpose and is available for disposal.

(3) To avoid doubt, nothing in sections 40 to 42 of the Public Works Act 1981 applies to the disposal of land to which this subsection applies, whether by sale, exchange, or otherwise, except as provided in section 58 ...

To date the exercise of this power is most evident in the Christchurch Central Recovery Plan and the compulsory acquisition of land for the key “anchor projects” that accompany the plan. The power to acquire land is central to the Crown’s desire to see the rebuild of central Christchurch go according to its vision, which would be almost impossible to implement without the ability to compulsorily purchase the necessary land. It is particularly interesting that the Act applies to both real and personal property, and overrides the provisions (and limited protections) of the Public Works Act 1981.

A further exceptional power granted to the Minister under the Act is the ability to cancel or revoke any resource consent. Section 27 provides, among other things:

27 Suspension of plan, etc

(1) The Minister may, by public notice, suspend, amend, or revoke the whole or any part of the following, so far as they relate to any area within greater Christchurch:

document. An “RMA document” is defined in s 4(1) and includes: a regional policy statement (or proposed regional policy statement), a proposed plan and a plan (s 15).


109 For a detailed discussion of land acquisition under the plan and information about particular acquisitions see: <https://ccdu.govt.nz/land-acquisition>.
(a) an RMA document:
(b) a plan or policy of a council under the Local Government Act 2002 …

(2) The Minister may, by public notice, suspend or cancel, in whole or in part, any of the following for an activity within greater Christchurch:
any resource consent:

(7) No compensation is payable under this Act in respect of any action taken under this section.

Section 27(6) provides that if a consent is cancelled or revoked under the Act, the person who held the resource consent remains liable for the performance of any conditions under the consent, and the whole or part of any bond paid under s 108 of the RMA must be retained. While the exercise of the power in s 27 is constrained and must be read in light of the requirement to prepare a Recovery Strategy it does provide an “ancillary discretionary power conferred on the Minister, which may, depending on the circumstances need to be exercised before, during or after the development of the Recovery Strategy”.

Both ss 27 and 53 serve to illustrate that in an attempt to achieve a timely rebuild of Christchurch, some private property holders may have to endure significant burdens being placed on their ability to use their resources. At the risk of belabouring the point, legislation like the Canterbury Earthquake Recovery Act 2011 indicates a societal recognition that sometimes what is good for the community will require sacrifice by some or all members of the community. It may well behove land owners in central Christchurch to let the land lie fallow in the hope that, as others rebuild, the value of their land will increase. However, in recognising that one promising way to get Christchurch back on its feet is to have a functioning and vibrant city centre, the state has intervened, developed a plan for the area and is exercising the necessary powers to see it happen. Not only does

110 See the Court of Appeal discussion in *Canterbury Regional Council v Independent Fisheries Ltd* [2012] NZCA 601, [2013] 2 NZLR 57 at [68].
111 See the Court of Appeal discussion in *Canterbury Regional Council v Independent Fisheries Ltd* [2012] NZCA 601, [2013] 2 NZLR 57 at [71].
this involve the compulsory acquisition of land by the state, but also the added complication that land may be transferred to a new (and different) private owner. In addition, the situation in relation to resource consents is quite extraordinary. It seems counterintuitive that while a consent can be revoked, the conditions attaching to it remain in force.

This Act provides further evidence that the social obligation norm already operates in our law, by demonstrating several situations where private property rights can be diminished or acquired in the best interests of the general community. As the Court of Appeal has observed there can be “little doubt from the legislation that Parliament considers it to be in the national interest to accord priority to the recovery of Christchurch”.

G. Constitutional Law

I will complete this review by looking at the constitutional law of Germany and South Africa which both demonstrate institutional legitimacy being given to the social obligation theory.

Germany

The German idea of property starts from the presumption that private property comes with obligations. Article 14 of the German Federal Grundgesetz (Constitution (or more correctly Basic Law)) contains a civil rights guarantee of ownership, a statement that the

112 Essentially, this is an example of the Act allowing what is sometimes called ‘private takings’. In these circumstances, property is taken from one private owner and transferred to another private owner for a particular purpose. Although the transfer may have a public benefit (such as the transfer of land in Victorian England for the construction of railways), the primary purpose is private commerce. This can be contrasted with the Public Works Act 1981, which allows the transfer of private property to State control for a public purpose. For a discussion of private takings see Emma JL Waring “The Prevalence of Private Takings” in Nicholas Hopkins (ed) Modern Studies in Property Law Vol 7 (Hart Publishing, Oxford and Portland, 2013). Private takings also have implications for social obligation theory although space does not allow for a full treatment here.

113 Canterbury Regional Council v Independent Fisheries Ltd [2012] NZCA 601, [2013] 2 NZLR 57 at [13]. Albeit that these powers are not unfettered. See also Canterbury Earthquake Recovery Act 2011, s 10.
content of property rights will be set out in legislation, a qualified power of compulsory acquisition, and a statement that ownership carries with it obligations.\textsuperscript{114}

The Constitution was adopted in 1949 with the active participation and approval of the Western World War II allies.\textsuperscript{115} It is underpinned by a commitment to the principle of human dignity (\textit{Menschenvürde}) that must be seen as existing in both social and economic contexts.\textsuperscript{116} It creates not only a \textit{Rechtstaat} (a state governed by the rule of law) but also a \textit{Sozialstaat} (social welfare state). Underlying this is the idea that the government has the responsibility to provide for the basic needs of all its citizens.\textsuperscript{117} Modern day Germany views its responsibilities as not only to provide a social welfare backstop for those in need, but also to redistribute wealth for the benefit of the common good. The general German presumption is that the overall social wellbeing of the community improves if, and as far as, everyone shares in the fruits of what society can produce.\textsuperscript{118} The Basic Law reflects these cultural values.

\begin{itemize}
\item \textsuperscript{114} Translated and cited in Murray Raff “Environmental Obligations and the Western \textit{Liberal} Property Concept” (1998) 22 Melbourne University Law Review 657 at 675:
\textbf{Article 14 (Ownership, Inheritance and Expropriation)}
\begin{enumerate}
\item Ownership and inheritance will be guaranteed. Their meaning and limitations will be defined in legislation.
\item Ownership creates obligations. Its use shall at the same time serve the common good.
\item An expropriation is permissible only for the common good. It is to be permitted by legislation, or on the basis of legislation, which arranges the manner and measure of compensation. The compensation is to be determined by just weighing of the interests of the common good and of the private party…
\end{enumerate}
\item \textsuperscript{115} At 676.
\item \textsuperscript{116} Alexander “Property as a Fundamental Constitutional Right? The German Example”, above n 19, at 743.
\item \textsuperscript{117} At 741 – 742. Although the Basic Law is a modern legal institution, its inspiration can be traced back far earlier in German history. Indeed, the idea can be seen in the Lutheran idea of a mutual obligation between a prince and his people. This is an idea that has permeated nearly all of German constitutional history. For example, the code for the Prussian States (\textit{Allgemeines Landrecht der Preußischen Staaten}) (1794) contained a commitment to the idea that the state holds some responsibility for ensuring the people’s basic needs. Legislation passed during the Bismarck era (and later the Weimar Republic) deepened and extended this state commitment to social welfare. Indeed, article 14 of the Basic Law drew inspiration from article 153 of the \textit{Weimar Constitution} of 1919. Moreover, as Raff notes, article 14 draws on natural law principles developed in Germany since the enlightenment and a more general and historical cultural view that property rights are based on social obligation (see Raff, above n 114, at 676).
\item \textsuperscript{118} Alexander “Property as a Fundamental Constitutional Right? The German Example”, above n 19, at 742.
\end{itemize}
The most extensive development of the obligations referred to in Article 14(2) has occurred in cases where owners have claimed compensation under Article 14(3) for expropriations. The cases have usually occurred in the context of government planning or environmental regulation. Very briefly, in developing the law the courts have indicated that where a citizen has an obligation to ensure the environmental quality of their property, Article 14(2) can preclude a right to compensation for what would otherwise be a governmental interference with private property. Compensation will only be available where the infringement exceeds the obligations the owner already has. The German Federal Constitutional Court (Bundesverfassungsgericht) has indicated that a citizen is a person living within, and dependent upon, society. Citizens are not simply autonomous and egocentric individuals. It follows that the rights of owners are malleable and must be placed within the broader and integrated setting of the environment in which the private property is located. There is no inherent right to use property in a way that is socially disruptive. The test developed by the Court considers what the reasonable thoughts of a rational, but economically minded, person would be when considering the potential uses of property in light of the property’s overall social and environmental context (and in the absence of any already extant legal regulation).

A practical example of this at work can be seen in the Gravel Extraction Case (1984) 14 Agrarrecht 281. An owner of land wanted to further develop a gravel pit on his property but was refused, not only because the extraction interfered with groundwater management, but also because the area to be developed contained a small forest that was seen as vital to the

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119 Raff, above n 114, at 677.
120 At 677.
121 At 678.
regeneration of the area. The German High Court held that compensation was not
required. It noted in relation to the forest that: 122

… [A] rational and reasonable owner, who had not lost sight of the common good,
would abstain from gravel extraction. He would not close his mind to the
knowledge that the completely paramount interest of landscape protection requires
retention of the remaining forest and compels him to refrain from the otherwise
economically rational exploitation of the gravel deposit which lies in his private
interests.

This example clearly displays the inherent limitations within the German conception of
ownership and private property. Consequently, the law can be seen as reflecting a social
obligation view of property that caters for the social and environmental goals of the
community. 123 In interpreting Article 14 the courts have rejected the view that wealth
maximisation, individual preference satisfaction or individual liberties are the primary
interests protected by the constitutionally protected property right. Moreover, there is a
general level of mistrust regarding the market as a mechanism for achieving the social
good. This is particularly evident in relation to natural resources. 124 The Court has been
very attentive in upholding legislation aimed at protecting environmental resources, which
the Court views as basic to human existence. 125

Germany is a fascinating jurisdiction from a private property perspective because the Basic
Law and its application in the courts articulate an extremely sophisticated and subtle view
of the way private property operates. Overall, it is clear that the German constitutional
approach does not view property rights as simply protecting subjective preferences and
wealth maximisation. It follows that the fact that a property right is engaged will not block

123 Alexander “Property as a Fundamental Constitutional Right? The German Example”, above n 19 at 750.
124 At 739. The environmental context provides some more interesting illustrations. See for example the
series of cases known as the “Groundwater Cases” (Naßaussiedelungsentscheidungen) (discussed by Alexander)
where the court considered that water was a resource that was too special and too important to be left
completely to the market to allocate. As Alexander perceptively notes, the Groundwater Cases were not
about the redistribution of water from person A to person B. Rather, the water is, and always has been, A and
B’s and in Germany this is recognised through its management for the benefit of the common good.
125 At 755.
legislative or regulative interference with autonomous satisfaction of personal preference. Property law on the German model has purposes that are both moral and social, in addition to being economic. The purpose is moral in the sense that property is seen as intrinsic part of what goes to facilitating human dignity and self-governance. It is social in the sense that it sees property as a way of realising a pre-existing idea of the property social order. Thus, it clearly fits with a social obligation approach to private property. Moreover, the economic success of Germany since the adoption of the Basic Law at the end of the Second World War tends to suggest that the classical liberal (and neoliberal) advocacy of strong property rights to achieve the maximum social wealth may be flawed. It is clearly possible to have an extremely successful economy which also recognises that property rights can serve community as well as private interests.

**South Africa**

The South African Constitution provides a further example of the social-obligation norm of property in action. Unsurprisingly, given South Africa’s history, the Constitution has a clear commitment to both land reform and racial justice.\(^{\text{126}}\) For example, s 25 of the Constitution states, *inter alia*, that, no one may be deprived of property except in terms of law of general application (ss (1)) but also that “[t]he state must take reasonable legislative and other measures, within its available resources to foster conditions which enable citizens to gain access to land on an equitable basis” (ss (5)). There are also other very interesting Constitutional provisions dealing with an assortment of social rights including a right to both housing and health care.

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\(^{\text{126}}\) Alexander, above n 9, at 783.
The South African Constitution seeks to be unambiguously transformative and strives to address many past injustices, which is inspired by a commitment to an open and democratic society based on human dignity, equality and freedom. In this context social transformation is primarily aimed at land reform. A lack of homes and land is a real problem in South Africa, particularly for non-whites. Without access to land and secure tenure the constitutional rhetoric is likely to be cold comfort to the majority of South African citizens. It is unsurprising then, that settlements established through illegal invasions of either public or private land are a ubiquitous part of the South African landscape. These settlements provide a place for the desperately poor to live. The long and continuing history of these settlements clearly underpins the Constitution’s approach to property generally and housing in particular. Although the commitment to goals such as transforming housing and achieving a just and equal society will take a very long time to achieve, the South African Courts are attempting to facilitate this social transformation.

One case in particular provides an excellent example. Modder East Squatters v Modderklip Boerdery (Pty) Ltd (2004) 8 BCLR 821 involved two different, but related, matters. Very briefly, the Modder East Squatters (whose numbers swelled from 400 to 40,000) unlawfully occupied a portion of the farm owned by Modderklip Boerdery (Pty) Ltd near Johannesburg. Modderklip applied for, and was granted, an eviction order. However, the Modder East Squatters refused to move. The relevant sheriff was ordered to execute the eviction order, but he insisted on a large sum of money to cover the cost of the eviction. This sum exceeded the value of the land and the owner was unable or unwilling to pay it.

The owner eventually reapplied to the courts and was granted a declaratory order forcing

128 Alexander, above n 9, at 784.
129 At 784.
130 At 787.
all relevant government officials to take the necessary steps to remove the unlawful occupiers.

The case made its way to the Supreme Court of Appeal in the form of a combined application by the state appealing both the initial eviction order and the enforcement order. The Court held that the case involved a conflict between two of the state’s constitutional duties, the ownership rights of Modderklip under s 25 and the state’s duties to provide adequate housing under s 26. On further appeal to the Constitutional Court the court acknowledged that Modderklip was entitled to the eviction order, but the court conditioned this right on the state first providing alternative land or housing to the squatters. In essence, it ordered the state to comply with its constitutional obligations by providing land so that the eviction could proceed. The occupiers were entitled to remain until this was achieved. In the meantime the owner was entitled to the compensation ordered by the Supreme Court of Appeal.\textsuperscript{131} Although each of the courts focused on the state’s obligations, the decision also impacts on the private owner’s obligations. Modderklip wanted the exclusive possession of its land back. The courts, however, held that it was constitutionally obligated to sacrifice that entitlement. Not only did this force Modderklip into a continuing relationship with the squatters, but it also increased the risk that the state would simply appropriate Modderklip’s land permanently (albeit with some degree of compensation).

It is difficult or impossible to rationalise the imposition on Modderklip with classical liberal principles.\textsuperscript{132} The continuing relationship with the squatters was not autonomously assumed and cannot be seen to facilitate any individual preference that Modderklip may have had. The court was faced with a manifest struggle between tensions inherent in the

\textsuperscript{131} At 788.
\textsuperscript{132} At 789.
Constitution. Property is protected in s 25(1), but this must be balanced against the state’s obligation to take reasonable measures to enable citizens to gain land on an equitable basis (s 25(5)) and citizens’ rights to housing (s 26). The court’s decision is certainly an elegant solution within the South African context. Its import, however, goes beyond the narrow compass of South African law post-apartheid. The decision cannot be meshed with a classical liberal, preference satisfaction view of property. It does, however, fit very comfortably with the normative idea that private property rights come with social obligations. In order to facilitate the South African vision of a properly ordered society, and to create the necessary conditions for human flourishing, the South African state is expressly required to provide its citizens with access to, among other things, land and housing. Moreover, as a large landowner and member of the community Modderklip is also under an obligation to contribute from its own private property to assist in the maintenance of the proper order (albeit that it receives some degree of compensation from the state). By doing this Modderklip, as a private owner, helps to facilitate the squatters to obtain the resources they need to flourish (or at least survive). The Constitution attempts to balance these obligations. The example is remarkable because it demonstrates that society has a choice regarding private property’s function. It is possible for private property to serve goals greater than base preference satisfaction. South Africa has passed through the crucible of apartheid and has made the positive choice to use private property as one means of social transformation. This is a powerful lesson.

VI. Conclusion

In comparison to the classical liberal view of private property, social obligation theory is significantly more complex. It paints a picture of the core of property that imposes

133 At 791.
obligations on owners to provide benefits to society. The presence of these obligations, in turn, results in internal constraints on private rights. At the core of property is not simply exclusion but rather a reflection of the plurality of values that, as a community, we believe property should be serving. It is the job of the legal system to negotiate what will inevitably be conflicting ideas in articulating the shape of private property.134 The examples I have canvassed in this chapter provide a degree of insight into a range of areas where the law attempts to do this. In each case the outcome of the negotiation will depend greatly on the legal, political and social culture of the society in question.

Progressive property theory stresses a social vision as the base of any property system.135 Alexander and Peñalver argue for a vision of private property that fosters social relationships of equality and dignity aimed at enabling individuals to flourish. It recognises that humans are inherently social animals. In order to flourish we rely on the cooperation of others, but others are also necessary to ensure we have sufficient for basic survival. The interdependency of humans means that we owe each other obligations, not because we consent to obligations, but because they are an irreducible aspect of what it means to be human.136 Moreover, the goal of individual autonomy is best achieved through assisting people to achieve their own ends, and to flourish, though social relations.137 Thus, interdependence is at the heart of the freedom of the individual. This account gives normative credibility to state interference which encourages or compels individuals to meet

134 Foster and Bonilla, above n 16, at 1011.
136 Alexander, above n 18, at 2.
137 Peter Burdon, above n 17, at 731 citing Jennifer Nedlesky “Reconceiving Rights as Relationship” (1993) 1 Review of Constitutional Studies 1.
their social obligations. The state may appropriately coerce individuals into acting for the
good of the whole community in some circumstances.\footnote{138 Alexander, above n 18, at 2.}

It is important to recognise, however, that this approach does not advocate the surrender
of certainty or law-like predictability to the vagaries of social justice. It can, and indeed
should, be consistent with the strong protection of property rights (including things such
as the right to exclude). As Alexander notes: “Property remains property; ownership,
ownership.”\footnote{139 Alexander, above n 41, at 1067.} It is still necessary to have a certain and well-structured system, however,
this system must also include a moral dimension.\footnote{140 Alexander “Pluralism and Property”, above n 16, at 1024.}

Private property rights are not ends in and of themselves. They are an institution, the goal
of which is to serve deeper normative and substantive values. In spite of the fact that
private property is characteristically associated with private interests, it cannot be
understood apart from its social or public function.\footnote{141 Barnes, above n 10, at 119.} Ownership cannot be seen as sole
individual entitlement, but rather must be justified by the overall good of all. The common
good is best achieved when individuals are free to flourish and this requires, in some
circumstances, that some rights are constrained by obligations in the common interest.

If we accept that at the heart of private property is a norm of social obligation then it will
be necessary for us to recognise that property rights have, within them, socially contingent
boundaries.\footnote{142 Burdon, above n 17, 732.} This should pose little difficulty because, as illustrated by the examples
discussed in this chapter, we are already comfortable with this fact.

There are few areas of private property more important or controversial than natural
resources. They lie at the heart of a great deal of our wealth and are essential to our health.

\footnote{138 Alexander, above n 18, at 2.}
\footnote{139 Alexander, above n 41, at 1067.}
\footnote{140 Alexander “Pluralism and Property”, above n 16, at 1024.}
\footnote{141 Barnes, above n 10, at 119.}
\footnote{142 Burdon, above n 17, 732.}
Balancing the competing demands upon the environment is extremely hard. In my view, the dominant classical liberal idea of private property makes this task harder. It is no surprise that people become concerned about proposals to use private property to manage natural resources. There are very real risks and relevant concerns. However, I am firmly of the view that the solution is not to do away with private property altogether. This would be impossible. Instead, I consider the counter-tradition of private property as social obligation that I have explored in chapters six and seven provides a very promising alternative approach. What I aim to do in part four is apply this theory to practice by looking at two private property based regimes of resource management. In doing so I aim to demonstrate that the social obligation norm outlined in this chapter provides a persuasive account of how private property is deployed by these regimes and underpins their operation.
Part Four

Demonstrating the Social Obligation Norm within Private Property Based Regimes of Environmental Management
Chapter Eight: An Introduction to the QMS, NZ ETS and a Note on Analytical Method

My purpose in this part is to demonstrate the validity of my thesis by considering the New Zealand quota management system for fish (QMS) and the New Zealand Emissions Trading Scheme (NZ ETS). I propose to go about this in two steps. Firstly, in chapters nine and ten I will analyse the QMS and NZ ETS in order to demonstrate that the private property right at the heart of each of these schemes does not actually reflect the ‘strong’ private property right predicted by the theory discussed in chapter four. Secondly, in chapter eleven, I demonstrate that this lack of strength can be accounted for by the presence of the social obligation norm of property in the structure of these rights. However, before I can undertake this detailed analysis I have two preliminary tasks to accomplish in this chapter. The first is to introduce the QMS and the NZ ETS. These are both extremely complicated schemes and it is necessary to have some background to their history and operation before beginning the detailed analysis of their underlying private property rights. My second task is to discuss the methodology I will employ in chapter nine to determine whether these rights actually reflect the ‘strong’ classical liberal right anticipated by the theory. For reasons I explore below, although classical liberal theory relies on the ‘liberal triad’ of possession, use and disposition, these incidents of property do not lend themselves to a comparison of the strength of private property rights. If one is to argue that a particular property right is stronger or weaker than another it is necessary to have some sort of metric by which to make this comparison. To that end I adopt a method that has been developed by Anthony Scott and applied to tradeable environmental allowances. I describe this approach and outline its reasoning and contours in this chapter before turning to the actual analysis in chapters nine and ten.
I. A Brief History and Overview of the QMS and the NZ ETS

Beginning with the QMS, it is useful to briefly outline the history of the schemes I am analysing, by summarising how they work in practice and introducing the legislation underpinning them.

A. A brief history of New Zealand QMS

Until 1978, when New Zealand claimed an exclusive economic zone, the domestic fishery was small and confined to an inshore industry which was exploited to a depth of about 200 metres. It had been deregulated in the early 1960s and was, essentially, open access. The deep-water fishery (which operated beyond a point about 12 miles from the coast) was largely the preserve of foreign fishing vessels from Japan, Korea, and the Soviet Union. One consequence of adopting the exclusive economic zone was that these foreign fleets were expelled, and New Zealand began to develop its own deep-sea fishing fleet. In many respects this represented the continuation of a trend that had begun in the 1960s, when the government had started to actively encourage investment and entry into the domestic industry. By the late 1970s and early 1980s the government was still actively attempting to restructure and develop the fishing fleet and was also attempting to exploit the

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2 Quin, above n 1, at 515.

3 See the Fisheries Act 1963 (repealed).


opportunities opened up by the adoption of the exclusive economic zone.\textsuperscript{6} To this end the government initiated a “think big” campaign aimed at encouraging people to exploit the deep-waters.\textsuperscript{7}

Paradoxically, at the same time, conservation and sustainability concerns emerged. During the 1970s the yield from the domestic fishery increased from about 50,000 to 500,000 tonnes per annum.\textsuperscript{8} This increase was paralleled by a growing concern that the level of fishing was becoming unsustainable\textsuperscript{9} and the government began to restrict entry into the domestic fishery. The first attempts relied on classic “command and control” regulation and a panoply of rules regarding the licencing of vessels and fishers, closed areas, seasonal closures, minimum fish sizes, gear restrictions, vessel controls and requirements to land fish at specific ports.\textsuperscript{10} These measures were imposed by way of annual permits issued to all commercial fishers. Unsurprisingly, these attempts at regulation behaved in textbook fashion and did not have the intended effect.\textsuperscript{11} They actually resulted in an increase in the fishing effort.\textsuperscript{12}

As a result, the 1980s saw a paradigmatic change in the way New Zealand approached its fisheries management. The first attempt at reform came in 1983. Although discussion of quota schemes had been present in policy circles since 1980, the primary purpose of the Fisheries Act 1983 was to consolidate the various regulations that were in force. The Act

\textsuperscript{6} New Zealand Federation of Commercial Fishermen v Minister of Fisheries HC Wellington CP 237/95, 24 April 1997, McGechan J at 84.
\textsuperscript{7} Cath Wallace “Environmental Justice and New Zealand’s Fisheries Quota Management System” (1999) 3 New Zealand Journal of Environmental Law 33 at 13. “Think big” was the colloquial name given to a series of large-scale industrial projects undertaken by the National government under Prime Minister Robert Muldoon (1975 – 1984). Originally, it was applied to a group of large energy-based investments. It was later applied to virtually any big investment project promoted by the government (see Brian Easton The Commercialisation of New Zealand (Auckland University Press, Auckland, 1997)).
\textsuperscript{8} Richard Barnes Property Rights and Natural Resources (Hart Publishing, Oxford and Portland (Oregon), 2009) at 358.
\textsuperscript{9} Quin, above n 1, at 515.
\textsuperscript{10} At 518.
\textsuperscript{12} Batkin, above n 4, at 865.
was based around establishing formal regional fishery management planning, extending the controlled fishery framework and establishing a special licensing authority for close regulation of fisheries.\(^{13}\) However, the Act also did another very important thing; it introduced a precursor to the quota management system, the Deepwater Enterprise Allocation System for deepwater trawl fisheries.\(^{14}\)

This system appears to have been introduced to trial the idea of the quota management of fisheries.\(^{15}\) When the 1983 Act was enacted it was well recognised that attempts to control the inshore fishery had been ineffectual, and there “was little doubt that it would have to be replaced by a better system”.\(^{16}\) In the early 1980s there were relatively few fishers exploiting the deepwater fishery (as a consequence of the adoption of the exclusive economic zone and the expulsion of the foreign fleets) and deep-water fisheries stocks were comparatively healthy.\(^{17}\) Mindful of the over-fishing and over-capitalisation that had occurred to both its own inshore fishery and open access fisheries around the world\(^{18}\) it seems the government decided to be proactive and adopt a quota management regime for the relatively healthy deep-water stocks before problems developed.\(^{19}\) The scheme would also serve as a useful experiment to decide whether it would be extended to all fisheries in New Zealand.

The scheme itself covered seven deepwater fish stocks. Individual quota were issued to several large companies who could then choose to harvest their entitlement in whatever

\(^{13}\) R Connor “Are ITQs Property Rights? Definition, Discipline and Discourse” (paper presented at the FishRights99 Conference, Fremantle, Western Australia, 1999).

\(^{14}\) Hannesson, above n 5, at 88.

\(^{15}\) Wallace and Weeber, above n 1, at 516.


\(^{18}\) Hannesson, above n 5, at 88.

\(^{19}\) Clark, Major and Mollett, above n 11, at 326.
manner they wished. The individual quota were granted for 10 years. While the
government was unable to authorise the trading of this quota, de facto trading and leasing
was reported.20

Within the inshore fishery, coherence between the existing regulations was to be achieved
through the implementation of a series of fisheries management plans.21 However, for a
variety of reasons these plans stalled and never came to fruition.22 As a result, the 1983 Act
was generally judged to be a failure, unable to address the problems of over-fishing and
over-capitalisation. In response, after a period of intense policy debate and what was seen
as a successful experiment with quota for deep-water fisheries23 a “consensus emerged for
the introduction of a rights based approach to fisheries management”.24 Consequently, the
quota management system for a range of fish species was introduced by the Fisheries
Amendment Act 1986.25

It is worth stressing that although the introduction of individual transferable quota was an
attempt to rebuild fish stocks, the development of the QMS was also largely driven by
economic concerns. It was introduced at a time of vast economic reform and, in particular,
the restructuring initiated by the fourth Labour government in 1984.26 These economic
reforms were driven by politicians and Cabinet, but were underpinned by a body of advice
prepared by the government’s policy advisers, especially those in the Treasury. This advice
was, in turn, based on neoliberal economic theory, especially as propounded by American

20 See Barnes, above n 8, at 358; and Lock and Leslie, above n 17, at 12.
21 See Fisheries Act 1984, s 4 (now repealed).
22 Quin, above n 1, at 518.
23 Wallace, above n 7, at 43.
24 The Ministry of Fisheries, Fisheries Management in a Property Rights Regime: The New Zealand Experience
(Ministry of Fisheries, Wellington, 1996) at para 2.23 cited in Quin, above n 1, at 519.
25 Wallace, above n 7, at 43.
26 Hannesson, above n 5, at 88.
The goal was to make the general economy more competitive and open to trade by lowering tariffs, dismantling subsidies and adopting free market reforms. Individual transferable quota fit brilliantly into this theory, and the fishing industry and Ministry of Fisheries used academic policy advice on economic reform extensively in developing the quota management system. As the Minister of Fisheries (the Hon Colin Moyle) observed on the introduction of the Fisheries Amendment Bill 1985:

... To date, fisheries legislation has been founded on management approaches that sought to protect the biological base of the fishery. The 1983 Act did not materially change those concepts. However, it did add the process of fisheries management plans that were designed to formalise a structure of consultation and regional based management. The 1983 Act did not consider the question of maximising the economic benefits from the fishing industry to New Zealand as a whole, or take any steps to improve industry efficiency by restructuring to reduce over capacity in the catching sector ...

As with similar schemes, the QMS has its roots in classical and neoliberal economic theory with its emphasis on market mechanisms and an ostensibly decreased role for the state (although, as we will see, this last goal has not been fully achieved). This tends to reinforce the point that quota management was primarily introduced to make the fishery as economically efficient as possible, rather than necessarily being targeted directly at environmental considerations. However, over time, the language of the relevant Acts has increasingly incorporated mechanisms aimed at achieving better environmental outcomes.

Under the scheme New Zealand’s fisheries waters were divided into 10 quota management areas and each species of fish was separated into management units known as fish stocks.

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29 [1985] NZPD 468 at 8958.
30 Quin, above n 1, at 517.
31 Quin, above n 1, at 517; Hannesson, above n 5, at 88; and Clark, Major and Mollett, above n 11, at 327.
Each fish stock was allocated a total allowable catch that was reviewed annually.\textsuperscript{32} Individual transferable quota was then assigned to commercial fishers, representing the maximum tonnage of fish they could catch across a given year. Quota was allocated in perpetuity and capable of permanent transfer or lease.\textsuperscript{33} The Act was amended several times over successive years and eventually nearly all of New Zealand's commercial fisheries were brought under the system. Although the QMS retains the same basic outline as its first enactment, there have been several important changes (which will be discussed in chapters nine and ten). Eventually, following a five-year review process, the Fisheries Act 1996 was passed which aimed to replace all previous Acts and amendments. As it currently stands, the vast majority of the Fisheries Act 1983 has been repealed and the QMS now operates entirely under the Fisheries Act 1996.

B. An overview of the QMS under the Fisheries Act 1996

The long title to the Fisheries Act 1996 (“the Act”) indicates that it reforms and restates the law relating to fisheries resources and recognises New Zealand's international obligations relating to fishing.

The purpose of the Act is outlined in s 8 and is to provide for the utilisation of fisheries resources while ensuring sustainability. “Ensuring sustainability” is further defined as:\textsuperscript{34}

\begin{itemize}
\item \textbf{Total allowable catch}, with respect to the yield from a fishery means the amount of fish, aquatic life, or seaweed that will produce from that fishery the maximum sustainable yield, as qualified by any relevant economic or environmental factors, fishing patterns, the interdependence of stocks of fish, and any generally recommended sub-regional or regional or global standards.
\item From 1990 a sub-set of total allowable catch was set – the “total allowable commercial catch”. Total allowable commercial catch was defined in s 2 of the Fisheries Act 1983 as:
\textbf{Total allowable commercial catch} means, in relation to a fishery subject to a quota management system under Part 2A of this Act, the total allowable commercial catch for that fishery specified pursuant to section 28C(1) or section 28CA or section 28OB or section 28OC of this Act:
\end{itemize}

\textsuperscript{32} Quin, above n 1, at 519. The “total allowable catch” was defined in s 2 of the Fisheries Act 1983: \textbf{Total allowable catch}, with respect to the yield from a fishery means the amount of fish, aquatic life, or seaweed that will produce from that fishery the maximum sustainable yield, as qualified by any relevant economic or environmental factors, fishing patterns, the interdependence of stocks of fish, and any generally recommended sub-regional or regional or global standards.

\textsuperscript{33} From 1990 a sub-set of total allowable catch was set – the “total allowable commercial catch”. Total allowable commercial catch was defined in s 2 of the Fisheries Act 1983 as:

\textbf{Total allowable commercial catch} means, in relation to a fishery subject to a quota management system under Part 2A of this Act, the total allowable commercial catch for that fishery specified pursuant to section 28C(1) or section 28CA or section 28OB or section 28OC of this Act:

\textsuperscript{34} Christine Stewart \textit{Legislating for Property Rights in Fisheries} (Development Law Service of the Food and Agriculture Organization of the United Nations Legal Office, Rome, 2004) at 24.

\textsuperscript{34} Fisheries Act 1996, s 8(2).
(a) maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations; and

(b) avoiding, remedying or mitigating any adverse effects of fishing on the aquatic environment.

Utilisation is also further defined. It means conserving, using, enhancing, and developing fisheries resources to enable people to provide for their social, economic and cultural wellbeing.

Section 9 outlines three environmental principles that must be adhered to: species must be maintained above a level that ensures their long-term viability; biological diversity of the aquatic environment should be maintained; and habitat of particular significance for fisheries management should be protected. Section 10 imports the “best available information” and “precautionary” principles.35

By s 18 the Minister may, from time to time, declare a fish stock subject to the QMS.36 Having declared a stock to be subject to the QMS, the Minister must also set a “total allowable catch” in respect of each quota management stock in a quota management area (s 13). The total allowable catch must be set at a level which will maintain, or replenish the stock at or to a level that can produce the “maximum sustainable yield”. “Maximum sustainable yield” is defined in s 2 and reflects the greatest yield that can be achieved over

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35 In essence, in exercising or performing functions duties or powers under the Act, decision makers shall take into account various decision making principles including: that decisions should be based on the best available information; that decision makers should consider any uncertainty in the information available in any case; that decision makers should be cautious when information is uncertain, unreliable, or inadequate. See Fisheries Act 1996, s 10.

36 Stocks already subject to the quota management system under the 1983 Act automatically became quota management stocks under s 17(3). The declaration in s 18 must be accompanied by a declaration of the quota management area (specified in Schedule 1). Because a fish species can consist of a large number of distinct and geographically separated populations each species of fish under the quota management system is subdivided into separate fish stocks within quota management areas. Each quota management area is managed separately in an attempt to ensure sustainability. Lock and Leslie, above n 17, at 3.
time while maintaining the stock’s productive capability having regard to the population
dynamics of the stock and any environmental factors that influence the stock.\footnote{37}

The Minister may vary the total allowable catch, from time to time, by either increasing or
decreasing it (s 13(4)). The Minister may set or vary any total allowable catch at, or to, zero
(s 13(5)). Once established, the total allowable catch remains in place until amended, which
the Act stipulates must usually happen at the start of the relevant fishing year (ss 13 (6) and
(7)).

Once the total allowable catch has been set the Minister must set an annual “total
allowable commercial catch” for each quota management stock in a quota management
area. This is established having regard to the total allowable catch and non-commercial
fishing interests (s 20). A proportion of the total allowable catch is set aside to provide for
recreational fishing, customary uses, and all other fishing related mortality of that stock (s
21). The remainder is available as the total allowable commercial catch. This represents the
total quantity of fish stock that the commercial fishing industry can catch for that year.
The Minister may vary the total allowable commercial catch and may set it at zero (ss 20(2)
and (3)). It must not exceed the total allowable catch (s 20(5)(b)).

Individual transferable quota are generated when a stock is introduced to the QMS. Quota
are expressed as a number of shares in each fish stock (s 42).\footnote{38} The total number of quota

\footnote{37} Space does not allow for a full treatment of the idea of maximum sustainable yield, however, the concept recognises that no renewable resource can carry on increasing indefinitely. If fish stocks are low, fish will multiply quickly; when they start competing for food the growth rate will slow. The population level should eventually balance out at a maximum level. Theoretically, if fishers take the maximum sustainable yield from a fish stock it will rejuvenate to its maximum level, allowing fishers to harvest the maximum sustainable yield in an ongoing manner. It is an attractive idea because the fish population should carry on in perpetuity while fishers continue harvesting a sustainable amount. (See Quin, above n 1).

\footnote{38} Section 42 states:

\textbf{42 Quota to be expressed in shares}

Quota for any stock shall be expressed as shares that are whole numbers, and—
(a) The sum of that quota shall be 100,000,000 shares for each stock; and
(b) The value of 1 share is equal to one hundred-millionth of the total allowable
commercial catch for the stock.
shares for each stock is 100,000,000. Consequently, each individual quota represents a one-hundred-millionth share of the total allowable commercial catch. Theoretically quota are allocated in perpetuity and are fully transferable (although there are limits on both of these factors, which will be discussed below). Transfers must be registered and registration is backed up by a Crown guarantee. Other property dealings are limited by the Act to mortgages (the conditions for which are set out in ss 136 – 146) and caveats (see ss 147 – 152).

It is no longer possible to lease quota. Since 2001 each quota share generates an annual catch entitlement (ACE) that is allocated at the start of each fishing year and ceases at the end of the fishing year. This specifies the amount of the fish stock that a fisher can catch in any given year. It is calculated by multiplying the quota shares held by the quota owner (divided by 100,000,000) by the total allowable commercial catch (expressed in kilograms) (s 66). At any point during the fishing year, ACE may be bought or sold, (which essentially replaces leases of quota). ACE can also be traded independently of the quota itself. Under s 76 each fisher must balance their fishing catch against the ACE they hold. If they have caught in excess of their entitlement they must either acquire more ACE via the market, or pay a sum of money to the Crown reflecting the “deemed value” of the excess catch, which is set by the Minister (s 75). The deemed value should be set at a level that will ensure there is an incentive for commercial fishers to either catch only their entitlement, or alternatively, acquire ACE to balance against their catch, rather than risking what is essentially a penalty for over-fishing. If necessary, the deemed value is paid after the actual catch history is balanced against ACE at the end of the fishing year (s 76).

The Act also contains a number of additional requirements that must be met before fishing can actually take place. Details will be discussed below, but in addition to holding
quota (and/or ACE) a fisher must also have a vessel that has been registered in the Fishing Vessel Register established under s 103 of the Act and hold a commercial fishing permit issued under s 89.39

Finally, Part 13 of the Act establishes a range of offences and penalties for contravention of the Act’s terms. Significant penalties can apply, including fines of up to $250,000, imprisonment for up to five years and forfeiture of gear and vessels. Some offences can also result in the forfeiture of quota to the Crown.40

*The success of the QMS*

While this thesis does not aim to assess the ‘success’ of the QMS, it is interesting to note that opinions differ regarding its overall efficacy. Barnes notes that the QMS is generally regarded as a success. He suggests that over-exploitation has been reduced, the stock size of most species has either increased or stabilised and the fishing industry is said to be highly profitable and strongly supportive of the quota system.41 Hannesson echoes these comments observing that, with few exceptions, the catch from the most important fish stocks around New Zealand has increased since the QMS was adopted. In light of this, and the fact the increases have continued over a long period, he suggests that it is difficult to avoid the conclusion that the QMS has been a success in terms of conservation.42 He also

39 As will be discussed below, a range of conditions can accompany these permits (s 92) including requirements in relation to: areas of fishing, types of vessels and gear that can be used and times when fishing may take place. Commercial fishers are also required by s 191 to dispose of any fish caught to a “licensed fish receiver”. Licensed fish receivers are the only people entitled to buy fish from commercial fishers. They have a number of obligations regarding record keeping. Controlling the disposal of fish in this manner allows the Ministry to check what fishers report catching, against what they actually land.
40 See ss 255C(3), 255E and 256.
41 Barnes, above n 8, at 359.
42 Hannesson, above n 5, at 93.
notes that there are clear indications that the system has increased the economic efficiency of the fishery. 45

However, other commentators are far more cautious. As Wallace remarks, the success of the system can be measured in a number of ways. If success is portrayed as rising export revenues from the fish alone then there might some validity to the claim that the QMS has been “successful”. However, part of this increase has been as a result of increases in fishing that have exceeded long-term sustainable fishing rates. 44 Indeed, she notes that a number of fish stocks have been managed in a way that has allowed their numbers to drop well below the level required to generate the maximum sustainable yield. 45 She points out that because of limited actual knowledge and research, the state of many fish stocks is unknown. Consequently, it is extremely difficult to be definitive regarding either the success or failure of the QMS. In her view, any claim to success must be treated with a degree of suspicion if the test is whether fish stocks have been maintained at a level that will ensure maximum sustainable yield; we simply do not know. She does, however, conclude that the QMS may not be worse than open access, but stresses that this will be insufficient to protect the environment and the fishery in the long term. 46

C. A brief history of the NZ ETS

The NZ ETS is established under the Climate Change Response Act 2002. It was implemented in order to facilitate New Zealand in discharging its obligations under two

43 At 93.
44 Wallace and Weeber, above n 1, at 520.
45 Wallace, above n 7, at 58.
46 At 65.
international treaties: the United Nations Framework Convention on Climate Change\textsuperscript{47} and the Kyoto Protocol\textsuperscript{48} (the Protocol).

The United Nations Framework Convention on Climate Change was launched at the Rio de Janeiro Earth Summit on Environment and Development in 1992. One of the treaty’s objectives is to “stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.\textsuperscript{49} The treaty itself contains no binding targets for the reduction of greenhouse gas emissions. When first signed, however, it did incorporate a non-binding target for industrialised countries to reduce greenhouse gas emissions to 1990 levels by the year 2000. By the mid-1990s, however, it had become evident that more urgent action was necessary. As a result, the parties to the Convention developed the Kyoto Protocol, which was finalised in 1997.\textsuperscript{50}

The Protocol sets individual, legally binding commitments for most developed countries to reduce the emission of greenhouse gases.\textsuperscript{51} Although the objective of the Protocol is to reduce overall emissions, it provides for a degree of flexibility as to how and where these reductions are generated. The “flexibility mechanisms” are specified in the Protocol.\textsuperscript{52} In

\begin{itemize}
\item [\textsuperscript{47}] United Nations Framework Convention on Climate Change 1771 UNTS 107 (opened for signature on 4 June 1992, entered into force on 24 March 1994).
\item [\textsuperscript{49}] United Nations Framework Convention on Climate Change, above n 47, Article 2.
\item [\textsuperscript{51}] Mattieu Wemaere, Charlotte Streck and Thiago Chagas “Legal Ownership and Nature of Kyoto Units and EU Allowances” in David Freestone and Charlotte Streck (eds) Legal Aspects of Carbon Trading: Kyoto, Copenhagen and Beyond (Oxford University Press, Oxford 2009) at 35.
\item [\textsuperscript{52}] The flexibility mechanisms are:
\begin{itemize}
\item 1. Emissions trading. This allows parties to the Protocol to buy Kyoto units from other countries to help meet their domestic emission reduction targets.
\item 2. The Clean Development Mechanism (CDM). The CDM allows a country with an emission-reduction or emission-limitation commitment under the Protocol (i.e. a developed country) to implement an emission-reduction project in developing countries. These projects can earn “certified emission reduction” (CER) credits, which can be counted towards meeting Kyoto targets in the developed country.
\item 3. Joint Implementation (JI). The JI allows a developed country to invest in emissions reduction projects in another developed country as an alternative to reducing emissions domestically.
\end{itemize}
\end{itemize}
essence, they allow developed countries (known as Annex B countries)\(^{53}\) to reduce the cost of meeting their commitments by using emissions reductions in other countries to offset emissions at home.\(^{54}\)

New Zealand ratified the Protocol in 2002. It committed to limiting its greenhouse gas emissions to 1990 levels over the first commitment period (2008 – 2012).\(^{55}\) The Protocol assists countries to achieve this target by setting up what is essentially an international cap-and-trade scheme. On joining the Protocol New Zealand was allocated 309,564,733 “assigned amount units” (AAUs). Each AAU is equivalent to one tonne of carbon dioxide emissions and is the primary Kyoto unit allocated to Annex B countries under Article 3 of the Protocol.\(^{56}\) The number allocated to New Zealand reflects New Zealand’s emissions in tonnes of carbon dioxide in 1990, multiplied by five to reflect each year of the first commitment period.\(^{57}\) At the end of the first commitment period New Zealand must surrender the same number of units (while this period has now ended, accounting for the period is still to occur). If New Zealand is unable to surrender this number of AAUs it will need to buy emissions units from another country to make up the difference. Of course, in discharging its obligations New Zealand can employ the international permit trading aspects of the Protocol and the “flexibility mechanisms” it provides.

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The mechanisms are defined under the Protocol and are aimed at lowering the overall costs of achieving emissions targets. They enable parties to the Protocol to achieve emission reductions in other countries and offset those reductions against their own domestic emissions. This is an attractive approach because despite the considerable variation in cost of reducing emissions across different regions, the benefits to the atmosphere are the same regardless of where the emission reduction occurs. See United Nations Framework Convention on Climate Change “International Emissions Trading” (12 February 2012) <http://unfccc.int>.

\(^{53}\) Annex B to the Kyoto Protocol states the emission objectives for most “Annex 1” parties. The countries who are listed in Annex B are entitled to participate in emissions trading under the Protocol (see Article 17). “Annex 1” parties are the developed or industrialised countries or “economies in transition” listed in Annex 1 of the United Nations Framework Convention on Climate Change.

\(^{54}\) Ministry for the Environment and The Treasury, above n 50, at 39.

\(^{55}\) At 39.

\(^{56}\) Wemaere, Streek and Chagas, above n 51, at 35.

Originally, New Zealand did not anticipate that meeting its obligations would be onerous. New Zealand has a large number of forests. It was anticipated that these would operate as “carbon sinks” storing carbon and earning New Zealand additional credits under the Protocol for taking this carbon out of the atmosphere. These surplus units could then be used to offset New Zealand’s emissions in other areas. They could also provide a revenue stream for the Crown who could sell any units New Zealand did not need on the overseas market. By 2005, however, it became clear that not only were these calculations wrong, but that New Zealand’s emissions were growing at a rate much higher than expected.\textsuperscript{58} There would be no surplus units; the reality was quite the opposite. It became evident that New Zealand would have to adopt a more stringent emissions mitigation policy.

\textit{Adopting the NZ ETS}

While New Zealand has developed a collection of different tools and policies for addressing its emissions\textsuperscript{59} the focus here will be on New Zealand’s primary response: the NZ ETS. Since 2005 an economic, or price-based instrument has been seen as the central pillar of New Zealand’s attempts to reduce emissions. In line with the theory outlined in chapter two, putting a cost on emissions was considered the most efficient way of deterring emissions. As the Secretary of the Treasury noted in 2007:\textsuperscript{60}

\begin{quote}
Climate change can be characterised as what economists refer to as a “tragedy of the commons”. Where a clear property right to a common resource does not exist, no individual has an incentive to manage the use of that resource – and over
\end{quote}

\textsuperscript{58} In fact these projections turned out to be very wrong. The errors were largely driven by a misunderstanding of how forest sink credits would be calculated, over-estimation of forest planting rates and a higher rate of emissions growth than expected. Moreover, by 2005 New Zealand’s emissions were approximately 25 per cent over those of 1990 and levels were projected to reach 48 per cent of 1990 levels by 2020 in the absence of intervention. See Toni Moyes “Greenhouse Gas Emissions Trading in New Zealand: Trailblazing Comprehensive Cap and Trade” (2008) 35 Ecology Law Quarterly 911 at 918 - 919.

\textsuperscript{59} Including direct regulation, incentives, public education programmes, and joint investment in research on climate change mitigation and adaptation. See Moyes, above n 58, at 920.

\textsuperscript{60} John Whitehead, Secretary to the Treasury “An Emissions Trading Scheme for New Zealand” (Journalists Trading Organisation training forum on sustainability, in conjunction with the Ministry for the Environment and PricewaterhouseCoopers, Wellington, 8 August 2007) at 7.
exploitation will occur. The capacity of the atmosphere to absorb greenhouse gases is a good example … \[A\]n economic instrument has the advantage of automatically allocating responsibility according to the marginal abatement costs of emitters. It provides an incentive for those in the economy with the knowledge and ability to reduce emissions to do so. Emitters are likely to have much better knowledge of their emissions abatement costs than a regulator – but just as importantly, they are best placed to search out the best ways to reduce their emissions.

Originally, the government advocated imposing a price on greenhouse gas emissions via the mechanism of a tax. A “carbon tax” was developed and was set to apply to energy, industrial and transport carbon-dioxide emissions from April 2007.\(^\text{61}\) The tax was, however, abandoned at the end of 2005 because it was considered that “the proposed carbon tax would not cut emissions enough to justify its introduction”.\(^\text{62}\) Later discussion indicates that the general view was that a carbon tax would have been a “blunt instrument” that would require regular alteration to ensure its effectiveness and to keep it in line with international emissions prices.\(^\text{63}\)

At about this time, policy makers began to actively advocate an emissions trading scheme. This was seen as more desirable than a carbon tax as it would, among other things:\(^\text{64}\)

1. Provide certainty regarding the total volume of emissions. This would provide an assurance that environmental objectives were being met. In contrast, a tax would not have placed an overall cap on emissions, but rather would have imposed a price in the hope of modifying behaviour.

2. Be easily linked to the international emissions price and global emissions reduction efforts.

\(^{63}\) Ministry for the Environment and The Treasury, above n 50, at 4.
\(^{64}\) At 4.
3. Provide New Zealand firms with the maximum degree of flexibility by enabling them to reduce or offset their emissions by accessing emissions reduction opportunities at the lowest costs.

4. Be in line with the favoured measures for reducing emissions in other developed countries (such as those in the European Union).

It is clear that the development of the NZ ETS fits neatly into the general theories regarding the tragedy of the commons, and the role of economic instruments and private property in addressing it.

D. An overview of the operation of the NZ ETS

The NZ ETS is a complicated instrument. The Climate Change Response Act 2002 contains over 250 provisions and is supplemented by 16 sets of regulations, many of which are also detailed and complex. The purpose of the Act is specified in s 3. For our purposes the relevant subsections are:

1. Enabling New Zealand to meet its international obligations under the Convention and the Protocol (s 3(1)(a)); and

2. Providing for the implementation, operation, and administration of a greenhouse gas emissions trading scheme that supports and encourages global efforts to reduce the emission of greenhouse gases by assisting New Zealand to meeting its international obligations under the convention and

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protocol and by reducing New Zealand’s net emissions below business-as-usual levels (s 3(1)(b)).

The principal objective of the NZ ETS, therefore, is to support and encourage global efforts to reduce greenhouse gas emissions. This objective is to be achieved both by enabling New Zealand to meet its international obligations and reducing New Zealand net emissions below the level they would otherwise be if the NZ ETS had not been implemented (i.e. business-as-usual levels).

Summary

The NZ ETS is the subject of Parts 2, 4 and 5 of the Act. In essence, the NZ ETS is designed so that each participant must both monitor and report their emissions of various greenhouse gases. Once this has been done the participant must surrender to the Crown one “emissions unit” (of which there are different qualifying sorts) for each tonne of emissions they have made over the relevant compliance period. This unit is the private property right created (or adopted from the Protocol) by the NZ ETS to achieve its purpose. Failure to surrender sufficient emissions units is met with both criminal and financial sanctions. In order to facilitate the scheme the Act establishes a register within which all participants (including the Crown) must have holding accounts. Participants meet their obligations by transferring units from their accounts to the various Crown accounts.

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66 Section 3 also defines “business-as-usual levels” which means the levels of New Zealand greenhouse gas emissions that would be present at a particular point in time if the NZ ETS had not been implemented.
67 Cameron, above n 65, at 244. Cameron also suggests that the way in which the purpose section is structured is arguably quite weak given that any reduction, even if very small, will be below business-as-usual levels. He argues that the way the whole scheme is set up indicates that it is not necessarily intended to drive significant, absolute emissions reductions in New Zealand. New Zealand emissions can rise, provided New Zealand offsets those emissions through the Protocol’s flexibility mechanisms.
68 At 252.
69 Moyes, above n 58, at 925.
**Participation**

Participation within the NZ ETS is established on the basis of activity described in Schedules 3 and 4 of the Act. Individuals or entities who undertake any of the activities listed in Schedule 3 automatically become participants in the NZ ETS (s 54(1)(a)). Qualifying activities include: forestry (such as deforesting a forest planted prior to 1990); liquid fossil fuels (such as selling petrol); stationary energy (such as importing or mining coal); industrial processes (such as producing iron, steel or aluminium); agriculture (such as dairy processing or raising ruminant animals); or waste (such as operating a landfill). Those who carry out any of the activities listed in Schedule 4 may choose to become participants (s 54(1)(b)). Examples of Schedule 4 activities include: forestry removal activities (such as owning a forest planted after 1989); or removal activities (such as producing a product that embeds a substance that would otherwise result in an emission or storing of carbon dioxide after capture). The Act requires that a public register be kept specifying the identity of each participant and the nature of the activity giving rise to their participation (s 54(5)).

**Coverage**

The coverage of the NZ ETS is comprehensive and extends to all of the primary emitting sectors of the economy. It is also important to note that the scheme is not simply limited to carbon dioxide, but encompasses all six of the gases covered by the Kyoto Protocol. The reason for having an “all sectors, all-gases” scheme stems partly from New Zealand’s small size (and therefore small market), but also from New Zealand’s relatively unusual

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70 Although biological emissions from agriculture have not yet been brought within the NZ ETS.
71 As its name suggests “removal activities” involve the removal of carbon (or other gases) from the atmosphere. The most obvious example comes from planting trees which store carbon.
72 Moyes, above n 58, at 913.
73 These are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. See Moyes, above n 58, at 913.
74 Cameron, above n 65, at 247.
emissions profile. By adopting a comprehensive “all sectors, all-gases” approach New Zealand’s aim is to maximise total reductions and increase efficiency. As Moyes outlines, a broad approach should improve economic benefits because all of the lowest cost opportunities for abatement should be captured. It should improve environmental outcomes by regulating all greenhouse effect causing gases and not only a few. Moreover, a comprehensive approach is likely to lead to increased liquidity in the market overall, as it is likely to include more participants and enable linking with international markets. Finally, given New Zealand’s unusual emissions profile, and in particular its reliance on agriculture, a broad approach is important from a practical perspective.\footnote{In comparison with most other developed countries New Zealand’s economy depends very heavily on agriculture. This sector of the economy contributes almost 50 per cent of New Zealand emissions, whereas in Canada it is eight per cent and six and a half in the United Kingdom. In Canada and the United Kingdom energy emissions make up nearly 85 per cent of their emissions. New Zealand’s energy emissions make up only 42 per cent of its profile (see Whitehead, above n 60, at 4). As a result of its reliance on agriculture, coupled with the fact most of its energy is derived from hydroelectricity schemes, carbon dioxide does not dominate New Zealand’s emissions profile. Rather New Zealand emits comparatively high amounts of methane from ruminant animals and nitrous oxide from fertiliser and animal waste.} An emissions trading scheme that included only carbon dioxide would disregard a large part of the problem and nearly half of New Zealand’s overall emissions.\footnote{Moyes, above n 58, at 929-930.} A large driver of New Zealand’s desire to implement an emissions trading scheme was to maintain its credibility in relation to ongoing international climate change efforts as a supposed world leader in environmental issues.\footnote{At 915.} Ignoring the effect of agriculture would have had a detrimental effect on this effort.\footnote{It is somewhat ironic that, as discussed below, the inclusion of agriculture in the legislation has been extremely controversial, and the provisions have not yet been activated and do not look likely to be activated in the foreseeable future.}

However, there are a number of important provisos to the claim that New Zealand has an “all-gases, all sectors” emissions trading scheme. For example, the scheme will never cover small volumes of emissions where the costs of compliance would outweigh any...
environmental benefit. Perhaps more importantly, the various sectors are to be staged into the NZ ETS over time. While, in theory, the NZ ETS should eventually cover as many sectors and gases as possible, it was decided early on that there would be a phased approach to the introduction of various sectors in the scheme. Factors that contributed to this decision included preparedness for trading, administrative feasibility and the consideration of price effects through the economy. Different sectors of the economy are to enter the scheme at different times. Forestry entered the NZ ETS on 1 January 2008. The stationary energy, industrial processes and liquid fossil fuel sectors entered on 1 July 2010. The waste sector (landfill operators) entered on 1 January 2013, although a number of small and remote landfills have received exemptions. Since 1 January 2012 the agriculture sector has faced reporting obligations on its biological emissions. However, since a legislative amendment passed in late 2012 there is currently no specified date for when biological agricultural emissions will enter the scheme.

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79 Cameron, above n 65, at 247.
82 Paradoxically, although agriculture has always been an important aspect of the NZ ETS, it is also the sector that has caused the most controversy. Originally obligations for the agricultural sector were to commence on 1 January 2013, however, following the defeat of the fifth Labour government in the 2008 general election, the new National led government amended the NZ ETS. Among other things, it delayed the entry of agriculture to the NZ ETS until 1 January 2015. Following a further amendment in late 2012 the start date for surrender obligations for emissions from agriculture is no longer specified in the legislation (see Ministry for Primary Industries “Agriculture and the Emissions Trading Scheme” (25 June 2013) <www.mpi.govt.nz>). Overall, it appears that there is some discomfort that no other country in the world has put a price on biological emissions from agriculture and there are no economically viable and practical technologies available to farmers to help them reduce their emissions (see Ministry for Primary Industries “FAQ’s – Agriculture and the Emissions Trading Scheme (7 February 2013) <http://www.mpi.govt.nz>). The government has indicated that biological emissions from agriculture will be brought within the NZ ETS only if:

1. Economically viable and practical technologies to reduce emissions become available; and
2. New Zealand’s trading partners make more progress on tackling their emissions in general.

This change was effected by s 96 Climate Change Response (Emissions Trading and Other Matters) Amendment Act 2012, which amended s 219 of the principal Act.
Emissions units

The Protocol gives each party the ability to design an emissions trading scheme that suits their purposes. As a result, the precise nature of a trading unit under any scheme is left to the determination of domestic law. It is important to recognise that a domestic emission trading scheme can be a simple domestic mechanism. A state can create a regime which functions entirely independently of the international emissions trading scheme established under the Protocol. However, if a state wants to engage with the Protocol process and use Kyoto units then the domestic emissions trading scheme must follow the Kyoto rules. The NZ ETS is currently integrated with the Protocol process and therefore allows for the surrender and trade of both a domestic emissions unit and a number of units created under the Protocol. There are three different types of units that may be held and traded. Each is important, and each has slightly different rules surrounding its use. As the different treatment of each unit helps to demonstrate the overall contention that emissions units do not reflect the strong property right theory would predict, it is necessary to consider each of them. In brief the different types of units are:

1. Kyoto units: The Kyoto Protocol employs a number of different units for use in the international trading scheme it establishes. These are all, to varying degrees, currently present in the NZ ETS.

   a. Assigned amount units (AAUs). These are equal to one tonne of carbon dioxide or equivalent and are assigned to Annex B countries with emission reduction targets.

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84 See Cameron, above n 65, at 268; and United Nations Framework Convention on Climate Change “Glossary of Terms” <http://unfccc.int/essential_background/glossary/items/3666.php#R>.
b. Certified emission reductions (CERs). These are equal to one tonne of carbon dioxide or equivalent and are issued for emission reductions from Clean Development Mechanism (CDM) projects that support sustainable development and reduce emissions or create forest carbon sinks in developing countries.

c. Temporary CERs (tCERs) and Long-term CERs (lCERs). These are special units generated by afforestation and reforestation CDM projects.

d. Emissions reduction units (ERUs). These are equal to one tonne of carbon dioxide or equivalent and generated by joint implementation (JI) projects that reduce emissions or create forest sinks in Annex 1 countries.

e. Removal units (RMUs). These are equal to one tonne of carbon dioxide or equivalent and are awarded to Annex 1 countries for activities that absorb carbon dioxide.

2. New Zealand Units (NZUs). These are a domestic unit created and issued under the Act. The primary purpose for the creation of the NZU was to enable the Crown to impose different trading rules on the domestic and international markets.\(^{85}\) The Act simply defines a NZU as a unit issued by the Registrar and designated as a New Zealand unit.

3. Approved Overseas Units (AOUs). These are the NZU equivalent of other countries’ domestic emissions trading schemes. They may be imported into the New Zealand register if regulations allow.\(^{86}\) None are currently approved.\(^{87}\)

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85 Cameron, above n 65, at 268.
86 Climate Change Response Act 2002, s 4, definition of an approved overseas unit.
87 Cameron, above n 65, at 268.
Subject to various restrictions that will be outlined in chapters nine and ten, participants in
the NZ ETS may currently hold and trade all of these units and may use them to discharge
their obligations under the scheme.\textsuperscript{88} However, as of 1 June 2015, participants in the NZ
ETS will only be able to use NZUs and (possibly) New Zealand originated AAUs (NZ
AAUs) to meet their obligations under the scheme. All other Kyoto Protocol units held by
participants other than the Crown will be cancelled at this time. This reflects the fact that
from 1 June 2015 the NZ ETS will no longer be operating as an international trading
scheme but will instead be operating solely as a domestic scheme.\textsuperscript{89} As of the date of
submission of this thesis the necessary amendments to legislation and regulation have not
been made (and in fact have not been released to the public). However, both the scheme
as it stands and the proposed changes support my overall thesis, which I discuss further in
chapters nine and ten.

\textit{Participants’ obligations under the NZ ETS}

A participant’s primary obligation under the NZ ETS is to surrender one “emissions unit”
for every tonne of carbon dioxide equivalent emissions that they cause. Section 63 of the
Act obliges participants to surrender one emission unit for each whole tonne of emissions
from each of their activities.\textsuperscript{90} Participants are required to prepare an annual emissions

\textsuperscript{88} At 269.
\textsuperscript{89} NZ ETS Announcement of carry-over and access to Kyoto markets post-2015 available from:
Environmental Protection Agency “The New Zealand Emissions Trading Scheme: NZEUR account holders
access to Kyoto Units” (7 February 2014) New Zealand Emissions Unit Register
\textsuperscript{90} Although due to the transitional measures this requirement is modified by s 63A which states:

\textbf{63A Modification of liability to surrender units to cover certain emissions}

(1) This section applies to a person who—

(a) carries out an activity listed in any of Parts 2 to 6 of Schedule 3; or

(b) is a participant in relation to an activity listed in Part 3 or 4 of Schedule 4.

(2) Despite anything in this Act, a person to whom this section applies is only liable to
surrender, and may only surrender, 1 unit for each 2 whole tonnes of emissions from the
activity.

The effect of this is that participants in the NZ ETS from non-forestry sectors are required to surrender only
one emission unit for every two tonnes of emissions they produce. See the Climate Change Response Act 2002
return (s 65) specifying their activities and recording their emissions or removals for each year. It must contain an assessment of the number of emissions units that must be surrendered (or its entitlement to receive emissions units) (s 65(2)).

The Act provides that participants who do not discharge their obligations face a number of potential consequences. There are criminal sanctions for, among other things, failing to collect data, keep records or submit an emissions return. Importantly, there are also penalties for failing to surrender units. In particular, a participant who fails to surrender the units sufficient to discharge their obligations as calculated in their annual emissions return must either surrender sufficient units or pay to the Crown an excess emissions penalty of $30 for each unit they should have surrendered.

Surrendering the unit means that it cannot be used again or transferred to another participant. In line with theory, the requirement to surrender a unit has the effect of altering the price associated with undertaking a particular activity. Activities that require emission units to be surrendered should become more expensive. Over time, the changes in price should affect incentives and behaviour. If structured appropriately, it should lead to reduction in greenhouse gas emissions, at least in comparison with what the situation would have been in the absence of the NZ ETS.

In addition to surrendering a unit to meet obligations or transferring a unit for sale, there are a limited number of other transfers that account holders may undertake. For the most part these additional sorts of transfer involve processes under the Protocol. Thus, it is

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91 Climate Change Response Act 2002, s 132.
92 Climate Change Response Act 2002, s 134.
93 Climate Change Response Act 2002, s 134(2)(b).
possible to transfer any sort of unit to a cancellation account,\footnote{Climate Change Response Act 2002, s 18CA(1).} which has the effect of cancelling the unit so that it may not be further transferred.\footnote{Cameron, above n 65, at 272.} Kyoto Units can also be retired, which also has the effect of preventing any further transfer.\footnote{Cameron above n 65, at 272.}

One of the very interesting elements of the NZ ETS is the fact that it has neither an explicit nor an implicit limit on local emissions. Originally, it was designed to operate under the global cap created by the Kyoto Protocol but it did not place an absolute cap on domestic emissions. Because of the way the Kyoto Protocol was structured, New Zealand's overall emissions could rise, provided New Zealand offset or otherwise covered any increase through one of the Protocol's flexibility mechanisms.\footnote{While this option is likely to primarily be used by the Crown to meet its Kyoto obligations, any account holder can, with the consent of the Minister of Finance, retire units (Climate Change Response Act 2002, s 18C(3)). The difference between cancellation and retirement is that cancellation takes the units out of circulation completely, whereas retirement aids New Zealand in meeting its Protocol commitments and emissions targets. See New Zealand Emissions Unit Register “Guide to Kyoto Units and Rules” (21 February 2013) New Zealand Emissions Unit Register <http://www.eur.govt.nz>.
} Consequently, participants in the NZ ETS can emit as many tonnes of greenhouse gases as they wish, so long as they are able to surrender a corresponding number of emissions units to the Crown.\footnote{Cameron above n 65, at 245.} Therefore, in the sense that the NZ ETS is a “cap-and-trade” scheme, the “cap” can be thought of as “flexible”. While all New Zealand emissions will be constrained by international market prices for carbon, there is no limit on the number of emissions permitted in New Zealand, provided adequate emissions units are imported into the country.\footnote{Wilson, above n 84, at 158.} However, it appears this will change as of 1 June 2015, at which point participants will only be able to hold and trade NZUs and, potentially, NZ AAUs.\footnote{Moyes, above n 58, at 913.} Of course, any “cap” will then depend on the number of NZUs issued by the Crown. It may

\footnote{Moyes, above n 58, at 913.}
be that the recently announced changes have the effect of imposing a fixed, as opposed to flexible, cap on the number of emissions units tradable in the NZ ETS.

**Acquisition of emissions units**

Participants in the NZ ETS can acquire emissions units in a number of different ways. Some participants will receive a free allocation of units from the Crown. For example, the owners of pre-1990 forest land and holders of individual transferable quota under the Fisheries Act 1996 are eligible for a free allocation under ss 70–79 of the Act. The purpose of this allocation is to partially compensate forestland owners for reduced land values. Quota owners are being compensated for the potential fall in quota value that is predicted to occur if the price of fuel increases due to the implementation of the NZ ETS. Some industrial sector participants will also receive a free allocation (ss 80–86E). This is designed to compensate firms that are emissions intensive and trade exposed.

Participants who are not eligible for a free allocation, such as the transport and stationary energy sectors, must purchase emissions units on the market. Theoretically, the principal source of supply will be those entities that have received a free allocation of NZUs as well as those “post-1989 forest land” owners who have placed their forest into the scheme and earned NZUs for the carbon stored in their forests. It is also currently possible to buy...
various Kyoto credits from overseas (such as CERs and ERUs), although this will no longer be possible from 1 June 2015. While AAUs issued to other Kyoto Protocol parties can be sold into the New Zealand market, they cannot be used by NZ ETS participants to discharge their obligations. In addition, it is possible to purchase NZUs from the Crown if it has surplus units to auction. The current advice is that, in the short term, the Crown is unlikely to sell emissions units because the Kyoto units allocated to New Zealand will be needed for free allocation to eligible sectors under the emissions trading scheme and to support New Zealand’s international obligations. It is unclear whether this position will change following the amendments scheduled to come into effect on 1 June 2015.

II. Measuring the Strength of Private Property Rights: A Note on Methodology

In demonstrating my thesis, my first step is to establish that the private property rights at the heart of the QMS and the NZ ETS do not reflect the strong or unattenuated rights one would anticipate after considering the literature in chapter four. However, I am confronted with the problem that classical liberal theory, and in particular the literature surrounding tradeable environmental allowances, is extremely unspecific by what is meant by ‘strong’ private property rights. This section considers that difficulty and outlines the methodology I will adopt to address it.

As discussed in chapter four, many economists and lawyers view private property rights as having the potential to exist on a continuum, and accept that private property rights can

106 Climate Change Response Act 2002, ss 18CB – 18CC.
107 See Climate Change Response Act 2002, s 6A.
either be strong (which is often desirable), or weak (which can be criticised). There remains, however, a general consensus that these rights remain private property.\textsuperscript{109} Not all scholars accept this view. For example, Epstein maintains that an absolute property right requires each incident of the liberal triad to exist to the fullest extent possible.\textsuperscript{110} For Epstein, not only is any weakness to be abhorred, but it also raises the question of whether that right can actually be called a private property right at all. However, most scholars do not go as far as Epstein and it is generally accepted that private property rights can be relatively strong or weak.

Assuming then, that there can be gradations within our idea of private property, how can we draw distinctions between particular private property rights? How can we determine whether a property right is “strong”, “weak” or somewhere in the middle? One approach would simply be to assess whether the three fundamental powers of the liberal triad exist in relation to a particular right. However, this runs the risk of being a very blunt approach that does not adequately assess the degree of nuance many scholars recognise can exist in relation to private property.\textsuperscript{111} After all, it is difficult to identify exactly how much “use” one has of a particular resource.\textsuperscript{112} Likewise, identifying the level of “possession” is very difficult. While these powers are central to the classical liberal idea of what private property should give the holder, they do not necessarily tell us much about what actually constitutes the right in the first instance.


\textsuperscript{111} Guerin, above n 109, at 4.

\textsuperscript{112} As Douglas notes when discussing the ‘right to use’ land, although the fee simple is extremely important and there are many texts devoted to discussing the rules governing its conveyance and ways to protect it, little has been written about how the holder of a fee simple is actually able to \textit{use} his or her land. This can be contrasted with a lessee or the holder of an easement or restrictive covenant, whose rights are well discussed in most texts Simon Douglas “The Content of Freehold: A ‘Right to Use’ Land” in Nicholas Hopkins (ed) \textit{Modern Studies in Property Law Vol 7} (Hart Publishing Oxford and Portland 2013).
Fortunately, some scholars have adopted a more refined approach to assessing the relative strength of private property rights. In particular, Anthony Scott has proposed a method that can also function as a tool to analyse the relative strength of tradeable environmental allowances.\textsuperscript{113} This method builds on the three powers of the liberal triad and assesses which of the characteristics of private property are present in a particular private property right. Although the six characteristics are distinct from the liberal triad, there is a degree of crossover between them. The characteristics are: exclusivity, duration, flexibility, quality (or security) of title, transferability and divisibility.

The characteristics are a useful tool of analysis because they make it possible to quantify and compare the individual aspects of a whole private property right. For example, the power of use, and the characteristic of duration are clearly related. One can only use a resource for the period one has access to it. However, by identifying the duration a right is held for (either in perpetuity or for a fixed term) we can contrast the length of time different right holders have access to a resource. This allows us to draw comparisons between rights. Consequently, while the characteristics of private property are intimately related to the liberal triad they provide a more guided way in which to assess relative strength.

Scott suggests that these characteristics, along with the three powers of the liberal triad and the concept of the bundle of rights are related ways in which we can analyse the elements that comprise individual property rights. While others have made different attempts to

articulate the criteria of property,\textsuperscript{114} he argues that analysing characteristics is a particularly useful way of considering the property rights held by people to use and manage natural resources such as tradable environmental allowances.\textsuperscript{115} He notes that in our system of property law there are a range of names for various rights that an individual may hold over a particular resource, many of which we are very familiar with. Over a particular piece of land we readily accept it is possible to hold a lease, an easement, or the freehold. Each of these is a different type of property right and each has a different degree of “strength.”\textsuperscript{116} It is generally accepted that the holder of a lease has more powers than the holder of an easement (albeit that an easement may last forever and a lease must, at some stage, end) and the freehold “owner” has more powers than either of them. The freehold right can be described as “strong” or “absolute” whereas the other two rights could be termed “incomplete” or “deficient”. Building on the idea of “completeness”, Scott suggests that we imagine property rights as comprising a number of separate characteristics and proposes

\begin{itemize}
  \item In order to be considered a property right the person who holds the right must be clear beyond doubt.
  \item The subject matter of the right (i.e. the land, or mineral or species of fish) must also be clear beyond doubt.
  \item The rights associated with the property (such as the right to take or use, or the purposes for which it may be taken or used) must be capable of definition.
  \item The right must exist for a sufficiently long period without change to give a degree of security.
  \item It must be transferable.
  \item It must be both recognised and protected by the legal system through the ability to bring proceedings.
\end{itemize}

Later Fisher broadly outlines the tests he considers courts have traditionally used to determine whether a right is one of property or not:
\begin{itemize}
  \item The right can be enforced by the legal system.
  \item The substance of the right can be defined and identified.
  \item The right is exclusive to the holders of the rights.
  \item The right is sufficiently permanent and stable to attract a sufficient degree of security.
  \item The right is able to be transferred.
\end{itemize}

\textsuperscript{114} For example DE Fisher “Rights of Property in Water: Confusion or Clarity” (2004) 21 Environmental and Planning Law Journal 200 suggests in a similar vein, but using different language, the traditional criteria of property include: exclusion (which is fundamental to the idea of property itself), definition, identification, assumption, permanence, stability, transferability, value and protection. In expanding on what he means Fisher suggests that:

1. In order to be considered a property right the person who holds the right must be clear beyond doubt.
2. The subject matter of the right (i.e. the land, or mineral or species of fish) must also be clear beyond doubt.
3. The rights associated with the property (such as the right to take or use, or the purposes for which it may be taken or used) must be capable of definition.
4. The right must exist for a sufficiently long period without change to give a degree of security.
5. It must be transferable.
6. It must be both recognised and protected by the legal system through the ability to bring proceedings.

\textsuperscript{115} Scott The Evolution of Resource Property Rights, above n 113, at 5.
\textsuperscript{116} Scott “Introducing Property in Fishery Management”, above n 113, at 5.
that we can assess the differences between rights by examining the differences between the amount or degree of each characteristic present in each property right.

Scott suggests that one conceptualises the exercise in this way. The powers of a property right (use, possession and disposition) can be likened to the output of a property right (the final good or service), while the characteristics are more like its inputs (i.e. the factors of production such as land, capital or labour). Consequently, by identifying the characteristics we would expect private property rights to exhibit, and gauging the extent to which each characteristic is present in relation to a particular private property right, we can quantify the strength of that particular right. This allows us to compare it to other rights.

All of the standard or well-known property rights (such as a lease or freehold) have some of each of the six characteristics, in varying amounts. A person’s property right is said to be complete, absolute or perfect, when it can be shown to have all the characteristics to the fullest possible extent. Conversely, a right which has very few of the relevant characteristics might still be viewed as a property right, but it is likely to be relatively weak. Analysing the characteristics of property rights allows them to be compared in a consistent manner and also allows rights to be measured or compared to the theory underpinning their use.

A practical demonstration will help to explain why Scott’s approach is useful and valid, although it also highlights some of the limitations of his method. He illustrates his point by reference to a licence over land. Scott argues that a licence can been seen as similar to a lease or an easement to the extent that it gives one a limited right over another's land.

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117 At 5.
120 Scott uses the example of licence to use a car park as evidenced by a receipt or ticket.
However, it is rather restricted, giving the holder few powers beyond those which accompany the species of licence in question and giving its holder no control over how the lot is used. It certainly does not confer an interest in land in the holder. Overall, it has few of the characteristics we would expect to see in a strong property right. If, indeed, this sort of right can actually be admitted within the broadest categorisation of what constitutes property, the most that can be said about it is that it is rather feeble. By assessing the characteristics that accompany a licence we can get some guidance as to its relative strength. Scott goes on to consider similar rights in the resource management sphere. For example, a simple fishing licence or permit, is very similar to a licence over land and is occasionally considered to be private property by the courts. It gives a fisher a right to access the resource and to do something to it. But as a “property right” it is very weak (if indeed one accepts that it is a property right at all; see below). It has few of the characteristics we would expect to see in a property right and therefore offers few of the powers that accompany a right of ownership.

In contrast, an individual transferable quota may have a great deal more of the characteristics we would expect to see in a strong private property right (although by no means all).

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121 Licences are generally classified as being of four general types: a bare licence, a licence coupled with an interest, a contractual licence or a licence supported by estoppel. A bare licence traditionally gives its holder very few rights (see Thomas v Sorrell (1673) Vaugh 330; 124 ER 1098) and can be revoked by the licensor at any time. In contrast, the terms of a contractual licence are governed by the contract underpinning it. Whether it is revocable will depend on the terms of the contract and some of the provisions contained in Part 4 of the Property Law Act 2007. While the historical view of licences was that they were simply personal arrangements and could not bind third parties, this view is now seen as too simple. For example, the benefit of a licence is assignable unless the contrary appears from its nature, form or a provision contained in the licence itself (Darling v Honnor Marine Ltd [1964] Ch 560). See David Brown “Licences” in Tom Bennion, David Brown, Rod Thomas and Elizabeth Toomey New Zealand Land Law (2nd ed, Brookers Ltd, Wellington, 2009) 455.

122 This is made explicit by the Property Law Act 2007, s 206(4). This section makes it clear that a licence is not an estate or interest in land.


124 See, for example, the discussion of Australian fishing licences in Sevaly Sen, Kaufmann and Gerry Geen “ITQs and Property Rights: A Review of Australian Case Law” (paper presented at the Tenth Biennial Conference of the International Institute for Fisheries Economics and Trade, Corvallis (Oregon), 2000) at 2, which notes Australian courts have found that fishing licences are proprietary in nature and can be the subject matter of a trust or partnership.

125 Scott “Introducing Property in Fishery Management”, above n 113, at 5.
I immediately admit that Scott’s illustration is problematic. Many lawyers would find it objectionable to describe a licence as property of any description. The orthodox view is that a licence to use land is simply a personal right. It is not a property right.\footnote{See *Thomas v Sorrell* (1673) Vaugh 330; 124 ER 1098 for the classical exposition of this point.} However, in the area of private property based resource management this can be a problematic area of doctrine, as a number of tradeable environmental allowances regimes use the language of licence for something that looks very much like, and sometimes is, private property.\footnote{See, for example, Sen, Kaufmann and Geen, above n 124; and the discussion of New South Wales bore licences in *IMC Agriculture Pty Ltd v Commonwealth* [2009] HCA 51, (2009) 261 ALR 653. In this case one issue was whether a number of bore licences were property that can be acquired by the Commonwealth for the purposes of s 51(xxxi) of the Australian Constitution. Of the High Court majority, three judges decided the issue did not need deciding, three agreed that they were a species of property but said no more. The dissenting judge (Heydon J) was firmly of the view that the licences were property.} Notwithstanding this objection, however, Scott’s illustration does help to show how the exercise of assessing the relative strength of rights can be undertaken and why it is useful. Indeed, Scott should perhaps have avoided the personal or property right issue and instead have focused on rights which are uncontroversially property. His point could easily be applied to leases, easements, restrictive covenants, patents or copyright in a way that would not offend orthodox property jurisprudence. The duration of a freehold is theoretically infinite in comparison to a lease, which much have a time of commencement and a time of determination. In relation to the characteristic of *duration* then, we can say that a leasehold is weaker than a freehold. Of course, this is not to say that a leasehold cannot be ‘strong’ in the sense that it gives its holder all of the rights and privileges that attach to the institution of a leasehold. Indeed, some usufructuary rights can be ‘strong’ in the sense that they will endure as an unimpeachable right, for example to take fish, until there is some sort of legal or legislative intervention.\footnote{See, for example, *Te Weehi v Regional Fisheries Officer* [1986] 1 NZLR 680. In that case Te Weehi was convicted in the District Court for taking undersize paua contrary to s 88(2) of the Fisheries Act 1983. On appeal to the High Court Te Weehi argued that he had a “Maori fishing right” which, given the Act’s express statement “Nothing in this Act shall affect any Maori fishing rights”, overrode the provisions of s 88(2). The} Moreover, in relation to the lease and licence distinction it can
get even more complicated given the fact that, in many respects, the Property Law Act 2007 treats these distinct rights in a similar way.\textsuperscript{129}

However, notwithstanding the deficits and inherent limitations of Scott’s approach I maintain that it provides a useful metric by which we can assess the strength of relative private property rights. It is not perfect, but neither is reliance on the classical liberal articulation of three simple, and in many respects immeasurable, elements. It also seems to fit well with the theory and structure of many tradeable environmental allowances, which is the area in which Scott developed the method. In particular, I think that it will help me compare how “strong” the private property rights at the heart of the QMS and NZ ETS are in comparison with the theory. However, before beginning this analysis it is useful to outline the contours of each characteristic and say a little about their individual importance to private property.

A. The characteristics of private property

Exclusivity

Exclusivity refers to the extent to which the benefits of accessing and using the resource accrue to the owner.\textsuperscript{130} It refers to an owner’s freedom from interference of his or her enjoyment of the right. The more a right is subject to interference, the less exclusive the

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\textsuperscript{129} See, for example s 206(3) which applies the Property Law Act 2007 provisions regarding cancellation (i.e. forfeiture) and relief from cancellation (ss 243 -264) to a licence as if it were a lease. It should also be noted that the issue is further complicated by the fact that it appears that licensees have standing to evict trespassers (even though they do not have exclusive possession). See, for example, the discussion in Manchester Airport plc v Dutton [2000] 1 QB 133, Sealink Travel Group of New Zealand Ltd v Waiheke Shipping Ltd, HC Auckland CIV-2008-404-4602, 22 August 2008 and, more generally Stephen Todd (ed) \textit{The Law of Torts in New Zealand} (6th ed, Brookers, Wellington, 2013), para 9.2.04(3). It follows that, notwithstanding the fact that exclusive possession remains the key component of a lease (see \textit{Fatac Ltd (in liq) v CIR} [2002] 3 NZLR 648; (2002) 4 NZ ConvC 193,609), in some circumstances a licensee may “have such extensive control over land or part of it that it would be absurd to deny their interest in preventing unauthorised entry” (Todd, above n 129, at para 9.2.04(3)).

right. Interference can come in two main forms. Firstly, it can refer to the extent to which a right holder’s use of a resource is subject to physical interference. Interference in this sense often amounts to having to share a resource with other owners. Secondly, it can refer to the extent to which the right holder is free from government regulations that constrain the way in which the resource can be used. These sorts of regulations may promote the general public good or the government’s own ends.\textsuperscript{131}

Exclusivity is often associated with the idea of excludability, which refers to an owner’s ability to exclude others from the enjoyment of, or interference with, the owner’s interest in a resource. Exclusion is seen as crucial aspect of property because owners have greater long-term incentives to invest in enhancing resources if they can exclude others from the accrued benefits.\textsuperscript{132} As Rose notes, the right to exclude is often cited as the most important characteristic of private property because it:\textsuperscript{133}

\ldots makes private property fruitful by enabling owners to capture the full value of their individual investments, thus encouraging everyone to put time and labor into the development of resources. \ldots it [also] makes it possible for owners to identify other owners, and for all to exchange the fruits of their labors, until these things arrive in the hands of those who value them most highly – to the great cumulative advantage of all.

The ideas of exclusion and exclusivity sit clearly within the liberal worldview. Indeed it is a core liberal value. The owner is said to have a small domain of complete mastery, self-direction and protection from the actions of others. It also means that they have the sole responsibility for the use of their assets and therefore good reason to make decisions

\textsuperscript{131} Scott The Evolution of Resource Property Rights, above n 113, at 6.
\textsuperscript{132} Guerin, above n 109, at 7.
prudently. As discussed in earlier chapters this idea is also very important to the incentives tradeable environmental allowances are said to create.

**Duration**

This is relatively straightforward and refers to the length of time that the property right allows the holder to exercise powers over the resource. A right can be held in perpetuity, or it can be held for a specified time (possibly with an option of renewal). Where the value of a property right can be increased by investment over time, the duration of a right will have a direct influence on an owner’s incentive to protect and develop the resource. These incentives are fundamental to investment behaviour, and thereby the operation of the market. Evidence of permanence is generally considered to be a prerequisite for encouraging investment. To be secure a right must endure for a sufficiently long period of time with no prospect of change or variation. Duration is valuable because it allows the owner to get the benefit of investments undertaken in earlier years at a point several years later. If a right’s duration is short the holder is likely to avoid long-term investments and improvement leading to the paradoxical effect that they may over-exploit the resource in the short-term.

**Flexibility**

This refers to the degree to which the powers and obligations a right confers on a holder can be adjusted without weakening the holder’s title. Owners who have no flexibility have limited or no choice with regard to the powers to use, possess, or transfer the property. In

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137 Fisher, above n 114, at 211.

such a case owners are restricted to using the property for one standard kind of use or mode of alienation. A flexible right, on the other hand, may allow the owner to change the mode or purpose of using the resource without consequence.\(^{139}\) Moreover, a flexible right may impart the ability for the holder to re-negotiate the terms of the holding during the duration of the user’s occupation. As Scott notes, many rights come with conditions or stipulations. The more easily they can be relaxed in special circumstances the more flexible the right is. For example, if an individual transferable quota for fish can easily respond to a change in fish migration patterns or total population it will be very flexible.\(^{140}\) In Scott’s view, the most flexible right would be in an open access regime, where only the imposition of a governmental regulation can make the right less flexible.\(^{141}\)

**Quality or security of title**

This refers to the extent to which a right is secure against another’s claims to possession. Quality of title can be a vague term, but the relevant things to think about include whether the right is absolute, and whether compensation is available for any changes to the terms of the right.\(^{142}\) It can be thought of as the degree of risk that attaches to the exercise of the rights over time. This will depend on the vulnerability of the regime to change and the instrument that confers the rights in the first instance.\(^{143}\)

Quality of title is key in establishing the incentives desired from a property regime. If the right is able, or likely, to be revoked at any time, then there will be little value in investing

\(^{139}\) Guerin, above n 109

\(^{140}\) Scott “Moving Through the Narrows: From Open Access to ITQS and Self-Government”, above n 113, at 110.


\(^{142}\) Guerin, above n 109, at 7.

\(^{143}\) McKenzie, above n 130, at 452
in the resource or looking to the future. In particular, in the natural resources sphere, good quality of title is generally thought to be crucial to the sustainable management of resources because it allows the owner to be sure that he or she will receive the benefits that flow from his or her investment in the resource. Consequently, a title is of high quality (or security) if the right holder can be confident of his or her ability to maintain his or her possession, or to recover possession from, or protect their powers against, interlopers.

Quality of title has been a central preoccupation of the common law of property. Generally (but not exclusively) owners of property obtain their title by way of grant from an earlier title holder. It is uncontroversial that owners cannot pass better title than they themselves hold (nemo dat quod non habet). Thus, many aspects of the common law are focused on questions regarding how good the prior owner’s title was, and resolving or preventing disputes about who has the better title. Quality of title has usually depended upon three conditions: legitimacy (for example, by inheritance or transfer); enforceability (which depends on the existence and quality of relevant social institutions, such as courts); and, freedom from government seizure. As Scott notes, because property rights are seen as central to our economic prosperity and a high standard of living, restraints on state acquisition of property are now found in most developed countries. To a certain extent this is true in New Zealand. While there are no explicit legislative prohibitions on state acquisition of property there is a general presumption against uncompensated acquisition. As Sir Geoffrey Palmer explains:

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146 For an interesting historical survey of the Crown’s powers in this respect see Scott The Evolution of Resource Property Rights, above n 113.
147 Scott The Evolution of Resource Property Rights, above n 113, at 8.
... it is a recognised principle that the state should not appropriate private property for public purposes without just compensation. But in New Zealand, absent any statutory obligation such as that contained in the Public Works Act, it is a principle that has to be honoured by the executive and Parliament. It cannot be implemented by the Courts.

When the Crown does take property, even with an offer of compensation, it tends to be highly controversial. For example, recent moves by the Crown to compulsorily acquire land in central Christchurch in order to facilitate rebuilding following the devastating earthquakes has been hugely controversial;\(^{149}\) although this is unlikely to prevent the Crown from achieving its objectives.

**Transferability**

The more a right is transferable, or alienable, the greater the extent to which right holders can trade, sell, or gift their interests in a particular resource. This characteristic makes it possible for the market to operate and is often cited as a necessary, or inherent, aspect of property. Transferability or “free-alienability” is seen as crucial to the legal infrastructure of capitalism, as a market requires not only private property, but also freedom of contract and the exchange it promotes. Crucial to exchange is the ability to transmit resources to others at will by buying and selling.\(^{150}\)

In the environmental context, being able to transfer private property is at the heart of tradeable environmental allowances regimes.\(^{151}\) As a result, some writers, and in particular those who advocate the use of private property as a tool of environmental management, argue that transferability is an indispensable characteristic for good resource use; even

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\(^{151}\) Maguire and Phillips, above n 136, at 226.
more so than quality of title.\textsuperscript{152} The ability to invest in a resource and divest oneself of it on terms that are suitable and attractive is key to allowing resources to flow to their highest valued use. Through the ability to sell, those who wish to exit from a resource can take their capital with them. This will encourage those who are less efficient to leave and be replaced by those who are better at utilising the resource.\textsuperscript{153} Transferability not only ensures that the resource will flow to their highest value use, but it also provides a form of compensation for those who voluntarily decide to no longer use the resource. They can sell their rights and exit the scheme.\textsuperscript{154} Consequently, any restrictions on transferability are said to reduce the overall efficiency of the scheme.

\textit{Divisibility}

Divisibility refers to the ability of an owner to subdivide their right and trade all or part of it. It is often seen as a subset of transferability.\textsuperscript{155} For example, when an individual transferable quota is divisible its holder has the ability to change the scale of his or her enterprise. The ownership may be made joint or single. The size or quantity of the thing that is owned, such as the hours of fishing, a territory or a quota can be divided. If the right is also transferable the owner can assemble parts of rights, or collate rights, to match their desired scale of project or the scale of the resource.\textsuperscript{156} Divisibility in relation to tradeable environmental allowances really refers to the ability to divide up the rights to harvest a share of the resource units, or to sell or lease any number of units. This is crucial

\begin{flushleft}
\textsuperscript{152} Scott \textit{The Evolution of Resource Property Rights}, above n 113, at 9.
\textsuperscript{153} Connor and Dovers, above n 144, at 123.
\textsuperscript{155} McKenzie, above n 130, at 453.
\textsuperscript{156} Scott “Moving Through the Narrows: From Open Access to ITQS and Self-Government”, above n 113, at 110
\end{flushleft}
as it provides the ability to adjust the level of holdings to the levels in accordance with the intended level of harvest.\footnote{Conor and Dovers, above n 144, at 123. Scott (Scott \textit{The Evolution of Resource Property Rights}, above n 113, at 10 – 11) argues that there are in fact three different subsets of divisibility. Although in relation to tradeable environmental allowances the distinctions between these subsets is not always particularly relevant, for the sake of comprehensiveness it is useful to briefly note them:}

\begin{enumerate}
\item Horizontal divisibility. This refers to the ability of a right holder to subdivide his or her resource into rights over small parcels by way of lease, gift, will or sale. It includes the ability to divide a resource by way of a joint or common tenancy. The consequences of this are well known. By the “right of survivorship” the share of a joint tenant simply vanishes when that party dies (or otherwise “drops out”). The share of a tenant in common, however, passes intact to another person when he or she leaves.
\item Vertical divisibility. This refers to overlapping temporal claims in a particular resource. A classic example is the lease, but life interests and entailments are also familiar illustrations. Scott suggests that we can measure the vertical divisions of a resource by counting the “estates” into which the current “ownership” has been fragmented. The degree to which this characteristic is present in any given right can be measured by counting the number of estates in existence at any given point in time.
\item Multiple-use divisibility. This characteristic allows the right holder to divide his or her powers and create a separate right over each of the uses of the resource. For example, it is possible to sever the powers of management, disposal and income or enjoyment for each of a range of different natural resources that may be present on once piece of land. An owner may allow different people to fish, hunt, log or mine on a particular piece of land.
\end{enumerate}

\footnote{Stewart, above n 33, at 12.}

\section{Conclusion}

That completes my introduction to the QMS, NZ ETS and the methodology I will use to analyse the private property rights on which they rely. It is worth stressing that in relation to private property generally and tradeable environmental allowances in particular, we would not necessarily always expect each of the characteristics to be absolute. It is likely that they will be present in varying degrees in relation to particular rights.\footnote{Stewart, above n 33, at 12.} However, the comparative strength of each characteristic will provide a measure of the overall quality and strength of each particular right. In a perfect and strong property right we would expect to see a strong balance of all six characteristics. While a perfect right might not exist in reality, as discussed in chapter four, the dominant theory of tradeable environmental allowances is that the more strongly each of the characteristics manifest themselves in a right, the stronger its proprietary nature, the more it will acquire value and the more
efficient the use of the underlying resources should be.¹⁵⁹ I will go on to undertake this analysis with regard to the QMS and the NZ ETS over the next two chapters.

¹⁵⁹ Guerin, above n 109, at 6.
Chapter Nine: The Divergence between Theory and Practice

It is a central plank of my thesis that environmental regimes that rely on private property do not actually use the strong property rights predicted by the theory discussed in chapter four. The following two chapters aim to substantiate this claim by reference to the private property rights at the heart of the QMS and NZ ETS. In this chapter I focus on those characteristics of private property that serve to best demonstrate my point. In chapter ten I consider those characteristics which appear *prima facie* strong, but when properly analysed also indicate that the rights relied on by these regimes are not the strong rights anticipated by the theory. Of course, my overall suggestion is that the social obligation norm of property explains this disjuncture and I consider this point in the balance of the thesis.

I. Exclusivity

Exclusivity is the characteristic that provides the best demonstration that these rights are not strong in any real sense. Neither quota nor emissions units reflect the degree or type of exclusivity predicted by the theory. This is somewhat ironic given the ability to exclude others is generally seen as the crucial characteristic of private property\(^1\) and is, ostensibly, of central importance to tradeable environmental allowances. Indeed, in theory, exclusivity is both the primary benefit and defining characteristic of tradable environmental allowances.\(^2\) It follows that if quota and emissions units are strong property rights one would expect to see property rights that are highly exclusive. However, careful analysis of the QMS and the NZ ETS reveals a different reality.

\(^1\) Indeed, it is this feature of property that provides the owner with the small domain of complete mastery and self-direction which is so important to liberal thought.

\(^2\) Anthony Scott *The Evolution of Resource Property Rights* (Oxford University Press, Oxford, 2008) at 6 -7 and 174; and Carol M Rose “Canons of Property Talk, or, Blackstone’s Anxiety” (1998) 108 Yale L. J 601 at 604. See also the discussion in chapter four.
A. QMS

Under the QMS, quota do not represent a private property right in the fish themselves (that is, the resource being managed). Rather quota represent a share of a total overall catch. Quota provides no ability to exclude others from the fish and provides no say in how the resources are managed.

In order to prove this point it is necessary to delve into the detail of the Fisheries Act 1996. Under the Act quota are created through a combination of several sections. Section 2 of the Act, which deals with interpretation, states that individual transferable quota is, inter alia, individual transferable quota allocated under ss 44, 47, or 49, or quota that was allocated under the 1983 Act but that has been converted into quota shares via the operation of s 343. As s 42 makes explicit, quota are to be expressed as a share of the total allowable commercial catch for each stock. Quota shares also underpin the yearly generation of “annual catch entitlement” (ACE) (s 66(1)). As a result, the holder of quota has the exclusive right to catch the amount of fish represented by their quota, which is calculated as a percentage of the total allowable commercial catch and expressed as ACE.

This is exclusive in the sense that the quota shares confer an exclusive right to fish for that percentage of the catch. That part of the total catch need not be shared with any other person. It is possible to think of a quota holder’s fish as swimming around waiting to be caught in the manner and at the time that suits the fisher best. However, this is totally dependent on the fisher actually being able to catch those particular fish first. This is why quota does not provide exclusivity in a strict sense. Although a degree of exclusivity

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3 This was a transitional provision, which has now been repealed. It provided for individual transferable quota held prior to Part 8 of the Fisheries Act 1996 coming into force to be converted into quota shares under the 1996 Act.
4 As discussed further below (at III) this gives the holder the right to take a specified quantity of fish stock during the fishing year. It can be traded separately from quota and has its own dedicated register.
attaches to quota we do not see the sort of completely exclusive right that would accompany a “strong” or “absolute” property right. The only thing an individual quota right represents is a share of the stock. Access to a proportion of a shared resource, however, is not exclusive ownership in the sense demanded by the theory.\(^5\) Quota holders are still in competition with the other quota holders for the actual fish. There are no guarantees in the Act that the quota holder will actually land any fish, or that some other “saucy intruder”\(^6\) will not have already taken the fish. Different fishers are likely to be at sea fishing at the same time, which may cause them to interfere with each other’s ability to catch fish, and therefore the exclusivity of the quota.

Moreover, a strong element of exclusivity would allow fishers to harvest in any manner that suits their individual preferences. However, under the QMS government regulation interferes with this ability in a number of significant ways.\(^7\) In addition to holding sufficient quota or ACE, in order to actual go and catch fish a fisher must also have a permit to fish issued under s 89. Section 92 outlines the conditions that may accompany a permit. These include, but are not limited to: areas or methods; the use or non-use of vessels; the types and amounts of gear; the places where fish may be landed; and the periods during which fish may be taken. Section 92 also makes it clear that these conditions can be changed from time to time and that the permit holder can be required to surrender their permit and accept a replacement on different conditions. In addition, s 103 requires vessels to be registered in the Fishing Vessel Register before they can take fish. Registration of a vessel can be accompanied by conditions,\(^8\) and has a number of consequences in relation to

\(^5\) Anthony Scott “Moving Through the Narrows: From Open Access to ITQS and Self-Government” (paper presented at the FishRights99 Conference, Fremantle, Western Australia, 1999) at 112.
\(^6\) See *Pierson v Post* 3 Cai R 175, 2 Am Dec 264 (NY 1805).
\(^7\) R Árnason “Property Rights as a Means of Economic Organization” (paper presented at the FishRights99 Conference, Fremantle, Western Australia, 1999) at 19.
\(^8\) See Fisheries Act 1996, s 103.
wage, labour and occupational safety laws. Finally, the Act restricts the class of people who can actually receive fish to “licensed fish receivers”. Licensed fish receivers are obliged to, among other things: keep detailed records of fish received and from whom; provide a monthly report to the Ministry showing the commercial fishers that they have received fish from, and the species and weight of that fish; carry out annual audits; and report annually. There is no shortage of additional requirements that must be met by a fisher before the quota can actually be exercised, all of which look suspiciously like direct “command and control” regulations. While these requirements may be necessary for the effective operation of the QMS, they all clearly conflict with an individual fisher’s exclusivity in his or her quota.

Consequently, it is clear that quota does not provide complete exclusivity to its holder. Certainly, it is indisputable that quota does not provide an exclusive right in the fish themselves. Indeed, what the government has actually granted is closer to a usufructory right than an actual right to the swimming fish. The holder’s right is merely in co-ownership with the other holders, and is merely a right over the catch, not over the stock. Neither the swimming fish, nor the fish habitat have been exclusively assigned to any individual or collective. A share gives the holder the right to hunt, but it does not give the holder any power over the management of the resource. In addition, managerial powers are diffused and dissipated among fishers and the regulator. Subsequently, while a quota holder has much more exclusivity than his or her forebears (who operated in an open access fishery or only had a licence to fish) it is not truly exclusive in the sense demanded

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9 See Fisheries Act 1996, s 297.
12 Scott, above n 5, at 112.
13 At 112.
by the strong property rights envisaged by the theory discussed in chapter four. This is recognised by Scott who notes that individual transferable quota “… [are] generally not yet exclusive enough to allow complete optimization by its holder: to fish intensively, cut costs, build up his capital in his vessel, cash in on swings in market price, sustain his crew’s moral, use his vessel in a second fishery, [or] take a chance on the stock …”.  

B. NZ ETS

The divergence between theory and practice is even more glaring when the exclusivity of emission units under the NZ ETS is considered. The exclusivity inherent in an emissions unit is essentially restricted to the effect of s 7(2) of the Climate Change Response Act 2002 which implies that, with a few narrow exceptions, only account holders are able to transfer or otherwise deal with emissions units. Thus, the Act appears to confer an exclusive right to deal with the units held in the holder’s account. The interesting point, however, is that the ability to deal exclusively with the right is extraordinarily narrow. Dealings with emissions units are limited to surrender, cancellation, retirement, transfer and (to a certain extent) use as security (which requires possession of the units to pass to the secured party). Moreover, once surrendered, cancelled or retired, units (generally speaking) cease to be of any practical benefit to market participants in the NZ ETS. In reality, therefore, there is little that this exclusivity is protecting the right holder from. The regime’s structure means that there are no “neighbours” or “saucy intruders” who could potentially interfere with the use of an emissions unit holder’s right.

14 Scott, above n 1, at 174.
16 It is also interesting to compare the language adopted by the Climate Change Response Act 2002 with that used by the Fisheries Act 1996. With one exception the Climate Change Response Act 2002 does not address the question of “ownership” of title to units. Instead, the Climate Change Response Act generally refers to the “holding” of units. For example: the language used in s 10, which outlines the purpose of the registry,
The reason for the limited degree of exclusivity that accompanies emissions units becomes evident when one considers the precise aim of the NZ ETS and exactly what an emissions unit entitles its holder to. Essentially, the NZ ETS is aimed at establishing a new market. The commodity traded in this market is the emissions unit. Although the different types of units are identified in the interpretation section of the Climate Change Response Act (s 4), the Act does not further define the nature of these units. What the Act does do, however, is to specify that participants have a liability to surrender one unit for each whole tonne of emissions emitted over a specified period (currently this is on an annual basis).

states that the register's purpose is to ensure the accurate, transparent and efficient accounting of the “holding” of units; a “holding account” is defined as an account in the register for the purpose of “holding units” (s 4); the register itself must contain “a record of the holdings of units in holding account in New Zealand” (s 18(2)(b)). The list could go on. In contrast, the Fisheries Act 1996 expressly uses the language of ownership. For example, under s 132 of the Fisheries Act 1996 no transfer of quota can be registered unless at the time of transfer the transferor “owns” the individual transferable quota shares in question. Other examples under the Fisheries Act include, but are not limited to:

a) Every caveat registered under s 159 must include the names of the caveator and the quota owner (s 127);
b) The aggregation limits under s 59 refer to the fact that “no person shall be entitled to own”;
c) Section 56 indicates that the purpose of the overseas investment fishing provisions is to acknowledge that it is a privilege for overseas person to own or control interests in fishing quota.
d) Importantly, s 168 is entitled “Guarantee of ownership rights” and states, inter alia: The production of a certified copy in hard copy form … of a record in any register kept under this Part as to the ownership of any individual transferable quota, shall be held in every court of law or equity and for all purposes to be conclusive proof that the owner shown in the certified copy was … owner of the quota to which the certified copy relates.

Unlike these examples, in the Climate Change Response Act 2002 the only section which suggests that holders of emissions units can be said to “own” those rights, and therefore have the exclusive right to deal with the units held in their accounts is s 29. Section 29 is framed in much the same way as s 168 of the Fisheries Act 1996 and notes that:

29 Printed search result receivable as evidence
A printed search result, or a copy of a printed search result, that purports to be issued by the Registrar is receivable as evidence and is, in the absence of evidence to the contrary, proof of any matter recorded in the unit register, including (but not limited to)—
(a) the ownership of units; and
(b) the date and time of the registration of a transaction; and
(c) information that the Registry holds. (emphasis added)

Consequently, although the Climate Change Response Act eschews the language of ownership we can accept that a degree of “ownership” is envisaged by the Act. This is supported by the fact that the Act does provide for a degree of exclusive use as discussed in the main body of the text. See also: Cameron, above n 15, at 269.

17 Indeed, the nature of Kyoto units is governed by the international agreements underpinning the Kyoto Protocol itself. The Climate Change Response Act essentially incorporates these by reference. NZUs are simply defined as a unit issued by the Registrar and designated as a NZU.

18 Climate Change Response Act 2002, ss 63 and 65.
the heart of the NZ ETS and it gives emissions units both purpose and value. Without this they would be meaningless.

Generally speaking, however, scholars almost always paraphrase this structure by saying that the holder of an emissions unit has the right to emit one tonne of carbon dioxide (or equivalent) for each unit he or she holds. For example, Wilson notes that “[i]n the case of a trading regime covering greenhouse gases, the “property right” is permission to emit a certain amount of gas into the atmosphere at a certain time; for example, one tonne of CO2 in a given year”. The reality of what the Act does, however, is more complicated than this.

The structure of the Act suggests that it is not granting “the right” to emit a tonne of emissions. Neither is it granting “permission” to emit. Rather, if a participant does emit a tonne of carbon dioxide they are liable to surrender one emissions unit. Failure to do so leads to specified consequences. Participants can face criminal sanctions, but also face a charge of $30 for each unit they ought to have surrendered. Thus, the exclusive right created by the Act is not a right to emit greenhouse gases, but actually the ability or right to avoid being stung with the penalties under the Act. Consequently, it is not possible to even roughly equate the ownership of an emission unit with ownership of the atmosphere or the actual carbon or other greenhouse gases. The two are conceptually distinct. An emissions unit can only be used to discharge obligations under the Act or fulfil various Kyoto processes. It does not, however, grant any interest in the relevant gases themselves. This can be contrasted with quota under the QMS, which does give its holder an entitlement to a certain percentage of the total allowable commercial catch. It appears

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21. Such as cancellation, retirement, or carry over. See Cameron, above n 15, at 272.
therefore, that the degree of exclusivity provided by an emission unit is significantly less than that provided by quota. This is noteworthy given quota itself can hardly be described as especially exclusive.

The precise form of an emissions unit is surprising given the theory underpinning the use of such tools. It follows from the discussion in chapter four that on a purely theoretical basis the best way to deal with the problem of greenhouse gas emissions would be to somehow establish private property rights in the atmosphere itself. However, due to the practical difficulty of achieving this, scholars have suggested the second best approach is to explicitly assign private property rights to the greenhouse gas emissions themselves and set up a market in them. Other scholars have suggested achieving this result by privatising access to the resource (i.e. greenhouse gases). As Tietenberg notes in discussing the Kyoto Protocol and emissions trading generally:

> Although the popular literature frequently refers to the tradable-permit approach as ‘privatising the resource’ … in most cases it does not actually do that. Rather, it privatizes the right to access the resource to a pre-specified degree. Economists have consistently argued that tradable permits should be treated as secure property rights to protect the incentive to invest in the resource. Confiscation of rights or simply insecure rights could undermine the entire process.

However, it is clear that the Climate Change Response Act 2002 does not create a property right in the atmosphere, nor does it provide a property right in the relevant greenhouse gases. Moreover, it is arguable that, given its structure, an emissions unit does not actually privatise the right to access the resource to a ‘pre-specified degree’. Rather, an emissions unit simply enables its holder to avoid the consequences of non-compliance under the Act. It gives neither an interest in the relevant resources, nor the right to access the resources.

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Consequently, although it can be argued that quota grants its holder at least a usufructory right to hunt for fish, a similar argument in relation to emission units is far more tenuous. The fact that the primary use of an emission unit is to escape a liability severs any relationship between the right and the resource.

This is a particular problem from the point of view of exclusivity and the attraction of using a system of private property to manage these natural resources (i.e. greenhouse gases). The environmental benefits of an exclusive right are said to flow from the fact that exclusivity functions to forbid others from taking or using the resource.\(^{24}\) This means that one can then use the resource in any way one sees fit, protected from interference by others.\(^{25}\) This should, in turn, create an incentive to use resources in a way that rationally secures long-term sustainability.\(^{26}\) Overall, one of the key things that exclusivity usually provides is a say in how the resource is managed.\(^{27}\) However, an emissions unit does not confer any power of management over the resources in question. In fact an emissions right does not reflect an interest in a specific resource at all. While the market created may provide incentives to reduce one’s own emissions profile, in order to profit from selling any excess units, it does not actually give a right in the greenhouse gases, or atmosphere itself.

It is very difficult to argue that emissions units reflect the exclusive right demanded by the liberal conception of absolute property (let alone a lesser right that is easier to achieve in practice). The NZ ETS has not granted participants a share of the atmosphere over which


\(^{27}\) Scott, above n 5, at 112.
they have absolute property rights (even if this were possible).\textsuperscript{28} Neither has it granted an interest in, or the right to access, the relevant greenhouse gases. The property right in an emissions unit is much narrower than this. It was created to serve what is essentially a single purpose; allowing participants to engage in a market comprised of a commodity that allows them to discharge particular obligations. Nevertheless, an emissions unit is a form of private property, albeit one with a very specific purpose and with limited practical application.

II. Transferability

Further support for the claim that neither quota nor emissions units reflect the unattenuated private property rights predicted by the theory can be drawn from the issue of transferability. A strong private property right should be freely transferable.\textsuperscript{29} This is said to be an important aspect of private property because it enables trade and is fundamental to the operation of an efficient market. Certainly, as the name suggests it is absolutely crucial to environmental mechanisms such as individual transferable quota\textsuperscript{30} and emission trading. However, the transferability of quota and emissions units is restricted in a number of important ways.

\textsuperscript{28} Edward A Page “Licenses to Kill? Cosmopolitanism, Climate Change and Global Emissions Trading” (paper presented at the 5th ECPR General Conference, Potsdam University, 2009) at 20.

\textsuperscript{29} Margaret Jane Radin \textit{Reinterpreting Property} (University of Chicago Press Chicago and London, 1993) at 113.

\textsuperscript{30} Indeed, transferability is perhaps the fundamental property characteristic of quota as it is the ability to transfer that allows those fishers with greater skill, access to capital and better management skills to buy out their less successful competitors. Over time, this should result in a change to the composition of the industry so that it is more productive and efficient than it would have been if the quota had been non-transferable. Theoretically, this should have positive environmental outcomes by eliminating over-fishing and providing fishers with direct incentives to make sure the fishery is well managed. After all, over-fishing will only result in a reduction in the number of fish that can be caught, which is likely to affect both the level of catch allowed and the value of the quota. See Scott, above n 1, at 176.
A. QMS

Quota transferability is a crucial aspect of the QMS and, unsurprisingly, quota are transferable. The process of trading quota is complicated (with the Fisheries Act 1996 dedicating nearly 50 sections to simply allowing it to happen).\(^{31}\) In essence, quota are transferable by way of a share transfer (s 132). There is no requirement to get regulatory pre-approval for a transfer and there is also no limit on the number of times that quota can be bought or sold.\(^{32}\) It follows that to a certain extent, quota holders are able to sell their quota to whomever they wish. There are, however, a number of administrative obstacles that must be overcome in order for a transfer to be valid. Dealings are only effective if performed in accordance with the Act (s 135) and the effect of s 155\(^{33}\) is that all trades must be registered before the buyer is able to own and use the quota.

Although the regulatory framework imposes a number of hurdles, the key restrictions of transferability flow out of the potentially unwelcome outcomes that might accompany the ability to deal completely freely with quota.\(^{34}\) In an attempt to avoid some of these pitfalls the Act places two explicit restrictions on the tradability of quota that significantly restrain their transferability. Both of these restrictions suggest that Parliament was concerned about the broader community effects of absolutely free transferability.

The first restriction concerns foreign ownership of quota. Under s 45 no “overseas person”\(^{35}\) can hold quota without obtaining consent. Consent can only be granted where it

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32 At 23.

155 Transactions not effectual until registered
No transaction has any effect for the purpose of this Act until it is registered in accordance with this Part.

34 Lock and Leslie, above n 31, at 23.

35 Defined in s 7 of the Overseas Investment Act 2005 as, *inter alia*, an individual who is neither a New Zealand citizen nor ordinarily resident in New Zealand.
can be demonstrated that New Zealand will benefit from the exchange (ss 56 – 57]). If New Zealand ceases to benefit s 58 stipulates that the quota can be taken without compensation. This provision, or one very like it, has been a fixture of the quota management system since its introduction in 1986. It is expressly aimed at ensuring the maintenance of domestic ownership of New Zealand fisheries and ensuring that only New Zealanders or New Zealand-owned companies are able to own quota, so that domestic control of the fishery is retained and profits are not expropriated by foreign nations. Of course, the effect of this provision is to restrict the transfer of quota to other New Zealanders (or foreigners who have consent). This limits the market, and the value of quota, dramatically. Moreover, there are disadvantages on a theoretical level to denying foreigners access to the market. In particular, it denies the domestic industry access to investment capital. It also runs contrary to the general global trend towards liberalising foreign investment. Obviously, it also impacts on the strength of transferability as a characteristic of quota.

The second restriction is found in s 59, which provides for limits on the number of quota shares any person may own (an aggregation limit). The purpose of this provision is to combat concerns regarding anti-competitive behaviour and abuse of market power. The default aggregation limit under s 59 is no more than 35 per cent of the total allowable commercial catch (s 59(e)), although individuals can own up to 45 per cent of the quota for species listed in the Fifth Schedule (s 59(a)). There are also specific limits for various individual species including: spiny rock lobster, paua and bluenose (s 59(b) – (d)). Section 61 states that if a person is in breach of s 59 by owning more quota than provided for, any excess quota is forfeited to the Crown without compensation. Of course, the effect of these restrictions is to limit the potential pool of buyers to those who do not yet hold more

36 Lock and Leslie, above n 31, at 23.
than the maximum quota. Obviously this restricts the free transferability of quota more generally.\textsuperscript{37}

Restrictions of this sort have been in place since the introduction of the QMS in 1986, although they have been modified over time. The express purpose of limiting the number of quota shares any individual can hold was to inhibit monopolistic behaviour and to ensure that “there [was] a diversity of ownership and an opportunity to enter the fishery”.\textsuperscript{38}

The particular fear was that by moving to a quota management system, speculators, large firms, or collectives would be able to use the quota market to capture and horde quota in an effort to drive up the price. This had the potential to lead to a very concentrated industry in which a dominant player would have the ability to set prices or place other sorts of controls on the amount of quota traded.\textsuperscript{39} This could lead to negative consequences whereby other fishers may have been deprived of expected gains, faced extreme difficulty in entering the industry, or have been forced out. Section 59 and its predecessors are aimed at eliminating (or at least alleviating) these problems.\textsuperscript{40}

\textbf{B. NZ ETS}

As with quota, the fact that emission units can be transferred between participants and overseas traders is a crucial aspect of the NZ ETS. It lies at the heart of the market that has been created. The operation and efficiency of that market will be extremely dependent upon the ease of transfer and any restrictions that are placed on it.

\textsuperscript{37} Although, it should be noted that there is nothing in the Fisheries Act to prevent a person who “owns” the maximum amount of quota from buying additional ACE. In this way the total number of fish that can be caught by an individual fisher can be increased without breaching the aggregation limits.


\textsuperscript{39} Scott, above n 1, at 178.

\textsuperscript{40} It is interesting to note that New Zealand is not alone in adopting this approach. The Icelandic quota management system also contains restrictions on the free tradability of quota that are aimed at preventing a single buyer or group from acquiring a significant percentage of quota. See Scott, above n 1, at 178.
In comparison with quota, emission units are far more transferable, at least in some respects. The only condition applying to participation in the NZ ETS is the requirement to have an account in the register. There are no restrictions on how many emission units an individual or entity can hold. The class of individuals or entities eligible to have a holding account is extremely wide and includes individuals (living in New Zealand or overseas) who meet a fit and proper person test. Consequently, there are no limits on aggregation or overseas investment under the NZ ETS.

However, although emission units may be more transferable than quota, the purpose of the NZ ETS means that they are also subject to a number of restrictions that weaken the strength of this characteristic.

The NZ ETS was designed to help meet New Zealand’s obligations under the United Nations Framework Convention on Climate Change and Kyoto Protocol. It is specifically aimed at trying to put a price on emissions in the local economy (in order to lower New Zealand’s overall emissions level), but it is also targeted at allowing New Zealand emitters to utilise cheaper emissions reductions achieved outside of New Zealand.\(^41\) In order to have a functioning market the NZ ETS needs to provide for the ease of transfer between New Zealand based participants, but it is also absolutely critical that it is linked with the international market for emissions units. The importance of enabling the trade of emissions units across international boundaries has been evident from very early in the gestation of the NZ ETS. As John Whitehead, then Secretary to the Treasury, noted in a speech delivered in 2007:\(^42\)

\(^41\) Wilson, above n 19, at 156.
\(^42\) John Whitehead, Secretary to the Treasury “An Emissions Trading Scheme for New Zealand” (Journalists Trading Organisation training forum on sustainability, in conjunction with the Ministry for the Environment and PricewaterhouseCoopers, Wellington, 8 August 2007) at 11.
Frankly, it is very unlikely that New Zealand can comply with its Kyoto commitments, at reasonable cost, without trading internationally. Earlier I outlined why economic instruments generate efficient, least-cost responses. The same argument applies equally to international trading – if emissions reductions are cheaper in other countries … it’s sensible to focus at least some reduction efforts in those countries. A scheme which linked internationally would recognise this principle, and would allow New Zealand emitters to engage to some extent in this “out-source” of their emissions reductions.

As it stands\textsuperscript{43} the basic impetus for enabling the NZ ETS to be linked to the international emissions market was to increase the liquidity of the NZ ETS market (that is to increase both the number of individuals and entities participating in the market and the number of emissions units available to trade).\textsuperscript{44} This is not only in line with the desire for economic efficiency, but it was also anticipated that this would increase the overall stability of the market by ensuring that the domestic price is aligned with the international price.\textsuperscript{45} This was particularly important in the New Zealand context because, in the absence of forestry participants, it was likely there would be fewer than 200 participants.\textsuperscript{46} Perhaps most importantly, however, it was anticipated that linking the NZ ETS internationally would allow local participants to purchase emissions units reflecting an emission reduction occurring overseas. This meant emissions reduction did not need to be achieved in New Zealand and New Zealand based participants did not necessarily need to radically change their behaviour or way of doing business. Currently, the NZ ETS is linked internationally to the extent that participants may surrender (some) Kyoto units to meet their obligations and may also convert NZUs into AAUs which they may then sell overseas.\textsuperscript{47} While the NZ

\textsuperscript{43} Clearly, the fact that the recently proposed changes (discussed in chapters eight and ten) will transfer the NZ ETS from an internationally focused scheme to a domestic scheme is somewhat ironic and shows just how far the current proposals have drifted from the original ideas underpinning the establishment of the NZ ETS. In light of this caveat, however, it should be noted that these changes have not yet become law and the current law still serves to illustrate the fact that the transferability of emissions units is not absolute.


\textsuperscript{45} Ministry for the Environment and The Treasury The Framework for a New Zealand Emissions Trading Scheme (Ministry for the Environment and The Treasury, Wellington, 2007) at 42.

\textsuperscript{46} Moyes, above n 44, at 940.

\textsuperscript{47} The procedure is laid down by s 30E.
ETS is not currently linked to the domestic trading scheme of any other country, this could eventually be achieved through regulations\(^{48}\) (although this is now unlikely to happen).

When we look closely at the transferability of the emission unit we can clearly see the impact of the design stage of the NZ ETS’s development. It was stressed during this period that there were several factors that required consideration in linking the NZ ETS with overseas markets. In particular, questions were raised about the extent of free transferability that should be extended to Kyoto units. The government had to consider whether to restrict the type or volume of Kyoto units that could be traded in the NZ ETS. In deciding the ambit of trade the government needed to balance issues of cost, efficiency, flexibility, equity, international acceptability, and environmental integrity.\(^{49}\) A number of these factors have led the NZ ETS to significantly restrict the transferability of several types of Kyoto units.

The actual mechanism of transfer under the NZ ETS is relatively straightforward. Under s 18C an account holder may apply to the Registrar to transfer units from the account holder’s account to another account either within the registry or an overseas register. While a participant must apply to the Registrar to transfer units (suggesting a degree of regulatory pre-approval) the Registrar must effect the transfer subject to any regulations made under the Act (18C). Each transfer must be registered (s 20) and does not take effect until it is registered (s 22). Holders of emissions units have a limited number of different transfer options available to them. They have the option to surrender their units to meet their obligations under the NZ ETS, or they can choose to sell, cancel or retire their units.

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\(^{48}\) Cameron, above n 15, at 273.

\(^{49}\) Ministry for the Environment and The Treasury, above n 45, at 43.
While the holder of an emission unit has a broad power of transfer (and the Registrar is generally required to effect any request for transfer made under s 18C), there are also a number of restrictions that do limit the transferability of particular types of emissions unit under the NZ ETS.

For example, although it will principally be the Crown who will transfer units to a retirement account (in order to meet its obligations under the Protocol) the Climate Change Response Act allows other account holders to retire units. However, under s 18C(3) if the Registrar is asked to transfer Kyoto units to a retirement account the Registrar must first seek a direction from the Minister of Finance as to whether the units can be transferred. They can only be transferred if the Minister of Finance so directs. There is no indication in the Act as to the type of factors the Minister must consider in making this decision. Presumably, the reason for this rule stems from the fact that the transfer of a Kyoto unit to a retirement account aids New Zealand in meeting its Kyoto obligations. The Minister may not only want to keep account of the number of units that are going towards this effort, but also limit the number of units retired if the Crown already holds sufficient Kyoto units to discharge its obligations, so as to keep a degree of liquidity in the market.

There are also restrictions on the transfer of various types of Kyoto units participants can use to meet their surrender obligations:

1. Section 18CB indicates that no participant may surrender a non-New Zealand AAU (although the section also states that in future, regulations may be passed allowing for this).

   a. The purpose of this restriction was to address the concern that participants would use “hot air” AAUs to meet their NZ ETS
obligations. Hot air AAUs arose because of the way in which the Protocol was structured. Each country with an emissions reduction commitment received AAUs that were equivalent to the number of tonnes of emissions it would be permitted to emit during the first commitment period of the Protocol. The year used to calculate the amount allocated was 1990. A number of Eastern European and Soviet Union countries were granted AAUs on the basis of their emissions profiles in 1990, notwithstanding the fact that the fall of communism and the economic depression that followed had already drastically reduced their emissions levels in comparison with 1990. Consequently, while these countries had a large surplus of AAUs to dispose of, the surplus did not reflect real environmental reductions, but rather economic reductions. For this reason they are termed “hot air”. They do not reflect actual reductions in emissions and will not contribute to the overall effort to reduce greenhouse gases in the atmosphere.

b. A further restriction on non-New Zealand AAUs is found in s 18CC. This indicates that imported AAUs which were issued out of the initial amount assigned to parties for the first commitment period of the Protocol cannot be used to discharge obligations incurred after 31 December 2012. Consequently, even if regulations were passed participants would only be able to use non-New Zealand AAUs to meet obligations prior to 2013. This restriction was aimed at preventing NZ ETS participants from buying large numbers of possibly inexpensive non-New Zealand AAUs towards

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50 Cameron, above n 15, at 271.
the end of the first Kyoto Protocol commitment period, stockpiling these, and using them to meet obligations from 2013 onwards. This is possible because, as discussed in relation to duration in chapter ten, AAUs do not have a specific vintage and can be used to discharge obligations during any commitment period. Without this restriction the goal of the NZ ETS (imposing a price on emissions in order to modify behaviour) could well be undermined.  52

2. Other transfers are restricted under the Climate Change (Unit Register) Regulations 2008:

a. The transfer of a “temporary certified emissions reduction unit” (tCER) to a surrender account is prohibited by the regulations. 53 The regulations also state that only the Crown is entitled to hold long-term CERs (lCERs), and only the Registrar, as administrator of the Crown holding account, may transfer this sort of unit within the register. 54 Both tCERs and lCERs are special types of reduction units that are issued for emissions removals that arise from afforestation and reforestation CDM projects (i.e. they arise from forest sinks planted in developing countries.) The restrictions on transfer and holding reflect the potential impermanence of forest sinks 55 and their treatment under the Protocol. The Protocol indicates that a party can only retire tCERs and lCERs to discharge its obligations during the commitment period during which the unit was issued. If a party does retire

52 See Cameron, above n 15, at 272.
53 Climate Change (Unit Register) Regulations 2008, reg 8.
54 Climate Change (Unit Register) Regulations 2008, reg 9.
a unit of this sort it must be replaced during a subsequent commitment period and that unit must be permanently cancelled. These rules are integrally linked to the Kyoto provisions regarding the CDM and in particular the problems associated with forestry projects. There are concerns regarding the overall performance of carbon sinks and other general risks (such as the forest burning down) that might cause the ICER or the tCER to be “reversed”.56

b. Certain industrial gas CER units cannot be transferred to a surrender account.57 This restriction places a prohibition on the surrender of CERs that are generated from the destruction of either hydrofluorocarbon-2358 (which is produced in the manufacturing of refrigerant gases)59 or nitrous oxide resulting from the production of adipic acid (which is a precursor to the manufacture of nylon).60 The restriction has been in place since 23 December 2011. Although the regulation provides some transitional provisions regarding forward contracts, in general, the consequences of surrendering one of these units is that the transfer into the surrender account is reversed and treated as if it had never taken place. This may have an effect on whether the participant in question has discharged their obligations under the NZ ETS (although the Registrar may accept replacement units to discharge this obligation).

57 Climate Change (Unit Register) Regulations 2008, reg 8A.
58 Hydrofluorocarbon-23 is a very potent greenhouse gas with a very high potential to contribute to global warming. See Ministry for the Environment, above n 55.
The intention behind adopting this restriction appears to be threefold.51

i. To support the environmental integrity of the NZ ETS by addressing concerns about the level of environmental benefit flowing from the destruction of these gases. In particular, there were concerns about projects to destroy hydrofluorocarbon-23 because the previous rule had the potential to create a perverse incentive by encouraging entities to actually create the gas in order to then destroy it.

ii. Limit the risk of an oversupply of this type of unit which could have an effect on prices within the NZ ETS market. This was a risk because the cost of destroying hydrofluorocarbon-23 is disproportionately low and the volumes of CERs generated very large.52

iii. To facilitate the possibility of future international linkage between the NZ ETS and overseas emissions trading schemes that prohibit the surrender of this sort of unit.

c. Further restrictions have been imposed since 18 December 2012. Certain industrial gas ERUs (as opposed to the CERs discussed above) and large-scale hydropower ERUs and CERs cannot be transferred to a surrender account.53 This restriction applies to:

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52 Ministry for the Environment, above n 55.
53 Climate Change (Unit Register) Regulations 2008, reg 8B.
i. ERUs generated from the destruction of either hydrofluorocarbon-23 or nitrous oxide.

ii. ERUs or CERs that are generated from a hydropower project that has a generation capacity of more than 20 megawatts (and not listed in the schedule attached to the regulations (which in turn refers to those dams that meet the guidelines in the World Commission on Dams’ final report).

Surrendering one of these units has the same consequences as above (i.e. it will be transferred out of the surrender account and treated as though it had never taken place).

As with the creation of CERs as a result of the destruction of hydrofluorocarbon-23 and nitrous oxide, the primary driver of this restriction was a concern about perverse incentives and the environmental integrity of the scheme. As noted in the Ministry for the Environment’s consultation document regarding the imposition of the new rules, banning ERUs stemming from these projects ensured a consistent approach between CERs and ERUs:

Under the Kyoto Protocol, ERUs may be issued only for projects which lead to emission reductions that are additional to what would have happened anyway. Given the perverse incentives described

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64 As this article discusses (Elisabeth Rosenthal “Profits on Carbon Credits Drive Output of Harmful Gas” The New York Times (online ed, New York, 8 August 2012) a number of plants based in China and India were actually “churning out more harmful coolant gas [than necessary] so they [could] be paid to destroy its waste by-product.” Consequently:

The high output keeps the prices of the coolant gas irresistibly low, discouraging air-conditioning companies from switching to less-damaging alternative gases. That means, critics say, that United Nations subsidies intended to improve the environment are instead creating their own damage.

above, there is concern that this criterion may not be met. These concerns have led other jurisdictions (eg, EU and Australia) to ban these units from use in their domestic emissions trading schemes.

Similar reasoning lay behind the decision to restrict the use of ERUs arising from hydroelectric projects. The environmental concerns about these projects included concerns regarding sustainability such as: the loss of biodiversity; the displacement of local communities; and the effect on land use change. More generally, it was noted that the projects were probably likely to have occurred regardless of emissions trading and, therefore, were not actually contributing to global emissions reductions.

Another contributing factor was the fact that the EU ETS bans the use of emissions units generated by large hydropower projects that do not comply with the World Commission on Dams’ report (the intention being to ensure that such projects are developed along lines that are least damaging to the environment). Overall, it was considered that banning the surrender of these units within the NZ ETS:

... now strengthens the credibility of our ETS and therefore our ability to advance discussions on linking with other major domestic emissions trading schemes. Building regional and bilateral linkages amongst carbon markets beyond 2015 will be important, given lack of access to Kyoto markets beyond this point. New Zealand continues to have access to existing Kyoto carbon markets at least until 2015 and continuing to allow these units to be accepted in our scheme until 2015 would likely damage our reputation given the concerns about their environmental integrity.

d. No account holder (including the Crown) may hold CERs or ERUs that have been derived from projects involving nuclear energy. If any account holder is found to hold units originating from a nuclear source the

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66 Ministry for the Environment, above n 65.
Registrar must serve notice requiring them to transfer those units out of New Zealand within 30 days and stating that if this is not done those units will be cancelled.\textsuperscript{68}

The precise reason for this is unclear, although we can speculate that New Zealand took this approach in line with its general nuclear free stance.\textsuperscript{69} Yamin and Depledge note that:\textsuperscript{70}

\begin{quote}
Although some Parties wanted to exclude certain project activities, such as nuclear projects, based on their views about their inherently unsustainable development credentials, these views did not prevail and, in fact, no project types are excluded from the CDM.
\end{quote}

The Protocol does, however, require Annex 1 parties to refrain from using CERs derived from nuclear CDM activities to meet their obligations.\textsuperscript{71} This rule is aimed at removing the economic incentive to invest in projects that use nuclear energy.\textsuperscript{72} Consequently, decisions regarding the exact treatment of CERs or ERUs generated from nuclear activities is left to the sovereignty of each party, which is free to make its own choice about whether to employ them. It is no surprise that New Zealand does not.

e. The free transfer of NZUs is also restricted to the extent that they cannot be transferred to an overseas registry unless that registry is prescribed in the regulations.\textsuperscript{73} However, s 30E of the Act does provide the facility for

\begin{quotation}
\footnotesize\textsuperscript{68} Climate Change (Unit Register) Regulations 2008, reg 10(2)(a)(i) and (ii).
\footnotesuperscript{69} See for example the New Zealand Nuclear Free Zone, Disarmament, and Arms Control Act 1987 the long title to which begins: “An Act to establish in New Zealand a Nuclear Free Zone”
\footnotesuperscript{70} Yamin and Depledge, above n 51, at 175.
\footnotesuperscript{71} See the Preamble to Decision 17/CP\textsuperscript{7} (United Nations Framework Convention on Climate Change FCCC/CP/2001/13/Add.2 17/CP.7 (2002)) which states “Recognising that Parties included in Annex I are to refrain from using certified emission reductions generated from nuclear facilities to meet their commitments”.
\footnotesuperscript{72} Yamin and Depledge, above n 51, at 175.
\footnotesuperscript{73} Climate Change (Unit Register) Regulations 2008, reg 11.
\end{quotation}
an account holder to apply to the Registrar to convert a NZU into an AAU for transfer to an overseas registry.

3. It is important to note that s 30G of the Act provides, *inter alia*, that regulations may be used to place further restrictions on a holder’s ability to hold and trade units. This power has most recently been used in relation to ERUs generated from the destruction of some gases and ERUs and CERs from hydropower noted above. Clearly, it is possible that these restrictions may interfere with the existing rights of participants.74 This risk is mitigated to a certain extent by various procedural safeguards in relation to consultation and a three-month statutory delay between when the regulations are notified in the *Gazette* and when they come into force.75

4. Finally, a further Kyoto rule impacting on the ability to transfer Kyoto units is known as the “Commitment Period Reserve”. Each party must maintain a minimum quantity of Kyoto units in its national registry at all time. Basically, for New Zealand’s purposes the reserve should not drop below 90 per cent of its assigned amount.76 The purpose of this rule is to prevent a party from divesting itself of so many units that it would later have difficulty meeting its commitment period obligations.77 Consequently, for New Zealand, if the number of Kyoto units in the registry drops below 278,608,26078 the registry will close to outgoing transfers until sufficient Kyoto units have been transferred into the registry to take

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74 Cameron, above n 15, at 273.
75 Climate Change Response Act 2002, s 30H(3).
77 United Nations Framework Convention on Climate Change, above n 56, at 58.
78 Being 90 per cent of New Zealand’s assigned amount of 309,564,733 units.
it above the 90 per cent cut-off. Clearly, closure of the registry will constrain the ability of participants in the NZ ETS to trade their units internationally.

III. Divisibility

The characteristic of divisibility also provides support to the claim that quota and emissions units are not the strong rights one might expect. Divisibility itself can be measured either vertically (in the sense of temporal division) or horizontally (in the sense of sub-division).

It is notable that neither the NZ ETS nor the QMS allow for vertical divisibility in a strict sense. For example, the NZ ETS provides no facility for emissions units to be vertically divided. In particular, it is not possible to lease an emissions unit. This is clearly appropriate given the very limited range of activities one can undertake with an emissions unit. They can be surrendered, retired, cancelled, or transferred. With the exception of transfer, each of these activities has the effect of taking the emissions units permanently out of the NZ ETS (although the Crown itself may use Kyoto units to discharge its obligations under the Protocol). The concept of the lease, which allows a lessee to use the property for a limited period of time before returning it to the lessor does not easily fit within this paradigm. A lessee could not use an emissions unit to discharge his or her own obligations and then return it to the lessor at the end of a specified period. The inability to lease a unit is essentially a function of the nature and purpose of the right. The NZ ETS is aimed at creating a scheme for regulating the emission of greenhouse gases by creating an essentially consumptive unit. Once it is used it cannot be used again. This purpose does

not cater for the idea of vertically divisibility, which is aimed at allowing a resource to be temporally divided, and for different parties to take advantage of this temporal division.

The QMS provides an even better example of the limited strength of these rights with regard to divisibility. Although it was possible to lease quota under the original statutory scheme developed in 1986\(^\text{80}\) this is now prohibited.\(^\text{81}\) Rather, since 2001 the Fisheries Act has employed a different right known as “annual catch entitlement” (ACE) that functions in much the same way as a lease. ACE is assigned to quota holders on the basis of their overall share of the available quota. Once the total allowable commercial catch for a year is known, the kilogram equivalent of each quota share is calculated and transferred to quota holders on the first day of the fishing year as ACE. This determines the total tonnage of fish that the quota holder is able to land in the next fishing year.\(^\text{82}\) The ACE can be traded separately from quota (s 133) and has its own dedicated register (s 124). It is not possible to secure a mortgage against an annual catch entitlement (s 136). ACE is crucial to the process of catch balancing, and is a disincentive to over-fishing by ensuring that fishers either land what they are entitled to, or pay a “deemed value” to the Crown.\(^\text{83}\)

The change to the ACE system appears to have been driven by the twin desires of simplicity and conceptual rigour. In particular, it was considered desirable to have a clear separation between the right to harvest a particular amount in any year, and the ownership of the resource in future.\(^\text{84}\) Moreover, under the Fisheries Act 1983 a lease of quota

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\(^{80}\) Section 28Q of the Fisheries Act 1983 made this clear:

**28Q Transfers and leases of individual transferable quotas**

(1) Except as provided in section 28X of this Act, any person who is the holder of an individual transferable quota may permanently transfer that quota to any other person or lease the rights of the holder to any other person for a specified period or specified tonnage of fish.

\(^{81}\) See the Fisheries Act 1996, ss 341, 345 and 347.

\(^{82}\) Lock and Leslie, above n 31, at 18.

\(^{83}\) For more detail see Basil M H Sharp “ITQs and Beyond in New Zealand Fisheries” in Donald R Leal (ed) *Evolving Property Rights in Marine Fisheries* (Rowman & Littlefield Publishers Inc, Oxford, 2005) at 198.

\(^{84}\) Lock and Leslie, above n 31, at 18.
required a formal document in an approved form specifying a number of details (s 28R). This had the potential to lead to a number of problems. Leases could become complicated and expensive to draft, which would lead to increased transaction costs. The complexity of many leases also gave rise to an increased risk of litigation. In particular, the insolvency of either the lessor or lessee could cause serious legal and financial problems for the other and result in ambiguity over who was actually entitled to exercise the right to catch fish. By moving to ACE these risks could be avoided and costs reduced. As the Minister of Fisheries (the Hon Douglas Kidd MP) noted on the introduction of the Fisheries Bill 1994:

> The separation of catching rights from quota is a further means of simplifying the quota management system. These catching rights would be spawned annually from quota, and would be superficially similar to the annual lease of quota. The annual catching right could then become the authority to cover catch. Catching rights would be explicitly spawned from quotas as annual catching entitlements, unlike at present when they are derived after calculating underfishing and overfishing provisions. There are advantages in separating the two rights. A separation assists investment in the fisheries. This is because it clearly separates the nature of interests in the fishery between perpetual interest and the annual catching right. Such a separation will aid the introduction of the security of individual transferable quota as the volume of trading on the register will be reduced and the nature of the individual transferable quota redefined.

In essence, the benefit of an annual catch entitlement is that it allows for the separation of the current ability to harvest from the individual transferable quota itself. Consequently, individuals can purchase the right to catch more fish in one year with no consequent change in the ownership of the property itself. In moving to this system the concept of a lease has been superseded by a statutory creation that, as the Minister notes, is only superficially similar to a lease. In particular, the Act has done away with leases of more than one year. Consequently, it is not possible to have any overlapping temporal claims to

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86 (6 December 1994) 545 NZPD 5392.

87 Lock and Leslie, above n 31, at 21.
quota. This is reinforced by s 132(3) which states that no transfer can be accepted for registration if it is expressed to take effect on a date after the date on which it is presented for registration. Overall, the Act no longer allows for any vertical divisibility of the quota right itself.

However, in comparison to vertical divisibility both quota and emissions units are horizontally divisibility (although even this requires a rather generous approach to be taken to the concept.) Technically, in order for a right to be divisible an owner must be able to subdivide their right and trade all or part of it.\(^8\) Clearly, it is not possible to divide one quota share\(^9\) although it is possible to divide a large holding of quota shares and sell them by portion (s 132). So, although somewhat artificial, to this extent quota are horizontally divisible and quota holders can adjust their level of holdings in accordance with their anticipated level of fishing. It is this divisibility that provides the benefits of the transferable quota system. It is also possible for ownership of quota shares to be divided between two or more individuals. There is nothing in the Fisheries Act that prevents quota shares from being held by a corporation or by way of a partnership, joint or common tenancy or on trust.\(^9\)

Likewise it is not possible to divide one emissions unit.\(^1\) Again, however, the reality is that given one emissions unit is generally going to form part of a much larger bundle of units (which can be divided and transferred) we can say that emissions units are, in practice, horizontally divisible. It is the ability to add to or subtract from a larger holding of

\(^8\) Scott, above n 1, at 10.  
\(^9\) Quota shares must be expressed in whole numbers (s 42) and it is not possible to transfer part of an individual transferable quota share (s 132(2)).  
\(^9\) The Fisheries Act 1996 refers to “the person” who owns or holds quota throughout without drawing a distinction between different types of legal personality. Section 29 of the Interpretation Act 1999 makes it clear that, in an enactment, the word person includes a corporation sole, a body corporate, and an unincorporated body.  
\(^9\) Section 18(3) of the Climate Change Response Act 2002 makes it clear that, while units are transferable, they are indivisible.
emissions units that enables participants in the NZ ETS to tailor their unit holdings according to their anticipated emissions obligations.

Ownership of emissions units can also be divided between two or more individuals. The regulations expressly provide that two or more qualified people may hold a holding account jointly. Each person who holds a joint account is jointly and severally liable for any obligations arising in relation to that account. Joint account holding is most likely to occur in relation to trusts and partnerships. The Climate Change Response Act expressly provides the mechanism for trusts to be registered as account holders. While each trustee must apply to open the holding account, and will become joint account holders, they can specify the name of the trust as the name of the holding account and this will appear in any search of the register.

IV. Flexibility

Finally, the characteristic of flexibility provides further support for the claim that neither quota nor emissions units are strong property rights. Both quota and emissions units are particularly inflexible rights.

A. QMS

Holders of quota have little or no choice with regard to the ways in which they can use, possess or transfer quota. Indeed, quota as a private property right is really a right to catch a certain percentage of a pre-determined overall catch and quota can only be held, transferred, or mortgaged in accordance with the Fisheries Act. It is not possible for a quota holder to renegotiate the terms of the property holding and the quota right is subject

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92 Climate Change (Unit Register) Regulations 2008, reg 6(1).
93 Climate Change (Unit Register) Regulations 2008, reg 6(2).
94 Cameron, above n 15, at 266.
95 Section 18E(1A) of the Act.
to all the terms of the Fisheries Act regarding the processes that must be undertaken in order to actually fish. Quota can really only be used as the basis for activity in the fishing industry, as security for a loan or as the source of ACE that can be sold for profit. More limited changes to the conditions which accompany the permit necessary to actually fish (under s 92) require negotiation with the Ministry which may also be very inflexible. While it is possible for a fisher to negotiate limited changes to the conditions of their permit, s 92(5) indicates that any conditions accompanying a permit must be substantially the same for all fishing permits in respect of the same stock. Consequently, any negotiation to modify the terms of an individual’s permit would also need to apply to all fishers’ permits unless a case could be made for an exception. In addition, quota has only one mode of alienation; transfer by way of sale or gift. Its mode or purpose cannot be easily expanded, all of which suggests that it is a very inflexible right.\(^96\)

**B. NZ ETS**

In the same vein, emissions units can only be used for a limited range of activities. They can only be surrendered to discharge an obligation under the NZ ETS, retired or cancelled in accordance with the Climate Change Response Act, transferred or used as security. There is certainly no ability to adjust the powers or obligations that the right confers.\(^97\) A holder of emissions units must confine his or her activities to those provided for by the scheme. As with quota, changes to the scheme require either primary or delegated legislation. Moreover, an emissions unit does not actually bestow the ability to manage the greenhouse gases in question. It simply provides the means to discharge a liability that arises under the Climate Change Response Act. There is no direct connection between the

\(^96\) Kevin Guerin *Property Rights and Environmental Policy: A New Zealand Perspective* (New Zealand Treasury, 2003).

\(^97\) Scott , above n 1, at 7.
natural resources that cause climate change and emissions units. Emissions units simply provide the mechanism for discharging an obligation, without which the NZ ETS participant would suffer a range of consequences (including the requirement to pay an excess emissions penalty of $30 for each unit that ought to have been surrendered). The fact that the uses of an emissions unit cannot be expanded beyond the activities permitted by scheme suggests that it is also a very inflexible right.

V. Summary

Overall, the four characteristics of private property considered in this chapter indicate that the private property rights relied on by the QMS and the NZ ETS are not the strong rights predicated by the theory. None of these characteristics indicate the sort of unattenuated right theorists say are necessary for the proper functioning of these regimes. While each right provides a certain level of each characteristic, they do not reveal the sort of strong rights anticipated by the literature reviewed in chapter four.

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98 Climate Change Response Act 2002, s 134(2)(b).
Chapter Ten: Further Indicators of Weak Rights

While my discussion of quota and emissions units demonstrates that these rights are not the strong rights predicted by the theory, some of the people who are practically engaged with them might disagree with my analysis. For example, in one case involving quota it was submitted that the Minister had failed to take into account as a relevant consideration, a legislative intention to create “strong property rights” when reducing the total annual commercial catch of snapper.¹ Moreover, when these rights are carefully considered there are some characteristics of private property that, prima facie, appear to be quite strong in relation to both quota and emissions units. However, it is my argument that this fails to take a sufficiently broad view of these characteristics and misunderstands the fundamental nature of the rights. My goal in this chapter is to address the characteristics which appear, at a superficial level, to indicate a strong right and to demonstrate that a careful assessment of these characteristics indicates the opposite. Indeed, properly considered these characteristics actually add further support to my claim that these rights are not the strong rights predicted by the theory.

¹ New Zealand Federation of Commercial Fishermen v Minister of Fisheries HC Wellington CP 237/95, 24 April 1997, McGechan J; CA82/97, 22 July 1997. This submission was roundly rejected in both the High Court and the Court of Appeal. In the Court of Appeal Tipping J went so far as to observe:

While acknowledging the extensive arguments which we heard on the property rights point, we consider the answer is quite straightforward. While quota are undoubtedly a species of property and a valuable one at that, the rights inherent in that property are not absolute. They are subject to the provisions of the legislation establishing them. That legislation contains the capacity for quota to be reduced. If such a reduction is otherwise lawfully made, the fact that quota are a “property right”… cannot save them from reduction. That would be to deny an incident integral to the property concerned. There is no doctrine of which we are aware which says you can have the benefit of the advantages inherent in a species of property but do not have to accept the disadvantages similarly inherent. (emphasis added)
I. Quality or Security of Title

Perhaps the most obvious rejoinder to my claim that the private property rights inherent in quota and emissions units are somewhat weak is to point out that they both appear to be quite secure. Certainly, the fact that they are both successfully traded in functioning markets suggests that they must be reasonably strong, at least in this respect. If either right were excessively insecure no one would have any incentive to engage with either regime. If the rights were likely to be revoked without warning, there would be little value in investing in either resource and there would be no incentive to conserve them in the long term.\(^2\) As the theory runs, quality or security of title is crucial in establishing the incentives that make private property based resource management regimes attractive. “Rational” owners are unlikely to manage resources in a sustainable way without the incentives that make it attractive and will be particularly concerned if the right may be impugned at short notice and without compensation.

It is unsurprising therefore, that both the QMS and the NZ ETS contain provisions that suggest title to their property rights is reasonably secure, especially as against third parties. If this were the only measure, it might be true to say that the rights showed a reasonable degree of quality or security of title, however, the reality is that neither right is very secure when assessing how vulnerable these rights are to changes in governmental policy. It follows that in order to assess the overall quality of these rights it is necessary to consider their security under each of these distinct headings. Moreover, when each right is compared to the other it becomes clear that they are not equally secure. The security of quota is markedly higher than the security of emissions units. This also lends support to the argument that neither right reflects the absolute right predicted by the theory.

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However, before looking at the security of the right under each regime it is necessary to begin by considering an objection; that the doctrine of parliamentary sovereignty applies to all private property rights and therefore obviates any reliance that can be placed on the vulnerability of these rights to governmental change in assessing their strength.

A. An objection addressed – parliamentary sovereignty

One response to the claim that quota and emissions units are not a particularly secure private property rights is to point to parliamentary sovereignty. Essentially, the argument would be that because quota and emissions units are creatures of statute, it is particularly uncontroversial if Parliament changes them. Indeed, the argument continues, as quota and emissions units are designed to operate in this way, they consequently have nothing further to teach us about private property more generally. However, my rebuttal is that parliamentary sovereignty actually works to support both the claim that these rights are not the strong rights predicted by theory, and also the broader claim that private property can be utilised to achieve social ends.

As a matter of law, in New Zealand it is generally accepted that there are no constraints preventing Parliament from passing or amending any laws it sees fit. As Robertson J noted in Rothmans of Pall Mall (NZ) Ltd v Attorney-General [1991] 2 NZLR 323 at 330:

In my judgment the constitutional position in New Zealand (as in the United Kingdom) is clear and unambiguous. Parliament is supreme and the function of the Courts is to interpret the law as laid down by Parliament. The Courts do not have a power to consider the validity of properly enacted laws.

Although there is, as yet, no case law discussing the NZ ETS, in relation to the QMS the High Court has given explicit support to the doctrine of parliamentary sovereignty. Cooper v
Attorney General\textsuperscript{3} was a case decided under the Fisheries Act 1983 and basically involved a privative clause restricting appeals and applications for review against the Quota Appeal Authority. It made it clear in relation to quota (but also more generally) that the rights conferred on a citizen by one statute (whether private property or otherwise) may be taken away by another statute.

The case itself revolved around the initial allocation of quota following the introduction of the QMS. In 1986 when the QMS was first instigated, quota was allocated to vessel holders based on their commitment to, and dependence on, the industry. This was determined by assessing a vessel’s catch history over the years 1982 to 1984.\textsuperscript{4} The process had a number of steps, but eventually the Director General of Agriculture and Fisheries would grant what was called provisional maximum individual transferable quota. From this decision there was a right of appeal to the Quota Appeal Authority.\textsuperscript{5}

An early decision on the allocation of provision quota (\textit{Jenssen v Director General of Agriculture and Fisheries})\textsuperscript{6} involved a claimant who, according to the Director General and Quota Appeal Authority, had no history of taking a particular species of fish (in that case orange roughy) and consequently did not come within the ambit of the relevant section. The Court of Appeal however, disagreed noting that a person could be committed to, and dependent on, a species at the date on which the species came under the quota management system if, by that time, he or she had taken “practical steps” to enable fishing for that species in the event he or she was granted quota.\textsuperscript{7}

\textsuperscript{3} \textit{Cooper v Attorney General} [1996] 3 NZLR 480 at 484.
\textsuperscript{5} This process was outlined by Cooke P in \textit{Jenssen v Director General of Agriculture and Fisheries} CA313/91, 16 September 1992.
\textsuperscript{6} \textit{Jenssen v Director General of Agriculture and Fisheries} CA313/91, 16 September 1992.
\textsuperscript{7} At 10.
This decision was unpopular and Parliament took steps to change its effect by amending the Fisheries Act 1983. It did so by imposing a condition precedent to a fisherman’s receipt of provisional maximum individual transferable quota. It would become necessary to be (or to have been at the time the species came under the QMS) the holder of a fishing permit issued under the Fisheries Act 1983. The provisions also provided that no court or tribunal could review, quash, call into question or award damages in respect of relevant decisions in proceedings filed after 16 September 1992 (the date of the Court of Appeal decision in *Jenssen*). Of course, the effect and intention of the amendments was to reverse the effect of *Jenssen*.

Although simplified for the purposes of this discussion, in essence, *Cooper* was a test case involving three cases from a total of 18 claims by fishers who sought judicial review of decisions that they were not entitled to provisional maximum individual transferable quota. As was accepted by the High Court, the plaintiffs were aggrieved that the decisions of the Quota Appeal Authority holding them to be disentitled to the fishing quota were *indistinguishable* from the decision it had made in *Jenssen* and that the Court of Appeal had held to be wrong in law. Although the Crown accepted that Mr Cooper’s case was, in principle, indistinguishable from Mr Jenssen’s, it applied to strike out the proceedings on the basis of the recently enacted amendments to the Fisheries Act 1983 which had been aimed at reversing the effect of *Jenssen*.

The High Court accepted that the effect of the amendments was to reverse the effect of *Jenssen*. However, it rejected an argument that the amendments had deprived the parties of access to the courts. Moreover, and significantly from the point of view of parliamentary sovereignty, the court found that it did not have to respond in detail to a claim that

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*It was also to overrule the effect of another two cases, which are not discussed for reasons of clarity.*
Parliament had no power to remove the plaintiffs’ substantive rights. The Court noted that no authority had been put forward for the proposition, and, in the absence of a constitutional protection of private property (as in the United States) protection of private property in New Zealand is restricted to that provided by Ch 29 of Magna Carta. As the judge noted, the amendments in question were “by any normal test” the “law of the land”. After considering Lord Cooke’s warning that the judiciary reserves the right in extreme cases to declare that some common law rights lie so deep that even Parliament cannot override them, Baragwanath J concluded that “Cooke J … does not however, suggest that property rights conferred on a citizen by statute may not be taken away by another statute; nor in my view is such a proposition arguable”.

The discussion is interesting for a number of reasons. Firstly, it is clear throughout that Baragwanath J considered that quota were private property rights. Secondly, it reinforces the supremacy of Parliament in New Zealand law and this suggests that quota (as a private property right) is only secure to the extent that Parliament refrains from interfering with it. Finally, the court accepted that the intention of Parliament in passing the amendments and limiting the access of people in Mr Jenssen’s position to quota was primarily based on a desire to protect the public interest. As the Attorney-General noted during the Parliamentary debates on the amendments “I am satisfied that an unrestricted right to challenge past decisions almost inevitably will result in an allocation of additional quota and permits to an extent that will adversely impact not only on the fishery itself but also on existing quota and permit holders”.

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9 Which provides “No freeman shall be … disseised of his freehold or liberties, or free customs … but … by the law of the land.” Imperial Laws Application Act 1988, s 3(1) and First Schedule.
10 Cooper v Attorney General, above n 3, at 483.
11 See the discussion at 484 and references cited therein.
12 Cited at 492.
Indeed, during the parliamentary debates the Minister of Fisheries expressed some dissatisfaction that the line had to be drawn at the date where *Jenssen* was decided. This protected about 27 sets of proceedings that had already been lodged, representing approximately 30,000 tonnes of fish quota which he thought would seriously impact on the fishery quota which had already been fully allocated. Baragwanath J noted this public interest point towards the end of the judgment:

Ordinarily the rule of law requires that a person whose factual situation is indistinguishable from another should be given like treatment: *Commissioner of Inland Revenue v Wilson* (Court of Appeal, Wellington, CA 30/95, 22 March 1996). But no such New Zealand authority supports the proposition that property rights are of such fundamental importance as to prevent Parliament from removing them by legislation which it considers to be required in the public interest. Here that public interest is expressed quite clearly in terms of the Ministers’ apprehension that the advent of new claimants would greatly increase the 30,000 tonnes required to be provided for the persons protected by subss (2) and (3) of s 28ZGA and thus destabilise the industry.

Overall, the discussion indicates that individual transferable quota is subject to the general principle of parliamentary sovereignty. The history of the right indicates that Parliament can and will interfere with it.

Returning to the general point of this part of the discussion, it may be tempting to argue, when considering the quality and security of quota or emissions units that because they have been created by statute it is uncontroversial if Parliament changes them. Moreover, because this is how both of these rights are designed to operate they have nothing novel to tell us about property law in general. We should simply look at the statute and no further.

The argument, however, does not stop there and the truth is, as always, more complicated than that. As has been outlined, the literature and theory surrounding mechanisms such as quota and emissions units clearly indicate an intention to deploy private property as it is

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14 At 495.
commonly understood and not just as a statutory creation. This was certainly accepted by Baragwanath J in *Cooper*. Indeed, it appears from the New Zealand case law discussing the QMS that it is now beyond question that quota are private property in New Zealand law. They are not simply a lesser species of right. Moreover, as Gummow J noted in *Commonwealth v WMC Resources Ltd* simply because these sorts of private property rights are “inherently unstable … is not to assert that the defeasible character of the statutory rights in question denies them the attribute of “property” in the “traditional” sense of the general law”.

In addition, when we look at the general institution of private property, we frequently see Parliament interfering with it. Some of the most ubiquitous forms of property owe their existence to Parliament. For instance, the fee simple was created by statute in the 13th-century, as was the ability to enforce a positive covenant in the 20th. Commercial leases now operate under the auspices of the Property Law Act 2007 and residential leases under the Residential Tenancies Act 1986. It is hard to separate the ownership of land from the requirements of the Resource Management Act 1991; holding shares in a company is governed by the provisions of the Companies Act 1993 and objects of particular historical or artistic merit are controlled by the Protected Objects Act 1975. The list could go on and on.

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15 In particular see the discussion of Tipping J’s comments in *New Zealand Federation of Commercial Fishermen v Minister of Fisheries CA82/97*, 22 July 1997 at 6-7.
16 *Commonwealth v WMC Resources Ltd* (1998) 194 CLR 1. A case in which the High Court of Australia was asked to consider whether the rights under an exploration permit granted under the Petroleum (Submerged Lands) Act 1967 (Cth) were rights of property.
17 At [195] – [196].
18 See *Quia Emptores* (1289–90) (Eng) 18 Edw 1, St 1.
19 Section 303 Property Law Act 2007 allows for the creation and enforcement of a positive covenant. This change to the common law was introduced by s 64A of the Property Law Act 1952 and came into force on 1 January 1987. In order to run with the land and bind successors in title covenants executed before this date must be negative or restrictive.
In many respects, the exercise of parliamentary sovereignty actually supports the idea that private property is not, and never has been, absolute. It has both intrinsic obligations as to how it is used, and it can be modified in order to achieve results in the common interest (in most cases by Parliament but also through the courts and society more generally). Theoretically, this means that an open and democratic process of some complexity must be undertaken in order to redraw the ambit of private property rights. This exercise will be carried out over time and we would expect to see ongoing changes in the way private property operates in response to changing social expectations and our ever increasing knowledge of the way in which systems (both environmental and normative) operate. Creations such as quota and emissions units (which, as discussed, are so clearly serving both public and private purposes) help us to see this point more clearly. Society as a whole has nominated Parliament, as the ultimate expression of its will, to control private property in the public interest.

There is a further way in which quota and emissions units help to demonstrate this point. It is uncontroversial that parliamentary sovereignty affects the security of all private property holdings be they land, quota, or emissions units. However, because quota and emissions units perform an explicit public service, they serve as an excellent illustration of this broader point. As discussed below, quota has been subject to significant changes over its relatively short life-span. Recently announced changes to the NZ ETS indicated the same is likely to be true for emissions units. Quite often these changes can be seen as serving a public purpose. This indicates that although all private property is subject to restrictions stemming from parliamentary sovereignty, some particular private property rights are more vulnerable than others. The extent of this vulnerability will depend on the role the private property right is playing in society at any given time.
Finally, the strength of parliamentary sovereignty and the lack of a written constitution make modifying property in New Zealand easy. However, even in countries with a constitutional protection of private property such as Australia, legislative interference with the property rights reflected in these sorts of regimes appears unproblematic. Courts in these countries have accepted quite extensive interference with these sorts of rights. This is further evidence that private property as a concept is not solely aimed at protecting the rights an owner has. Sometimes the property right can be tempered in relation to changing information and expectations.

Consequently, rather than parliamentary sovereignty being an impediment to my argument, it actually supports it. Parliamentary sovereignty provides the mechanism by which changes to private property can be effected and also supports my claim that private property rights are not, and never have been, unattenuated. It follows that in assessing the quality and strength of quota and emissions units it is both necessary and appropriate to consider their vulnerability to governmental change. This objection having been dispatched, it is now necessary to consider just how secure these rights are.

B. The quality or security of quota under the QMS

The security and quality of quota stems largely from Part 8 of the Fisheries Act 1996 which deals with the registration of quota, transfers, mortgages and caveats. Part 8 requires the maintenance of a quota register, which some commentators have suggested is an attempt to create a virtually indefeasible title to individual transferable quota. Certainly, it is clear that the provisions of the Fisheries Act are modelled on the Land Transfer Act 1952 and the Torrens system of land registration. This is unsurprising as it has been

recognised for some time that a reliable registration system plays a key role in the efficient operation of market based approaches to environmental regulation.  

In addition to establishing a quota register for recording particulars and providing the mechanism that makes quota transferable, Part 8 allows for the protection of third party interests. In particular, it is possible to register a mortgage over quota shares (s 136). This also has the effect of preventing the transfer of that quota (s 136(2)). As a result, quota can operate as security for creditors. The fact that quota can be used to secure credit suggests that they do have a reasonable degree of security. Any lender will demand a degree of security to balance the risk they are taking with their investment. The fact the Fisheries Act provides provisions to protect these investors indicates an intention to create a right that is at least moderately secure as between borrowers and lenders.

Further security is provided by the ability to register a caveat against quota (ss 147 – 148). This prevents dealings with the quota (such as the transfer of the quota in question or the registration of a mortgage against it). The Fisheries Act provides no guidance regarding when a court can direct that a caveat be registered and there is no case law discussing the issue.

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24 Section 147 indicates that there are three ways in which a caveat can be registered:
   1. A consensual caveat can be registered by any person with the consent of the owner of the quota shares.
   2. A caveat can be registered by court order in the course of any civil proceedings.
   3. The Crown can register a caveat over quota shares in four circumstances:
      a. For a breach of the foreign ownership provisions (discussed below).
      b. For a breach of the aggregation limit provisions (discussed below).
      c. In the event the quota holder is alleged to have committed an offence one of the penalties of which is forfeiture of quota.
      d. The failure to pay certain levies under the Act.
25 It is interesting to compare the caveats available under the Fisheries Act 1996 with those created by the Land Transfer Act 1952 because, although they serve comparable purposes, they are subtly different. Section 137 of the Land Transfer Act 1952 entitles any person claiming to be entitled to or beneficially interested in
As with the Land Transfer Act 1952, one of the key sources of security under the Fisheries Act is the fact that no transaction involving quota is effective until registered (s 155). This serves to reinforce the quota holder’s security as, except in the case of fraud, a certified hard copy of a record in the register is deemed to be a guarantee of ownership (s 168). Sections 171 – 173 deal with compensation for loss arising from: an omission, mistake or wrongdoing on the part of the Chief Executive (or the organisation tasked with maintaining the register) (s 171(1)(a)); the registration of any other person as the owner or mortgagee; any error, omission, or misdescription on the register (s 171(b)(i) and (ii)); or by the wrongful inclusion on the register of a statement about the ownership of any mortgage or quota (s 171(c)). Should any of these circumstances apply an action in damages may be taken against the Crown (or the organisation maintaining the register). Clearly, this section deals with mistakes and is likely to be particularly relevant in the event of loss arising from some sort of “wrongful” (perhaps dishonest or fraudulent) behaviour. Evidently, although the language is different, registration under the Fisheries Act is intended to provide similar protections to land registered under the Land Transfer Act 1952. Although this is not the forum for a detailed comparison of the provisions between the two Acts (and it should be noted that the Fisheries Act provisions are not as comprehensive as the Land Transfer Act 1952 provisions), the Fisheries Act does appear

any estate in land, or any person transferring any estate in land to be held on trust, to lodge a caveat against dealings. In other words, a caveat can be lodged as a protective mechanism before legal proceedings are commenced. Section 148A of the Land Transfer Act 1952 simply requires the Registrar to ensure that any caveat complies on its face with the requirements of the Act or of any regulations, but he or she is not required to be satisfied that the caveator is actually entitled to the interest claimed. Conversely, caveats under the Fisheries Act 1996 can only be directed by the court in “any civil proceedings” although the Act provides no further guidance. We can presume that such an application would need to be accompanied by evidence of some sort of legal or equitable interest in the quota, even if the test was limited to the sort of considerations that are relevant on an application for an interim injunction. Assuming this is correct, on balance it is arguable that caveats under the Land Transfer Act 1952 provide the greater protection as they can be more simply obtained.

26 Compare s 155 of the Fisheries Act 1996, with s 41 of the Land Transfer Act 1952.

27 Subject, of course, to the general principle that those who lose out partly as a result of their own actions may have their claim reduced or discounted entirely. See Contributory Negligence Act 1947, ss 3 and 7 and the general discussion of this point in relation to the Land Transfer Act in Toomey and others Land Law (online looseleaf ed, Brookers) at LT178.05.
to create a reasonably “indefeasible” title to quota backed up by a degree of governmental compensation for loss.

Overall, Part 8 effectively resolves any questions about the quality and security of title to quota as between the quota holder and third parties. As with the registration of land under the Land Transfer Act 1952, the mirror and curtain principles suggest that the register should reflect (mirror) all of the facts regarding a person’s title and it should be unnecessary to go behind the registered title (the curtain). This prevents arguments regarding the root of a particular title and the requirement to trace ownership back to an original grant. Certainly, we can conclude that the provisions of Part 8 suggest that a fisher can be reasonably complacent regarding the security of his or her title as against other fishers and third parties knowing that the government will enforce the rules even-handedly and will compensate for any loss arising out of wrongdoing or fraud.

However, while quota might appear to be relatively strong when its vulnerability to third parties is considered, the same is not true with regards to government intervention. A practical example will help to illustrate the issue and the fact that assessed in the round, quota are not the secure rights predicted by the theory.

The 1990 changes to the QMS

An excellent example of governmental change of these rights occurred to the QMS in 1990. Under the original statutory structure adopted in 1986 quota rights were defined as a right to a specified tonnage of harvest in perpetuity. Each individual transferable quota under the Act enabled the holder to “take in total within the quota management area concerned in any year fish of the species or class shown in the quota up to the tonnage

shown in the quota”. In order to adjust the amount of quota available the government would enter the market as either a buyer or a seller. The government could sell more quota if stock assessments suggested that an increase in the commercial harvest was appropriate. If it was necessary to lower the commercial harvest (because the harvest exceeded what was thought to be sustainable) the government would buy quota rights from the fishers.

The rationale for this mechanism was threefold. Firstly, this approach was considered to provide certainty for the industry because the buy-back provisions would compensate for any loss fishers might suffer from a reduction in the total allowable catch. Secondly, it was presumed that the level at which the total allowable catch for each species had been set was understated. Policy makers also thought that better management would lead to larger stocks. As a result, because the Crown hoped there would be more fish overall, it was aiming to exact a revenue stream from the fixed tonnage approach as it would be able to sell more quota to fishers over time. Finally, quota trading in this way was supposed to provide the most accurate and effective way of obtaining the information necessary to set appropriate resource rentals (i.e. what fishers were to be charged to access the resource).

Overall, the goal was to create the incentives necessary to encourage fishers to fully harvest the total allowable catch. The fact that the government would essentially compensate fishers for any necessary reduction in harvest, via its involvement in the quota market, was considered crucial to the success of the system. This accorded with the general neoliberal economic theory underpinning the adoption of quota as a management tool and certainly

29 Section 28O(4) Fisheries Act 1983.
30 Lock and Leslie, above n 4, at 17.
31 Sharp, above n 23, at 197.
32 Lock and Leslie, above n 4, at 17.
34 Sharp, above n 23, at 198.
provided a “strong” element of security as the holder of the quota would know exactly what degree of resource use he or she could expect now and in the future (and the compensation they would receive if that changed).

However, in 1990 the Government was faced with the potential collapse of the orange roughy fishery and needed to vastly reduce the total allowable catch. This was going to cost an enormous amount of money and the Crown suddenly realised that it was carrying all the risk of uncertainty surrounding future catch limits. It also highlighted the potential political conflict inherent in the fact that the Minister was actively involved in the quota market, while at the same time administering changes in overall catch levels.

A new, and very different, system was devised and, as discussed in chapter nine the quota now conferred by the Act represent an entitlement to a certain amount of what is, in reality, a variable total catch. Section 42 states that quota is to be expressed in shares, each representing one hundred-millionth of the total allowable commercial catch for the stock. Section 20 states that the Minister must set the total allowable commercial catch for each stock and that he or she can vary this by either increasing or reducing it. Thus, quota shares actually only represent a certain percentage of the number of fish the Minister allows to be caught in any given period. Consequently, the actual number of fish a quota holder can catch in any year can go up or down, even though his or her percentage of the quota will remain the same. While the holder’s total percentage of the total allowable commercial catch will always remain unchanged, the total allowable commercial catch that can be

36 Lock and Leslie, above n 4, at 17.
landed by all quota holders may increase or reduce frequently. Indeed, s 20(3) expressly states that the Minister may set the total allowable commercial catch at zero.

The effect of this change was to shift the risk of any stock adjustment away from the government towards the industry. Any changes in the total allowable commercial catch are now spread evenly across all quota holders. If the total allowable commercial catch goes up the holders of quota enjoy this increase. Conversely if it decreases, they will all suffer the consequences (i.e. a reduced harvest) with no compensation.  

The change in 1990 suggests that the security of quota is not absolute. The move to a percentage based right inevitably led to an unavoidable tradeoff. On one hand, the quota as a percentage of the variable catch, like any potentially short term right, offers less security and marketability to individual fishers.  

Assessment

Assessed overall it appears that quota are not particularly secure. While the registration provisions in the Fisheries Act do provide a measure of protection for a quota holder in any dispute with third parties, quota are extremely vulnerable to governmental change. The reality is that although the security of quota may be enough to reassure its holder that their title is fairly secure as against other traders and third parties they may be much less sanguine regarding security against future government policies and changes to the regimes overall. It is difficult to maintain that quota truly provide the sort of absolute security anticipated by the theory. Beyond the risk that the regime as a whole may be subject to

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38 Sharp, above n 23, at 198. However, it should be noted that a degree of protection is afforded by s 22, which provides that where there is a reduction in the total allowable commercial catch and the Crown owns any unallocated quota shares these must be allocated to each quota holder in line with the proportion of shares they already hold.

significant change, there is always the very real risk that holding quota may be rendered otiose on an annual basis. Holding quota is all very well, but it is an illusory right if one has no entitlement to actually catch any fish.

C. Security of emissions units under the NZ ETS

In common with the QMS, much of an emissions unit’s security stems from a registry set up by the Climate Change Response Act 2002. Established by Part 2 of the Act, the New Zealand Emissions Unit Registry (“the registry”) provides the mechanism for identifying individuals and entities that hold emissions units and recording all dealings involving those units.  

The registry is defined very simply by s 4 of the Act as the registry established in New Zealand for the purposes as outlined in s 10. Section 10 notes that the registry has two primary purposes. The first is to allow for dealings with Kyoto units. The second is to provide for the issue of NZUs and to enable holding, transfer, surrender and cancellation of NZUs and AOUUs. The registry itself is established in accordance with s 18. It must exist in electronic form, be accessible via the Internet and operate at all times (unless suspended by the Registrar). By s 15 the Registrar must allocate a unique serial number to each unit. This enables the explicit identification of each emission unit operating within the NZ ETS.

Every participant in the NZ ETS must have a holding account in the register. This enables them to surrender units to meet their obligations or receive units if they are entitled (for example though participating in removal activities). It also enables the transfer of units between account holders. Account holding is not limited to participants

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41 See Climate Change Response Act 2002, ss 56 and 57 and Climate Change (Unit Register) Regulations 2008, reg 3.
42 For example, if they have undertaken any removal activities.
in the NZ ETS. The scheme is designed to allow a range of secondary participants to trade within the market. These participants may include individuals, brokers, banks and commodity traders.\textsuperscript{43} In order to be eligible to open a holding account one must apply to the Registrar under s 18A and be a “qualified person” under the Climate Change (Unit Register) Regulations 2008.\textsuperscript{44} While the Act appears to give the Registrar some discretion about whether to open a holding account for a particular person, it is likely the Registrar will always do so where the applicant meets the eligibility requirements.\textsuperscript{45}

The transfer of units is governed by s 18C. Account holders can apply to the Registrar through the registry’s internet site specifying the type and number of units they wish to transfer and to which account (or overseas registry) they are to be transferred.\textsuperscript{46} Subject to certain restrictions\textsuperscript{47} the Registrar must transfer the specified emissions units as requested (s 18C(2)). By s 20 each transfer must be registered on the register and only takes effect when registered (s 22(1)). A transaction is not registered until the Registrar assigns a registration number, date and time to the transaction and enters those particulars in the register.

Clearly, the way in which the registry operates is not dissimilar to the register created under the Fisheries Act 1996 for quota and, to some extent, the register of land under the Land Transfer Act 1952. However, there are some interesting and important differences that

\textsuperscript{43} Alastair Cameron “Corporate and Commercial Issues” in Alastair Cameron (ed) \textit{Climate Change Law and Policy in New Zealand} (Lexis NZ Limited, Wellington, 2011) as 412.

\textsuperscript{44} These include: NZ ETS participants, individuals who are entitled to a free allocation of New Zealand units, any person who is over 18 years old and meets specified “fit and proper person” requirements, any New Zealand entity (established in accordance with the laws of New Zealand), any Australian company, and foreign based company registered in New Zealand under the Companies Act 1993 (see Alastair Cameron “New Zealand Emissions Trading Scheme” in Alastair Cameron (ed) \textit{Climate Change Law and Policy in New Zealand} (Lexis NZ Limited, Wellington, 2011) at 265).

\textsuperscript{45} At 266.

\textsuperscript{46} Climate Change Response Act 2002, s 18C and Climate Change (Unit Register) Regulations 2008, reg 7.

\textsuperscript{47} Discussed in relation to transferability in chapter eight at II.
suggest the security of title to emission units is significantly weaker than that provided under the quota and land registers.

For example, unlike the registers established for land and quota, it is not possible to register either a mortgage or a caveat against the emissions units held in an individual’s account. Rather, the approach taken in establishing the NZ ETS was to enable the use of emissions units as security by including them within the schemes set up under other Acts. Consequently, although the registry itself does not provide for the recording of interests, in line with the desire to establish a functioning market in emission units the NZ ETS does provide a degree of security to those who are asked to lend money which is secured against emissions units. These protections are provided by ancillary legislation that was passed to clarify the status of emissions units under both general securities law and personal property securities law. Most relevant from the point of view of security of title were amendments made to the Personal Property Securities Act 1999 (“PPSA”).

These amendments included provisions that extend the general procedure for the creation and registration of security interests in personal property to security interests over emissions units. Consequently, it is possible to obtain a security interest over emissions units by following the requirements of the PPSA with regard to security agreements and perfection. The PPSA also provides some protection to bona fide purchasers of

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48 The Securities Act 1978 was also amended to state that offers of emissions units to the public would not be subject to the restrictions that Act places on offers of securities to the public. This was accomplished by including “emissions units” in the definition of “chattel” under the Securities Act which are not affected by restrictions on offers of securities to the public. See Securities Act 1978, s 2.

49 In relation to emission units, perfection is achieved once the secured party has possession. Section 18(1A) of the PPSA specifies that a lender takes possession of emissions units by having its name recorded in the debtor’s registry account as the possessor of the units in that account. This occurs with the consent of the account holder (Climate Change (Unit Register) Regulations 2008, reg 18(4)). Once the lender is recorded as the possessor of the units the debtor cannot transfer any units out of the account without the lender’s consent (Climate Change (Unit Register) Regulations 2008, reg 19). Although the lender is recorded as the possessor of the units, it does not itself have any power to use the holding account for the purposes of making a transaction (Climate Change (Unit Register) Regulations 2008, reg 19). Thus, a lender’s security is
emissions units for value and without notice of a perfected security interest. This means that by virtue of s 97 of the PPSA, a purchaser of emissions units who takes possession, for value and without knowledge, has priority over a perfected security interest. Section 18(1A)(d) of the PPSA makes it clear that possession occurs when the purchaser of the emissions units is recorded in the registry as the holder of those units.

Consequently, the Climate Change Response Act provides a mechanism to protect those who wish to lend money to the holder of an emissions unit. This is important for the proper functioning of the market. It also suggests that emissions units must be sufficiently secure to underpin the effective operation of the market. However, because there is no ability to caveat the title to an emission unit, the Climate Change Response Act provides no protection to a person who acquires an interest in an emissions unit but is unable, or not entitled, to become the holder of the unit itself, or where there is a gap between the point at which a person acquires an interest and when the transfer can be registered. Exactly when an interest would arise is unclear. If emissions units are not covered by the limited to their rights of enforcement under Part 9 of the PPSA, which deals with the enforcement of securities (see Cameron, above n 43, at 444).

This was achieved by amending the definition of an “investment security” under s 16(1). See Personal Property Securities Act 1999, s 16 definition of “investment security” (a)(ii).

The goal of s 97 is to facilitate the ready transferability of “investment securities”. The PPSA allows for certain instruments that have traditionally been regarded as negotiable and some other types of personal property that has a similar character to retain that quality (see Barry Allan Guidebook to New Zealand Personal Property Securities Law (CCH New Zealand, Auckland, 2002) at 6.18). Essentially, the Act provides a range of exceptions to the nemo dat rule by providing special priority rules for various classes of monetary obligations (or negotiable collateral): accounts recoverable, chattel paper, investment securities or negotiable instruments. Section 97 deals with investment securities. As Gedye, Cumming and Wood note, in common with money and negotiable instruments “… a security interest in an investment security may be perfect by registration, or possession or temporary perfection. However, it is commercially unacceptable to require ordinary course transferees of investment security to search Personal Property Securities Register before acquiring an investment security”. Section 97 has the effect of giving priority to a transferee of an investment security who has acquired possession of it for value and without knowledge (which is further defied in s 97(2)). See Michael Gedye, Ronald CC Cumming, and Roderick J Wood Personal Property Securities in New Zealand (Brookers Limited, Wellington, 2002) at: 16.1.28, 16.1.52, 19.4, 97.1, 98.1 and 98.4. Thus, if a person purchases a negotiable instrument such as an “investment security” he or she will usually have a claim that is superior to any previously perfected security interest (Barry Allan Guidebook to New Zealand Personal Property Securities Law, at 6.18).

See Gedye, Cumming, and Wood, above 51, at 18.2. However, because a perfected security interest in an emissions unit requires the lender to be recorded as the possessor of the units, and means the units cannot be transferred without the lenders’ consent, this is unlikely to be a problem in practice.
Sale of Goods Act\textsuperscript{53} the matter would depend on when title (perhaps to a chose in action) is considered to pass under the common law (both of which raise interesting questions it is unnecessary to determine here). Certainly, we can speculate that there may well be circumstances when issues of this nature arise. Resolving them may be complicated.

On a related note, the Climate Change Response Act provides no protection to the holder of an emission unit who is deprived of their interest through the dishonest behaviour of others, for example through fraud or theft.

These points also suggest that given the design of the scheme and its reliance on computer technology the holder of an emissions unit might be quite vulnerable in some important respects. Section 25 of the Act does provide for corrections to be made to the registry in the event of an error or mistake by the Registrar. However, s 30A expressly states that the Crown or Registrar is not liable for any loss arising from any inaccuracy in a search of the register or an inaccurate entry or omission in the register arising from “reasonable reliance on information received from”, among other sources, an overseas registry, a third party, or the account holder.

Furthermore, in contrast to both the Fisheries Act 1996\textsuperscript{54} and the Land Transfer Act 1952\textsuperscript{55} there is no Crown guarantee of title under the Act. Consequently, there is no provision for account holders to be compensated for any loss arising from fraud. This is not an insignificant issue from a security point of view and has already become an issue for emissions trading regimes overseas. For example, in early 2010 hundreds of thousands of carbon trading units were “stolen” from European account holders under the European

\textsuperscript{53} Section 2 of the Sale of Goods Act 1908 defines “goods” as including “all chattels personal other than money or choses in action”. It is arguable that emissions units are best described as a form of chose in action which would take them outside the ambit of that Act.

\textsuperscript{54} Fisheries Act 1996, s 173.

\textsuperscript{55} Land Transfer Act 1952, s 172(b).
Union Emissions Trading Scheme (EU ETS) by fraudsters who duped companies into giving their details via a fake website.\textsuperscript{56}

\textsuperscript{56} Felicity Carus “Carbon Trading Fraudsters Steal Permits Worth £2.7m in ‘Phishing’ Scam” The Guardian (online ed, London, 4 February 2010). Account holders in the NZ ETS were also targeted. See Cameron, above n 43. At 405. The value of the fraudulently acquired permits was approximately €3m and at least one reported case arose out of the episode: Armstrong DLW GMBH v Winnington Networks Ltd [2012] 3 All ER 425. This case involved a question regarding liability for loss suffered as the result of a trade involving stolen carbon credits worth over €250,000. In essence, the fraudsters had used a fraudulent email to obtain the username and password to Armstrong’s account in the German Greenhouse Gas Emissions Trading Registry. The fraudsters then approached another company (Winnington Ltd) and sold the credits to them, duly transferring the units into Winnington’s account at the UK Greenhouse Gas Emissions Trading Registry. Winnington, who it was accepted was not a party to the fraud, traded them onto another party on the same day. At issue in the case was which of the two parties (Armstrong or Winnington) should bear the loss of the fraud perpetrated by the third party.

The case is particularly useful as it demonstrates some of the difficulties that might arise in solving these sorts of disputes, especially where the legislation provides no protection or guidance. One thing that is abundantly clear is that the law of property will play a decisive role. It is very clear from the judgment in Armstrong that the court approached the issue on classic property law grounds. When discussing the relevant legal principles the judge began by noting that “The legal question at the heart of this dispute is as follows. If B steals A’s property and sells it to C, does A have a claim against C for the property or its value, and if so, what is the legal basis of A’s claim and what defences, if any, does C have to such a claim” (at [28]). Moreover, while it was accepted by all parties that “European Union Allowances” (EUAs) were a property right, there was a dispute over their precise nature and characterisation. In particular, the defendant (Winnington) argued that, while they were property, they were not a type of property that the common law protects by a relevant cause of action (at [40]). This submission was the subject of a great deal of argument about the fact that EUAs were a creature of European legislation and only existed in electronic form and that, as a result, they did not fit neatly into one of the recognised categories of personal property. While the details of this argument are not relevant for our purposes, eventually, the judge decided that EUAs were best classified as “intangible property” (at [61]). This opened the door to a discussion of the law of restitution and the law of trusts, and enabled the judge to conclude the case in Armstrong’s favour by holding that either:

1. The fraudster had become a constructive trustee of the EUAs in question, and that Winnington’s degree of knowledge (in particular as a result of deficient behaviour in assessing client due diligence information) was enough to make their receipt of the EUAs unconscionable; or
2. If beneficial and legal title to the EUAs had not been separated, Winnington was sufficiently on notice of potential fraud as to be liable for a claim for proprietary restitution (at [273] – [289]).

In addition to demonstrating the importance of the general common law of property (and equity) in resolving this sort of dispute, the case also illustrates that the way in which the legislation is structured can have a profound effect on the overall security of the right. There is nothing in the way that emissions units in the NZ ETS are structured that would prevent a similar case from arising here.

We can speculate that there are some very good reasons for this from the Crown’s point of view, although there does not appear to be any discussion of the point in the literature. If we were to apply the compensation provisions of the Fisheries Act 1996 to Armstrong v Winnington we can see some of the complications. Firstly, because each European Union nation is responsible for setting up its own domestic trading scheme (with fungibility of units across different national schemes) you might have the Crown in right of the United Kingdom having to compensate for a fraud perpetrated in the Federal Republic of Germany. Similar problems might arise in New Zealand if the fraud involved the transfer of Kyoto units out of, or into, the country. Secondly, the Crown is unlikely to be willing to guarantee title under a system where an unspecified number of units can be both entering the system from overseas and leaving again. The level of contingent risk would be impossible to calculate. Thirdly, there might almost always be a major issue with contributory negligence given the security surrounding access to holding accounts and the responsibilities of account holder in relation to user names and passwords (for example Armstrong should probably have protected itself against falling victim to a fraudulent email). (See the “security reminder” on the front page of the New Zealand Emissions Unit Register webpage: \langle www.eur.govt.nz \rangle).

Regardless of the precise reasons for the Crown forbearing to guarantee title to emissions units we can observe that any disputes that do arise regarding the quality and security of title to emissions units in the
Moreover, although some purchasers for value without knowledge have priority over perfected security interests under the operation of the PPSA, the Climate Change Response Act itself does not protect purchasers for value without notice of emissions units that have been dishonestly acquired. One cannot rely on the register for emissions units in the same way one can for land or quota. Where the costs will fall, and who gets to keep the units, will be a matter for resolution though the courts. In a scheme where a participant is likely to have to replace units in order to meet its obligations under the scheme (in addition to having lost title to the original units) the costs could be enormous. Of course, these risks are not necessarily any greater than those that accompany other types of property holdings not guaranteed by the Crown. Indeed, much of the law of property is aimed at solving these sorts of disputes and the lack of a Crown guarantee is not fatal to the operation of emissions units or the market in which they are traded.

Although the structure of the NZ ETS is somewhat similar to the QMS, these points indicate that the security of title to emission units provided by the scheme is significantly less than for quota. While the presence of the register and the provisions for taking security interests in emissions units does suggest that they have a degree of security inter partes, it is also necessary to consider how vulnerable emissions units are to changes in governmental policy. Some practical examples help to illustrate that on this test, emissions units are extremely vulnerable.

NZ ETS will involve very complicated questions under doctrines of the laws of property, equity and restitution. In particular, it is likely to raise very interesting issues surrounding the application of the nemo dat rule.

While the treatment of emissions units may simply reflect the general law’s tendency to extend a lesser degree of security to goods than to land (see Gedye, Cumming and Wood, above n 51, at Intro.3), this still does not explain why there is a distinction between quota and emissions units.
New Zealand’s withdrawal from the Kyoto Protocol and its impact on the NZ ETS

In many respects the holder of an emissions unit has much more to worry about than his or her fishing counterpart. Not only must he or she be concerned about changes in domestic policy, but there is also the risk of radical change to international climate change policy.

The history of the NZ ETS demonstrates that this risk is very real. An early commentator confidently predicted that there was unlikely to be any dramatic changes to New Zealand’s commitment to, and obligations under the Kyoto Protocol. This opinion was bolstered by the then increasing pressure that was being placed on the United States and other major developing countries to accept restrictions on emissions levels. At that stage “… withdrawal from the Protocol [was] considered politically infeasible because such action lack[ed] sufficient domestic support and would damage New Zealand’s reputation in the international community”. However, history has proven this confidence to be misplaced. On 9 November 2012 the New Zealand government announced that it would not be signing up for a second commitment under the Kyoto Protocol. Rather, it intends to pledge to reduce greenhouse gas emissions under the Convention only. The difference is that Protocol targets are legally binding while Convention ones are not. As the Minister noted when defending the decision in the New Zealand Herald:

When Kyoto was signed, developed countries accounted for nearly 60 per cent of global emissions. But it took a body blow right at the start. On July 25, 1997 Ted Kennedy and John Kerry (the next Secretary of State), along with 93 other Republican and Democrat senators voted the treaty down 95-0. I call that pretty

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59 At 918.
60 Tim Groser, Climate Change Minister “New Zealand Commits to UN Framework Convention” (press release, 9 November 2012).
decisive. Today, the countries that are prepared to do a second Kyoto commitment for the period beyond 2012 account for some 14 per cent of global emissions. In a few years time 90 per cent of emissions will be outside Kyoto. The unrelenting emphasis on "Kyoto, Kyoto, Kyoto" has sucked the political energy out of the negotiations, diverting attention from the real problem. It is time to move beyond Kyoto and find a solution that can have a real environmental impact.

Clearly, decisions around how New Zealand contributes to international efforts to reduce the emission of greenhouse gases are extremely political and subject to change over time. Moreover, although it is clear from the Minister’s statement that New Zealand intends to consider how much of a reduction it might commit to unilaterally, it is unclear when this decision might be made. In the meantime, the Minister notes, they “will be active internationally in the formal UN negotiating system and elsewhere”.

Of course, decisions regarding New Zealand’s participation in international climate change efforts do not directly affect the security associated with holding an emissions unit. However, the flow on effects of such decisions can have a profound on the quality and security of the right. For example, on 6 December 2013 the Acting Minister for Climate Change Issues announced that:

Decisions in the international climate change negotiations in Doha last year, including restrictions on New Zealand’s ability to trade any international Kyoto units after 2015, and the lack of action on international markets at the recent Warsaw negotiations, have contributed to uncertainties within Kyoto markets ... These conditions make it preferable for our ETS to operate with restricted access to these markets for the time being.

At the same time the Acting Minister also announced a decision regarding the use of Kyoto units in the NZ ETS after May 2015. In essence, participants may continue to use CERs, EURs, and RMUs to account for their surrender obligations up until 31 May 2015. After this date these units will not be eligible for surrender and participants will only be

64 Simon Bridges, Acting Minister for Climate Change Issues “Decisions on Kyoto Protocol Emissions Units” (press release, 6 December 2013).
able to surrender NZUs to meet their obligations. What the Acting Minister’s press statement does not mention, but is noted in the advice provided by the Environmental Protection Authority, is that:

When international carry-over is imposed by the UNFCCC (at some point in late 2015 – 2016), all Kyoto Protocol units remaining in non-Crown accounts in the NZEUR will be cancelled with the exception of NZ-AAUs, which will automatically be carried over to the next commitment period … These changes brought about by the Government’s announcement mean the ETS will essentially operate as a domestic scheme from 1 June 2015 onwards, pending further developments.

The fact that any Kyoto units remaining in participants’ accounts will be cancelled tends to suggest not only that the political decision making regarding the NZ ETS can have a profound effect on the utility of emission units but also that the quality and security of title to emissions units is particularly vulnerable to changes in governmental policy. It is notable that there is no mention in any available advice regarding compensation for the cancellation of these units (although the necessary amendments to legislation and regulation have not been promulgated.)

In addition to being evident in relation to the Kyoto units employed by the regime, we can also see the vulnerability of emissions units in relation to NZUs. For example, to the extent the NZ ETS adopts a “cap” on emissions, this has been dictated by New Zealand’s commitments under the Kyoto Protocol. Until 1 January 2013 the Climate Change Response Act provided that the government must hold an equal number of Kyoto units to the number of NZUs issued. This meant that there was a loose association between the number of NZUs allocated under s 68 and Kyoto units held by the Crown.

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65 Although they will continue to be able to use NZ AAUs beyond May 2015 (Bridges, above n 64).
67 See s 86F(1). This was repealed as from 1 January 2013, by s 39 Climate Change Response (Emissions Trading and Other Matters) Amendment Act 2012.
68 As Cameron notes the backing was “loose” in two senses:
obligation placed a financial constraint on the number of NZUs issued because if the
Crown issued more than it held it would have to source the balance on the international
market. It was also useful in promoting a meaningful cap as it ensured that New Zealand’s
own domestic unit of trade did not exceed New Zealand’s total liabilities under the
Protocol. Any units imported from overseas would reflect reductions achieved via the
flexibility mechanisms and made elsewhere. It also provided a degree of certainty for the
market as it was clear the Crown would face some constraints in its allocation of NZUs.
However, in line with New Zealand’s decision not to commit to a second Kyoto Protocol
period and the repeal of s 86F(1) there is no longer any requirement in the Climate Change
Response Act for NZUs to be backed by Kyoto units. Indeed, as noted above, the changes
announced to the NZ ETS on 6 December 2013 indicate that “the ETS will essentially
operate as a domestic scheme from 1 June 2015 onwards”.

Decoupling the NZ ETS from the Kyoto protocol means that any correlation between the
Crown’s holding of Kyoto units and NZUs will evaporate. This is reinforced by the
provisions enabling the issue of NZUs. In directing the Registrar to issue New Zealand
units into a Crown holding account the Minister must only have regard to:

1. New Zealand’s annual emission for the five years prior to the year of the
direction;

2. The most recent review of the operation of the emissions trading scheme
undertaken in accordance with s 160;

1. It is expressed in the aggregate rather than requiring each NZU to be attached to a specific
Kyoto unit.
2. The obligation to hold an equal number of Kyoto units did not arise until the end of the Kyoto
“true up” period by which time the Crown ought to have received removal emissions units for
forestry activities (see Cameron, above n 44, at 274).

69 Environmental Protection Agency, above n 66.
70 Climate Change Response Act 2002, s 68(2)(c).
3. New Zealand’s obligations under the Convention (if any);

4. New Zealand’s anticipated future international obligations.

The requirement to simply “have regard to” these matters suggests that the Minister has a very wide discretion to allocate NZUs. In the absence of a commitment by New Zealand to particular emissions goals it also injects a large degree of uncertainty into the number of NZUs that might be allocated in the future. In turn, this introduces a level of ambiguity to the market in general. Either the Minister will make decisions which limit the number of NZUs in circulation creating an inflexible cap, or the Minister will choose to issue more NZUs. This could have the effect of increasing the liquidity of the market in order to achieve political goals such as keeping the cost of emissions in New Zealand comparable to other countries internationally or to make it comparatively cheaper. One can speculate that it is unlikely the Crown will limit the number of NZUs in circulation so as to make it more expensive to emit in New Zealand than overseas.

Regardless of what decisions are taken, each would have an impact on the value and security of the property right inherent in an emissions unit and may impact on the efficacy of the scheme overall. It also tends to suggest that if New Zealand fails or is unclear in precisely what level of emissions reductions it is aiming for over the foreseeable future it may end up operating a “cap-and-trade” system with no cap. This would make the likelihood it will have any meaningful impact on overall emissions very low.

These sorts of changes to the international system and New Zealand’s participation in it should come as no surprise. Global attempts to address climate change are ambitious and coordinating so many different variables is a massive task. Indeed, even the Framework for a
New Zealand Emissions Trading Scheme published by the Ministry for the Environment and The Treasury in 2007 and outlining the basic design of the NZ ETS, anticipated that New Zealand may not continue as a participant in Kyoto:

If there was no successor agreement to Kyoto but an international market for emissions continues to operate, the government could continue to issue NZUs at an agreed level and establish domestic rules for the trading of international units meeting sufficient quality standards. Conversely, if there was no successor agreement to Kyoto and no international market for emissions to which New Zealand wishes to link, the government could maintain the ETS by auctioning NZUs, and could use a price cap to mitigate the price risks associated with a domestic-only trading scheme. This would ensure that New Zealand participants in the NZ ETS continued to face a cost of emissions in their business decisions, and to reduce the price uncertainty they faced … At a more fundamental level, it is possible that the international framework post-2012 could resemble more of a tax than an ETS. If this were the case, and given the objective of meeting New Zealand’s international obligations at least cost in the long run, it would be appropriate to consider whether a tax-based system rather than an ETS were more appropriate. As we have seen, many of the building blocks for developing an ETS are the same as those for developing a tax-based system. In summary, therefore, it is important (and very possible) to ensure that any NZ ETS is adaptable to future changes in international arrangements.

These comments demonstrate two points. The first is that the NZ ETS, like the QMS is very vulnerable to changes in government policy. This is particularly important given the international context of the NZ ETS and the political difficulties there have been in reaching a consensus of approach. The second point is that from its very inception the NZ ETS has been extremely vulnerable to change and the possibility it would either be abandoned or changed in a significant way.

Assessment

As with quota, emissions units appear to have a degree of security in relation to the transactions that may occur between parties. A limited number of protections flow from

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72 At 56.
the fact that they must be registered. Moreover, although not as secure in this respect as quota, case law suggests that that the general law of property will provide a degree of security (or at least a resolution grounded in doctrine and precedent) when something goes wrong. However, on the other measure of security, emissions units are extremely vulnerable. In my view it is impossible to argue that an emission unit is an absolute right because it can (and has) been changed quite significantly. Moreover as the recently announced changes indicate, it can be further modified or abandoned at any time without compensation. It is also extremely dependent on decisions regarding New Zealand’s international obligations and how they will be discharged. New Zealand’s approach is changing rapidly over time and is influenced by a very wide range of factors over which participants in the NZ ETS have little control. This changing landscape is unlikely to stop any time soon. All of these factors combined indicate that the quality or security of title to an emissions unit is not as strong as the theory would predict.

D. Overall assessment of the security of these rights

In assessing the security or quality of the title bestowed on quota and emissions units, it is clear that they are secure in some respects. Certainly, in relation to disputes between the right holders and third parties each regime provides different, although uncontroversial, approaches to the normal sorts of private property law issues that can arise. Each right is recorded in a register that addresses the central preoccupation of property law regarding the resolution of disputes over title. While there can still be arguments over who holds a particular right, or whether it has been validly transferred, the relevant Act addresses these issues. Both regimes adopt solutions to the problem of “bona fide purchasers for value” and fraud but it is interesting to note that the effect of the Fisheries Act 1996 is to confer on quota a degree of security that emissions units lack. In contrast, emissions units fall back on the common law approach to property disputes. However, there are some good
reasons for the differences between the regimes in this respect and this serves to further illustrate that private property is a flexible and contextual institution that can mould itself to the relevant circumstances. Overall, however, it seems clear that both quota and emissions units confer some degree of quality or security of title, at least *inter partes*.

However, the reality is that in assessing the strength of a right it is also necessary to consider how vulnerable they are to governmental change. On this measure it is clear that in relation to both regimes there is nothing at all to prevent inconsistent government policies being adopted over time. Governments can revise the regimes at any time; and they have done so. In the 1990 changes to the QMS we saw the government deprive quota holders of their property and the proposed changes to the treatment of Kyoto units under the NZ ETS will also have the effect of depriving the holders of those emissions units of their property. Consequently, when we assess the security of title to these rights we see a right that is secure to a certain extent, but is very vulnerable to the vicissitudes of government policy. It is also probably fair to say that each right appears more vulnerable than some other types of private property holding; especially land.

When assessed in the round, although quota and emissions units are afforded (differing) degrees of protection for disputes *inter partes* their comparative vulnerability to significant change at the whim of Parliament makes it clear that their security is insufficient to meet the requirements of a “strong” property right as anticipated by the theory. The rights are obviously not absolute and compensation is generally not available for any changes to the right. Moreover, the changes to each system over time suggest that the property right

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74 See for example the protections afforded to the confiscation of land for a public work under the Public Works Act. In order to confiscate land for the purpose of rebuilding central Christchurch following the 2010-2011 earthquakes it was necessary for Parliament to pass special legislation. See the Canterbury Earthquake Recovery Act 2011.
inherent in quota and emissions units is limited by community interests. I develop this point in chapter eleven.

II. Duration

Duration is closely related to the question of security or quality of title and simply refers to the length of time that a property right allows its holder to exercise powers over the resource. However, there are two ways in which duration can be measured. It may simply refer to the length of time before a particular holder’s entitlement lapses. Equally, it can be measured as the period during which the right, its rules and specifications will not be changed.\(^75\) Both quota and emissions units are theoretically infinite on the first measure, but significantly limited on the second.

A. QMS

Under the Fisheries Act 1996 quota is theoretically held in perpetuity. This was originally made explicit in the now repealed s 27, which stated that quota was “to be allocated in perpetuity in a manner permitted by this Act”. Notwithstanding the repeal of s 27 this idea remains implicit in the structure of the Fisheries Act.\(^76\)

\(^{75}\) Scott, above n 28, at 179.

\(^{76}\) This section stated that:

(1) Individual transferable quota for any stock has the following general characteristics:

(a) It is to be allocated in perpetuity in a manner permitted by this Act:

(b) It perpetually generates a right to receive an annual catch entitlement for that stock in the applicable quota management area:

(c) It is to be expressed as quota shares, and each quota share represents an equal proportion of the total allowable commercial catch for the stock:

(d) It may be traded in any manner permitted by this Act:

(e) It may be secured in any manner permitted by this Act:

(f) It may be caveated in any manner permitted by this Act:

(g) Each person’s holding is liable to be increased or decreased as a consequence of appeals against provisional catch history or the transfer of quota by the Crown under section 22 or section 23 or section 52 of this Act:

(h) It is liable to be forfeit for contravention of aggregation limits or foreign ownership constraints, or on conviction for any offence referred to in section 255(4) of this Act:

(i) It may be cancelled and reallocated to give effect to an alteration to quota management areas:
However, although the Fisheries Act ostensibly grants a perpetual right to quota, when closely considered this permanence is an illusion. The quota rights conferred by the Fisheries Act convey an entitlement to a certain amount of what is, in reality, a variable total catch. The ability of the Minister to adjust the overall catch, including the ability to set that catch at zero (s 20(3)), has a profound impact on the duration of quota. It is difficult to see how a right can be perpetual when it is at risk of being rendered otiose on an annual basis. If the catch is set at zero per cent, the quota will also be zero. While this is an extreme example, and unlikely to occur in practice, the evidence suggests that, in aggregate, the total allowable commercial catch available to commercial fishers under the QMS has fallen since 1998.\textsuperscript{77} This indicates that a quota holder’s entitlement to take fish can, and will, change over time. This is appropriate in light of the Fisheries Act’s structure and it is obviously necessary to achieve the Fisheries Act’s central purpose of providing for the utilisation of fisheries resources while ensuring sustainability.

However, it does mean that the perpetual nature of quota under the Fisheries Act is in many respects a misnomer. If the Fisheries Act truly provided for an indefinite duration we would expect to see a permanent right to catch a specified amount of fish. This would be a “strong” property right in the sense that fishers would know exactly what degree of resource use they could expect now and in the future, or the level of compensation they would receive in the case of any change. Indeed, this was effectively how the QMS was designed in the first instance. Under the original statutory structure adopted in 1986 quota rights were defined as a perpetual right to take a specified tonnage of fish each year.

\footnote{(j) In the case of quota for squid, the quota may be subject to a method restriction. The Parliamentary record does not disclose the precise reason for repeal of this section. Notwithstanding its repeal it is generally accepted that quota retains the same basic characteristics see Richard Barnes Property Rights and Natural Resources (Hart Publishing, Oxford and Portland (Oregon), 2009) at 359 and Sharp, above n 23, at 197.}{\textsuperscript{77} Sharp, above n 23, at 197.}
However, this was changed in 1990 and the current structure gives the Minister the ability to manipulate pressure on the stock. This is consistent with the need for management that can respond to both changing social expectations and information regarding fish stocks, however, it comes at the expense of a truly perpetual and enduring property right.

Moreover, leaving aside the ability of Parliament to adjust the regime at any time, the Minister also has explicit power to intervene at any time in order to change the rules surrounding how and when fish are caught or many other matters that may impact on the effective duration of the quota right itself. Again, this indicates that the question of duration is opaque. We can say that quota is supposedly permanent, but in reality the whole QMS is effectively subject to the chance of change at any time. Of course, this fact is not peculiar to instruments such as quota. As noted above, all property holdings are subject to modification by Parliament subject only to convention and political reality. However, the fact that the QMS has undergone extensive amendment since its introduction indicates that this is not an insignificant risk in relation to this particular example of private property.

Consequently, while it is difficult to assess the strength of duration as a characteristic of quota, it is clearly vulnerable in the two respects outlined, which indicates that quota is certainly not the “strong” property right demanded by the theory. In reality, we see a relatively weak form of duration. The right can be easily adjusted and this is an important, perhaps crucial, aspect of the regime.

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79 For example, s 92 indicates that a range of conditions that can be imposed under the permit fishers must have in order to actually fish. These have the potential to limit when and how quota rights can be exercised.
B. NZ ETS

Similar observations are true regarding the duration of emission units under the NZ ETS. This is also complicated by the fact there are currently a range of different units that can be traded within the scheme. While some of these are theoretically perpetual, others are designed to have a limited life span.

In considering the length of time before an emission unit holder’s entitlement lapses it is necessary to look at each different unit in turn:

NZUs

Although not explicitly addressed in the Climate Change Response Act, NZUs appear to be perpetual. Once issued by the Crown under s 68 they do not expire and can be surrendered to discharge obligations at any time. Their utility only ends (for want of a better phrase) when they are surrendered to meet a participant’s obligations or are otherwise cancelled or retired in accordance with the Climate Change Response Act.\(^{80}\) As Cameron notes, because they have no “specific vintage” holders of NZUs can make decisions in light of long-term projections regarding the behaviour of the market.\(^{81}\)

Kyoto units

As with NZUs the Climate Change Response Act does not directly address the duration of Kyoto units. This reflects the fact that these units are creatures of the Protocol; they are not created by the Climate Change Response Act itself. It is further complicated by the

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\(^{80}\) It is interesting to note that, in theory at least, they continue to exist on the register after surrender or cancellation, although they are recorded in specialist account held by the Crown (see s 7). Section 18C4(1) indicates that, if transferred to a “cancellation account” they may not be further transferred, retired, surrendered, carried-over or cancelled. Section 18CA(4) indicates that if transferred to a “surrender account” they may only be further transferred in accordance with an order from the Environmental Protection Agency under s 124 in the event a reimbursement is necessary.

\(^{81}\) Cameron, above n 43, at 414
fact that recent announcements have made it clear that, as of 1 June 2015, it will not be possible to use Kyoto units within the NZ ETS. However, as of the date this thesis was submitted the necessary legislative amendments have not been passed. Consequently, it remains necessary to consider the Protocol and supporting documents in order to determine the duration of Kyoto units in addition to the effect proposed changes will have on this type of emissions unit.

The duration of Kyoto units is intimately linked to the “carry over” provisions of the Protocol. Carry over allows for a Kyoto unit that was issued for one commitment period to become valid for a subsequent commitment period. In summary, the relevant rule states that Parties who have discharged all of their obligations for an earlier commitment period (including retiring sufficient units to meet their commitments under the Protocol) may carry over to the subsequent commitment period:

a) Any AAU held in the Party’s national registry that has not been retired or cancelled.

b) Any CER held in the Party’s national registry that has not been retired or cancelled to a maximum of 2.5 per cent of the assigned amount allocated to the party (i.e. 2.5 per cent of the party’s total Kyoto commitment for that commitment period).

c) Any ERU held in the Party’s national registry that has not been retired or cancelled to a maximum of 2.5 per cent of the assigned amount allocated to the party.

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82 As discussed above in relation to quality of title at I.
84 Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol FCCC/KP/CMP/2005/8 Decision 13/CMP.1 (2005) Annex at [15], [16] and [49].
d) RMUs may not be carried over.\textsuperscript{85}

Other Kyoto rules specify that any CERs or ERUs that remain in a national registry and exceed the 2.5 per cent threshold must be cancelled.\textsuperscript{86} It appears that adoption of this rule was driven by concerns that excessive carry over (or “banking”) from one period to the next could discourage Annex 1 countries from reducing emissions at home and instead let them rely on large numbers of CERs or ERUs for future commitment periods.\textsuperscript{87} Of course, there remains a problem because Annex 1 countries can still use CERs or ERUs in preference to their AAUs, carrying over AAUs and banking large numbers for future use.

In light of this rule we can conclude that AAUs have no vintage and can be used during any Kyoto commitment period.\textsuperscript{88} This conclusion is supported by the fact that under the recently announced changes to the NZ ETA participants will continue to be able to surrender New Zealand issued AAUs to discharge their obligations.\textsuperscript{89} Until recently, however, it has been much more difficult to assess the duration of CERs and ERUs. This

\textsuperscript{85} Note that for the purposes of simplicity this discussion does not consider the rules surrounding the duration of tCERs or ICERs, which are complicated. Briefly, however, under the NZ ETS they cannot be carried over (Climate Change Response Act 2002, s 16). By their nature tCERs and ICERs are valid only for a specific time. When they are first issued they are allocated an expiry date. While the Kyoto rules surrounding these units differ, in essence, a Kyoto party who holds one of these sorts of units is required to replace the tCER or ICER with another unit prior to the expiry date. For example, an expiring tCER may be replaced with an AAU (see United Nations Framework Convention on Climate Change, above n 83, at 79 and 84 – 85). Under the NZ ETS with the exception of the Crown, no participant my hold a ICER (Climate Change (Unit Register) Regulations 2008, reg 9). Participants are entitled to hold tCERS, but they are not able to use these to discharge their surrender obligations (Climate Change (Unit Register) Regulations 2008, reg 8). Consequently, for participants in the NZ ETS there may be an issue surrounding the precise duration of tCERS, but as these cannot be used for surrender purposes the only reason to hold them would be to participate in the secondary market. It is likely the only buyers would be overseas. This is unlikely to have an impact on the incentives underlying the NZ ETS or its overall efficacy.

\textsuperscript{86} See United Nations Framework Convention on Climate Change, above n 83, at 88 and the Data Exchange Standards for Registry Systems under the Kyoto Protocol rule 6.2.8.


\textsuperscript{88} This is also reinforced by Article 3.13 of the Protocol itself which states:

\begin{quote}
If the emissions of a Party included in Annex I in a commitment period are less than its assigned amount under this Article, this difference shall, on request of that Party, be added to the assigned amount for that Party for subsequent commitment periods.
\end{quote}

\textsuperscript{89} Environmental Protection Agency, above n 66.
is because it appeared that although some of these units were likely to endure beyond the end of the first commitment period, some might be cancelled.

The issue was complicated because it is not only the Crown who could hold CERs and ERUs. There are currently no restrictions on participants in the NZ ETS holding these types of units and they can trade them between each other and traders overseas. The Act also currently provides that participants in the NZ ETS may use CERs, ERUs, RMUs and New Zealand issued AAUs to meet their domestic obligations. In terms of carry over, s 16 of the Act provides the facility for an account holder to apply to the Registrar, subject to any regulations made under the Climate Change Response Act, to carry over AAUs, CERs, and ERUs. The Act, however, provides no guidance on what will govern decisions regarding whether units can be carried over or not.

Until recently, there was no guidance within either the Act or Regulations, on how to determine which of the CERs and ERUs which might persist beyond the first commitment period were to be carried over and which were to be cancelled. In particular, there was no guidance on how the Registrar is to distinguish between different account holders, who might lose out, and what, if any, loss the Crown will bear. Moreover, while it might have been implicit in s 16 that account holders must apply for Kyoto units to be carried over, there did not appear to be anything in the Act or Regulations indicating that a Kyoto unit which may have expired for the purposes of the Protocol could not continue to be used by a participant to discharge a domestic obligation.

That there might be some problems in relation to these units appears to have been recognised relatively late in the first commitment period. In October 2012 the government

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90 There are currently no relevant regulations promulgated.
announced that it was looking to clarify the domestic carry-over provisions in the NZ ETS. The Minister noted:\textsuperscript{91}

I have requested that officials look into the carry-over provisions and what needs to be done under the Act. Clarifying the rules for carry-over of international units would provide ETS participants with certainty about how the international carry-over rules will be applied domestically.

However, as discussed above, following New Zealand’s withdrawal from the Kyoto Protocol (providing the relevant legislation is promulgated) as of 1 June 2015 “… all Kyoto Protocol units remaining in non-Crown accounts in the NZEUR will be cancelled with the exception of NZ-AAUs, which will automatically be carried over to the next commitment period”.\textsuperscript{92}

It follows that, in reality, the duration of CERs and ERUs is severely limited, although this has not always been apparent. As of 1 June 2015 any of these units remaining in the NZ ETS (except in Crown held accounts) will be cancelled and they will cease to exist in any useful form. Prior to the Minister’s announcement the duration of the Kyoto units was potentially indefinite, however, it is now clear they only have a duration that aligns with the first commitment period. This has nothing to do with any intrinsic limit on the private property right itself. Rather, the end of these rights’ existence within the NZ ETS has been driven by political decision making. In December 2012 the United Nations Framework Convention on Climate Change amended the rules governing access to Kyoto units for the second commitment period of the Kyoto Protocol (1 January 2013 – 31 December 2019). The effect of these changes was that from 1 January 2013 only countries that have taken an emission limitation and reduction commitment under the Protocol’s second commitment are able to trade Kyoto units. New Zealand made the political decision to

\textsuperscript{91} Tim Groser, Climate Change Minister “Government to clarify use of international units in the ETS” (press release, 17 October 2012).
\textsuperscript{92} Environmental Protection Agency, above n 66 (emphasis added).
withdraw from the Kyoto protocol and so forfeited the right to participate in trading units such as CERs and ERUs. No compensation is currently being offered for any loss caused to NZ ETS participants as a consequence of this change.

The example of the treatment of Kyoto units under the NZ ETS also serves to illustrate that the duration of emissions units is subject to the very real prospect that the rules and specifications applying to the units will change. One consequence of New Zealand’s decision not to sign up for a second commitment period under the Protocol is that it will no longer have access to Kyoto markets after the end of the first commitment period “true up” period (which is likely to be at some point in January 2015).\(^93\) There has been concern about this almost from the beginning of the NZ ETS’s operation. These concerns are likely to have had an impact on the decisions made by participants in the NZ ETS. As Cameron noted in 2010: “With a second commitment period of the Kyoto Protocol in

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\(^93\) The relevant decision is Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol FCCC/KP/CMP/2012/L.9 Doha (2012) at [13] – [15]. The relevant sections read:

13. Clarifies also that for the purposes of the second commitment period, from 1 January 2013 onwards, a Party included in Annex I may continue to participate in ongoing project activities under Article 12 and in any project activities to be registered after 31 December 2012, but only a Party with a quantified emission limitation and reduction commitment inscribed in the third column of Annex B as contained in annex I to this decision shall be eligible to transfer and acquire certified emission reductions (CERs) in accordance with decision 3/CMP.1 and with paragraph 15 below;

14. Decide that a Party referred to in paragraphs 15 and 16 below shall be eligible to use CERs to contribute to compliance with part of its commitment under Article 3 of the Kyoto Protocol for the second commitment period upon the entry into force for that Party of the amendment contained in annex I to this decision and upon that Party meeting the requirements set out in paragraph 31 of the annex to decision 3/CMP.1;

15. Decide, with respect to joint implementation under Article 6 and emissions trading under Article 17 of the Kyoto Protocol, that:

(a) As of 1 January 2013, only a Party with a commitment inscribed in the third column of Annex B as contained in annex I to this decision whose eligibility has been established in accordance with the provisions of paragraph 3 of the annex to decision 11/CMP.1 in the first commitment period, shall be eligible to transfer and acquire CERs and assigned amount units (AAUs), emission reduction units (ERUs) and removal units (RMUs) valid for the second commitment period under Article 17 of the Kyoto Protocol, subject to the provisions of paragraph 3(b) of the annex to decision 11/CMP.1; (emphasis added)

The emphasised sections (and in particular paragraph 15) seem to indicate that only those parties that have made commitment will be able to transfer or acquire Kyoto units. This interpretation now appears to be confirmed by the announcement that, after 1 June 2015, participants in the NZ ETS will not be able to use most Kyoto units to discharge their obligations.
doubt, the market for Kyoto units beyond 2013 is also uncertain, which may lead holders of AAUs, ERUs and other Kyoto units to sell as soon as possible”.

Consequently, we can see that the rules and specifications relating to emissions units can change on both the particular level (in terms of how they operate) and on the general level (in terms of what they can actually be used for). Moreover, decisions are not limited to the sovereign who established the market. Members of the international community can collectively have an enormous impact on both the content of the right and what it can be used for. The decision of the United Nations Framework Convention on Climate Change is a stark example.

Overall, this suggests that, as with quota, the duration of an emissions unit, be it a NZU or a Kyoto unit is very difficult to assess and quite unpredictable. NZUs are theoretically perpetual but are clearly dependent on decisions surrounding the scheme’s operation. Having shifted to an “essentially … domestic scheme from 1 June 2015 onwards” there is also a clear the risk that the scheme will be abandoned. While Kyoto units were theoretically perpetual, that their duration will end on 1 June 2015. Clearly, in relation to each of the different types of emissions units under the NZ ETS none are absolutely perpetual in the manner we might expect from a strong property right.

Assessment

Assessed overall it would appear that both quota and emissions units do reflect perpetual rights in the sense anticipated by the theory. Thus, they may be taken to be strong rights on this measure. The QMS appears to treat quota as perpetual. The NZ ETS appears to take a similar (although somewhat less explicit) approach to emissions units. This accords

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94 Cameron, above n 43, at 414.
95 Environmental Protection Agency, above n 66.
with the theory underpinning the use of these instruments and the fact that in general, the shorter a right’s duration, the greater the incentive for the holder to overuse the resource in the short term and the more chance there will be negative environmental outcomes.\textsuperscript{96}

However, if one measures the period during which the right, its rules and specifications will not be changed, it becomes clear that the apparently perpetual duration of these units is somewhat illusory. Quota represent a share of a variable catch. While the quota itself may endure, if it entitles its holder to nothing it is at the least an extremely hollow right. Thus, the duration of quota is very dependent on political decisions regarding the appropriate level of catch. It follows that on this measure of duration it is difficult to accept that quota really represents the sort of infinite right we would expect to see in relation to an absolute piece of private property. Emissions units are arguably strong on this measure as they simply reflect the ability to discharge a liability for emitting greenhouse gases and do not translate into a share of a particular resource. However, the NZ ETS itself does seem particularly susceptible to change and there is clear evidence that emissions units can be caught in the cross-fire of political developments.

Overall, it would appear that of all the characteristics of private property, duration is the one that comes the closest to being ‘strong’ in the sense that anticipated by the theory. While this may be true on a theoretical basis, I have argued it does not translate to a practical level and the duration of these rights are highly susceptible to political change. Even if one accepts the relative strength of this characteristic, it rather highlights the weakness of some of the other characteristics and the vulnerability of both of these rights to frequent change at short notice helps to prove my overall point. Given they may change at short notice and in dramatic ways it is difficult to accept that they are truly permanent.

\textsuperscript{96} Anthony Scott “Introducing Property in Fishery Management” (paper presented at the FishRights99 Conference, Fremantle, Western Australia, 1999) at 6.
Certainly, the duration appears fleeting when compared to the ownership of a fee simple, a restrictive covenant, an easement or the concept of a chose in action such as money.

III. Conclusion on the Strength of Quota and Emission Units

With the possible exception of duration and quality of title none of the other characteristics of private property considered in relation to quota and emissions units can be described as strong in the sense predicted by the theory. Their exclusivity is limited; quota only represents a share in a changeable amount of fish. An emissions unit only entitles the holder to discharge an obligation. Neither provides access to a resource either shared or exclusive and neither provides any ability to manage or control a resource. Likewise, the transferability of quota and emission units is hedged with a number of caveats and provisos. Although the NZU is reasonably freely transferable within the limits of the NZ ETS, overall, emissions units do not reflect the freely transferable right the theory would predict. Moreover, neither right allows for the divisibility expected of an absolute private property right and both rights are extremely inflexible.

The way in which each of these characteristics are limited is unsurprising given the overall goals of each regime. The limited nature of each characteristic ties in with my claim that the use of private property can be limited in the community interest. I also maintain that this provides evidence of the social obligation norm of property at work which helps prove my overall thesis.
Chapter Eleven: The QMS, the NZ ETS and the Social Obligation Norm

I. Introduction

The foregoing analysis demonstrates very clearly that the private property rights at the heart of the quota management system (QMS) and the New Zealand emissions trading scheme (NZ ETS) cannot be explained by either the theory underpinning the use of private property as a tool of resource management or by classical liberal thought. The property rights created by the QMS and the NZ ETS are neither absolute nor unattenuated, and in fact, in many respects they are extremely weak. In this chapter, I seek to explain the divergence between the theory and the practice by developing my central thesis. In my view, a social obligation norm based on human flourishing explains the operation of private property within these schemes. It also provides a practically and morally superior way of explaining property’s operation more broadly.

I will develop my thesis by doing two things. Firstly, I wish to illustrate the presence of the social obligation norm in the structure of the private property rights employed by the QMS and the NZ ETS. I will do this by highlighting some of the obligations imposed on the holders of these rights and the ways in which their ownership interests are restricted in various ways. Secondly, I want to discuss why employing social obligation theory to explain the operation of private property within these regimes is practically and morally superior to explanations stemming from the classical liberal tradition. The discussion is intended to be illustrative not exhaustive. There are many aspects of the regimes that indicate the presence of an unseen, but nevertheless present, social obligation norm at work in our concept of private property. My hope is that considering several conspicuous examples will enable me to draw some general conclusions. I wish to stress at the outset
that I am not arguing that the social obligation theory I am exploring here has been fully incorporated and explicitly articulated in our law. As Alexander noted when undertaking a similar exercise in relation to American property law, the argument is not that the law has fully internalised this idea of property, but rather that it is an implicit aspect of the way in which property functions which deserves greater recognition and articulation.¹

In order to impose some structure on what threatens to become a rather amorphous discussion I have compared the obligations that accompany the private rights to quota and emissions units. There are a number of broad similarities between the obligations that accompany these rights, and each indicates the presence of a social obligation norm based on human flourishing operating within each regime. In particular, we can glean indications of the social obligation norm in relation to the obligations evident in: the structure and definition of the right; the explicit restrictions placed on the right; and the inherent vulnerability of the rights to policy change. Finally, differences between the ways the rights have been structured also demonstrates the presence of the norm within both regimes.

II. The Structure and Definition of the Right

The structure and definition of the private property rights in both quota and emissions units do not reflect the strong property rights classical liberal theory would predict. At the heart of the private property right created in both quota and emissions units, what we might call the “zone of exclusion”, we see very limited rights. Quota represent a share of a total allowable commercial catch. They provide neither an exclusive right in the fish themselves, nor the ability to exclude others from them. An emissions unit provides an exclusive right to discharge a liability. It does not reflect an exclusive share of the

atmosphere; it does not even grant the right to emit greenhouse gases. Objectively assessed it seems clear that the contours and structure of these rights are not solely concerned with the facilitation of individual interest and preference satisfaction. I suggest that by limiting access to the fishery and atmospheric commons through the institution of private property we seek an explicitly social goal; preserving the environment in the hope we may maintain our commodious lifestyles. Consequently, although “private property” is engaged in these regimes this cannot be read as simple code for the ability of individuals to act solely in their own interest with no regard to environmental consequences. Rather, it indicates that the private property rights used by these regimes are fundamentally concerned with ensuring that activities that have an impact on the environment are managed in a way that serves the broader public interest. This requires the holders of these rights to make certain sacrifices. In turn, these sacrifices provide evidence of a social obligation norm grounded in human flourishing operating at the heart of our idea of private property. In order to demonstrate my point it is useful to consider in a little more detail the structure of the right created under both regimes.

A. The structure of quota under the QMS

At the heart of the QMS is the concept of the total allowable catch and its correlate the total allowable commercial catch. This structure dictates that quota simply represent a share of a total catch and not a right to catch a fixed tonnage of fish. The ability of the Minister to set the allowable tonnage at zero means that the state has the ability to render the quota right hollow at any point. Although quota will still technically exist, a property right to catch zero fish has no utility or value. Effectively, this means that quota holders have an obligation to accept that their property right may be rendered otiose in circumstances where it is unsafe to continue exploiting the fishery; that is, they may be required to sacrifice their individual right for the benefit of the community.
The question, of course, is what justifies structuring the regime in this way? Why, if quota are a type of private property, can it be acceptable to create a right that is so inherently vulnerable? Such an approach seems at odds with the dominant justification for private property and its focus on the individual. In my view, the classical liberal account of property cannot adequately explain the obligation of quota holders to live with the potential need to sacrifice their quota in this way. Classical liberal theory does allow for private property to be sacrificed (for example by confiscation through forced sale) but only where this is likely to lead to increased economic efficiency and aggregate wealth.\(^2\) In essence, the state can only be justified in intervening with private property to overcome situations of market failure.\(^3\) Thus, the state may intervene in order to overcome monopolies or holdouts. This intervention is justified on the narrow basis that it should lead to an increase in aggregate wealth through increased economic efficiency. Clearly, however, this theory fails to account for the ability to set the total allowable catch at zero. It is difficult to see how economic efficiency or an increase in aggregate wealth can be achieved through reducing or eliminating the ability to catch fish. Even if stopping fishing in the short term was economically justified on the basis that it would ensure fishing in the long term, there are economic arguments that suggest it may be more rational to exhaust the fish for maximum profit in the short term rather than take a long-term view.\(^4\) Overall, I suggest that classical liberal accounts of property have real trouble explaining this crucial aspect of the QMS. A social obligation norm based on human flourishing, however, provides a more satisfying account.


\(^3\) Carol M Rose “The Comedy of the Commons: Custom, Commerce, and Inherently Public Property” (1986) 53 University of Chicago Law Review 711 at 720.

The basic premise of my argument lies in the fact that the fishery is being managed in the public interest. The relevant provisions of the Fisheries Act 1996 are clearly grounded in a recognition of the importance of fisheries to the community generally. The Fisheries Act is attempting to balance the economic importance of the fishery with its social and cultural importance. In particular, the ability to adjust the catch is central to the Fisheries Act’s purpose, which is to provide for the utilisation of fisheries resources while ensuring sustainability, and which is firmly grounded in a desire to provide benefits to the broader community. This is emphasised by the reference to “future generations” in the definition of “ensuring sustainability” and the definition of utilisation which is aimed at ensuring “people” are able to “provide for their social, economic, and cultural well-being”.

Economic efficiency is clearly not the sole metric guiding the operation of the Fisheries Act or those making decisions under it. The whole scheme of the Fisheries Act suggests that its overall goal is not solely to protect the property rights of quota holders, but rather to employ private property rights while recognising that they are subject to specific obligations and wider social goals. Defining quota as a percentage of an adjustable catch explicitly demonstrates and facilitates the QMS’s ability to prioritise the community’s interest over those of individual fishers in seeking to achieve the Fisheries Act’s goal. Not only can the total catch be set at zero (and perhaps must be set at zero in the appropriate circumstances) but the Minister has more general obligations to consider the public interest in managing the stock. The interests of Māori customary and recreational fishers must be specifically considered. In setting the way and rate at which a stock is moved

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5 See the Fisheries Act 1996, s 8.
7 Fisheries Act 1996, s 21.
towards the maximum sustainable yield the Minister must have regard to not only the relevant economic factors, but also social and cultural factors.\(^8\)

At its most basic level, the ability for humans to flourish requires access to the physical resources that allow them to live. It seems almost trite to observe that physical sustenance and health is a crucial precursor to the individual’s ability to make choices regarding how to live life. Water, food and shelter are all necessary to basic survival, let alone any degree of flourishing.\(^9\) Thus, it seems quite reasonable to suggest that the proper management and preservation of the fishery is necessary for the health of both the fish and various ecosystems on which humans depend. The ability for the catch to be adjusted allows for the sustainable management of the fishery. Fishing itself is consumptive and fish are an important source of food. Moreover, the act of fishing has an impact on the aquatic environment, biological diversity and other species of fish. While it can be argued these should be protected for their own sake, there can be no doubt that failure to protect them will inevitably have consequences for humans generally and, it follows, the ability of individuals to flourish. This suggests that the sacrifice sometimes required by quota holders (i.e. their obligation to accept a varying catch) is justified on the basic levels of sustenance and sustainability. The Fisheries Act is aimed at eliminating the tragedy of an unconstrained competition for fish in the hope that the fishery will remain healthy and productive now, and for the benefit of future generations.

The justification for the sacrifice does not, however, stop at considerations of basic sustenance. It also extends to other more metaphysical values that are an important aspect of human flourishing. Stand out examples include the Fisheries Act’s requirement that the

\(^8\) Fisheries Act 1996, s 13(3).
\(^9\) Alexander, above n 1, at 799.
Minister allow for the interests of Māori customary non-commercial fishing and recreational interests in setting the total allowable commercial catch.¹⁰

It cannot be seriously doubted that the interests of Māori need active recognition and encouragement in order to facilitate their ability to flourish. The whole process of Waitangi Tribunal inquiry and settlement negotiation is aimed at recognising breaches of the Treaty of Waitangi as well as providing Māori with the resources to ensure the wellbeing of their people and the survival of their culture.¹¹ Indeed, the fisheries settlement recognised not only the Article II guarantee of lands, forest and fisheries but also the importance of traditional fisheries to Māori culture more generally and the cultural importance of Māori ability to exercise rangatiratanga.¹² Although rangatiratanga is a difficult concept to accurately transpose into English, it carries with it the sorts of considerations a conception of human flourishing would recognise, that is the right to exercise authority, self-determination and leadership within a social group.¹³ The desire of Māori to exercise some degree of rangatiratanga over the fishery, and the Fisheries Act’s subsequent requirement that these customary interests be catered for, suggests that the holders of quota must accept some obligations on their right in order to facilitate this. Consequently, recognising the customary interests of Māori provides them with the ability (theoretically) to subsist, enjoy life, participate within and protect their cultural way of life. It gives them an (admittedly limited) degree of autonomy and self-determination. The recognition of these

¹⁰ Fisheries Act 1996, s 21.
¹¹ See, for example, the discussion of the Waitangi Tribunal in Waitangi Tribunal Ko Aotearoa Tenei: Te Taumata Tuatahi - A Report into Claims Concerning New Zealand Law and Policy Affecting Māori Culture and Identity (Wai 262, 2011).
¹² The Preamble to the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 notes that “the Crown recognises that traditional fisheries are of importance to Māori and that the Crown’s Treaty duty is to develop policies to help recognise use and management practices and provide protection for and scope for exercise of rangatiratanga in respect of traditional fisheries”.
interests dictates the structure of quota and the obligations of quota holders to accept a percentage based and rather vulnerable property right.

The justification is also evident when we consider the interests of recreational fishers. Not only does the regime seem to recognise that individual members of the community ought to have the ability to provide for their sustenance by access to the fishery, but it also recognises the importance of recreation as a part of human life. Recreation is both an important aspect of physical health (itself crucial to life) but also contributes to the ability of individuals to live “lives worth living”.\(^\text{14}\) In particular it supports sociability, or affiliation, and the social goods of friendship and participation. Sociability and participation in the community teaches us concern for others and how to express empathy. In turn, this leads to the individual learning to value dignity, equality, and respect for others in addition to individual autonomy. As Alexander notes, the importance of recreation to both health and sociability was well summarised in the celebrated early work of Carol Rose:\(^\text{15}\)

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\text{… recreation educates and socializes us, it acts as a “social glue” for everyone, not just those immediately engaged; and of course, the more people involved in any socializing activity, the better. Like commerce, then, recreation has social and political overtones. The contemplation of nature elevates our minds above the workaday world, and thus helps us to cope with that very world; recreational play trains us in the democratic give-and-take that makes our regime function. If these arguments are true, we should not worry that people engage in too much recreation, but too little. This again argues that recreation should be open to all at minimal costs, or at costs to be borne by the general public, since all of us benefit from the greater sociability of our fellow citizens. If we accept these arguments, we might believe that unique recreational sites ought not be private property; their greatest value lies in civilizing and socializing all members of the public, and this value should not be “held up” by private owners.}
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I suggest then, that it is no surprise the interests of recreational fishers are expressly catered for in the Fisheries Act. I think that this reflects an implicit recognition of the

\(^{14}\) Alexander, above n 1, at 806.

\(^{15}\) Rose, above n 3, at 799.
importance the act of fishing has to the health and well being of the community. If quota represented a fixed tonnage, or was structured so as to exclude everyone other than quota holders from the fishery, there would be no doubt that the private owners would be “holding up” the ability of community members to enjoy the advantages of recreational fishing.

B. The structure of emissions units under the NZ ETS

Similar themes emerge from the structure of the property right in emissions units. Emissions units are an extremely restricted type of private property. They can only be used to discharge a liability that arises when specific types of activity are undertaken. They confer no interest in the atmosphere or greenhouse gases, and it follows that they confer no right to manage or control those resources. Decisions regarding management and the overall environmental goal remain the preserve of the state. Clearly, the classical liberal theory underpinning the use of property as a tool of environmental management struggles to explain the use of such a limited right. Surely, if the goal is to encourage individuals to look after and manage a resource in their own interest we would expect to see, at the very least, some sort of property interest in the resource itself.

That we do not indicates that private property’s role in the NZ ETS is aimed primarily at changing behaviour in order to mitigate the effects of global climate change. This is unmistakably in the interests of the broader community and not necessarily the interests of those individuals responsible for emitting greenhouse gases. The regime is not aimed at increasing aggregate wealth, or facilitating individuals to indulge personal preferences. Social obligation theory and human flourishing, however, does account for the way property is deployed within the regime. As we have seen, property is one of the key ways
in which life itself can be nurtured. This means that, not only should individuals have the resources to engage in a well-lived life, but also that life itself is worthy of protection. As noted in relation to general public access to the fishery, this means that ensuring the physical survival of both individuals and the community is an inherent part of private property’s purpose. Of course, physical survival encompasses subsidiary goods such as health and security.

The use of private property as a tool to manage the earth’s atmosphere is so self-evidently aimed at ensuring the physical survival of the human species, the health and survival of species and ecosystems humans rely on, and the health and security of individuals and communities, that it almost goes without saying. As the Stern Review on the Economics of Climate Change indicated, warming of between two and four degrees Celsius could result in, among other things: 200 million people being permanently displaced by rising sea levels, floods and drought; serious difficulties in securing global food production; and the extinction of up to 40 per cent of all species! More recently, Lord Stern has admitted “I got it wrong on climate change – it’s far, far worse”. Clearly then, emissions trading and the private property it relies on are the community’s attempt to avoid the, quite frankly terrifying, consequences of climate change on the community in general. If this can be achieved, not only the community, but also the individuals within it, should have the capacity to live, and enjoy, life. States, by recognising that open access to the atmospheric commons may end in tragedy, are adopting a private property solution that has a clear focus on property’s social utility.

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Viewed in this way, the very restricted right created under the NZ ETS begins to make a degree of theoretical sense. We are not trying to use private property to manage a resource that we want more of; we are trying to use private property so that our consumption (in this case of the atmospheric sink) remains at a level that is safe. By controlling our level of consumption (by limiting the number of greenhouses gases pumped into the atmosphere) we hope to limit climate change and thereby ensure our physical survival, health and economic security. Implicit in the structure of the scheme is the recognition that protection of the community in which the individual exists is the primary function of private property under the regime. To this end, the right is limited in terms of what it actually allows the holder to do. Thus, the holder of an emissions unit must sacrifice the property right they would otherwise have in order to allow the appropriate functioning of the scheme overall. This point is somewhat obscured by the fact that the property right itself is created by legislation. This enables the state to establish the parameters of the right ex ante. In these circumstances it is unnecessary for the state to recognise a strong property right and then limit it. In structuring the right in the first instance the state can incorporate restrictions and obligations and therefore impose a degree of sacrifice on the eventual holders of the right. Moreover, as noted above, the limitations placed on what would otherwise be an absolute property right are justified because our concept of private property already accepts rights are not absolute.

Structuring the right in this way not only avoids the moral questionability of creating a ‘right to pollute’ but also provides the state with the flexibility to change the operation of the system as we learn more about climate change. The use of a relatively limited private property right recognises that all members of the community, including those who engage in emitting activities (and those who consume the resulting products), have an obligation to contribute to mitigation efforts. We are all interdependent and our interdependency is
nowhere more evident than in relation to the Earth’s atmosphere; a resource that is truly global. Overall, the limited nature of the property right in an emissions unit can be properly understood as an effort by the state to provide the incentives necessary to engage the benefits of private property, while defining the contours of the right in light of our social interdependence and the obligations this imposes. Private property then, is clearly being deployed in an effort to ensure we can all flourish, because if the atmosphere gets too hot the likelihood is that individuals and communities will wilt, with devastating consequences.

III. Explicit Restrictions on Each Private Property Right

The same themes are evident when we consider the explicit restrictions placed on the private property rights of quota and emissions units. As the analysis in chapters nine and ten indicated, the property rights in quota and emissions units are limited in a wide variety of ways. Holders of these rights cannot simply deal with them as they wish. They must conform to the requirements of the statutes, which place a number of specific restrictions on the way in which the rights are exercised, how long they might last and the classes of people who may hold them. Few of these restrictions can be explained on liberal grounds. The small number of restrictions that can be explained by liberal thought also appear to be serving social purposes beyond simply fostering market efficiency through individual preference satisfaction. Again, I suggest that they indicate that the use of private property in the regimes is primarily aimed at furthering the collective interest. By promoting the interests of the community the individual should gain the resources and support necessary to flourish.

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20 Alexander, above n 16, at 798.
It is instructive to explore a few of the most prominent examples. Perhaps the best are the myriad restrictions placed on the holding and transferability of emissions units. No NZ ETS participant can surrender a non-New Zealand AAU (a “hot air” AAU). Nor can they (with some exceptions) surrender CER or ERUs that have been generated by temporary forestry sinks, the destruction of various industrial gases or hydroelectricity projects. Participants are forbidden from holding units generated from nuclear energy and only the Crown may hold some types of units generated by forestry activities. Moreover, some types of dealing, such as the retirement of Kyoto units, require the approval of the Minister of Finance. Overarching all of these particular restrictions is the “commitment period reserve” and the risk that the registry may suddenly close to outgoing transfers thereby preventing the international trade of emissions units.

It is difficult to see how any of these restrictions (i.e. obligations, or sacrifices) can be justified on the basis of classical liberal thought. Generally the classical liberal approach attempts to limit state intervention in private property to the negative obligation to avoid causing nuisance to others. In some circumstances it will also accept interventions in the public interest, for example to protect citizens against crime, facilitate the enforcement of contracts,21 or avoid the inefficiency that flows from market failure. However, none of the restrictions in the NZ ETS seem able to explain themselves through the classical liberal filter. They are not voluntarily undertaken, nor can they be explained as being essential to protecting others from harm (unless one takes a very broad view of harm). The restrictions do not seem to be aimed at alleviating specific instances of market failure. Of course, one could argue that limiting “hot air” units is aimed at limiting the number of units within the global market in order to ensure conditions of scarcity (and therefore higher values and efficiency). One could also argue that the purpose of limiting the use of nuclear energy and

21 See the discussion of Robert Nozick Anarchy, State and Utopia (Basic Books, New York, 1974) in Alexander, above n 1, at 753.
hydroelectric power is to avoid placing participants in the position where they might cause harm to others. But neither of these arguments seems very compelling.

It is far more convincing to recognise that these restrictions are squarely aimed at ensuring the success of global efforts to reduce emissions in a way that does not cause unforeseen environmental consequences. “Hot air” AAUs do not actually reflect reductions in greenhouse gas emissions so their use is restricted. Likewise, the storage of carbon in forests is, by nature, impermanent. The Protocol, and by extension the NZ ETS, recognises this by establishing rules around the ways in which units generated by planting trees can be used. As discussed in chapters nine and ten, the destruction of hydrofluorocarbon-23 and nitrous oxide can result in the perverse circumstance of these gases being created for the express purpose of destruction so as to generate extra units. States that have restricted the use of units generated by these activities have rightly recognised that it is necessary to prevent ancillary environmental damage. Likewise, the restrictions placed on units generated by hydroelectricity explicitly recognise that many hydroelectric projects are environmentally unsustainable. They can have a devastating impact on biodiversity and the general environment, but also on local communities through displacement and dislocation. Moreover, many of these hydroelectric projects would have been built anyway and are not the product of the incentives established by the Protocol and emissions trading. Therefore, they do not reflect a true reduction in net emissions. As a result, only hydroelectric projects that meet international standards will generate Kyoto units that are acceptable for use within the NZ ETS.

In my view, the individual restrictions of the private property in emissions units and their collective effect can be explained by the social obligation norm I am advocating. It seems extremely clear that the restrictions are serving the interests of the community rather than the interests of individual emissions unit holders. In many respects the important points
here flow on from the discussion in relation to the structure of the property right in an emissions unit. The whole purpose of the NZ ETS is to reduce greenhouse gas emissions in order to contribute to the global effort to mitigate climate change. The restrictions we have considered are a crucial part of ensuring that the regime operates successfully and does not encourage equally poor environmental management in other areas. These restrictions, in essence, involve an economic sacrifice on the part of the owner, a sacrifice that may not apply in relation to other private property holdings. These are necessary in order to achieve the overarching goal of the regime, which is to try and ensure our physical sustenance and survival. We know that private property is an institution that is unmatched in its ability to motivate people and change their behaviour and we are desperately trying to use it to help us behave in a way that might at least limit climate change. Social obligation theory accepts that because individuals can only develop as autonomous agents within the confines of the community, individuals owe obligations to help maintain the infrastructure (including environmental infrastructure) that lies at the foundation of that community. Sometimes these obligations will involve sacrificing the “personal preference-maximizing uses of property.”

These observations are not limited to the NZ ETS, and the QMS provides a further example of the way that explicit restrictions on the private property used in these regimes indicates the operation of the social obligation norm. As discussed in chapter nine the Fisheries Act 1996 specifies a series of limits on the number of quota shares any individual may hold and also states that no “overseas person” may hold quota without obtaining consent. Each of these provisions imposes a restriction on the quota owner’s ability to hold and deal with their quota. The question is, of course, what justifies the imposition of this sacrifice?

22 Alexander, above n 1, at 795.
At first blush, the aggregation limits seem to accord with the general classical liberal acceptance of state intervention to regulate monopolies, which is firmly grounded in the desire to achieve maximum social wealth. If the person holding a monopoly raises prices beyond the competitive level, people will buy less of the product. This will lead to less production and lower growth, and as a result, society as a whole is worse off. Regulation is acceptable in order to preserve competition, maintain competitive prices and allow other players to enter the market. Clearly, one of the concerns of the framers of the QMS was that speculators, large firms, and collectives might use the quota market to capture and hoard quota. This might reduce competition in the industry, drive up the price of quota and lead to a significant risk of price fixing in relation to the actual fish. Thus, on classical liberal grounds it can be argued that individuals are required to sacrifice their private well-being, generated by acquiring as much quota as possible, for the sake of the common good, which in this instance is defined as aggregate wealth.

However, the discussion recorded in Hansard suggests that the aggregation limits had a broader purpose. A review of these debates suggests that this was a very difficult issue for Parliament and the approach settled on was a compromise. On the one hand, it was recognised that the big commercial players needed to have access to sufficient quota to ensure the economies of scale that would lead to commercially viable operations. On the other hand, the importance of small-scale fishing to people in small coastal communities was recognised. There was a clear desire to ensure that fishers and would-be fishers had the opportunity to enter the industry if they wished. As one Member of Parliament who had participated in the Select Committee process noted, “It is a balance between

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25 Alexander, above n 1, at 777.
commercial freedom, if one likes, the operation of the market, and social considerations. A reasonable balance will probably not satisfy anyone completely, but I hope it does not greatly offend anyone, either\textsuperscript{26}. This overt focus on social considerations does not have a place within the liberal justification for regulating monopolies. A human-flourishing based account of social obligation does, however, account for the Parliamentary discussion. Aggregation limits impose obligations on quota owners to limit their overall holdings and these obligations are aimed at contributing to the well-being of the community and individuals within it.

The limits recognise the importance of the fishing industry to small communities and acknowledge that the absence of this industry would have flow-on effects for these communities, including economic consequences. The industry helps to support a culture that nurtures the social goods necessary for the individuals within it to live satisfying lives, supported by access to employment, social affiliation and individual identity. The individual’s ability to live life in this way would not be possible, or at least not possible in the same way, in the absence of the fishery industry\textsuperscript{27}. In addition, the industry can be seen as part of the underlying infrastructure of the community and protecting it justifies the sacrifice asked of quota holders. The obligations recognise that if individuals are to develop as fully rounded moral agents within their community they must have the ability to choose between different life horizons. Thus, the individual freedom granted to prospective fishers involves a necessary restriction on all other quota holders to forgo hoarding. This contributes to the overall health of the community, which has an increased chance of remaining vibrant if the individuals within can remain geographically present and undertake satisfying work. Allowing a limited number of individuals to hold all of the

\textsuperscript{26} Hon Jim Sutton MP “Fisheries Bill: Consideration of Report of Primary Production Committee” (31 July 1996) 557 NZPD 14028.

\textsuperscript{27} Alexander, above n 1, at 780.
quota risks seriously undermining the ability for all individuals of the community to develop and flourish.

Similar observations can be made in relation to the restrictions on foreign ownership of quota. Theoretically, true economic efficiency will be achieved when the relevant resources can flow to those who value them the most. Generally, “value” is measured by willingness to pay.\textsuperscript{28} Of course, those who can afford to pay the most for the right to catch fish in New Zealand waters may not necessarily be resident in New Zealand. Given the international nature of fishing, the value of fish on overseas markets and the extremely long range of many fishing vessels, if there were no ownership restrictions it is likely a large amount of quota would flow to overseas interests. Economically this would be efficient, as the market would simply be allocating quota to those who value it the most. And yet, the QMS imposes obligations on quota holders to be members of the right class and to transfer quota to only those people qualified to receive it. This has the effect of limiting domestic access to international capital. It is also likely to depress the value of quota as it restricts the market. Overall, these rules seem to contradict the general trend towards globalised free trade and the desire for economic efficiency. This is doubly confusing because New Zealand governments are generally encouraging of foreign investment, which is thought to bring with it a number of benefits including: expertise, efficiency, and an inflow of capital, which encourages economic growth and expanded employment opportunities.\textsuperscript{29}

Clearly, however, the ownership provisions of the QMS are aimed at ensuring the domestic control of the fishery. One can speculate that this is partly driven by similar considerations as were engaged in relation to the aggregation limits. Maintaining domestic

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\textsuperscript{28} Carol M Rose “Privatization - The Road to Democracy” (2005) 50 St Louis U L J 691 at 694.
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\textsuperscript{29} Peter Bruce Hinton “New Zealand” in Dennis Campbell (ed) \textit{International Protection of Foreign Investment} (Yorkhill Law Publishing, 2008) at 117.
\end{flushright}
ownership enables the industry to be open to all members of the broader New Zealand community. In particular, it is important for regional development and the smaller communities whose identity and existence is dependent on access to the fishery. More broadly, it appears that maintenance of domestic control of the fishery is also seen as necessary to ensuring sustainable management in the national interest.\textsuperscript{30} This links back into the overall purpose of the QMS discussed above. It suggests that there is an implicit recognition that the owners of quota must accept a degree of sacrifice and obligation in order to further the community’s interest in a healthy well-managed fishery. These provisions do not easily satisfy an explanation grounded in the facilitation of preference satisfaction. In my view, the overriding normative commitment disclosed by these rules is ensuring that all members of the community of New Zealand have the ability to flourish, economically, culturally and environmentally. This limits the ability of members of other communities to participate in the New Zealand QMS. It also justifies the sacrifice asked by the community of individual quota holders in a way that classical liberal accounts of private property do not.

\section*{IV. Inherent vulnerability}

One of the remarkable characteristics of these two private property regimes is the fact that they are both extremely vulnerable to changes in government policy. It is quite clear that these regimes have been, and are likely to continue to be, changed over time. Sometimes these changes will directly impact on the property right at the heart of the regime. Sometimes this will require owners to sacrifice their property interests either partially or completely.

\textsuperscript{30} At 118.
The inherent vulnerability of these regimes is a further example of the operation and presence of the social obligation norm. Without wanting to belabour the point, the 1990 quota change from a fixed tonnage approach to a percentage of a total catch approach is an excellent example. Essentially, Parliament negated the original property right granted to quota holders and replaced it with a new (and very different) one. It did this in order to address structural defects between the original right and the purpose of the regime. It was recognised that a fixed tonnage approach did not provide the sort of flexibility necessary to quickly address changes in knowledge. The owners of quota essentially had to sacrifice their entire property holding and accept its replacement with a far more limited private property right. While parliamentary sovereignty might provide the mechanism by which this sort of change can be effected, it does not actually provide an explanation (beyond the simple assertion that Parliament can do what it wants) justifying this sort of intervention.

The closest general property law analogy to the government’s actions in 1990 is the compulsory acquisition of land for public works. “Takings”31 of land for public projects (such as motorways) are often justified in classical liberal thought on the basis that it allows the state to create the public infrastructure necessary to enable modern commercial practice for the least cost (in other words, it is the most efficient method available).32 However, similar reasoning cannot apply here, as in 1990 the state took an efficient property right and replaced it with one that is arguably less efficient in economic terms. However, the social obligation norm does provide an explanation. The driving force behind the QMS is recognition of the importance that a healthy fishery plays in the lives of the community and the individuals within it. The approach adopted in 1990, while not necessarily efficient, does allow for a fast and flexible response to changing information.

32 See Posner, above n 2, at 55.
This seems a very sensible way of balancing the competing tension between individual rights and environmental necessity. It also recognises that the state is sometimes justified in asking members of the community to sacrifice their property rights in order to help protect a resource that is in our collective interest to look after.

The emissions trading regime also reveals the inherent vulnerability of these rights. Indeed, it appears that from the outset it has been recognised that the NZ ETS is, to some extent, an experiment and that after the first commitment period of the Kyoto protocol the scheme itself might be abandoned or changed beyond recognition. This ambivalence has been justified by the fact that the NZ ETS is soon to shift from an internationally to a domestically focused scheme. Of course completely forsaking the NZ ETS would vitiate the property right existing in every emissions unit. As it stands holders of Kyoto units will see these units cancelled as of 1 June 2015 unless they are divested in the interim.

Other examples indicating the inherent vulnerability of the private property right in an emissions unit include: New Zealand’s withdrawal from the Kyoto Protocol (which will limit or exclude New Zealand participants’ access to international markets and will have the long term effect of rendering a number of emissions units worthless); the ambiguity surrounding the basis and form of any “cap” New Zealand may impose on emissions units (and the impact this will have on the value of each unit); and the “carry over” rules in relation to Kyoto units. More generally, further changes in either the international or domestic approach to climate change policy and emissions trading in particular could impact on participants’ property rights.

It is clear that the rights created by the QMS and the NZ ETS are extremely vulnerable to changes in government policy. In explaining this we must look to the purpose of the regimes. They are trying to change our behaviour in a way that will reduce the emission of greenhouse gases and therefore limit climate change; or to control the number of fish we
catch to ensure sustainability of the fishery. This not only dictates the structure of the rights, but also necessitates that the community (through the state as medium) has the power to adjust the operation of the schemes over time in line with new information and policy choices. This results in a right that is inherently vulnerable. This is justifiable on the basis that mitigating climate change and protecting the fishery is a good thing for the community as a whole and the members who comprise it. In my view, the moral obligation of individuals to promote the flourishing of others is both encapsulated and justified by the vulnerability of these rights as informed by the purpose they are serving.

Of course, this is not what one would expect in light of the theory discussed in chapter four. If inadequately specified property rights are said to be the root cause of environmental problems, solving them by employing property rights that are inherently vulnerable should be an anathema. And yet, people seem happy to accept and use these rights notwithstanding the limitations placed on them by legislation. For example, as noted in chapter nine it is accepted the QMS has achieved results that are no worse (if no better) than “command and control” based systems.\(^{33}\) It also seems clear that it has achieved this rather mixed praise at far less cost than the alternatives. While there can be no doubt the regimes are not perfect (and the NZ ETS in particular faces manifold difficulties) it does not appear that these problems stem from the articulation of the private property rights themselves. Rather the defects in these regimes seem to follow on from other, higher-level decisions (such as New Zealand’s decisions regarding participation in the Kyoto scheme itself). This is further evidence that the private property used by these regimes is not serving the purpose predicted by classical liberal thought. In my view, quota and emissions

units provide a clear demonstration of the particular social obligations that accompany private property rights, but which are frequently overlooked.

V. Evidence of the Social Obligation Norm in Differences between Rights Serving a Similar Purpose

Analysis of these regimes also suggests that the nature of the resource and the goals of the regime will impact on the structure of the property right and the obligations that accompany it. These differences also provide evidence of the social obligation norm underpinning the operation of property within the schemes. This is an observation that is true of broader property law as well. As Dagan notes “Property law, in its wisdom, has always tailored different configurations of entitlement to different property institutions so that they fit both the social context and the nature of the resource at stake”.34

An excellent example occurs in relation to the different protections afforded by the registration schemes established under each Act. Once registered, quota is essentially indefeasible and its owner will be compensated by the Crown for any loss caused by the operation of the register. In contrast, the register of emissions units essentially provides only a recording system. It is not possible to record interests such as mortgages or caveats on the emission units register. The protections necessary for commercial dealings and the operation of the emission unit market are provided by other regimes such as the Personal Property Securities Act 1999. There is no guarantee of title and the Climate Change Response Act 2002 leaves a number of important questions regarding the doctrinal behaviour of emission units to the judgment of courts applying the standard tools of common law and equity.

The interesting question is why Parliament has adopted such contrasting approaches in relation to two otherwise similar rights? Both schemes are aimed at solving the tragedy of the commons. Both create a private property right that can be traded in order to foster the incentives necessary to achieve positive environmental outcomes. Treating the rights in the same way, and using the same (potentially already litigated) statutory boilerplate should not only result in increased efficiency, but also increased certainty for the holders of these rights. Adopting dissimilar regimes does not, on the face of it, appear sensible, particularly for a country that has over 25 years’ experience with these sorts of tools. There does not appear to be any dissatisfaction with the structure of registration system for quota and it arguably provides a more secure right than that in emissions units. Why then, did New Zealand not use the QMS as a template for the NZ ETS?

The answer lies in the purpose each of these regimes is serving and the way in which private property is being used within them. The QMS operates in a purely domestic sphere. It manages New Zealand’s fisheries within the country’s Exclusive Economic Zone. The international backdrop of the scheme is informed by the United Nations Conference on the Law of Sea. Article 61 of this Convention makes it clear that it is up to the coastal state to determine the allowable catch of living resources in its economic zone. Thus, the focus and operation of the scheme is limited to domestic considerations. This fact guides the state, as representative of the community, when establishing the contours of the quota property right. Consequently, the protections afforded to quota owners under the register can afford to be quite strong because the state can make some assessment of the contingent risk and balance this against the desire to create a right that is secure as possible. It also informs the other obligations imposed on the quota right such as

aggregation limits, foreign ownership and the adoption of a percentage based total allowable catch.

Conversely, the NZ ETS is far more international in focus (at least as presently articulated). As noted in chapter nine, it was recognised early in the development of the regime that in order for it to operate effectively it would need to be “linked” internationally. This reflects the global nature of the problem and the fact that efforts to combat it are currently flowing from the international sphere to the domestic. The operation of the Kyoto Protocol underpins the structure of the NZ ETS (and will continue to do so notwithstanding the fact that New Zealand has abandoned the Protocol). The Protocol itself is an international document aimed at setting up an international tradeable environmental allowance market. Emissions units are designed for international trade. Units will be flowing in and out of the New Zealand register on the wings of the market. What happens overseas will directly impact participants in New Zealand. It is impossible for the state to calculate the level of contingent risk if it was to guarantee these rights. Consequently, in creating emission units the state has made different decisions regarding the security of the property right than those made in relation to quota. This helps to explain some of the differences between the two, otherwise similar, regimes.

This provides a further example of the social obligation norm at work. Private property does not always need to look exactly the same. How it looks in relation to quota is different from how it looks in relation to emissions units. This runs contrary to most classical liberal scholarship. Epstein draws no distinction between a house, a book or a share. For him “… there is a conception of property that is the concept of property”. 36

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However, this approach is demonstrably incorrect. The differences between quota and emissions units prove the point. They are both private property rights and while they are serving the same broad goals, the specific purposes of the rights are different. Indeed, I believe that the differences between these rights can be explained by the distinct purposes for which private property is being used in each regime. This indicates the unseen presence of the social obligation norm.

The social obligation norm provides for a greater degree of balance to be achieved between the plurality of values that inhere in our private property system. It recognises that there will always be competing values in relation to shared resources and it provides an explanation for the ways that the community chooses between often irreconcilable values.37 For example, sometimes both economic growth and environmental protection will not be possible. As Alexander notes, “In the context of both personal morality and law there are situations where more than one right option is available, and it is rational to choose among these options”.38 The social obligation norm helps to explain how these choices are carried out within our law of property. In relation to quota and emissions units we see the state (as representative of the community) establishing differing contours for each right. These contours are dictated by the ultimate goal of each regime, which is to achieve positive environmental outcomes, for the benefit of all members of the community, but by taking different paths to achieve this result with each resource.

Of course, we must also accept that this means there will be “no algorithm”39 by which we can predict in advance how competing values will be mediated. This is a discomfiting truth in relation to an institution as important to day-to-day life as the law of property. It is, however, honest. Advocates of classical liberal theory often expound the advantages of

38 At 1051.
39 Alexander, above n 1, at 805.
that theory’s focus on the singular goal of autonomy through preference satisfaction. This, they suggest, provides a single pathway to guide the resolution of property conflicts and defines the boundaries between the individual and the community.\(^{40}\) The social obligation norm recognises that the promise of this approach is deceptive and that there are a number of differing values that co-exist within our legal system that must be constantly renegotiated. My suggestion is that Alexander and Peñalver are right when they suggest that the human flourishing form of the social obligation norm recognises that there is a social foundation to our property system, and that the primary function of our property law is to help people negotiate their social relationships and the plurality of values within those relationships. The primary goal of property is to achieve equality, dignity, and autonomy for all members of the community.\(^{41}\) The QMS and the NZ ETS both help to demonstrate this point and the presence of this norm at work in our property law.

VI. Conclusion

At a facile level tradeable environmental allowances such as quota and emissions units seem to vindicate the preference satisfaction approach to property. We use private property in the environmental sphere precisely because we wish to harness the power of the market to tap individual energy and industry. The hope is that, almost as a by-product, we will be able to solve environmental problems along the way, simply by restricting access to the commons. Consequently, one can be forgiven for assuming that these regimes are overtly embracing the classical liberal idea of property. The reality, however, is quite different and when we actually go and look at the structures governments choose to adopt in creating tradeable environmental allowance regimes, we see a very different sort of market from the type anticipated by classical liberal thought. The classical liberal idea of

\(^{40}\) Alexander, above n 37, at 1051.

\(^{41}\) At 1024.
property employs the market as a way of regulating the commodities that we regard as desirable, and crucially, that we want more of. As we create more of these goods, there is more to go around, and as the economy grows, society as a whole becomes better off.

However, with tradeable environmental allowances the theory is exactly the opposite. We want to ensure the sustainability of the fishery by catching fewer fish and we want to mitigate the effects of anthropogenic climate change by emitting fewer tonnes of greenhouse gases. We are not using private property in these regimes in order to generate more of these resources, but instead to limit our use of them so that they are not entirely exhausted. It follows that the true aim of employing property in tradeable environmental allowance regimes is not individual preference satisfaction to achieve aggregate wealth maximisation; rather, the goal is resource conservation for the benefit of the entire community. The analysis in chapters nine and ten has identified many examples within these regimes of the ways in which owners are required to sacrifice their interests. Few of these sacrifices can be explained in classical liberal terms. In contrast, as I have demonstrated, the social obligation norm provides a persuasive account of why these sacrifices are a necessary incident of private property itself and its role within these regimes.

More generally, the social obligation norm offers a more compelling explanation of the way that private property actually operates within society generally, over and above these regimes in particular. In my view, while private property may also serve values such as wealth maximisation and preference satisfaction, its primary function is to enable each individual member of the community to live a life of human dignity. It recognises that this

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can only be achieved by accepting the inherent interdependence of individuals and the individual’s presence within the broader community. This means that individual owners may sometimes have obligations to the community in relation to the resources they control.

In turn, this recognition has an important practical implication, as it suggests that private property can provide the necessary incentives to avoid the tragedy of the commons, but in a manner that avoids the privileged conceptions that often accompany the culturally dominant liberal idea of private property. This also serves to validate my ultimate thesis; that the social obligation norm of property provides a legitimate way of explaining why private property can be a useful tool of environmental management, and which also accounts for how private property actually works within such schemes.
Conclusion

Private Property’s Hidden Potential
My daughter loves Dr Seuss. She is captivated by the bright pictures and zany rhythms. *Green Eggs and Ham* is her current favourite. It will be with some trepidation, however, that I introduce her to *The Lorax*; because although Dr Seuss brilliantly describes ecological catastrophe, the story ends without the hero ‘saving the day’. Rather, responsibility for restoring the Truffula Trees falls to the next generation:

“SO...
Catch!” calls the Once-ler.
He lets something fall.
“It’s a Truffula Seed.
It’s the last one of all!
You’re in charge of the last of the Truffula Seeds.
And Truffula Trees are what everyone needs.
Plant a new Truffula. Treat it with care.
Give it clean water. And feed it fresh air.
Grow a forest. Protect it from axes that hack.
Then the Lorax
and all of his friends
may come back.”

This puts “… a lot of responsibility on small shoulders”. It has now been 43 years since *The Lorax* was first published and we are still struggling with its central concern: the environmental consequences flowing from unconstrained greed and the assumption that if you own something you can do what you want with it. At some point *this* generation needs to come up with some realistic solutions. We cannot rely on our children to solve these problems. We need to act now, before we run out of time.

My aim in this thesis has been to explore the use of private property to manage natural resources. Somewhat unexpectedly, I have reached the conclusion that a possible solution

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4 Marris, above n 2, at 149.
5 See, for example, a recent report from the Intergovernmental Panel on Climate Change which suggests that an international push over the next 15 years is the only way to avoid the “disastrous effects of climate change” (cited in Sam Frizell “UN” Time is Running Out for Climate Change Action” *Time* (online ed, New York, 13 April 2014)). See Intergovernmental Panel on Climate Change “Climate Change 2014: Mitigation of Climate Change” (15 April 2014) <http://www.ipcc.ch>; and Intergovernmental Panel on Climate Change “Climate Change 2014: Synthesis Report” (1 November 2014) <http://www.ipcc.ch>.
to the central issue painted in *The Lorax* does lie in the use of private property as a way to avoid the tragedy of the commons. In my view, the social obligation norm of property reconciles some of the difficulties of using private property with the clear advantages it has for environmental management. It provides a principled way of accounting for the way that property actually works within environmental management schemes that rely on it.

Evidence that the social obligation norm is an inherent part of the institution of private property is clearly demonstrated by the private property relied on by the QMS and the NZ ETS. These regimes are ultimately aimed at changing individual behaviour in the common interest. They employ private property in an extremely targeted fashion. While they both seek to employ the positive incentives that flow from ownership, they do so while restricting the scope of that ownership, which demonstrates the social objectives of each regime. Unlike traditional classical liberal theory would have us believe, the private property in these schemes is not aimed at generating more of the resources being managed or squeezing the maximum degree of wealth from either the atmosphere or fish. Rather, the goal is resource conservation. Private property is being utilised here to serve an essentially protective function; not an exploitative function. Both regimes demonstrate the ability of private property to be used to balance the conflicting demands of the community and property owners.

The social obligation norm is an extremely useful way in which to explain private property’s function in these schemes as it correctly identifies private property’s focus on the needs and desires of the individual, but within the broader social context. By recognising this, one can acknowledge that private property need not be seen as incompatible with environmental protection. Rather, private property is a very malleable tool that can be, and indeed often is, used to help ensure that all members of the
community have the resources necessary to flourish. While space has only allowed for two of these regimes to be considered (both of them in the New Zealand context) I am confident that my thesis will be equally applicable to other tradeable environmental allowance regimes in other countries. Applying my thesis to other cultures and jurisdictions is an obvious next step in my research.

In addition, the clear presence of the social obligation norm in the two regimes I have considered demonstrates that our understanding of private property is already capable of responding to the ecological challenges we face, which addresses the key concern of scholars who are uncomfortable with the idea of using private property to solve the tragedy of the commons. It fills the oversight identified in this literature and removes the necessity for a complete reconceptualisation of private property. This is exciting, because it suggests that the law can respond without being completely overhauled. An idea of property that has existed for millennia and that, I argue, already exists in both our statute and case law, is more likely to succeed than something novel. It is a practical option for a redirection of private property, which provides a principled basis for a rebalancing of private property as legal tool.

It follows that the ramifications of my thesis go beyond the realm of environmental law. In reaching my primary conclusion I have traversed a great deal of literature and identified a rich and varied history which supports the central claims of social obligation theory. The presence of this counter-tradition in both our legal history and present law suggests that classical liberal theory lacks predictive power. Private property does not simply serve the twin goals of satisfying preferences and protecting individuals from government encroachment identified by classical liberalism. At no time has there ever been a view of property in which conditions on ownership were absent. While there are instances where classical liberalism appears to provide a valid justification for private property, on closer
inspection I suspect we will find restrictions on these rights dictated by broader social considerations. This has exciting ramifications for the future of property scholarship.

Social obligation theory demonstrates in real terms the social purposes served by private property and these should be further explored. I suspect that this research will indicate that when closely considered, *all* property rights are subject to social interests. Social obligation theory recognises that private property rights are underpinned by a normative structure serving ends far broader than preference satisfaction alone. This is not to say, of course, that the social obligation norm is unbounded. Property owners do not owe unlimited obligations to other members of the community and the social obligation norm does not suggest that the public interest will inevitably prevail over the interests of the individual. In each case it will depend on the interests engaged and the view of the community regarding the collective good. The account I have adopted in this thesis suggests that affirmative obligations on property owners are only justified so long as they are necessary to enable other individuals to flourish. While I think that an account of private property grounded in human flourishing is compelling, my broader point remains no matter the underlying aim of the system adopted. Whether one accepts a social norm grounded in human flourishing or prefers one of the more limited accounts of the norm, it remains clear that private property can, and does, impose obligations on property holders regarding the use of their property. Indeed, the fact that the exact normative underpinnings are contestable, illustrates that the accepted grouping of rights and obligations that accompany a private property right will shift over time as the needs of the community change. Overall, this indicates that regardless of the precise contours of the normative values underpinning it, there really is no impediment to a cultural recognition of private property being one which balances the desire for freedom and prosperity with the requirement for environmental sustainability.
Finally, on a practical note, it is possible that schemes such as the QMS and NZ ETS are already beginning to turn the tiller on our dominant perception of private property. My thesis indicates that tradeable environmental allowance regimes need not necessarily be mistrusted; instead, they should be viewed as counter-intuitively positive. These regimes do not, in fact, represent the ultimate triumph of the neoliberal project; they actually serve to undermine it. I am now of the view that, in combination with other tools of “smart regulation”\(^6\), these somewhat experimental regimes (although not without their problems) may well augur approaches that can assist us to address the ecological challenges we are faced with. This conclusion comes as a relief to me as these schemes already exist. We are all likely to become much more familiar with them over the coming decades. At some point we may even need to buy and sell carbon credits in order to turn on the lights or fill the car with gas. It seems likely to me that, over time, as we interact with these schemes, we will become familiar with an idea of property as having inherent restrictions. Perhaps this will lead us to the point where natural resources are no longer treated just as commodities and owners will take active steps to look after the resources in their possession. As Leopold noted in relation to land in 1948: “When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man”.\(^7\) The same must be true of all natural resources. As Dr Seuss might say, we all need to learn to care “a whole awful lot”.\(^8\) Consequently, my hope is that these schemes are a helpful tool in helping us to learn to care, by shifting the cultural perception of private property from an institution aimed

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\(^7\) Aldo Leopold A Sand County Almanac: and Sketches Here and There (Oxford University Press, Oxford, 1949) at viii.

\(^8\) Seuss, above n 3.
solely at the individual, to one aimed at the collective, so that we recognise that private property entails both privileges and obligations. ⁹

The concept of private property has a powerful rhetorical force. It is not simply incidental to our lives or our legal system. Private property has a great deal of hidden potential and my hope is that the ideas discussed in this thesis help us to not only embrace a wider view of private property, but to use it for the benefit of our society and our environment.

⁹ Leopold, above n 7, at 203.
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