

## Chapter 1

# Property Rights and Sustainability: Toward a New Vision of Property

Prue Taylor\* and David Grinlinton\*\*

[In conventional legal theory] [I]and is not seen as part of a common trust, like a spaceship in which we are all travelling, or even as part of an ecosystem, but as a collection of essentially separate and separable entities driven by notions of decentralism and autonomy, individual dominion and private aggrandizement.

– Joseph Sax<sup>1</sup>

The premise of this book is that property laws – in particular, property rights – need to change or evolve in order to better equip society to deal with the ecological challenges of our time. This premise is owed, in part, to the enduring wisdom of Aldo Leopold. In 1948 he wrote:

Conservation is getting us 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...<sup>2</sup>

In other writings, Leopold famously drew the parallel between ‘the land’ (i.e., the biotic community comprising soils, water, plants, and animals) and slavery. “Land, like Odysseus’ slave-girls, is still property. The land-relation is still strictly economic, *entailing privileges but not obligations*.”<sup>3</sup> This, he observed, had to change. As land health depends upon the integrity of the ecological whole, individual land owners need to understand how they fit into that community.<sup>4</sup> Ultimately, this requires a new understanding of ownership, a *new*

---

\* Prue Taylor is a senior lecturer, School of Architecture and Planning, the University of Auckland, New Zealand.

\*\* David Grinlinton is an associate professor, Faculty of Law, the University of Auckland, New Zealand.

<sup>1</sup> Joseph Sax, speech to the International Conference on Environmental Law, Sydney, Australia 1989, quoted by Hon. Peter Salmon QC, “President’s Address,” *Resource Management Journal* (1992):2, and cited in Trevor Daya-Winterbottom, “Editorial Introduction,” *Resource Management Theory and Practice* 5 (2009):6.

<sup>2</sup> Aldo Leopold, *A Sand County Almanac and Sketches Here and There* (Oxford: Oxford University Press, 1968), viii–ix.

<sup>3</sup> *Ibid.*, 203 (emphasis added).

<sup>4</sup> Although this is now better understood in respect of common pool resources, associated with private land use such as water, air and (to a lesser extent) wildlife, it is still not well

vision of private property. But how was this to be realized? Leopold recognized the limits of the law (state regulation), economic incentives and valuation to ensure enduring change. He noted: “[i]t is hard to make a man, by pressure of law or money, do a thing which does not spring naturally from his own personal sense of right and wrong.”<sup>5</sup> His answer to creating enduring behavioral change was the evolution of a land ethic; “the extension of the social conscience from people to land.”<sup>6</sup> Using land with love and respect was not some quaint agrarian notion, rather it was part of a fundamental moral obligation on the part of the landowner. Land-use was to be examined in terms of what is “ethically and aesthetically right, *as well as economically expedient*. A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.”<sup>7</sup>

Leopold envisaged his land ethic, and the ecological understanding that needed to underpin it, as transforming “the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it,” implying respect for fellow members and for the community itself. This transformation is now gaining momentum in legal and other contexts. As one legal commentator recently stated:

A substantial change in ethical outlook has occurred. It no longer seems strange to speak of the responsibilities of ecological citizenship. There is today a wide acceptance of a “new politics of obligation” – however imperfectly realized in practice – according to which “human beings have obligations to animals, trees, mountains, oceans, and other members of the biotic community.”<sup>8</sup>

With this change in mind, and Leopold’s work as a lodestar, this book brings together a diverse group of scholars with contributions on how property ownership and property rights (private, public, and communal) can be advanced to sustain Earth’s ecosystems. More explicitly, the intent of this book is to address the question of how property laws might evolve to provide for human freedom

---

understood in the context of biodiversity. As Leopold put it: creatures (plants and animals) of no economic value “are members of the biotic community, and if (as I believe) its stability depends on its integrity, they are entitled to continuance.” *Ibid.*, 210. Leopold was also the master of understanding how individual land ownership and economic utilization of land, can diminish the critical nutrient flows in soils, and not just the quantum of soils, on land. *Ibid.*, 104–108.

<sup>5</sup> Aldo Leopold, *The River of the Mother of God and Other Essays*, eds. Susan L. Flader and J. Baird Callicott (Madison: University of Wisconsin Press, 1991), 243–4.

<sup>6</sup> Leopold, *Sand County Almanac*, *supra* note 2, at 209.

<sup>7</sup> *Ibid.*, 224 (emphasis added).

<sup>8</sup> Kevin Gray, “Pedestrian Democracy and the Geography of Hope,” *Journal of Human Rights and the Environment* 1 (2010):63. On the need for lawyers and environmental law to both respond to, and stimulate ethical change, see Nicolas Robinson, “The ‘Ascent of Man’: Legal Systems and the Discovery of an Environmental Ethic,” *Pace Environmental Law Review* 15 (1998):497.

and prosperity while at the same time protecting and maintaining ecological integrity and resilience.

In addition to legal scholars, contributors to this book include social scientists, theologians, and philosophers.<sup>9</sup> As one might expect, the contributors have approached the challenge from a variety of perspectives and in an interdisciplinary manner. This approach reflects not only shared professional concern about the design and impacts of our property law systems, but also the complexity and magnitude of the task. Lawyers alone cannot transform the law; the task requires interdisciplinary cooperation and input with the alternative perspectives and insights that such an approach can offer.

In addition to representing a range of professional disciplines, the contributions to this book represent the work of scholars from diverse legal jurisdictions: New Zealand, Australia, the United States, Germany, South Africa, and Sri Lanka. With the exception of the chapters by German and South African scholars (Bosselmann and van der Schyff), there is a predominance of scholarship from Anglo and American traditions. A close look at the nationality of contributors reveals a predominance of New Zealand authors, which adds a particular strength and character to this book and reflects the unique contribution that New Zealand is making to the development of environmental law. This contribution stems, in part, from two decades of experience in implementing the groundbreaking *Resource Management Act of 1991*. This environmental and planning legislation was the first in the world to internalize the concept of sustainability as a defined and enforceable core obligation within a comprehensive integrated resource management structure.<sup>10</sup> New Zealand's unique contribution to environmental, property, and land law also stems from the strong presence of indigenous (Maori) worldviews and values, the experience of partnership (between the Crown and Maori enshrined in *Te Tiriti o Waitangi* [Treaty of Waitangi]1840)<sup>11</sup> and the settlement of Maori claims against the Crown.<sup>12</sup> Of course, New Zealand is not alone in incorporating indigenous concepts into law, as will be seen in the contributions using examples from Australia, South Africa, and Central America.

---

<sup>9</sup> We must acknowledge the absence of ecologists from this list of professionals.

<sup>10</sup> For an overview of the conceptual framework underpinning the Resource Management Act, see David Grinlinton, "Natural Resources Law Reform in New Zealand – Integrating Law, Policy and Sustainability," *Australasian Journal of Natural Resources Law & Policy* 2 (1995):1–37.

<sup>11</sup> *Treaty of Waitangi* 1840 (NZ). This treaty is regarded by many as the founding constitutional document of Aotearoa/New Zealand, although there is much debate about its original intention and effects. Such debate includes whether Maori ceded full sovereignty to the British Crown, and what rights in land and resources the Maori retained.

<sup>12</sup> Janine Hayward and Nicola Wheen, eds. *The Waitangi Tribunal* (Wellington: Bridget Williams Books, 2004).

Because of the diversity of disciplines and approaches represented in this collection, the chapters are assembled into three interrelated parts. Part One contains chapters that offer conceptual or theoretical examinations of property rights. The chapters in Part Two offer alternative, but complementary, cultural perspectives on property in natural resources. The final Part Three comprises chapters that trace and discuss how concepts of property are already beginning to change in selected contexts and jurisdictions.

While the objective of this book is clear – to rethink property rights in an age of ecological consequences – the particular approach it takes to this task requires brief explanation.

A survey of the literature on property rights and the environment reveals three predominant approaches. The first approach involves an attempt to reconcile private property rights with the constantly expanding agenda of public laws. This generally involves issues over who is the best steward of nature (the government, the public, private owners, or a combination of all parties), and the appropriate sharing of burdens and benefits (via liability and compensation regimes). According to this approach, environmental law is generally regarded as a body of competing rules that restrict private property rights and individual freedoms as a means of providing for the common good. A second approach, mainly involving issues of access, valuation, use, and management of common-pool resources, either advocates for the creation of new private property rights (and thus creates legal and economic incentives for protection via the creation of environmental markets), or relies on the administrative and management agencies of the state (or a mixture of both). A third approach, mainly in relation to common-pool resources, is to advocate for the creation, or acknowledgement, of complex communal (property) regimes.<sup>13</sup>

---

<sup>13</sup> Hardin's *Tragedy of the Commons* is commonly raised as a specter with respect to common pool resources. As Carol Rose explains: "[t]he 'tragedy' is that everyone's individual incentive is to keep on using the resource to the maximum, when in fact unrestrained individual use will exhaust the resource as a whole, to the great detriment of all the users." Carol Rose, "Property Rights and Responsibilities," in *Thinking Ecologically – The Next Generation of Environmental Policy*, eds. Marina Chertow and Daniel Esty (New Haven, CT: Yale University Press, 1997), 49–59. Note, however, the important critique of Elinor Ostrom and others that while the "tragedy" may apply to open-access regimes, it does not necessarily apply to resources that are communally managed. Nor are the typical responses of private ownership or state management the only viable options. "Many alternative forms of property have repeatedly been found to work effectively when well matched to the attributes of the resource and the harvesters themselves, and when the resulting rules are enforced, considered legitimate, and generate long-term patterns of reciprocity. . . . In spite of Hardin's persistent metaphor, today many people, ranging from policymakers, donors, practitioners, and citizen activists, to scientists from different disciplines, have begun to appreciate that here is a world of nuances between the State and the Market." Frank Van Laerhoven and Elinor Ostrom, "Traditions and Trends in the Study of the Commons," *International Journal of the Commons* 1 (2007):19. Note Elinor Ostrom (together with Oliver Williamson) won the 2009 Nobel Prize for Economics for "her analysis of economic governance, especially the commons." The Official Web Site of the Nobel Prize, "The Prize in Economics 2009 – Press

The intention of this book is to move beyond these traditional discussions of property rights and the environment and to broaden the discourse by addressing the larger question: How can property concepts 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? Answering this question involves boring down to the core content of property rights and examining it in its original context. It involves exploring the reframing of individual, public, and collective entitlements within an overarching context of protection and enhancement of ecological systems for the common good. In short, answering this question would establish a new paradigm for property rights with maintenance and protection of ecosystem resilience and integrity at its very core.<sup>14</sup>

In taking this approach, this book is neither “pro-property rights” (either private or common), nor is it “anti-property rights.” All contributors explicitly or implicitly acknowledge that property rights are a vital legal institution that performs an important role in human society. They recognize that property rights (properly understood) have the potential to be a valuable and powerful tool for responding to ecological problems. As one contributor observed, “[t]oday the individual creativity and moral self-governance, which private property fairly distributed potentially encourages, is necessary to preserve the planet.”<sup>15</sup>

Property rights are intimately connected to the social goals of the protection of life, liberty, and economic self-determination. They play a fundamental role in protecting individuals from the excessive and unfair exercise of power by the state. It could be said, therefore, that property rights *per se* are not the issue – rather the issue is what we understand property rights to entitle us to do and what obligations they impose. At issue are the values and interests currently served by property rights and how these should evolve to create a more appropriate balance of responsibilities, entitlements, and liabilities. The scale of recalibration needed to achieve this outcome is significant but, given the right supporting changes in our culture, society, and economic systems, it is achievable.<sup>16</sup> Conversely, if left unchanged, outdated property concepts run the risk of undermining the biophysical foundations of their own *raison d’être*.

---

Release,” Nobelprize.org, August 15, 2010, [http://nobelprize.org/nobel\\_prizes/economics/laureates/2009/press.html](http://nobelprize.org/nobel_prizes/economics/laureates/2009/press.html) (accessed August 15, 2010).

<sup>14</sup> For a discussion of the important implications this might have for reallocation of the burden of proof, see Joseph H. Guth, “Law for the Ecological Age,” *Vermont Journal of Environmental Law* 9 (2008):431.

<sup>15</sup> J. Ronald Engel, “Faustian Pact or New Covenant with Earth?” (paper presented at the conference, Property Rights and Sustainability, held at the University of Auckland, New Zealand, April 16–18, 2009).

<sup>16</sup> As Leopold noted: conservationists “are just beginning to realize that their task involves the reorganization of society, rather than the passage of some fish and game laws.” Leopold, *River of the Mother of God*, *supra* note 5, at 210.

This book is intended to make a new contribution to discussions on property rights, rather than simply deconstruct and criticize current property regimes. Thus individual authors do not dwell on the role of traditional liberal and economic property theories in perpetrating unsustainable activities and obstructing sustainable activities. There is a growing body of literature that performs that analysis<sup>17</sup> and which is referenced by many authors (see in particular, the chapters by Graham, Godden, and Alexander in Part One), before they turn to the task of exploring and offering alternative approaches to justifying and conceptualizing the purpose of property regimes or comparing them with alternative understandings.

All authors generally accept that property rights are malleable social and legal concepts, capable of change and (in the present ecological context) *requiring* change. A number point out that the traditional private law versus public law divide has blurred considerably in the area of environmental resources. Where they differ is on how to reformulate property concepts to internalize environmental protection into the body of property law itself and thus co-ordinate the exercise of human freedom *within* finite ecological resources. Some authors (such as Freyfogle, Bosselmann, Horsley, and Alexander) are reformist in their approach, arguing for a return to the core purpose of (or justification for) property systems, but with a much expanded or renewed understanding of the common good. Others (including Arnold, Graham, and Brower and Page) have chosen to investigate and critique the dominant property metaphors, and Tony Arnold's "web of interests" offers a new relational metaphor to better reflect human-nature relations. Some authors take a transformational approach. Samuel Alexander, for example, pays close attention to the relationship between property rights and neoliberal theories of economic growth. He argues that a post-growth theory of economics must go cap in hand with a supporting theory of property. Engel goes deeper still and searches for a new ethical foundation to ground and guide interpersonal and social human-nature relationships. New ideas about economy and law can be built on this ethical framework, indeed *must* be built on such a framework.

The chapters in Part Three, generally take a more empirical approach by examining emerging models of property relations, probing, and critiquing them to

---

<sup>17</sup> Joseph L. Sax, "Property Rights and the Economy of Nature: Understanding *Lucas v. South Carolina Coastal Council*," *Stanford Law Review* 45 (1993):1433–1455; Terry W. Frazier, "The Green Alternative to Classical Liberal Property Theory," *Vermont Law Review* 20 (1995):299–371; Eric T. Freyfogle, "Ownership and Ecology," *Case Western Resources Law Review* 43 (1993):1269–1297; Lynda L. Butler, "The Pathology of Property Norms: Living Within Nature's Boundaries," *South California Law Review* 73 (2000):927–1015; and John G. Sparkling, "The Antiwilderness Bias in American Property Law," *University of Chicago Law Review* 63 (1996):519–90.

derive lessons and find examples of improved environmental and social outcomes (Tomas, Godden, Strang, Kawharu, Grinlinton, Schyff, and Brower and Page).

In approaching the challenge of reconceiving property rights from different but interrelated perspectives, many authors have examined the historical development of modern property rights in the 17th and 18th centuries, tracing and testing the original theories and finding cracks.<sup>18</sup> There is general acknowledgement that this history is important, but that the task of contemporary society is to build on these traditions rather than remain enslaved by them beyond the limits of their logic (see, in particular, the chapters by Bosselmann, Freyfogle, Alexander, and Horsley).

In searching for inspiration and new sources to inform legal development, some contributors urge us to breach the bastions of legal formalism and reach out to diverse and ancient cultural and spiritual traditions. Several authors test traditional property systems, and different ways of knowing and owning nature, within the context of modern ecological conditions, cultural diversity, and diverse world views (Tomas, Horsley, Weeramantry, Strang, Godden, and van der Schyff). These authors highlight that non-Western concepts of ownership and property help us investigate different notions of “relationship” between persons and nature. They also provide us with models for reshaping Western concepts of property. The general conclusion emerging from these chapters is that our future property concepts could become much more diverse (van der Schyff, Tomas, Strang, and Horsley), if they are not subsumed by historical Western property concepts (as argued by Godden and Tomas). Whether they will deliver more sustainable outcomes is not yet clear.

## 1. Context for a property rights and sustainability discussion

This book does not presume to resolve the myriad of complex issues that surround property rights and sustainability, but it is hoped that it will make a useful contribution to a much-needed area of legal development.

First, we will give a brief introduction to the broader context and conflicts surrounding the interaction between property rights and sustainability.

### 1.1 *Property rights and sustainability*

Many of the major environmental issues that confront us today can be attributed to human activities that cumulatively, and over time, compromise shared and interconnected ecological systems. Damage to soils, water, air, oceans and the grave loss of biodiversity are causing significant harm to all life on Earth. This

---

<sup>18</sup> For a good overview, see Sean Coyle and Karen Morrow, *The Philosophical Foundations of Environmental Law: Property, Rights and Nature* (London: Hart Publishing, 2004).

degradation and loss is rapidly diminishing the health and prosperity of present and future generations and eroding the ecological basis on which the “common good” of all depends. A graphic illustration of the magnitude of ecological and economic havoc that can be wrought by human activities is the BP *Deepwater Horizon* oil-well blowout on April 20, 2010.<sup>19</sup> For 87 days, until the well was finally capped on July 15, almost 5 million barrels of crude oil surged into the Gulf of Mexico.<sup>20</sup> Not only did this spill cause ecological destruction on a vast scale, but it also caused major damage to livelihoods and the economies of communities in the region. While disasters such as these are shocking in the extreme, most lasting environmental damage occurs in a more insidious way, and over a longer period of time.

Such environmental damage, whether on a small or a grand scale, is often the result of the legitimate exercise of individual property rights over natural resources in ways that show little regard for the natural environment. Walter Lippman, writing more than 50 years ago on the “absolute rights” approach to land use in the 18th century, stated:

Absolute private property inevitably produced intolerable evils. Absolute owners did grave damage to their neighbours and to their descendants: they ruined the fertility of the land, they exploited destructively the minerals under the surface, they burned and cut forests, they destroyed the wild life, they polluted streams, they cornered supplies and formed monopolies, they held land and resources out of use, they exploited the feeble bargaining power of wage earners.<sup>21</sup>

In a similar vein, Timothy O’Riordan notes:

Throughout the industrial revolution and well into the [20th century], western nations were intent on creating wealth and exploiting environmental resources, whether they be clean air or water, undisturbed scenery, forests, or minerals. A belief in utilitarianism was matched by a love of private property, for private property conferred not only social status, but certain safeguards against environmental abuse. So, during the past hundred years, jurists and legislators have tended to favor use over preservation, private property rights over common property rights, and the generation of wealth and productivity over amenity, largely because society as a whole wanted it that way.<sup>22</sup>

These observations were directed at the industrial periods of recent human history, when most damage was thought to be local. Now the scales of harm are seen as regional or even global. We now better understand that the evolution of life on Earth has created interdependent ecosystems. The science of ecol-

---

<sup>19</sup> See generally, “Wikipedia, “Deepwater Horizon Oil Spill,” [http://en.wikipedia.org/wiki/Deepwater\\_Horizon\\_oil\\_spill#cite\\_note-FRTG-10](http://en.wikipedia.org/wiki/Deepwater_Horizon_oil_spill#cite_note-FRTG-10) (accessed August 15, 2010).

<sup>20</sup> Ibid. See also, Campbell Robertson and Clifford Krause, “Gulf Spill Is the Largest of Its Kind, Scientists Say,” *The New York Times*, August 2, 2010, U.S. Section, [http://www.nytimes.com/2010/08/03/us/03spill.html?\\_r=1&fta=y](http://www.nytimes.com/2010/08/03/us/03spill.html?_r=1&fta=y) (accessed August 15, 2010).

<sup>21</sup> Walter Lippman, *The Public Philosophy* (London, Hamish Hamilton, 1955), 109.

<sup>22</sup> Timothy O’Riordan, *Environmentalism*, 2nd ed. (London: Pion, 1981), 265.



ogy tells us that everything is connected to everything else and that humanity has an integral place within this network of connections. We are confronted with mounting evidence that Earth's biosphere is in serious decline as a direct consequence of human actions. In 2005, the United Nations' *Millennium Ecosystem Assessment Report* put this evidence in stark terms. It established that the cumulative impacts of human activity have put "such a strain on the natural functions of Earth that the ability of the planet's ecological systems to sustain future generations can no longer be taken for granted."<sup>23</sup> Climate change caused by human activities is now accepted as a reality and, in a recent authoritative report, considered "largely irreversible for 1,000 years."<sup>24</sup> Clearly, we are now struggling, on global, regional, and local scales, to achieve what Aldo Leopold termed the oldest task in human history, "... to live on a piece of land without spoiling it."<sup>25</sup>

This dire situation calls into question many of our social tools. Primary among these is property law. It is often the rules of property law, modified by planning and resource management regulation, that most directly govern human interaction with the natural environment.

### 1.2 *Property rights and ecological integrity*

When we examine the role of property law we find that, despite more than 40 years of environmental law development, the strength of legal protection accorded property rights continues to facilitate and incentivize forms of economic activity that cause widespread ecological harm. As will be seen through the analyses in this book, there are many explanations as to how this situation came about and why it endures. Wealth creation, for example, is an important function of property law. However, wealth is currently generated by an economic model that envisions continued economic growth largely unconstrained by the finite capacities of ecological systems. Furthermore, a fundamental aspect of traditional property law is that it contains *no inherent or internal means of restricting cumulative damage* to a level that is ecologically sustainable. As one commentator noted: both historically, and to this day, there is little awareness of an inherent duty to avoid environmental degradation as a qualification on

---

<sup>23</sup> Millennium Ecosystem Assessment Board, *Living Beyond Our Means* (Washington D.C.: Millennium Ecosystem Assessment Board, 2005), <http://www.millenniumassessment.org/en/BoardStatement.aspx> (accessed July 25, 2010).

<sup>24</sup> See, e.g., Susan Solomon et al., "Irreversible Climate Change due to Carbon Dioxide Emissions," *Proceedings of the National Academy of Sciences of the United States of America*, published online January 28, 2009 before print, <http://www.pnas.org/content/early/2009/01/28/0812721106.full.pdf+html> (accessed July 25, 2010).

<sup>25</sup> Leopold, *River of the Mother of God*, *supra* note 5, at 254.

property ownership.<sup>26</sup> This raises a key question of *how* property laws might evolve to provide for human freedom and prosperity while at the same time protecting and maintaining ecological integrity and resilience. The intent of this book is to address the question of how property laws can change to move beyond the “arrogance of rights” toward the “consonance of duties”<sup>27</sup> toward the biotic community to which we belong.<sup>28</sup>

At a more fundamental level, our property laws raise issues of what can be “owned” and what “ownership” entails. They also embody social and economic value systems, reflecting the values given to the function and purpose of natural resources, within human society. Property laws also determine power relations<sup>29</sup> between private individuals and a range of “others.” In the context of land ownership, “others” include the regulatory state, other landowners (individual neighbors and the larger community of landowners), the landless (wider public and future generations), and nature (other species and life forms). More specifically, property laws are the legal concepts that most strongly enshrine the view that economic wealth, freely pursued through the free use and enjoyment of natural resources, will provide for both individual and the so-called net social benefit, or common good. As will be seen from a number of the chapters in this volume, the freedoms that our property laws ensure, together with the notion that an economy can grow beyond ecological limits, have combined to create powerful legal incentives for ecological harm. As Walter Lippman and Timothy O’Riordan so eloquently point out, from the industrial revolution to the present, our property laws have become one of the main engines of unrestrained economic growth. While using property to generate individual wealth might have been an understandable position in the days when natural resources seemed boundless, it is now clear that the common good is not solely a matter of economic growth and wealth, even fairly distributed. Rather, the common good can only be realized through a “revived land ethic” that incorporates more enduring ways to live off the bounty of nature without destroying it.<sup>30</sup>

The peril of maintaining the primacy of private property rights in contemporary legal jurisprudence has been recognized by many commentators, who have

---

<sup>26</sup> Ugo Mattei and Andrea Pradi, “Doctrinal Issues in Property,” in *Encyclopedia of Law & Society: American and Global Perspectives*, ed. David Scott Clark (Thousand Oaks, CA: Sage Publications, 2007), 1198–1208, 1201.

<sup>27</sup> Attributed to Bertrand de Jouvenel, and cited in Kevin Gray, “Pedestrian Democracy,” *supra* note 8, at 65.

<sup>28</sup> Leopold perceived land as a “community to which we belong.” Leopold, *Sand County Almanac* *supra* note 2, at viii.

<sup>29</sup> As Kevin Gray puts it: “For serious students of property, the beginning of truth is the recognition that property is not a *thing* but a *power relationship* – a relationship of social and legal legitimacy existing between a person and a valued resource. . . .” Kevin Gray and Susan Francis Gray, *Elements of Land Law*, 3rd ed. (London: Butterworths, 2001), 95.

<sup>30</sup> See, e.g., J. E. Cribbet, “Concepts in Transition: The Search for a New Definition of Property,” *University of Illinois Law Review* 1(1986):1, 3.

asserted the need for a reorientation of fundamental concepts of ownership and use of land and resources. Lippman saw no theoretical barrier to such a reorientation of Western legal thought:

...Rights of property... are a creation of the laws of the state. And since the laws can be altered there are no absolute rights to property. There are legal rights to use and to enjoy and to dispose of property,... [and]

...The ultimate title [to land] does not lie in the owner. The title is in 'mankind'.<sup>31</sup>

Similarly, Ronald Bryant, writing in the early 1970s, recognized the need to re-establish the social responsibility element in property ownership:

In respect of land, we hold that there is very good reason for radical reappraisal and very particular reasons for holding to the view that property rights in land exist only so far as they are delegated to individuals by law, implicitly or explicitly. Such rights may endure to the extent that the individuals concerned are able and willing to exercise them according to the public interest, but ought to be withdrawn where they are not so willing or capable.<sup>32</sup>

The task of achieving reconciliation between the exercise of human freedom and ecological limits has largely fallen to what we call 'environmental law.' One view of environmental law is that it has emerged as a set of restraints and limitations on the freedom of individuals to use property in ways that can result in ecological harm (private individuals vs. the state). It can be viewed as a body of law that attempts to remedy some of the failings of property law by challenging the scope of rights and duties created by property law. In the past 50 years, environmental law (comprising both statutory and common law principles) has flourished in response to the ecological impacts of accelerating economic growth. Indeed, some would argue that environmental law has become so extensive and invasive that it has substantially eroded private freedom to do what one wishes with property owned.<sup>33</sup> And yet, if we pay serious attention to the continued and accelerating decline of Earth's ecological systems (across multiple scales), even in the light of half a century of environmental law and policy, we would have to conclude that environmental law is failing to meet society's objectives, particularly when viewed from the perspective of intra and intergenerational equity.

<sup>31</sup> Lippman, *Public Philosophy*, *supra* note 21, at 108.

<sup>32</sup> Ronald W. G. Bryant, *Land, Private Property, Public Control* (Montreal: Harvest House, 1972), 147.

<sup>33</sup> See, e.g., the comments of Wilson J in *Clifford v Ashburton Borough Council* [1969] NZLR 446 at 448 ("drastic erosion" of property rights by town planning law), approved by the Court of Appeal in *Ashburton Borough Council v Clifford* [1969] NZLR 927 at 943 per McCarthy J. In *Falkner v Gisborne District Council* [1995] 3 NZLR 622 at 632, Barker J held the planning and resource management regime under the *Resource Management Act 1991* (NZ) overrode pre-existing common law property rights where those rights were inconsistent with the statutory scheme.

Many critiques attempt to explain why environmental law is failing. This book, focusing on the intersection between environmental law and property law, explores the view that environmental law is failing because it still only floats over the surface of property law.<sup>34</sup> It creates a body of second-order legal principles, which reflect a second-order legal interest – that is environmental protection primarily for anthropocentric purposes, such as health, amenity, and aesthetic pleasure. Seen in these terms, it could be said that environmental law has not yet adequately penetrated the content of property law to challenge the dominant social view that human well-being can be achieved only through economic growth, substantially unlimited by ecological constraints. Recognition and enforcement of critical ecological constraints is left to be imposed externally, via the state (as the protector of the common good) through policy and remedial regulation, or through the limited reconciliation of conflicting private rights and duties via traditional legal processes (e.g., through the modern law of torts, contract law, and property law). Although not without benefits, the body of environmental law does not adequately challenge the status quo, or “business as usual” because it “generally harbors the same core presumption that economic activity provides a net social benefit.”<sup>35</sup> Thus, economic interests, rather than ecological interests in support of human well-being, remain the explicit or implicit priority. For this reason, property laws and environmental laws, as currently formed and interpreted, are at odds with the concept of sustainability.

The term ‘sustainability,’ as used here, is intended to describe ‘strong’ sustainability; that is, providing for the needs and interests of human beings through social, cultural, and economic activity that occurs *within the limits* of Earth’s ecological carrying capacity. Strong sustainability is distinguished from ‘weak’ sustainability, which proposes minimization of environmental “externalities” rather than strict constraints on the use of resources, thus enabling continued trade-offs between economic growth and environmental protection. Weak sustainability fails to recognize the finite capacity of ecological systems and the fact that these systems are being eroded by the cumulative impact of individual actions across interconnected systems and over large temporal and spatial scales. Weak sustainability enables trade-offs because it continues to prioritize economic growth, arguing that harms can be repaired later through improved technical “fixes,” or that the functions of degraded natural systems can be sub-

---

<sup>34</sup> See, e.g., the comments of Hammond J. in *Coleman v Kingston* (Unreported, High Court, Auckland, AP 103-SW00, April 3, 2001, noted [2001] 4 BRMB 59), at paras [25] & [28]: “The Resource Management Act [New Zealand’s primary environmental statute] floats, rather like oil on water, across the top of ownership rights without affecting the underlying substance.”

<sup>35</sup> Guth, “Law for the Ecological Age,” *supra* note 14, at 435.

stituted by human technologies.<sup>36</sup> Weak sustainability is sometimes called the “business as usual” approach because it leaves unchallenged the fundamental notion that the public good is best achieved through continued limitless economic growth, rather than the alternative view that the public good will be best served by finding new forms of economic activity that are conducted within, and in concert with, the healthy functioning of ecological systems. Conversely, ‘strong’ sustainability aims to move human society beyond prioritizing ‘either’ economic well-being ‘or’ environmental protection. It argues that both human well-being and environmental protection are possible, *if* the ecological limits of Earth are respected by all.<sup>37</sup>

Human society has the option to consciously choose a new social goal. If it chooses the provision of human well-being through the promotion of healthy and ecologically viable ecosystems, then new forms of economic activity will need to be developed, supported by appropriate legal change. One will not succeed without the other.

This interplay between economic imperatives and environmental legal change, informed primarily by ecological understanding, is well described by Joseph Guth:

If we are ever to develop an ecologically sustainable economy, we must free ourselves from the existing system of legal incentives that is compelling us to destroy the Earth. Our law must enforce a limit to the scale of environmental damage that we are collectively permitted to inflict upon the Earth. This would represent a transformation in the law’s understanding of the public welfare, and a dramatic evolution in the structure of property law.<sup>38</sup>

---

<sup>36</sup> The *reductio ad absurdum* of this approach is illustrated in the “plastic trees” debate of the early 1970s. See Lawrence H. Tribe, “Ways Not to Think about Plastic Trees,” *Yale Law Journal* 83 (1974):1315–1348; Mark Sagoff, “On Preserving the Natural Environment,” *Yale Law Journal* 84 (1974):205–67.

<sup>37</sup> Eric Neumeyer, *Weak versus Strong Sustainability: Exploring the Limits of Two Opposing Paradigms*, 3rd ed. (Cheltenham, UK: Edward Elgar Publishing, 2010); Timothy O’Riordan and Jill Jager, *The Politics of Climate Change: A European Perspective* (London and New York: Routledge, 1991). Generational and social justice aspects are also critical and integral aspects of strong sustainability, however they are not the specific focus of this book. The primary emphasis is on humanity managing activities so that they occur within the constraints of the biosphere. Concepts helpful to understanding this objective and the linkages with generation and social justice include the Ecological Footprint Model (<http://www.footprintnetwork.org/en/index.php/GFN/> (accessed July 25, 2010)), and the Strategy of Contraction and Convergence for Responding to Climate Change (<http://www.gci.org.uk/index.html> (accessed July 25, 2010)). See also, Franz Josef Radermacher, *Global Marshall Plan: A Planetary Contract* (Hamburg: Global Marshall Plan Foundation, 2004); and Franz Josef Radermacher, *Balance or Destruction: Ecosocial Market Economy as the Key to Global Sustainable Management* (Vienna: Oekosoziales Forum Europa, 2004). In the New Zealand context, see Sustainable Aotearoa NZ Inc., *Strong Sustainability for NZ: Principles and Scenarios* (Wellington: Nokedize Pub Ltd, 2009).

<sup>38</sup> Guth, “Law for the Ecological Age,” *supra* note 14, at 511.

New models of economic activity are emerging<sup>39</sup> together with new definitions of human wellbeing,<sup>40</sup> but what about the supporting legal change? The fundamental issues raised by this book are:

1. Can property laws, which have emerged as a tool to facilitate harmful economic growth, be changed and reconciled with the more sophisticated social goal articulated by sustainability?<sup>41</sup> and
2. If so, how can this reconciliation be achieved?

The challenges that these issues pose for the law generally,<sup>42</sup> and for property law in particular,<sup>43</sup> are only now coming of age. Indeed, it is not at all clear

---

<sup>39</sup> Tim Jackson, *Prosperity without Growth: Economics for a Finite Planet* (London: Earthscan, 2009); David C. Korten, *Agenda for a New Economy: from Phantom Wealth to Real Wealth* (San Francisco: Berrett-Koehler Pub Inc., 2009); Herman E. Daly, *Steady State Economics* (Washington, DC: Island Press, 1991). In addition to the development of new models of economic activity, critiques of the physical assumptions of mainstream economics are also important. See, e.g., Robert L. Nadeau, *The Environmental Endgame: Mainstream Economics, Ecological Disaster, and Human Survival* (New Brunswick: Rutgers University Press, 2006). From a more traditional economic perspective, see the 2006 report by Nicolas Stern, *Stern Review: The Economics of Climate Change* (Cambridge, UK: Cambridge University Press, 2007), that stimulated a renewed focus on transition toward the so-called green economy.

<sup>40</sup> Victor Anderson, *Alternative Economic Indicators* (London: Routledge, 1991); Tim Jackson and Nat McBride, *Measuring Progress? A Review of Adjusted Measures of Economic Welfare in Europe: Report for the European Environment Agency* (Guildford: University of Surrey, 2005). See also Richard Wilkinson and Kate Pickett, *The Spirit Level: Why More Equal Societies Almost Always Do Better* (United Kingdom: Penguin Books, 2010), advancing that view that beyond a certain level of economic wealth, social equality is a more important determinant of social well-being.

<sup>41</sup> How 'sustainability' is defined and understood is crucial – for a critique, in the specific context of evolving understanding of property rights, see Eric Freyfogle, *Why Conservation is Failing and How it Can Regain Ground* (New Haven, CT: Yale University Press, 2006).

<sup>42</sup> See, e.g., Klaus Bosselmann, *When Two Worlds Collide: Society and Ecology* (New Zealand: RSVP Pub., 1999); Klaus Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (London: Ashgate, 2008); Staffan Westerlund, "Theory for Sustainable Development" in *Sustainable Development in International and National Law: What did the Brundtland Report Do to Legal Thinking and Legal Development, and Where Can We Go from Here?*, eds. Hans Christian Bugge and Christina Voigt (The Netherlands: Europa Law Publishing, 2008), 49–68; Michael M'Gonigle and Paula Ramsay, "Greening Environmental Law: From Sectoral Reform to Systemic Re-Formation," *Journal of Environmental Law and Policy* 17 (2004):333–56; Cormac Cullinan, *Wild Law: Governing People for Earth* (South Africa: Siber Inc, 2002); Prue Taylor, *An Ecological Approach to International Law: Responding to the Challenges of Climate Change* (London: Routledge, 1998).

<sup>43</sup> See, e.g., Frazier, "Green Alternative, to Classical Liberal Property Theory," *supra* note 17; Guth, "Law for the Ecological Age," *supra* note 14; David B. Hunter, "An Ecological Perspective of Property: A Call for Juridical Protection of the Public's Interest in Environmentally Critical Resources," *Harvard Environmental Law Review* 12 (1988):311–383; Sax, "Property Rights and the Economy of Nature," *supra* note 17; Eric Freyfogle, *On Private Property: Finding Common Ground on the Ownership of Land* (Boston: Beacon Press, 2007); Craig Anthony (Tony) Arnold, "The Reconstitution of Property: Property as a Web of Interests," *Harvard Environmental Law Review* 26 (2002):281–364; Robert J. Goldstein,

whether an entirely new theory of property will be required,<sup>44</sup> or whether it will be possible, over time, to realign or recalibrate property rights and duties, so that they meet a new understanding of their combined social and ecological purpose.<sup>45</sup> However we choose to proceed, it is clear that we must engage in this task. The question of how to make property rights enhance rather than frustrate ecological understanding will not go away.<sup>46</sup> On the contrary, increasing instability and uncertainty in ecosystem functioning, together with growing human demand for natural resources,<sup>47</sup> are coming together in a manner that radically increases tensions between providing for the common good *and* protecting individual freedoms and human rights.<sup>48</sup>

---

*Ecology and Environmental Ethics: Green Wood in the Bundle of Sticks* (Aldershot, UK: Ashgate Publishers, 2004).

<sup>44</sup> Carl Circo, for example, argues that given the challenges sustainability poses for traditional liberal and economic theories of property, the sustainable development agenda will *not be able to succeed in the United States without a revolution in property theory*. He argues that relational theories of property hold promise, but that these theories are still at the periphery of property theory. Carl J. Circo, "Does Sustainability Require a New Theory of Property Rights?" *Kansas Law Review* 58 (2009):91. In comparison, Kevin Gray is of the view that (in the U.K. context) there is now nascent recognition of a communitarian perspective on property. Gray, "Pedestrian Democracy," *supra* note 8. See also Frazier, "Green Alternative to Classical Liberal Property Theory," *supra* note 17; Carol M. Rose, "Given-ness and Gift: Property and the Quest for Environmental Ethics," *Environmental Law* 24 (1994):1–31. In the field of international environmental law, there are important developments around the concept of 'common heritage of mankind' that hold potential to recognize a communitarian perspective, which could reshape traditional understanding of state sovereignty.

<sup>45</sup> Freyfogle, *On Private Property*, *supra* note 43; Carol M. Rose, "Canons of Property Talk, or, Blackstone's Anxiety," *Yale Law Journal* 108 (1998):601–32. For a more European perspective, see Murray Raff, *Private Property and Environmental Responsibility: A Comparative Study of German Real Property Law* (The Hague, The Netherlands: Kluwer Law International, 2003).

<sup>46</sup> Freyfogle, *Why Conservation is Failing*, *supra* note 41.

<sup>47</sup> Millennium Ecosystem Assessment *Ecosystems & Human Well-Being: Synthesis* (Washington, DC: Island Press, 2005).

<sup>48</sup> The creation of private property rights in water resources is one area where there is renewed interest in privatization, but which raises risks for human rights and security. As one commentator notes, creation of private property rights in public resources, together with the elimination of meaningful government regulation, will "result in the specification of private property rights in all valuable resources of the biosphere.... 'the whole world will have to be privatised' in order to save it." Guth, "Law for the Ecological Age," *supra* note 14, at 485. Others have referred to this expansion of privatization as the final enclosure movement, one that could lead to the ultimate *tragedy of fragmentation*. This term refers to the fact that modern legal concepts (e.g., individual private landownership that encourages competition between individuals via externalization of ecological harm) fail to recognize the biological interconnections of land, and frustrate co-operation on an ecological scale. Eric Freyfogle, *The Land We Share: Private Property and the Common Good* (Washington, DC: Island Press, 2003). For a discussion of the ecological critique of human rights, including the right to property, see Prue Taylor, "From Environmental to Ecological Human Rights: As New Dynamic in International Law?" *Georgetown International Environmental Law Review* 10 (1998):309–97.

## 2. Looking to the future

Property concepts need not be identical for all objects. In the case of real property, however, we need a revived land ethic to guide our decision in an uncertain future.<sup>49</sup>

– J. E. Cribbet

Many complex issues surround the intersection between property rights and sustainability. It is intended that this book will make a useful contribution to this much-needed area of legal development. Two recent publications highlight this need.

In a book on the philosophical foundations of environmental law,<sup>50</sup> Coyle and Morrow argue that from its inception, environmental law has been an attempt to address the relationship between humanity and the world, and the limits of our entitlement to the use of its resources.<sup>51</sup> According to their analysis, environmental law has historically attempted to shape the *content and substance of private property rights to require the fulfillment of responsibilities* that go far beyond the reciprocal legal duties owed to other individuals or the state. The continuing rapid decline of Earth's ecological systems is testimony to the ongoing failure of environmental law to achieve this fundamental objective. Nevertheless, an awareness that early property law theories and common law principles were concerned with human-nature relations and the intrinsic moral worth of nature is valuable. It provides a rich context against which to understand trends in modern environmental thinking and law that attempt to move beyond the "utilitarian reconciliation of clashing interests" and attribute value to nature beyond the purely instrumental.<sup>52</sup> It may lend support, for instance, to the re-emerging<sup>53</sup> "perception that all 'property' in land comprises not only rights and obligations, but also a form of *delegated responsibility* for land as a community resource."<sup>54</sup>

---

<sup>49</sup> Cribbet, "Concepts in Transition," *supra* note 30, at 3.

<sup>50</sup> *Ibid.*

<sup>51</sup> *Ibid.*, 1–7.

<sup>52</sup> *Ibid.*

<sup>53</sup> It might be noted that the feudal basis of early English land law included not only the rights attached to tenurial holdings, but also certain obligations of the tenants to the grantor. Such obligations included service, payments of money and goods, and also certain obligations to maintain the land itself and avoid wastage or damage. See Theodore F. T. Plucknett, *A Concise History of the Common Law*, 5th ed. (London: Butterworths, 1956), 506–520. See also the discussion on the meaning of *dominium*, in the chapter by Klaus Bosselmann, "Property Rights and Sustainability: Can They be Reconciled?" in this volume.

<sup>54</sup> Gray and Gray, *Elements of Land Law*, *supra* note 29, at 1132. The corollary is that "the mix or balance of utilities associated with any landholding is subjected, through state intervention, to an overarching criterion of publicly defined responsibility." *Ibid.*, 115. As Gray notes, this approach has much in common with Article 14 of the German Grundgesetz, which provides that property imposes duties. "Its use should also serve the public weal." *Ibid.*, 115. Note, however, the anthropocentric interpretation given to the scope of this duty and attempts at reform. Klaus Bosselmann, "Property Rights and Sustainability: Can they



The second publication is an article by Joseph Sax in which he critiques the last four decades of environmental law. Noting the current impoverished state of the Earth's ecological systems, he observes that our plethora of environmental laws and regulations, "still float at the surface of our domestic legal systems . . . and thus, at the profoundest level, the legal system is handicapped in doing the job it needs to do."<sup>55</sup> In his view, this is because our legal systems (particularly in relation to property rights) fail to address the values that create the incentive systems for environmental harm. Our legal systems do not yet "reconstitute themselves to respond to the new values and understandings" that comprise our appreciation of environmental degradation.<sup>56</sup> Sax concludes by noting that it is only when a *duty to protect* (in addition to [property] rights to use) is expanded into a general principle of our domestic law, governing all resources, will we "be able to say we have truly implanted environmental jurisprudence into our legal system."<sup>57</sup>

Sax is not dismissive of efforts of public officials and governments to respond to issues such as biodiversity loss and climate change through legislative means and to enforce that law. Nor is he dismissive of the use of common law action, such as nuisance, for an environmental harm that directly threatens health or the economic interests of identifiable individuals. However, as he notes,

there is a very significant difference between receiving the benefit of legal support as a matter of contemporary policy or politics, and having a [public environmental] right recognized as *one of the fundamental pillars of the legal system*. Although we may talk about fundamental rights to environmental quality, and even embody those precepts in major declarations or constitutions, *we need to understand at the same time how far we*

---

be reconciled?" in this volume. See also Kevin Gray and Susan Francis Gray, "The Idea of Property in Land," in *Land Law: Themes and Perspectives*, eds. Susan Bright and John Dewar (Oxford: Oxford University Press, 1998), 15–51. According to this "obligational" analysis of property, state intervention does not represent a diminishment or reduction of property rights or land-use entitlements. Rather state intervention amounts to recognition "that the proprietary utilities available to a landholder are *inherently curtailed by a community-directed obligation to conserve and promote fragile features of the environment*." *Ibid.*, 49. These obligations are "existing tacit constraints" the scope and nature of which are subject to evolving ecological consciousness and conscience. *Ibid.*, 15–51; and Gray, "Pedestrian Democracy," *supra* note 8. This approach raises interesting questions concerning the role of the state (both in national and international contexts) as steward or guardian of the environment, for present and future generations. It also greatly informs the discussion on compensation. Gray and Gray, "Idea of Property in Land," *supra* note 54, at 48–51. An obligational analysis of property is also relevant to the notion of self-responsibility. See generally, Gunther Tuebner et al., eds., *Environmental Law and Ecological Responsibility: The Concept and Practice of Self-Organization* (Chichester: Wiley, 1994).

<sup>55</sup> Joseph Sax, "Environmental Law Forty Years Later: Looking Back and Looking Ahead" in *Biodiversity, Conservation, Law and Livelihoods. Bridging the North South Divide*, eds. Michael I. Jeffery, Jeremy Firestone and Karen Bubna-Litic M. Jeffery, *IUCN Academy of Environmental Law Research Studies: Biodiversity, Conservation, Law and Livelihoods. Bridging the North South Divide* (New York: Cambridge University Press, 2008), 9–25.

<sup>56</sup> *Ibid.*, 9–10.

<sup>57</sup> *Ibid.*, 25.

*are from embracing any real conception of public rights as legal entitlements in matters like biodiversity protection.*<sup>58</sup>

In short, the very integrity of the law is threatened if we continue to allow it to be used to drive and sanction ecological harm, while at the same time attempting to use it as a protection or remedy.

To bluntly summarize our current situation, the burgeoning body of public environmental law owes its existence to the law's ongoing failure to reconcile the exercise of private freedoms with responsibilities toward the collective good. As one contributor put it, "environmental law owes its existence to the dark side of property rights, their ecological blindness."<sup>59</sup> The irony of this situation can no longer be overlooked. As Leopold warned 60 years ago, a system of conservation based on economic self-interest, and which overlooks our place in nature and the need to preserve the "integrity, stability, and beauty of the biotic community," is hopelessly lopsided. It "[t]ends to relegate to government many functions eventually too large, too complex, or too widely dispersed to be performed by government."<sup>60</sup> That we find ourselves standing at this very point, 60 years on, is the real *tragedy of OUR commons*. One need only compare the complex and vast array of international, regional, and national environmental laws with reports such as the United Nations' *Millennium Ecosystem Assessment*, to conclude that we are fast reaching the limits of this law *and* the biosphere. It is time to take a different path: to create legal frameworks that explicitly recognize that humanity is an interdependent part of the larger ecological order, and that the overall condition of that larger order is of paramount importance.<sup>61</sup>

In such an endeavor, adequate attention must be given to the need for transition strategies, applicable to the specific context of different political and legal systems. If, at the core, we are working toward a "new variant of the social contract" requiring us to coexist as members of the biotic community,<sup>62</sup> then great effort will be required to foster the necessary "democratic" will, and accommodate the legitimate concerns that such change may raise. We cannot expect governments to implement a substantially different balance of interests

---

<sup>58</sup> *Ibid.*, 22 (emphasis added).

<sup>59</sup> Klaus Bosselmann, "Property Rights and Sustainability: Can They be Reconciled?" in this volume.

<sup>60</sup> Leopold, *A Sand County Almanac*, *supra* note 2, at 214.

<sup>61</sup> Freyfogle, *Why Conservation is Failing*, *supra* note 41, at 236. Central to the idea of legal development based on an ethic of human stewardship is that obligations are defined by nature itself, not by the state, thus avoiding issues being categorized as a conflict between individuals and the society. In the words of David Hunter, "[t]he obligations imposed on land owners by the environment are independent of the obligations imposed by the 'state'. The state's apparatus is only necessary to interpret and enforce the land's demands of property owners." Hunter, "An Ecological Perspective of Property," *supra* note 43, at 319.

<sup>62</sup> Gray, "Pedestrian Democracy," *supra* note 8, at 65.

and understanding of harm, without clear societal support.<sup>63</sup> As Earl Murphy noted in 1977:

[P]roperty does not exist in a void, for the rules of property are exercised in the larger functioning of the social structure. It is the social decisions which determine the extent of the recognition the legal system may extend to the relationship between human demand and the renewing environment.<sup>64</sup>

Many elements will need to combine for this societal support to build.<sup>65</sup> But, if successful, this change will lead to the transformation of many components of legal systems – tax law, company law, contract law, investment law, and trade law are just some areas of so called anti-environmental law,<sup>66</sup> which are in need of reform. Changes of this nature will inevitably disturb the status quo and a failure to appropriately understand and acknowledge this will only lead to a counter-productive backlash, as vested interests fight tenaciously to maintain their positions.

Reactive legislation, which serves to strengthen traditional notions of property rights, can greatly impede the attainment of environmental objectives.<sup>67</sup> Key

---

<sup>63</sup> See generally, Guth, “Law for the Ecological Age,” *supra* note 14. There is a re-emerging critic of democracy and its ability to deliver the necessary degree of change. See John Barry and Andrew Dobson, “Green Political Theory: A Report,” in *Handbook of Political Theory*, eds. Gerald F. Gaus and Chandran Kukathas (London: Sage Publications, 2004), 180–191; Andrew Dobson and Robyn Eckersley, eds. *Political Theory and the Ecological Challenge* (Cambridge, UK: Cambridge University Press, 2006); Robyn Eckersley, *The Green State: Rethinking Democracy and Sovereignty* (Cambridge, MA: The MIT Press, 2004); J. Ronald Engel, Laura Westra, and Klaus Bosselmann, *Democracy, Ecological Integrity and International Law* (Cambridge, UK: Cambridge Scholars Publishing, 2010); Klaus Bosselmann, Ron Engel and Prue Taylor, eds., *Governance for Sustainability: Issues, Challenges, Successes* (Gland, Switzerland: IUCN, 2008). See also the growing literature on global civil society and cosmopolitanism.

<sup>64</sup> Earl Finbar Murphy, *Nature, Bureaucracy, and the Rules of Property – Regulating the Renewing Environment* (New York: North-Holland, 1977), 186. See also Cribbet, “Concepts in Transition,” *supra* note 30, at 40.

<sup>65</sup> See, e.g., Gary T. Gardner, *Inspiring Progress: Religions’ Contributions to Sustainable Development* (New York: Norton and Co, 2006); Anthony A. Leiserowitz and Lisa O. Fernandez, *Toward a New Consciousness: Values to Sustain Human and Natural Communities. A Synthesis of Insights and Recommendations from the 2007 Yale F&ES Conference* (New Haven, Connecticut: Yale School of Forestry & Environmental Studies, 2008), <http://environment.research.yale.edu/documents/downloads/o-u/Toward-A-New-Consciousness.pdf> (accessed July 25, 2010); and work by political ecologists Andrew Dobson and Robyn Eckersley, including *Political Theory and the Ecological Challenge*, *supra* note 63. See also Worldwatch Institute, *State of the World 2010: Transforming Cultures, From Consumerism to Sustainability* (London: W.M. Norton & Company, 2010), <http://www.worldwatch.org/sow10> (accessed July 25, 2010).

<sup>66</sup> John C. Dernbach, “Navigating the U.S. Transition to Sustainability: Matching National Governance Challenges with Appropriate Legal Tools,” *Tulsa Law Review* 44 (2008):93–120.

<sup>67</sup> See, e.g., Melissa Powers, “Land Use Regulation versus Property Rights: What Oregon’s Recent Battles Could Mean for Sustainable Governance,” in *Governance for Sustainability*, eds. Bosselmann, Engel, and Taylor, *supra* note 63, at 191. In New Zealand section 85 of the *Resource Management Act 1991* provides that no compensation is payable to landowners for changes to land use due to planning controls. There is currently an

transition strategies include: careful and open consideration of benefits and burdens;<sup>68</sup> recognition of fair expectations; and mechanisms that allow change to evolve in a gradual manner.<sup>69</sup>

Transition strategies will be important, but ultimately, at least three critical dynamics will have to come together to create the resolve for enduring change. First, a comprehensive understanding of the ecological crisis that we face and the development of comprehensive ecological quality criteria. Second, an acknowledgement of humanity's role as a member of the ecological community, and the development of an ecological conscience. Third, the cultural and social determination needed to (as Jared Diamond put it), "choose" to succeed.<sup>70</sup> Fear of cataclytic collapse will not bring these dynamics together, nor will hope alone. Hope can (and must) be built upon a strong and positive foundation – the knowledge that a healthy and resilient biosphere *is bountiful*. Our task is to "preserve the integrity, stability and beauty" of the biosphere<sup>71</sup> so that its bounty will continue to provide for the benefit of all, now and into the future.

---

intention to review this section as it is perceived to unfairly erode private property rights. See Alan Dormer et al., *Report of the Minister for the Environment's Technical Advisory Group* (Wellington: Ministry for Environment, 2009), <http://www.mfe.govt.nz/rma/central/amendments/resource-management-simplify-and-streamline-amendment-bill-2009/report-technical-advisory-group/index.html> (accessed July 25, 2010), 62 ("reviewing the extent of the burdens imposed on or the benefits gained by land owners, for example by the introduction of significant natural areas and examining the appropriateness of compensation/reward mechanisms for same").

<sup>68</sup> Kevin Gray notes: "... it can not be that *all* regulatory dislocations of a landholder's utility constitute compensable deprivations of 'property'.... [T]he task facing the modern jurisprudence of environmental property is to discriminate between the elements of land-based utility whose impairment constitutes a true taking of 'property' (and is therefore compensable) and those other elements which a landholder may properly be expected (without compensation) to forgo in favour of the communal good." Gray and Gray, "Idea of Property in Land," *supra* note 54, at 48–9.

<sup>69</sup> See, e.g., Rose, "Property Rights and Responsibilities," *supra* note 13, at 55–7: "Owners are entitled to expect that new environmental regimes will carefully weigh costs and benefits, and they are entitled to expect fair transitions to new ways of managing environmental resources; but no one can expect that existing [and future] property uses will forever remain the same." *Ibid.*, 57. See also Gray and Gray, "Idea of Property in Land," *supra* note 54, at 47–51; and Freyfogle, *On Private Property*, *supra* note 43.

<sup>70</sup> Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Penguin Books, 2006).

<sup>71</sup> Leopold, *Sand County Almanac*, *supra* note 2, at 224.