IS THE CONCEPT OF PERPETUITY IN CONSERVATION EASEMENTS RELEVANT? AN EVALUATION OF PERPETUAL RESTRICTIONS ON PRIVATELY OWNED LAND FOR HABITAT CONSERVATION WITH CONSERVATION EASEMENTS

by

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Conservation easements have become the most commonly used tool by land trusts to achieve conservation objectives on private lands. This thesis presents a critical analysis of the use of perpetual conservation easements to protect wildlife habitat in Oregon. Perpetual easements raise numerous questions, particularly regarding the effectiveness of such easements over time, the ability of land trusts to steward perpetual easements, and the ability of easements to protect conservation values in the face of ever-changing environmental conditions. This project addresses these concerns by analyzing easement documents, related policy and procedure documents, and land trust practices. The thesis addresses these concerns through the lenses of conservation science and land trust literature.

Land trusts in Oregon are preparing for perpetuity through clear easement language and the use of project selection criteria. However, inconsistent use of written documents and inflexible easement language may limit their ability to protect conservation values over time.

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CHAPTER ONE: INTRODUCTION

In recent decades, conservation easements have become the most commonly used tool by land trusts to achieve conservation objectives on private lands.[1] The increase in their use is attributable to many factors, including tax incentives, creation of the Uniform Conservation Easement Act, and increasing public desire to move away from the command and control system of regulation that permeated the "first generation" of environmental law.[2] Their use has generated praise from both conservative and liberal thinkers, as they seem to be sensitive to private property rights, provide some level of protection for wildlife habitat,[3] as well as provide compensation to landowners willing to engage in conservation on their land.[4]

It is only recently that critics, largely property rights organizations, have begun to question the implicit assumptions behind conservation easements and to warn against

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[1] Gustanski and Squires, eds., *Protecting the Land*, 14-19.

[2] Mahoney, "Perpetual Restrictions on Land," 780-81. Meffe et al., *Ecosystem Management*, 4. Gustanski and Squires, eds., *Protecting the Land*, 16-17.

[3] In this paper, "wildlife habitat" refers to game and non-game species, flora and fauna, single species or multiple species conservation, and ecosystem protection.

[4] A public poll taken in North Dakota suggests that most people (in that state) support the right of a landowner to sell or donate a conservation easement. Ducks Unlimited, "Conservation Easements an Important Property Right," http://prairie.ducks.org. Sixty-five percent of respondents felt that landowners should be able to sell conservation easements to protect wetlands and grasslands on their land. Over 70% of respondents thought that landowners should be able to determine how long an easement will last, whether from just a few years to forever.

their widespread implementation.[5] One point of debate is the goal of perpetuity expressed in and created by conservation easements.[6] The definition of *in perpetuity* in Blacks Law Dictionary is plainly, "forever."[7] Consequently, many conservation easements place permanent restrictions on privately owned property.[8] Some believe that this goal may ultimately cause hardship for future generations while primarily benefiting the generation that created the easement.

This thesis presents a critical analysis of the use of perpetual conservation easements in the context of wildlife habitat conservation. There are three main reasons this project centers on private land and conservation easements with the goal of habitat conservation. First, goals of habitat conservation are inherently unlike other goals for which conservation easements are used. Therefore, a discussion of conservation easements in light of habitat preservation will not competently address issues related to easements for open space, agricultural preservation, or trail ways, although all are coined "conservation easements."[9]

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[5] Shay, "Public Policy Update: Land Trusts and Their Skeptics," 4.

[6] The majority of states allow easements to last perpetually. In most states, statutes establish a default rule of perpetuity, based on the Uniform Conservation Easement Act. Gustanski and Squires, eds., *Protecting the Land*, 40.

[7] Garner, ed., *Black's Law Dictionary*, 352.

[8] Mayo, "Holistic Examination of the Law of Conservation Easements," in Gustanski and Squires, eds., *Protecting the Land*, 40.

[9] "The Uniform Conservation Easement Act allows states to create a conservation easement (1) to retain or protect natural, scenic, or open-space values of real property; (2) to ensure the availability of real property for agricultural, forest, recreational, or open-space use; (3) to protect natural resources; (4) to maintain or enhance air or water quality; and (5) to preserve the historical, architectural, archeological, or cultural aspects of real property." Ibid., 27.

Second, a substantial percentage of conservation easements have the goal of "habitat" protection. The Land Trust Alliance[10] (LTA) reports that forty-two percent of private lands encumbered with conservation easements are "primarily involved" in preserving endangered species habitat, while forty-five percent are primarily involved in protecting "nature preserves."[11] Thus, land trusts commonly use conservation easements for some form of habitat protection. Due to the unique issues relating to the use of conservation easements for wildlife habitat and because of their widespread use as tools for habitat preservation, it is important to address the particular concerns perpetual conservation easements present in light of this specific application.

The third reason for such a focus is that change is inevitable in ecosystems and conservation value.[12] Changes can stem from natural catastrophe, environmental uncertainty, synergistic and cumulative effects of events, biological variation in populations, and human activities.[13] Small-scale disturbances and large-scale changes (i.e., climate change) will certainly dictate what species and ecological systems will form on a landscape.[14] Land trusts, as protectors of the "conservation value" of easements, have a duty to protect that value even as it changes. Therefore, sources of uncertainty

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[10] The LTA is an umbrella organization for US land trusts that provides information, training and guidance on all aspects of land trust operation.

[11] Land Trust Alliance, "Summary Data from the National Land Trust Census," www.lta.org/newsroom/census_summary_data.htm (last visited May 10, 2003).

[12] Meffe et al., *Ecosystem Management*, 80.

[13] Ibid., 80-85.

[14] Noss and Cooperrider, *Saving Nature's Legacy*, 58-59. Agnew and Fennessy, "Climate Change and Nature Conservation," in French, *Habitat Conservation*, 273.

should be included in decision-making processes.[15] Learning how to do that will be a critical aspect of land trust practices.

The reason for the focus on private organizations and not government agencies as holders of the easement are two-fold. First, private organizations do not have the same degree and rigor of public scrutiny as government organizations. Second, the nature of interaction between government and individuals is likely to be different from interactions between private organizations and individuals. Land trusts are viewed by many as an alternative to excessive government involvement and should be considered separately.

In the context of using perpetual easements for wildlife habitat protection,[16] issues include questions regarding land trusts' ability to:

1. Protect the habitat conservation value effectively throughout changes in fee title ownership,
2. Select appropriate lands for conservation that will retain significant conservation value over time,
3. Work effectively with landowners (present and future) to protect and enhance conservation values, and
4. Create easement documents that respond to changing environmental realities and conservation knowledge.[17]

In this study, I address the above concerns by looking at the practical application of conservation easements by land trusts operating in Oregon. The specific research questions this project endeavors to answer are:

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[15] Meffe et al., *Ecosystem Management,* 87.

[16] Hereinafter, "habitat conservation easement" refers to conservation easements utilized for habitat conservation.

[17] This is not an exhaustive list of potential concerns; rather, this is a list of issues relevant to this research project.

1. Are conservation easements in place today designed to protect their habitat conservation values in perpetuity? Assuming the goal of perpetuity is possible and realistic, what are the best means by which land trusts can achieve it?

2. How should land trusts address the goal of perpetuity in terms of easement drafting, property selection, landowner contact, and easement and property stewardship policies and procedures?

3. How are land trusts in Oregon preparing for perpetuity as it relates to the use of conservation easements for wildlife habitat protection in terms of easement drafting, property selection, landowner contact, and easement and property stewardship policies and procedures? How can land trusts improve upon this goal through practices and policies?

Although the task of protecting the conservation value of conservation easements over time is daunting, with proper policies and procedures in place for project selection, land management and stewardship, landowner contact, and easement drafting, land trusts can create a framework to increase their chances of success and allow for flexibility to changes, both human and environmental.

Overview of Thesis

Chapter 1, the introduction, includes background on habitat loss, species extinction, conservation easements, land trusts, and theory on perpetuity in conservation easements. This chapter gives the reader a solid base with which to understand the goals of the project as well as an appreciation for the issues presented. This chapter also presents the reader with a broader perspective regarding the concerns of perpetuity than is addressed in the project.

Chapter 2 presents a literature review of land trust and conservation easement studies. It also presents a review of current conservation planning science and the practice

of protected area management, drawing from the principles of conservation biology and landscape ecology. This chapter defines current standards for protecting a piece of property and its conservation value in perpetuity. The land trust literature portion of the chapter presents basic organizational tools for the perpetual management of easements, properties, and land trusts. This genre of literature does not fully address conservation concerns. Thus, I have included a discussion of conservation planning and site management with a focus on principles that allow for changes in conservation value by having a broad spatial perspective and long temporal scale. Addressing conservation concerns directly will aid land trusts in making informed decisions regarding acquisition, easement placement, and easement management with an eye toward perpetuity.

Chapter 3 establishes the research methods, including participant selection, on-site interview design, and document review. The chapter then discusses the substantive analysis of the project. This portion of the chapter is divided into four categories of assessment; project selection, land management and stewardship, landowner contact, and easement drafting. The categories of assessment were selected based on the research questions. Chapter 3 ends with a discussion of the limitations and applicability of the data. This chapter establishes a comprehensive framework of analysis of the practices and polices of the land trusts and the application of conservation easements.

Chapter 4 presents the results of the project in text and graphs. This chapter begins by outlining the participating organizations. It is broken up into the same categories as those of the "substantive analysis" portion of chapter three.

The final chapter includes conclusions and generalized recommendations for the land trusts involved in the study. This chapter provides the land trusts with practical guidance for operation and easement use that is congruent with the theory presented in chapter two. This chapter presents a recommendation of policies and procedures Oregon land trusts can incorporate into their practices in order to maintain the conservation value of their easements through human and environmental changes.

BACKGROUND

SPECIES LOSS, LAND CONVERSION AND HABITAT DESTRUCTION

Numerous forces drive habitat conservation through land trusts and conservation easements. Among these are species extinction, loss of habitat, and the inability of government to protect special lands from development.[18] Species are declining at alarming rates due largely to habitat destruction and modification.[19] Patterns of land ownership indicate that degradation of private lands is a factor in extinction and will necessarily play a key role in revitalizing many species of wildlife and the ecosystems upon which they depend.[20] Sixty seven percent of land in the contiguous United States is in private ownership.[21] Additionally, government nature reserves and parks are not large enough or numerous enough to support viable populations of many species.[22]

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[18] Gustanski and Squires, eds., *Protecting the Land*, 17. Hudson, *Landscape Linkages and Biodiversity*, ix. McLaughlin, "Role of Land Trusts in Biodiversity Conservation," 454-55.

[19] Wilcove et al., "Quantifying Threats to Imperiled Species in the United States," 609.

[20] Ibid. Stein, Kutner, and Adams, eds., *Precious Heritage*, 283.

[21] Dale et al., "Ecological Principles and Guidelines for Managing the Use of Land," 641.

[22] Noss and Cooperrider, *Saving Nature's Legacy*, 71.

Conservationists are increasingly looking to private lands to fill the void in wildlife protection.[23]

The Nature Conservancy through its natural heritage program assessed the conservation status of over 30,000 United States species and subspecies. It has found that one-third of native U.S. flora and fauna are extinct, critically imperiled, imperiled or vulnerable.[24] Some groups are clearly in more danger than others. Freshwater mussels lead all species groups with 69% of their species in trouble. The study found that 14% of bird species are at risk and 16% of mammals are at risk. In addition, one-third of native U.S. plant species (5,090 species) are at risk. As of April 1998, there were 1,048 U.S. species listed as either "endangered" or "threatened" pursuant to the Endangered Species Act of 1973. At that time, 164 species were candidates for listing and 109 proposed for listing.[25] In 2004, the number of federally listed species increased to 1,260.[26]

The imperilment of species is not likely to halt as the extinction of species in the United States is rising at an unnatural rate, far exceeding "anything seen in the fossil record since at least the end of the Cretaceous period, at which time the impact of an enormous meteor profoundly disrupted life throughout the planet."[27] Scientists have estimated that the current extinction rate is between 100 and 1,000 times greater than

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[23] Knight, "Private Lands: The Neglected Geography," 224.

[24] Stein, Kutner, and Adams, eds., *Precious Heritage*, 101.

[25] Ibid., 106.

[26] United States Fish and Wildlife Service, Threatened and Endangered Species System, http://ecos.fws.gov/tess_public/TESSBoxscore.

[27] Stein, Kutner, and Adams, eds., *Precious Heritage*, 112-13.

normal, background rates.[28] This is coupled with the fact that the forces causing these extinctions are disrupting many natural processes that create new species.

Species losses in the United States are attributable to several major factors, the most significant of which is habitat loss.[29] Non-human animals and plants are losing ground due to conversion of habitat, urbanization, industrial agriculture, and other habitat modifiers. Between 1982 and 1992 over one million hectares of pasture was converted to residential and industrial development, roads and shopping areas.[30] Between 1990 and 2000 development on nonfederal lands increased by 18%, nearly 5% of the total in the U.S.[31] Geographer R. Platt surmises that when the United States reaches an estimated population of 285 million the amount of land dedicated to urban uses will have doubled the amount dedicated to urban land as of 1960.[32] In sum, wildlife habitat is rapidly disappearing in the U.S.

Private land conservation is an integral component of the conservationist's tool bag. Private lands are home to "at least one population of more than half of all imperiled species and two-thirds of federally listed species. From a population perspective, private lands account for about one-quarter of the documented populations of both imperiled and endangered species...."[33] Although few studies have assessed specific threats to species, initial research indicates that habitat destruction is the leading threat to imperiled

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[28] Ibid., 113.

[29] Wilcove et al., "Quantifying Threats to Imperiled Species in the United States,"609.

[30] Knight, "Private Lands: The Neglected Geography," 223.

[31] Dale et al., "Ecological Principles and Guidelines for Managing the Use of Land," 641.

[32] Platt, *Land Use and Society*, 24.

[33] Stein, Kutner, and Adams, eds., *Precious Heritage*, 283.

species.[34] The Nature Conservancy split the term "habitat destruction" into eleven distinct categories of activities, including agriculture, livestock grazing, extractive industry processes, logging, infrastructure development, military activities, outdoor recreation, water development, pollutants, land conversion, and disruption of fire regimes.[35] The Nature Conservancy found that agriculture practices affect the greatest number of species overall at 38%, followed by commercial development at 35%.[36]

Species losses and habitat degradation may also be attributable to a lack of effectiveness of government laws and conservation programs.[37] Flaws occur even in the strongest federal environmental law, the Endangered Species Act of 1973 (ESA). This is evidenced by the fact that only ten percent of listed species are improving in conservation status, while 33% of species are in decline.[38] The ESA ironically encourages landowners to maintain their property so as to deter endangered species colonization and to literally let their habitat waste.[39] This is largely because landowners are not required to actively maintain endangered species' habitat and harboring species on their property is nearly always an economic disincentive.[40] Still other problems of funding and enforcement prevent the ESA from being effective.[41] Wilcove concludes, "[I]t will be necessary to supplement the regulatory controls of the ESA and other wildlife protection laws with a

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[34] Ibid., 240-42. Wilcove et al., "Quantifying Threats to Imperiled Species in the United States," 609.

[35] Stein, Kutner, and Adams, eds., *Precious Heritage,* 243.

[36] Ibid., 245.

[37] Gustanski and Squires, eds., *Protecting the Land,* 17.

[38] Ibid., 1.

[39] Hood, "Section One: Introduction," 2.

[40] Wilcove et al., "Quantifying Threats to Imperiled Species in the United States," 614.

[41] Hood, "Section One: Introduction," 1-2.

wide array of incentives to reward landowners who wish to manage their property to benefit endangered species."[42]

Species extinction, loss of habitat, uncontrolled development and government inaction will continue to spur the conservation movement. Land trusts and conservation easements will continue to be a major factor in the success of halting species extinction and habitat degradation. Citizens must educate themselves about these tools as they continue to shape the landscape of the United States.

Conservation Easements and Land Trusts

Conservation easements and land trusts have become an increasingly used tool in the fight against species loss, land conversion, and habitat destruction. Through 1998, land trusts owned 828,000 acres outright, held conservation easements on 1,385,000 acres, and transferred 2,487,000 acres to third parties.[43] In addition, land trusts have used other methods to protect another 1.7 million acres.[44] The conservation easement is the fastest growing tool for land protection, increasing in numbers by 377% between 1988 and 1998.[45] Land trust growth has also been phenomenal, booming in the 1980's and continuing through the 90's at an unprecedented rate. "Between 1990 and 1994 alone, local and regional land trusts in the United States increased by 23.3 percent, or

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[42] Wilcove et al., "Quantifying Threats to Imperiled Species in the United States," 614.

[43] Gustanski and Squires, eds., *Protecting the Land*, 19.

[44] Ibid.

[45] Ibid., 14.

approximately one new land trust per week...."[46] Today, greater than 1,200 land trusts exist.[47] This growth in conservation easements and land trusts is likely to continue as more habitat and open space is paved over; therefore, it is important to understand their basic functions (see graphs 1 and 2).

A conservation easement is a hybrid tool that exists on a spectrum between direct acquisition for conservation purposes and outright development. It also falls between absolute private control and public control of property.[48] Generally, a conservation easement is an agreement that a landowner makes to restrict the kinds of development and activities that may occur on his or her property.[49] The landowner makes this agreement with a non-profit organization (land trust) or a governmental body, and conveys some amount of his or her nonposessory property rights to that organization or governmental body. [50] There are two essential features of a conservation easement. First, the easement document prohibits the fee title owner from engaging in certain activities on the property and may (although rarely) impose certain positive obligations on the fee

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[46] Ibid., 17-18.

[47] Ibid.

[48] For a discussion about the "voluntary" and "private" nature of conservation easements see Raymond and Fairfax, "The 'Shift to Privatization' in Land Conservation," 599-639.

[49] Diehl and Barrett, *The Conservation Easement Handbook*, 5.

[50] Uniform Conservation Easement Act (UCEA) §1; 26 U.S.C. § 170(h). Defining conservation easement as "a nonposessory interest of a holder in real property imposing limitations or affirmative obligations the purposes of which include retaining or protecting natural, scenic, or open space values of real property, assuring its availability for agricultural, forest, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological, or cultural aspects of real property."

holder to maintain the property in a certain way.[51] The prohibitions are "rights" that are transferred to the easement holder and can include mineral rights, timber harvest rights, right to subdivide, and other rights that a landowner holds in the proverbial bundle of sticks that makes up his or her property rights. The affirmative duties placed on the fee holder can include management obligations to maintain the conservation value of the property (for example, an easement may require removal of invasive species to maintain a native ecosystem). The second essential feature of a conservation easement is that the holder of the easement (i.e., a land trust or government) has the right to enforce the landowner's obligations. Whenever the landowner is in breach of his or her duties as expressed in the easement, the holder can use appropriate means to enforce the terms of the easement. The easement document usually spells out the enforcement options.

Although popular today, conservation easements did not exist at common law. The first conservation easements were used in the 1880's to protect parks in Boston that were designed by Frederick Law Olmsted, and the first publication on the use of conservation easements for open space protection was written in 1959 by William Whyte.[52] The federal and state governments first used conservation easements in the early 1900's to protect land along parkways and rivers. It was not until the 1960's and 1970's that states began enacting legislation to specifically authorize the use of conservation easements. In 1981, the National Conference of Commissioners on Uniform

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[51] Mayo, "A Holistic Examination of the Law of Conservation Easements," in Gustanski and Squires, eds., *Protecting the Land*, 31-34. The UCEA also sanctions affirmative obligations on the part of the landowner Gustanski and Squires, eds., *Protecting the Land*, 508.

[52] Gustanski and Squires, eds., *Protecting the Land*, xvii.

State Laws approved a Uniform Conservation Easement Act (UCEA).[53] The American Bar Association soon recommended the UCEA as a model for states wishing to enact conservation easement enabling legislation.[54] As of 1997, sixteen states and the District of Columbia had adopted the UCEA outright, several states had adopted a modified version of the Act, and others had statutes that pre-dated the UCEA.[55] A few states have retained their original enabling legislation while two states have not adopted any legislation at all. Today, the conservation easement is the most widely used private land conservation tool in the United States, "protecting" almost 1.4 million acres of private lands.[56]

Land trusts are private, non-profit organizations that accept conservation easements as part of their land conservation mission.[57] They can be local, regional, or national.[58] The first land trust started in 1891 in Massachusetts.[59] The term land trust does not have a precise legal meaning and its creation does not necessarily invoke fiduciary duties in the same manner as legal trusts. It remains unclear whether courts will impose trust-like fiduciary duties on land trusts that hold conservation easements.[60] Land trusts

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[53] Ibid., 11.

[54] Ibid.

[55] Hollingshead, "Conservation Easements: A Flexible Tool for Land Preservation," 335. Mayo, "Holistic Examination of the Law of Conservation Easements," in Gustanski and Squires, eds., *Protecting the Land*, 26-50.

[56] Mayo, "Holistic Examination of the Law of Conservation Easements," in Gustanski and Squires, eds., *Protecting the Land*, 9-11

[57] McLaughlin, "The Role of Land Trusts in Biodiversity Conservation on Private Lands," 453.

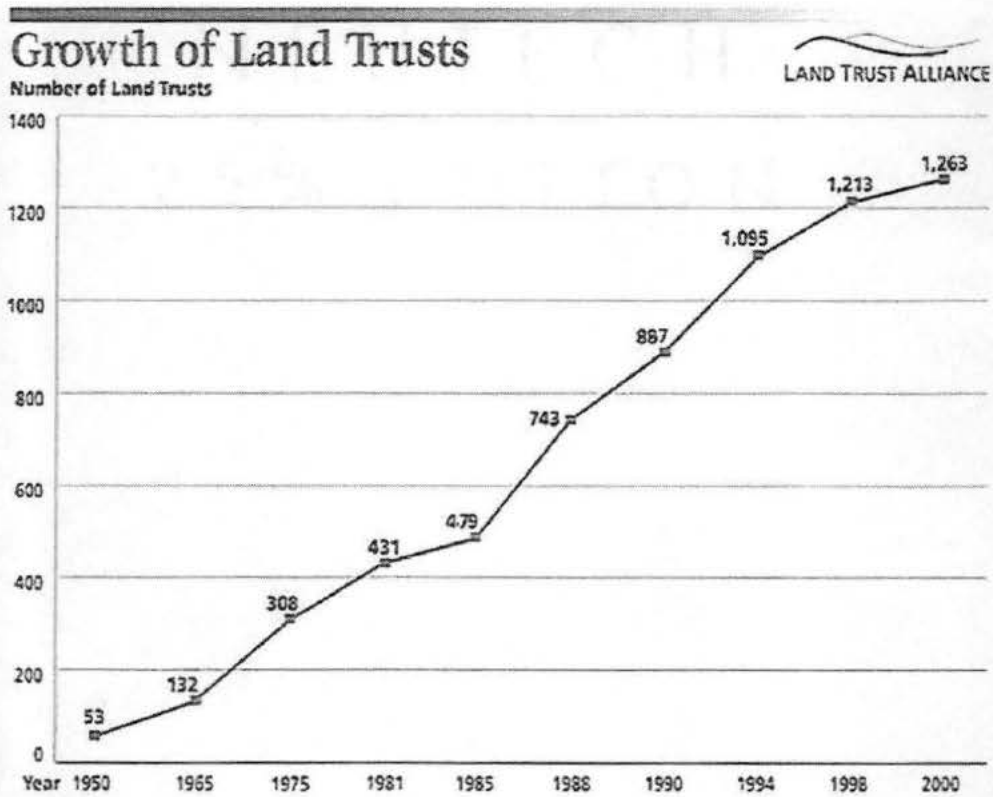
[58] Cooper, "Saving Open Spaces," 970.

[59] Gustanski and Squires, eds., *Protecting the Land*, 17-23.

[60] For a discussion of the consequences of applying trust law to conservation easements see Arpad, "Private Transactions, Public Benefits, and Perpetual Control over the Use of Real Property," 92-149.

differ in size, mission, geographic range, and the amount of resources they have available for acquisition programs and staffing.[61] This surge in land trusts and easements will have great repercussions for landowners and government conservation organizations as land trusts are obligated to perpetually oversee conservation easements.

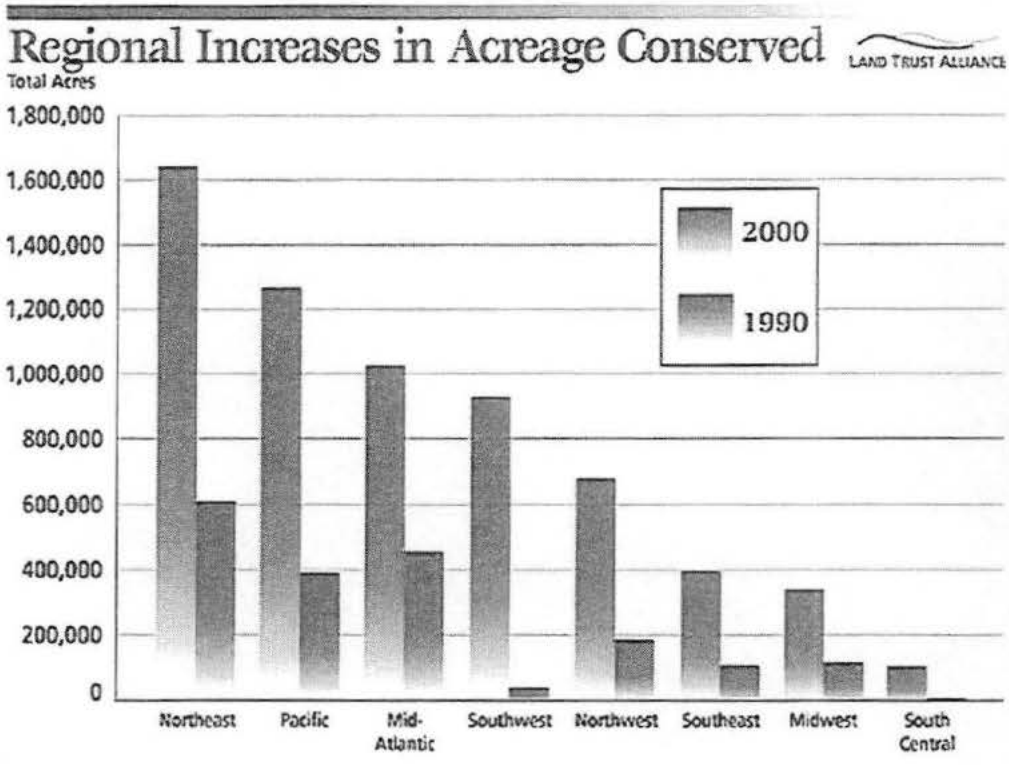
Graph 1. National Growth of Land Trusts – Indicates the number of land trusts in existence nationwide between 1950 and 2000.[62]



[61] Braun, "Strategies for Using Conservation Easements in Tax and Estate Planning," 18-19.

[62] Land Trust Alliance, "National Land Trust Census," www.lta.org/newsroom/census_charts.htm.

Graph 2. Regional Growth of Acres Protected in 2000 and 1990[63]



This graph shows the growth of acres conserved by land trusts by region between 1990 and 2000. The 2000 numbers are represented by the left bars while the 1990 data is on the right.

Conservation easements (and land trusts) have the obligation of perpetual protection of habitat. The UCEA creates a presumption of perpetuity through section 2(c), which states, "Except as provided in Section 3(b) a conservation easement is unlimited in duration unless the instrument creating it otherwise provides."[64] Section 3(b) declares that the UCEA does not alter "the power of a court to modify or terminate a conservation easement in accordance with the principles of law and equity."[65]

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[63] Ibid. The bar on the left is the 2000 data and the bar on the right is the 1990 data.

[64] Gustanski and Squires, eds., *Protecting the Land,* 510.

[65] Ibid., 511.

Consequently, although easements are created for perpetuity, there are various common law doctrines that may limit the temporal extent of easements. Thus, regular easement and charitable trust law as relating to modification and termination of easements apply to conservation easements. The common law principles and doctrines that coincide with the UCEA are the doctrines of changed conditions, *cy pres*, abandonment, and merged titles.[66] Abandonment allows for termination of an easement when the holder (the land trust) fails to enforce the restrictions and obligations in the easement.[67] The doctrine of merged titles causes an easement to be terminated when the easement holder acquires the fee title to the land.[68] The doctrine of *cy pres* may allow for modification of an easement if the land trust cannot carry out the purposes of the easement due to a change in circumstances.[69] Common law also governs situations where the holder of the easement ceases to exist and where unforeseen circumstances arise after easement creation.[70]

While the UCEA gives the presumption of perpetuity to validly created easements, it also accepts their validity if created for a limited duration. Even so, conservation easements are unlikely to have expiration dates. There are two reasons for this. First, only perpetual easements qualify as donations to charitable organizations

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[66] Arpad, "Private Transactions, Public Benefits, and Perpetual Control over the Use of Real Property," 120-28.

[67] Mayo, "A Holistic Examination of the Law of Conservation Easements," in Gustanski and Squires, eds., *Protecting the Land*, 46.

[68] Ibid.

[69] Ibid., 12.

[70] Gustanski and Squires, eds., *Protecting the Land*, 511.

under IRS income tax regulations.[71] Second, qualified "holders" of easements usually prefer to reserve their resources for permanently restricted lands.[72] In short, the UCEA presumption of perpetuity, IRS regulations requiring perpetuity for charitable donations, and land trust preferences have promoted perpetuity.

This preference for perpetuity combined with the rapid growth in land trusts and conservation easements has significant ramifications for future property owners, policy makers and for adequate protection of habitat. Not only are these tools shaping ownership patterns across the American landscape they are fundamentally altering conservation practices. Just as land encumbered with a conservation easement will require perpetual monitoring, land trusts and easements must be placed under a perpetual eye of scrutiny. One goal of such scrutiny is to ensure they are working to protect wildlife habitat and to abate the tide of extinction.

THEORY ON PERPETUITY

There are numerous reasons why land trusts and landowners prefer perpetual easements to term easements. First, it provides individuals with an opportunity to become

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[71] To qualify for federal income tax deduction for protection of natural habitat, according to IRS regulations the property should be in a relatively natural state and either (1) rare, endangered, or threatened species must be present, (2) the property must contribute to the ecological viability of a park or other conservation area, or (3) it must otherwise represent a high quality native terrestrial or aquatic ecosystem. Diehl and Barrett, *The Conservation Easement Handbook: Managing Land Conservation and Historic Preservation Easement Programs*, 14-15.

[72] Ibid., 7. There are other ways to put a piece of land in a limited duration conservation holding and still receive tax or other benefits. For example, the Conservation Reserve Program allows farmers to take specified farmland out of production for a period of thirty years in return for a partial reduction in taxes and other compensation.

ecological stewards knowing that their contributions will be lasting.[73] Second, it allows future generations to enjoy the benefit of today's protection efforts.[74] Additionally, restricting development permanently relieves the pressure on landowners to utilize their property inconsistently with habitat protection goals.

Julia D. Mahoney, in "Perpetual Restrictions on Land and the Problem of the Future," has brought to light many potential problems with perpetual easements. Although she does not limit her discussion to habitat conservation, she implicitly extends her arguments to conservation easements for habitat.

Mahoney argues that the perpetual nature of conservation easements will make them costly to future generations.[75] Additionally, she argues that the goal of perpetuity in conservation easements rests on two erroneous assumptions. The first assumption is that "today's landowners, together with the institutions that purchase conservation servitudes and accept them for donation, are capable of making long-term land preservation decisions, and that they can and should identify particular parcels of land as deserving of perpetual restriction."[76] The second assumption she claims is supporting conservation easements is that the "present generation represents nature's last or near-to-last chance, because once land is developed, it will never or almost never go back to being undeveloped."[77] Mahoney's arguments rest on the belief that these assumptions are false.

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[73] Ibid., 37-38.

[74] Mayo, "A Holistic Examination of the Law of Conservation Easements," in Gustanski and Squires, eds., *Protecting the Land*, 40.

[75] Mahoney, "Perpetual Restrictions on Land and the Problem of the Future," 744.

[76] Ibid.

[77] Ibid., 745.

Supporters of conservation easements cite their flexibility as a great advantage of their use.[78] Conservation easements are malleable to the particular needs of the landowner and are often tailored to protect and enhance the habitat value of the particular parcel. This flexibility is appealing as it is unlike regulation by governmental entities where fairness dictates that similar lands are addressed in a similar manner. Mahoney suggests that this flexibility is limited to the desires of the contracting parties and limited temporally to the time before deed recordation. Mahoney argues that environmental protection based upon an "outmoded model of nature," which she claims conservation easements are, locks property into management patterns that will not be desirable or feasible in the future.[79]

It is true that changes in nature will occur and management systems will have to adapt to those changes. That point is not arguable. Mahoney's arguments, while intellectually correct, fail to consider the sophisticated nature of many of today's conservation easements. Some easements *are* based on outmoded models of nature and attempt to freeze a certain conception of nature in place; however, that is not the standard. Modern habitat protection easements include provisions for modification to account for changing knowledge about wildlife so long as the modification is consistent with the overall conservation goal of the easement. In addition, many modern habitat conservation easements incorporate a clause in the easement and a management plan created by the land trust that allows for the identification of additional conservation value. These

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[78] Hollingshead, "Conservation Easements: A Flexible Tool for Land Preservation," 319.

[79] Mahoney, "Perpetual Restrictions on Land and the Problem of the Future," 755-58. Bean, "Strategies for Biodiversity Protection," in Stein, Kutner, and Adams, *Precious Heritage*, 262.

provisions create room for evolving understanding of habitat protection principles. In addition, if the conservation value of the easement no longer exists, most easement documents (and the common law) allow for termination of the easement.[80] While it may be expensive and time consuming to extinguish a useless conservation easement in some cases, this is not likely to be true in all situations for two reasons. First, many conservation easements contain binding arbitration or mediation clauses that substantially reduce the costs normally expended in traditional termination and modification of easements.[81] Moreover, it is unlikely that land trusts will fight to pursue easements that truly have no conservation value. In addition, landowners can convey future conservation easements on the same property to further restrict access or provide more protection to newly discovered resources.

Furthermore, the use of conservation easements *is* innovative land use planning. Land trusts often strategically place easements across the landscape where conditions suggest they will be most effective in achieving conservation goals. A sign of this is land trust involvement in and use of regional conservation planning. One scholar noted, "Land trusts are becoming more regional in their operations, more focused in their mission, and more strategic in their direction."[82] Although human thinking may be short sighted, as mentioned above, land trusts are not trapped in the scientific world of the past. There are avenues that allow for modification of documents and policies. In addition, land trusts and landowners are usually free to bargain regarding the terms of the easement in order to

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[80] Diehl and Barrett, *The Conservation Easement Handbook*, 160.

[81] Ibid., 204.

[82] Liegel and Duvernoy, "Land Trusts: Shaping the Landscape of Our Nation," 95.

maximize protection of the conservation value. In sum, although it is important to be aware of the concern Mahoney presents regarding future ecological and biological changes, land trusts have found ways to structure conservation easements to incorporate some of the uncertainty.

Mahoney also argues that conservation easements represent a particular view of nature and seek to lock that view of nature on the landscape permanently. Mahoney asserts, "Conservation easements embody the shared cultural attitudes of the contracting landowner and the easement holder and identify particular landscape features …for permanent protection."[83] In the context of many open space and historical easements, this argument is irrefutable. It becomes a difficult argument in the context of habitat conservation. Sax and Freyfogle argue that there is a natural right to nature.[84] An extension of this argument suggests that, since wildlife is an integral part of "nature," then humans have a natural right to wildlife. If this is true, changes in cultural values do not affect the basic need for and desirability of habitat protection.

Mahoney makes a case that because of our society's current level of ecological knowledge we are not competent to make land use decisions that will bind future generations. She argues that legal regimes designed to regulate land use will have the capacity to incorporate any changes in scientific understanding and that conservation easements will only thwart that process as they create permanent contractual

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[83] Mahoney, "Perpetual Restrictions on Land," 760-61.

[84] Raymond and Fairfax, "The "Shift to Privatization" in Land Conservation: A Cautionary Essay," 633-35.

obligations.[85] Mahoney contends that current science does not support designating a place as "preserved" or "conserved" in perpetuity.

Certainly, conservation thinking has evolved over time. Monumentalism during the life of John Muir focused on saving places of extraordinary beauty.[86] Later, from Aldo Leopold and the wilderness movement of the 1930's, emerged ideas that nature was self-willed and had intrinsic value.[87] Arriving around the same time in the 1920's and 1930's were concepts of biological conservation as the value of wetlands became obvious to ecologists.[88] Conservation then evolved into island biogeography and the species-area relationship through studies of the island of Krakatoa.[89] Today, as conservationists look through the lenses of conservation biology, landscape ecology, conservation planning, and ecosystem management, they attempt to preserve biodiversity and "rewild" regions.[90]

The evolution of conservation thought has been significant, but it is difficult to understand how scientists will continue to learn about ecological systems if habitat fragmentation, habitat loss, and species extinction continue at seemingly uncontrolled rates.[91] Current conservation laws and polices do not adequately address the significant loss of species and habitat in this country. Conservation easements provide a means by

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[85] Mahoney, "Perpetual Restrictions on Land," 758-59.

[86] Soule and Noss, "Rewilding and Biodiversity," 20-23. Rewilding is the scientific argument for restoring wilderness based on the regulatory roles of large predators.

[87] Ibid.

[88] Ibid.

[89] MacDonald, *Biogeography*, 428-39. Island biogeography is a theoretical construct that links species-area relationships on islands to dispersal and extinction processes. This theory is used in reserve design.

[90] See above note 29. Sanderson et al., "A Conceptual Model for Conservation Planning," 41-56.

[91] Bean, "Strategies for Biodiversity Protection," 263. Noting that easements may protect land enough so that later conservation can occur.

which to halt the rapid extinction and habitat degradation while at the same time providing compensation to landowners and skirting issues of regulatory takings. Conservation easements (if designed appropriately) can give scientists more time to study species and understand habitat needs.

In addition, drafting easements to incorporate adaptive management principles lessens the concern over locking lands into unsound management regimes. If land trusts and landowners protect significant amounts of habitat through conservation easements, and those easements retain enough flexibility to apply adaptive management techniques, then landowners will be free from unrelenting market pressures to engage in stewardship practices.

A final argument against the creation of perpetual restrictions with conservation easements is that they conflict with the policy against restraints on alienation. This policy stems from the idea that free alienability of property is central to political freedom and to economic efficiency.[92] That is, the ability of individuals to buy and sell land allows the property to move to higher valued uses and gives landowners rights they would not otherwise have in a feudal system. Along with this policy is the problem of "dead hand control," where past owners control their property from the grave by imposing restrictions on the sale and use of the land. This policy has led to strict common law rules regulating servitudes and future interests.[93] These rules and policies promote

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[92] Singer, *Property Law*, 53-54.

[93] Servitudes are agreements between two landowners whereby restrictions are placed on (at least) one parcel to benefit the other parcel. These agreements are binding and benefit successors to the first landowners. Ibid., 781. Future interests confer rights to use and enjoy a piece of property at a future time. Ibid., 269.

marketability of title, prevent concentration of ownership, promote increased access to property, and promote efficiency by allowing property to be used for a "more valued use." They also advance liberty by allowing current owners to be freed from decisions of past owners.[94] Illustrating the importance of scrutiny of restraints on alienation is the past use of covenants and servitudes for racial or class discrimination. Heightened scrutiny provided a means to free land from such malicious restrictions. Arguably, conservation easements can serve discriminatory purposes as well.[95]

Mahoney argues that conservation easements violate many of the public policy purposes behind the rule against restrictions on alienation.[96] Even so, in reality conservation easements are unlikely to be struck down under this doctrine because they do not limit transfer of the fee simple interest and have the backing of public policy.[97]

The concern of restraints on alienation presents important issues. It would not be prudent to return to a quasi-feudal tenure system where land trusts control large amounts of privately owned land. This goes back to the political freedom and economic efficiency arguments expressed above. This suggests that there should be more supervision of land trust activities, and perhaps that land trusts should be subject to trust law and encumbered with similarly stringent fiduciary duties. This would solve some of the problems presented by the policy against restraints on alienation.

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[94] Ibid., 560-561.

[95] Duncan and Duncan, "The Aestheticization of the Politics of Landscape Preservation," 387-409.

[96] The rule against unreasonable restraints on alienation usually applies where a property owner attempts to transfer a piece of property on the condition that the new owner does not convey his or her fee simple interest to a third person. These fee simple restrictions are generally void as against public policy. Justifications for the rule against restraints on alienation are often contested as not achieving the goals asserted. For a discussion, see Singer, *Property Law*, 572-75.

[97] Mahoney, "Perpetual Restrictions on Land," 774-75.

In many instances, restraints on alienation can serve socially useful functions. Conservation of species and habitat is of high import to society. The utility of conservation is evidenced by the Endangered Species Act of 1973, the National Wildlife Refuge System, the mission of the U.S. Fish and Wildlife Service, state laws prohibiting hunting without a license, state endangered species legislation, and numerous other laws, policies and regulations that are designed to protect wildlife and habitat. In addition, Congress and states spend millions of dollars annually to promote, protect and enhance wildlife habitat. Two examples of this are the Land and Water Conservation fund that authorizes congressional expenditure of $900,000 per year for conservation and the Conservation and Wetland Reserve Programs that provide tax incentives and direct pay to farmers willing to forego agricultural activities on their lands and instead promote conservation.[98] Government regulations and expenditures indicate that conservation is an important public good that deserves promotion even at the risk of some restraints on alienation.

In addition, arguments against perpetuity in conservation easements hold less weight in light of current land use activities. In many land use decisions, perpetuity is the default.[99] This is true of city build out, subdivision restrictions that are binding on all future owners and industrial lands that include deed restrictions as part of the remediation process.[100] Mahoney claims that these land use decisions are reversible; that they are

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[98] United States Department of Agriculture, "Conservation Reserve Program," www.fsa.usda.gov/dafp/cepd/crp,htm. Cooper, "Saving Open Spaces," 964.

[99] Hollingshead, "Conservation Easements: A Flexible Tool for Land Preservation," 321.

[100] In many hazardous waste clean up agreements, deed restrictions are used to provided that the property can never again be used for a residence or a park even after the clean up process.

modifiable by enough political will and by changes in legislation. While it is true that a subdivision can physically be reverted to a park, on human time scales it will never contain the diversity of wildlife that it did pre-development. Thus, Mahoney's argument may hold up when discussing conservation easements for open space, but it certainly does not work when considering habitat preservation. Simply put, extinction is forever. Furthermore, the amount of resources expended digging up shopping malls and further remediation of hazardous waste sites is likely to be more costly than simply preserving habitat before it becomes paved over or relegated to industrial uses. It is imprudent (and arrogant) to assume that humans can re-construct nature once we have already destroyed its processes and removed its components.

The issues presented will continue to gain importance as more lands have conservation easements. Property rights concerns will increase as the first generation of landowners begins to pass land on to the next generation. Mahoney asserts that future generations will have great difficulty in re-connecting their property rights into one bundle of sticks. The idea that property rights are invariably the same bundle suggests a simplified view of the nature of property rights. Property rights are numerous and come in a wide variety of forms. Cheever argues, "Much of our property rights debate is based on the completely erroneous assumption that property rights are standardized – stamped out of the same 'fee simple' machine."[101] Illustrating this point is the fact that sovereigns have property rights in wildlife and hold that wildlife in trust for their citizens.[102]

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[101] Cheever, "Property Rights and the Maintenance of Wildlife Habitat," 436.

[102] Wood, "The Tribal Property Right to Wildlife Capital," 52-72.

The theory on perpetuity in conservation easements is young. Future studies and articles will shed even more light on these important issues. In the meantime, land trusts continue to utilize conservation easements to protect ecologically important lands. Therefore, it is important for conservation scholars and practitioners to help land trusts accomplish their goals in the most careful manner. Land trusts will need to consider these concerns presented (and others) carefully as they accept and purchase conservation easements. Additional research should be done to aid them in their endeavor.

CHAPTER TWO: LITERATURE REVIEW

A review of the current literature on land trusts presented no studies of the same type as this one. Thus, the project was broken down into its core elements. From there, appropriate literature was reviewed to address the research questions. The following materials present the several areas of literature that were combined to create the methodology presented in the next chapter.

The literature review is composed of two main sections. The first is a review of conservation science and the second is an assessment of land trust and conservation easement literature. The conservation science review was divided into two subparts, regional conservation planning and protected area (or site) management. Conservation science is important when considering perpetual wildlife habitat easements as it provides the tools necessary for managers and observers to assess how well land trusts are preparing for perpetuity with their easements. The easement and land trust literature reviewed consists of studies completed on stewardship of perpetual easements, easement management, and easement violations. This literature is essential to this study as it allows for a national comparison of land trust practices and provides a baseline against which to measure success. These two major areas of literature combine to create a more holistic lens through which to answer the questions presented by this research.

Conservation Science

Land trusts and researchers are slowly integrating conservation science into conservation easement practice and literature. It has been somewhat neglected in the easement context because of the unique distribution of rights and obligations created between land trusts and landowners in easements. There are two components of conservation science that are important for land trusts to be familiar with and implement when appropriate in relation to this thesis: regional conservation planning and protected area (or site) management. Regional conservation planning is a priority setting exercise that culminates in the designation of particular portions of the landscape as conservation targets. Conservation planning employs a core-buffer-corridor-matrix model based on a "coarse-filter," "fine-filter" approach that is discussed in depth below. Protected area (or site) management is the use of information available and scientific understandings to implement management strategies that are designed to increase (or maintain) the conservation value of a particular piece of land. It involves the use of management plans, adaptive management techniques, and is dependent on the goals, uses, history, spatial configuration, and present and future conservation values of a particular site. Both of these fields of study can aid land trusts in selecting properties and in helping landowners manage properties so that the conservation values remain viable through environmental and other changes.

Regional Conservation Planning

Governments and large private conservation organizations frequently engage in large-scale, long-term conservation planning.[103] Less frequently, small, regional, or local land trusts engage in (or use) conservation planning.[104] This reactive strategy has the potential to jeopardize the land trust movement.[105] If land trusts do not base acquisitions on their own policies, they "may become the owner of a crazy quilt of small parcels having no relationship either to one another or to the management capabilities of the organization, or, indeed, to any long-range goals of the organization or the community itself."[106] If a trust has a focus on wildlife habitat (a particular species, plant type or community, or ecosystem type) then it must have specific criteria based on scientific research that allows it to discriminate amongst potential sites. This discrimination helps to build a cohesive network of conserved sites with an increased chance of adapting to environmental change. In addition, accepting properties in a haphazard manner will ultimately threaten the trust's credibility, its effectiveness, its tax-exempt status, and erode its community support.[107] Therefore, each conservation organization must have a structured way to evaluate and prioritize fee title and easement acquisitions.

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[103] Foreman et al., "The Elements of a Wildlands Network Conservation Plan," 17-29. Hecimovich, "Appendix B. The Southern California Natural Community Conservation Planning Program," in Duerksen, *Habitat Protection Planning: Where the Wild Things Are*, 79-82.

[104] Brenneman, "Criteria for Acquisition and Management," in Brenneman and Bates, *Land-Saving Action*, 35.

[105] Ibid.

[106] Ibid.

[107] Ibid. The Land Trust Alliance, "The Standards and Practices Guidebook: An Operating Manual for Land Trusts," 8-1.

There are several different models of regional conservation planning, most of which are complex and require significant amounts of research, money, and time to implement. However, land trusts do not have to engage in these processes alone. Collaborating with national or regional conservation organizations and governmental agencies may be necessary for adequate conservation planning and may help build stronger community ties.

Many conservation planning approaches are based on the fundamental concepts expressed in the fields of landscape ecology and conservation biology.[108] Landscape ecology is the study of ecology on a landscape level (as opposed to a single site level), which seeks to understand the "causes and consequences of spatial pattern on the environment."[109] Conservation biology is a field of applied science that draws from the "principles of ecology, biogeography, population genetics, economics, sociology, anthropology, philosophy," and other theories to create an interdisciplinary approach for conserving biodiversity.[110] Both of these disciplines are important for land trusts to utilize in that they recognize that ecosystems (hence, wildlife and other conservation values) and our knowledge of them are constantly changing. These disciplines embrace these changes and attempt to create conditions in which ecosystem processes thrive. If the processes that create ecosystems are maintained, the system and its components will be more able to adapt to changing conditions. In addition, both disciplines are derived from an

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[108] Morrison, *Wildlife Restoration*, 1-5, 188-94.

[109] Weins, "Central Concepts and Issues of Landscape Ecology," in Gutzwiller, *Applying Landscape Ecology in Biological Conservation*, 5-6.

[110] Meffe and Carroll, *Principles of Conservation Biology*, 4-5.

appreciation of holism, include considerations of human land-use, and have long-term perspectives.[111] Land trusts have taken perpetual responsibility for the oversight of conservation values protected in easements. To adequately do that, they must utilize (and help landowners to use) conservation principles that incorporate flexibility and response to human and environmental change. Land trusts cannot simply assume that monitoring alone will provide perpetual protection of wildlife resources.

Landscape Ecology

Landscape ecology focuses on three general components of a landscape: composition, structure, and process.[112] More specifically, it is the recognition that landscapes[113] are composed of different elements (or "patches") that create spatial heterogeneity.[114] These elements include different habitats, vegetation types and assemblages, or land uses.[115] The elements have a specific spatial configuration that can

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[111] Weins, "Central Concepts and Issues of Landscape Ecology,"4. Meffe and Carroll, *Principles of Conservation Biology*, 16-27. Noss and Cooperrider, *Saving Nature's Legacy*, 84.

[112] Weins, "Central Concepts and Issues of Landscape Ecology," 6.

[113] There is debate among landscape ecologists regarding what a "landscape" is. Weins considers it to be a spatial scale that is smaller than a biome yet includes multiple ecosystems. Ibid., 4. Others argue that landscapes include the biotic, abiotic and land use components of an area with a "uniform structure and functional pattern." In addition, landscapes are the result of processes occurring on various time-scales, are in constant change, yet have stabilizing forces. Landscapes also have predictable changes, like successional patterns. Landscapes are open systems, affected by vertical influences, influences from surrounding landscapes and from patches within a landscape. Landscapes are vertically and spatially heterogenous and their boundaries can aid or hinder exchange of energy, matter, or organisms. Landscapes do not have a standard size or scale; rather the definition of a landscape depends on the research at hand. For an in depth discussion see, Klink, et al., "Landscape and Landscape Ecology," in Bastain and Steinhardt, eds., *Development and Perspectives of Landscape Ecology*, section 1.1.

[114] Weins, "Central Concepts and Issues of Landscape Ecology," 4. Heterogeneity in this context means that the landscape is composed of different parts, or elements, that contribute to the quality of the landscape and affect landscape interactions.

[115] Ibid.

be displayed on a map or through a geographic information system.[116] The spatial relationship among different elements affects the interaction among elements as well as within elements.[117] Those interactions are considered processes, or "the flows of organisms, materials, or disturbances through" a landscape mosaic.[118]

This understanding that landscape elements are connected to each other and influence each other at different scales, both temporally and spatially, is the backbone of landscape ecology. In order to understand the wildlife composition of a particular site, land trusts must be aware of the relational context of the landscape. In practice, this strategy will depend on the goals of the project and available information. However, there are several guiding principles land trusts can follow. First, land trusts should consider the size of an area and its conservation values. "Understanding *why* organisms occur where they do or move in a landscape requires a consideration of variations in patch quality."[119] In order to understand the differences in quality, land trusts should recognize the "structural configuration," or pattern, in which the patches exist on the landscape. In short, if a land trust is concerned about a particular species on a site, it must consider how that species is connected to other populations of the same species or other species, both within the site and among other sites.[120]

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[116] Ibid.

[117] Ibid.

[118] Ibid., 6.

[119] Ibid., 9-10.

[120] Knight and Landres, "Central Concepts and Issues of Biological Conservation," in Gutzwiller, *Applying Landscape Ecology in Biological Conservation*, 23-24.

A second guiding principle is that land trusts should consider edge properties and potential edge effect.[121] Species respond differently to edges, or boundaries of a reserve or habitat feature. *Edge-sensitive species* tend to be harmed by edge effects while *edge-generalist species* (parasites and predators) tend to thrive on patch edges.[122]

Third, the location and spatial context of the site should be considered. Land trusts should research adjacent land quality and determine how it will influence the site.[123] It is important to know where the site is "in terms of its adjacency to different kinds of neighboring patches with different ecological properties."[124]

Fourth, connectivity across a landscape is important to consider. Connectivity is determined by patch quality, patch configuration, patch boundaries, and the particular qualities of different organisms.[125] Corridors between high quality conservation sites can slow extinction processes and protect against species or population loss caused by habitat fragmentation.[126]

Fifth, it is important to consider different spatial and temporal scales when assessing a site. "Observations of ecological phenomena change depending on the scale used."[127] Land trusts should have some mechanism for learning about large and small-

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[121] Weins, "Central Concepts and Issues of Landscape Ecology," 10. Meffe et al., *Ecosystem Management*, 174.

[122] Knight and Landres, "Central Concepts and Issues of Biological Conservation," 25. Meffe et al., *Ecosystem Management*, 174.

[123] Weins, "Central Concepts and Issues of Landscape Ecology," 10.

[124] Ibid., 11.

[125] Ibid., 11-12.

[126] Ibid., 11.

[127] Ibid., 13.

scale ecological phenomena as well as long and short-term changes across a landscape and within sites. These principles are summarized in table 1 below.

Table 1. Principles of Landscape Ecology

The Five Concepts of Landscape Ecology from Weins
1. **Quality is important** -- "landscape elements differ in quality."
2. **Understand edges** – "patch boundaries influence ecological dynamics both within and among patches."
3. **Location is everything** – "patch context is important."
4. **Movement matters** – "connectivity is a key feature of a landscape structure."
5. **Consider different scales** – "spatial patterns and processes are scale-dependent."

Conservation Biology

Conservation biology is an interdisciplinary field of applied science that seeks to promote the continuance of evolutionary change in species as well as change in ecological structure over time.[128] It also recognizes that humans are a part of nature and must be considered in conservation efforts.[129] "Conservation biologists believe that we must preserve *ecological integrity*, the conditions and natural processes (such as energy flow and matter cycling in ecosystems….) that generate and maintain biodiversity and allow evolutionary change as a key mechanism for adapting to changes in environmental

[128] Meffe and Carroll, *Principles of Conservation Biology*, 17-18. For a history on the evolution of wildlife management into conservation biology see Meine, "Conservation Biology and Wildlife Management in America: A Historical Perspective," in Meffe and Carroll, *Principles of Conservation Biology*, 348-49.

[129] Meffe and Carroll, *Principles of Conservation Biology*, 19.

conditions."[130] This differs from wildlife habitat management, which traditionally focuses on manipulating the populations of prized game species.[131]

There are two main approaches to delineating conservation targets, coarse-filter and fine-filter. The coarse-filter approach emphasizes management at a landscape or ecosystem scale.[132] The goal of this approach is to ensure that each type of ecosystem or landscape patch is represented in a network of protected sites. The fine-filter approach emphasizes species-level management.[133] This is generally employed for species of special concern, such as listed endangered species.[134] Today, many managers are blending coarse and fine filter approaches, as they are finding that neither alone is adequate.[135] The Nature Conservancy's (TNC) ecoregional approach is an example of a coarse-filter approach.[136] TNC's ecoregion portfolios include ecological communities and species as conservation targets.[137]

A key to successful conservation planning is to utilize a systematic approach to address the needs of the community as well as protect biodiversity. One focus of conservation biology is the Bioreserve Strategy. The Bioreserve Strategy is a long-term

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[130] Miller, *Environmental Science*, 174.

[131] Ibid.

[132] Meffe et al., *Ecosystem Management*, 195.

[133] Ibid., 196.

[134] Ibid.

[135] Ibid.

[136] Shaffer and Stein, "Safeguarding Our Precious Heritage," in Stein, Kutner, and Adams, *Precious Heritage*, 314-16.

[137] Ibid., 314.

protection program and relies upon ecosystem processes.[138] The components of this strategy are core reserves, buffers, zones of connectivity, and matrix land (see figure 1).[139] Core reserves are areas in which "the overriding goal of management or stewardship is preservation of native biodiversity and ecological integrity."[140] These areas include portions of national parks, natural areas, and preserves. Buffers are areas around the core reserves that include light human activity, such as hiking trails, and in second buffer zones, motorized travel might be appropriate. Zones of connectivity are areas that allow for movement of organisms, materials or energy across conservation areas. These can include corridors. Matrix land is a catch-all category for land that is not within the first three designations. The matrix can include agriculture lands, urban, and suburban lands.[141] Conservation easements can be utilized in all three of these designations. While most consider them appropriate for use in buffer zones,[142] depending upon the situation of the land, the size of the land, and the goals of the land trust and landowner, conservation easements can be appropriately utilized for core and matrix as well. Table 2 below is an example of how the Bioreserve Strategy is implemented once core areas, the matrix and buffers are delineated.

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[138] Cooperrider, Day, and Jacoby, "Chapter 3: The Bioreserve Strategy," in Baydack, Campa and Haufler, *Practical Approaches to the Conservation of Biological Diversity*, 52.

[139] Ibid., 39.

[140] Ibid.

[141] Ibid., 39-41.

[142] McLaughlin, "The Role of Land Trusts in Biodiversity Conservation," 460-61.

Figure 1. The Bioreserve Strategy[143]

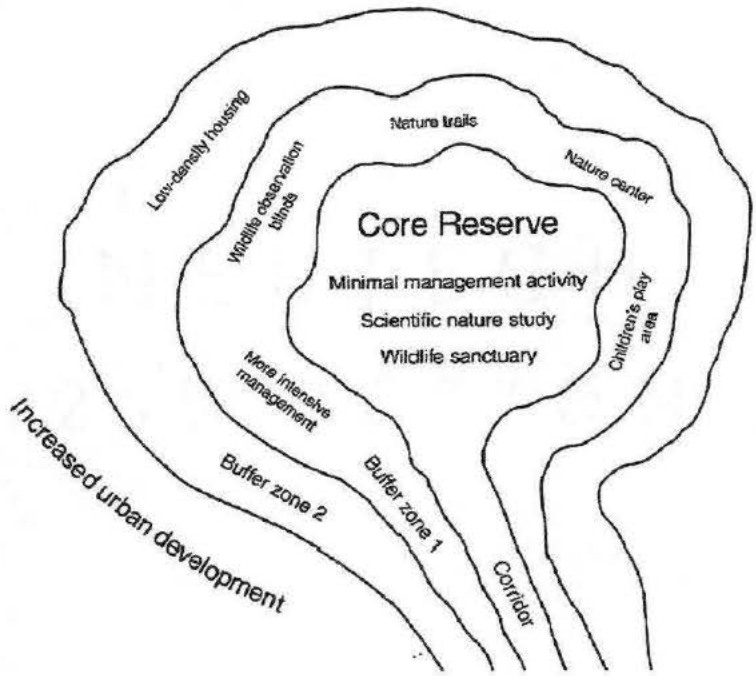

Table 2. Bioreserve Strategy of Conservation Planning

Five Tenets of Conservation Planning[144]
1. Represent all native ecosystem types and seral stages across their natural range of variation with in a network of protected areas.
2. Maintain viable populations of all native species in natural patterns of abundance and distribution.
3. Maintain ecological and evolutionary processes, including disturbance regimes and hydrologic processes as well as biotic interaction.
4. Manage landscapes and communities so that they are responsive to short-term and long-term environmental variation.
5. Encourage human uses that are compatible with ecological goals; discourage other uses.

[143] Morrison, *Wildlife Restoration*, 165.

[144] Cooperrider, Day, and Jacoby, "Chapter 3: The Bioreserve Strategy," in Baydack, Campa, and Haufler, *Practical Approaches to the Conservation of Biological Diversity*, 38.

Land trusts should begin by identifying their conservation goals (see land trust literature), and assess their organizational capacity to engage in long-term, landscape-wide conservation planning. Next, they should follow appropriate steps in conservation planning (from conservation biology and landscape ecology) that will achieve their aims. Once these steps are taken, trusts are prepared to assess a potential piece of property and whether an easement is the appropriate tool to utilize. Table 3 presents a compilation of several studies' recommendations for consideration of reserve selection.

Table 3. Recommendations for Reserve Selection

Tenants of Reserve Design[145]
1. Species Diversity and Presence of Rare Species
2. Total Area
3. Naturalness and Level of Disturbance
4. Potential Utility (products and use)
5. Education Value
6. Level of Threat
7. Known History (ecological and human)
8. Complimentarity – unique contribution to a reserve system
9. Representativeness - species, habitat and range of physical variation
10. Irreplaceability – extent to which conservation options are altered if a site is lost
11. Opportunity Cost – relative cost to management if a unit is lost
12. Threat – the likelihood that a unit will be destroyed
13. Survivability – threat plus some estimate of resilience

[145] Morrison, *Wildlife Restoration*, 165.

PROTECTED AREA (OR SITE) MANAGEMENT

The type of management employed at a location depends greatly on the circumstances of the particular area and what the goals of the land trust and landowner are. Because of the importance of place on the direction and goals of site management, this study addresses only the tools used in site management, adaptive management and land management plans. This section of the thesis provides a framework for answering the following thesis questions: Are conservation easements in place today designed to protect their habitat conservation values in perpetuity? If we assume the goal of perpetuity is possible and realistic, what are the best means by which land trusts can achieve it? How should land trusts address the goal of perpetuity in terms of easement and property stewardship policies and procedures?

Adaptive Management

Adaptive management is the premise that management should be flexible and adjustable to environmental conditions.[146] "In the most direct terms, adaptive management is the process of treating management as an experiment." [147] The goal of adaptive management is to treat site management as an experiment, to learn from the experience, and continue to implement new and better techniques. Critical components of this process are evaluation and appropriate monitoring.[148] Evaluation considerations

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[146] Meffe and Carroll, *Principles of Conservation Biology*, 386.

[147] Meffe et al., *Ecosystem Management*, 195-199. Meffe and Carroll, *Principles of Conservation Biology*, 386.

[148] Hirons, Goldsmith, and Thomas, "Managing Habitat for Conservation," in Sutherland and Hill, *Managing Habitats for Conservation*, 33.

should include achievement of goals, goal changes, and modifications to be made to the plan.[149] These evaluation procedures should be incorporated into land trust practices, preferably through land management plans (see next section). Table 4 (below) illustrates one application of adaptive management in a conservation planning context.

Table 4. Application of Adaptive Management

Approach to Conservation Decision-Making[150]
1. Maintain critical ecological processes and biodiversity composition.
2. Seek to minimize external threats and maximize internal benefits.
3. Conserve evolutionary processes.
4. Management should be adaptive and minimally intrusive.

Land Management Plans

> Management plans that clearly spell out quantifiable objectives and link management action with conservation targets can ensure a common understanding amongst all the stakeholders involved in the use, management and protection of that resource.[151]
>
> Sanjayan, p. 36

Land management plans are living documents that identify resources to be protected, delineate a process for protecting the resources, and designate the responsible parties for protecting the resources, among other functions that vary depending on the site.[152] The LTA and conservation professionals recognize the need for land trusts to have

[149] Meffe and Carroll, *Principles of Conservation Biology*, 386.

[150] Meffe and Carroll, *Principles of Conservation Biology*, 381.

[151] Sanjayan, "Ask an Expert: Buffer Zones, Invasive Species and More," 36.

[152] Land Trust Alliance, "The Standards and Practices Guidebook," 15-15.

management plans for all their fee simple properties. It is not as widely recommended (nor discouraged) for land trusts to develop (in concert with a landowner) management plans for easement properties. I suggest that there is a need for a management plan on easement properties, regardless of fee title ownership, especially for wildlife habitat easements. The use of a land management plan can increase the trusts' and landowners' abilities to preserve, protect, and enhance the conservation value of property over time.

All management techniques and all nature reserves should have an appropriate management plan, even if the site does not currently need management. Management plans are not only necessary for actual management, but they can save land trusts time and money in the end because they prioritize management activities. In addition, management plans allow for evaluation of conservation values, provide a baseline of such value, and indicate where ecological and human information gaps exist. Another key to management plans is that they allow land trusts to facilitate landscape-wide projects by aiding in consistent management.[153]

There are even more reasons that easement properties should have management plans. First, if there is significant conservation value on an easement property, which there must be in order to receive a favorable tax break, that value needs protection just as if it were owned in fee simple. As a leading Nature Conservancy scientist indicates, "From a scientific perspective, management plans are critical for the successful conservation of an area or particular resource."[154] Second, even if a particular

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[153] Hirons, Goldsmith, and Thomas, "Managing Habitat for Conservation," 23-24.

[154] Sanjayan, "Ask an Expert: Buffer Zones, Invasive Species and More," 35-36.

conservation value is of little significance today, it may increase in significance over time. A land management plan will help determine what is significant and help to understand what type of management brought about the change in conservation value. See table 5 below for one view on the functions of a management plan.

Third, landowners often need expertise; land trusts should have that expertise. Anything the land trust can do to aid the landowner in developing sound management plans will ultimately aid the landowner's understanding of the value of the site and may influence the landowner's decision-making on the property. Fourth, a management plan serves as a way to identify new conservation values to be protected by the easement (many easement documents have a clause that allows land trusts to protect newly discovered conservation values). This aids easement defense in the long-term as easements will have more supporting purposes. This function is not achieved through regular monitoring activities. Fifth, they will aid in transition of new landowners, by giving new landowners a sense of how much the previous landowner valued the land and might influence how a new landowner views conservation on the property. Finally, they keep a record in one place of all the conservation activities that have occurred on the property. This helps facilitate adaptive management of the property for increasing the conservation value over time. The first step in implementing conservation is informed management.[155]

What goes into the plan is crucial to management success. See below discussion for LTA recommendations on what should be included in management plans. At a minimum

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[155] Noss and Cooperrider, *Saving Nature's Legacy*, 93.

the plan must include a biotic and abiotic description of the site (the baseline), the purposes and goals of management, identification of the management that will achieve objectives, a schedule and description of management actions and who is responsible for what activities, and provisions for periodic review and standards for revision.[156]

Of importance is that the management plan be periodically reviewed and updated to reflect new information, management success and failure, and other important changes. In general, management plans should be reviewed and updated every five years.[157] The prescriptive portion of the plan should be flexible and continually evolve based on new information, ecological changes that occur, any new threats that occur, and to account for new information.[158]

The studies and papers presented in this section provide part of the framework to answer thesis questions one and two in Chapter 1 of this paper. They instruct property managers on how to protect conservation values into perpetuity through protecting the components and systems of nature. The information presented above is applicable to every organization and every piece of property protected for habitat value. The information is particularly useful in the project selection and land management phases of easement use and provides the backbone for that portion of the methodology.

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[156] Land Trust Alliance, "The Standards and Practices Guidebook," 15-17 – 15-20.

[157] Hirons, Goldsmith, and Thomas, "Managing Habitat for Conservation," in Sutherland and Hill, *Managing Habitats for Conservation*, 39. Sanjayan, "Ask an Expert: Buffer Zones, Invasive Species and More," 36.

[158] Hirons, Goldsmith, and Thomas, "Managing Habitat for Conservation," in Sutherland and Hill, *Managing Habitats for Conservation*, 39. Sanjayan, "Ask an Expert: Buffer Zones, Invasive Species and More," 36.

Table 5. Management Plans

Functions of Management Plans[159]
1. Describe the site through collecting available biotic and abiotic information.
2. Identify the purposes and objectives of management.
3. Anticipate conflicts and problems of achieving the objectives and suggest means of resolution.
4. Identify and describe the specific management that will achieve objectives.
5. Identify the type and extent of monitoring needed to determine the effectiveness of management.
6. Organize funding and manpower.
7. Operate as a guide for new staff (and landowners) to facilitate continuity of management.
8. Coordinate with national and regional species and habitat plans.
9. Demonstrate the effectiveness of management.
10. Ensure that management objectives and procedures reflect the mission of the land trust or funding organization.
11. Facilitate communications between other conservation sites and organizations.

[159] Hirons, Goldsmith, and Thomas, "Managing Habitat for Conservation," in Sutherland and Hill, *Managing Habitats for Conservation*, 23.

LAND TRUST AND CONSERVATION EASEMENT LITERATURE

To date, there have been few independent studies on land trusts, conservation easement durability, and long-term easement stewardship.[160] Most studies have focused on preventing easement violations, assessing stewardship practices, and determining the susceptibility of easements to litigation losses. Even though the studies have not addressed the exact question as this thesis, the recommendations made are applicable to the long-term protection of conservation values. Certainly, easement violations, lax monitoring and baseline reports, and the inability to enforce easements will affect the integrity and potential of conservation values. This section begins with a survey of land trust and easement studies, then moves in to the Land Trust Alliance (LTA) guidelines for land trusts, and finishes with a discussion of another pertinent publication from a respected conservation organization.

STUDIES: STEWARDSHIP PRACTICES AND LAND TRUST STANDARDS

The following studies and information provide a methodology for addressing questions two and three of this thesis. That is, it seeks to inform ways that land trusts can protect conservation value over time. In addition, this section helps define how land trusts should address perpetual management goals in terms of easement drafting, property

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[160] Easement stewardship can have many meanings. The Land Trust Alliance indicates that stewardship means adequate funding, regular monitoring, well-developed baseline reports, maintaining contact with landowners, and enforcing easements when a violation occurs. Land Trust Alliance, "The Standards and Practices Guidebook," 14-1. More established land trusts are beginning to view stewardship as creating and maintaining strong relationships with landowners in order to foster a collaborative working environment. Ratley-Beach, Wagner, and Bradley, "Easement Stewardship: Building Relationships for the Long Run,"6-10. These two definitions reflect different viewpoints on the role of the land trust in easements.

selection, landowner contact and easement and property stewardship policies and procedures.

Darla Guenzler's 1999 study for the San Francisco Bay Area Open Space Council, entitled "Ensuring the Promise of Conservation Easements, Report on the Use and Management of Conservation Easements by San Francisco Bay Area Organizations," analyzed stewardship practices of easements by land trusts, government organizations and other non-profit organizations in the San Francisco Bay Area.[161] The study examined baseline documentation and monitoring practices, easement violations, documents, expenditures, stewardship, and identified the characteristics and purposes of easements used.[162] Guenzler found that 75% of land trusts monitored easements regularly and 72% of easements with land trust holders had baseline reports.[163] The study found substantial differences in stewardship practices among land trusts based on differences in "size, available resources, personnel, and organizational identities."[164] The study differentiated land trusts between "land holders" and "deal-makers." It suggested that the "land holders" were better at the stewardship aspects, like monitoring, while "deal-makers" were more invested in new acquisitions and less concerned with monitoring.[165] The study made several recommendations, including improving stewardship programs, bettering

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[161] Guenzler, "Conservation Easements in the San Francisco Bay Area: Study Reveals Differing Approaches to This Popular Tool," 10-14.

[162] Ibid., 10.

[163] Ibid., 11-12.

[164] Ibid., 10.

[165] Ibid., 11.

easement and monitoring programs, creating partnerships to aid stewardship, and generally supporting others' stewardship efforts.[166]

Similarly, a national survey completed in 1999 by Marty Zeller evaluated land stewardship concerns of land trusts. The study, "Stewardship of Land, An Investigation into the State of the Art," found that a majority of land trust respondents were "either unsure or, or felt that most land trusts are not providing adequate stewardship of their easements."[167]

Concerns regarding stewardship were slightly assuaged in 1999 when a national study by the Land Trust Alliance found that "less than 7 percent of the easements held by land trusts have experienced violations and land trusts considered most violations to be minor."[168] Of the 498 violations reported, only 115 were major and required a significant commitment of resources to resolve.[169] Of the twenty-one cases where lawsuits were filed, subsequent landowners or third parties committed all the underlying violations. Many "litigated violations occurred even though the land trust representatives had met with the landowners to explain the easements' terms."[170] In fact, a majority of land trusts believed a subsequent landowner knowingly violated the easements. The study made the following recommendations on how to avoid violations. Land trusts should:

1. Carefully draft easements,
2. Have policies and procedures in place before a violation occurs,

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[166] Ibid., 13-14.

[167] Zeller, "Stewardship of the Land," 6.

[168] Danskin, "Conservation Easement Violations," 5.

[169] Ibid.

[170] Ibid., 6.

3. Conduct regular monitoring and make contact with the landowner during monitoring,
4. Maintain good community and landowner relations,
5. Have adequate financial resources for stewardship and easement defense, and
6. Consult legal counsel immediately after discovering a violation.[171]

Brenda Lind conducted a study for the LTA on the quality of conservation easements stewardship practices in Vermont, New Hampshire and Maine.[172] The study examined conservation easements and stewardship documents and included interviews on topics of easement drafting and acquisition, baseline documentation, finances, violations and amendment procedures, and monitoring.[173] The results indicated that several aspects of easement stewardship were deficient. Those areas that are important for this study include "conservation easement drafting, baseline document report preparation, monitoring standards,"[174] as well as written amendment policies, and other written stewardship policies.[175] Of particular concern was baseline documentation and written monitoring policies. Less than half of organizations interviewed had a written monitoring policy while, "Only four of the 18 organizations interviewed had completed baseline documentation for every easement held."[176]

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[171] Ibid., 7.

[172] Lind, "How Strong Are Our Defenses," 2-46.

[173] Ibid., 2.

[174] Id., Foreword.

[175] Ibid., 3.

[176] Ibid., 20-21.

Lind found that stewardship practices varied according to number of staff and influence of larger easement holders. Smaller staffed land trusts had greater community connections, but were not as organized in stewardship documentation.[177] The study concluded that smaller organizations might not be as able as larger ones to withstand the challenges of perpetuity.[178]

Debra J. Pentz conducted a study on easement practices in Colorado entitled, "Planning for Perpetuity: A Study of Colorado Conservation Easement Practices."[179] The study looked at the practices of local, state, and national conservation organizations as well as local, state, and federal governmental conservation agencies.[180] The study utilized a written survey, an on-site interview and document review.

Pentz found several areas that needed improvement in nonprofit practices. Those relevant to this study include: baseline reports, educating new landowners, ensuring consistency in written documents (easements, baseline, and monitoring reports), and developing written polices and practices.[181]

The relevant recommendations from the study were that easement holders should:

1. Formalize conservation easement stewardship programs,
2. Create baselines for all easements and perform annual monitoring,
3. Better define conservation values in easements,

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[177] Ibid., 4.

[178] Ibid., 40.

[179] Pentz, "Planning for Perpetuity," 1.

[180] Ibid.

[181] Ibid.

4. Ensure that all documents track with the conservation values and permitted/restricted uses as defined in easements, and
5. Ensure proper notice of fee title transfer to new owners and establish relationships with new landowners.[182]

Pentz made additional recommendations, but they were not included as they are not applicable to this study.

Land Trust Alliance Standards and Practices

The Land Trust Alliance (LTA) has developed an operating manual for land trusts that contains fifteen standards and practices for land trusts to follow. All the land trusts in this project have formally adopted LTA's standards and practices. The standards and practices general categories are: 1) Purpose and Goals, 2) Board Accountability, 3) Conflict of Interest, 4) Basic Legal Requirements, 5) Fundraising, 6) Financial and Asset Management, 7) Staff, Consultants, and Volunteers, 8) Selecting Projects, 9) Choosing the Best Conservation Method, 10) Examining the Property, 11) Ensuring Sound Transactions, 12) Tax Benefits, 13) Board Approval of Transactions, 14) Conservation Easement Stewardship, 15) Land Stewardship.[183]

All of the above categories are important to the success of a land trust and its easement program; however, not all of the Standards and Practices were included in this study. The standards that are directly within the scope of this project are standard eight, Selecting Projects, standard ten, Examining the Property, standard fourteen, Conservation

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[182] Ibid., 3.

[183] Land Trust Alliance, "The Standards and Practices Guidebook," 1-1 - 15-26.

Easement Stewardship, and standard fifteen, Land Stewardship. Of the standards selected for this study, only some of the practices were relevant. Those practices, along with their corresponding standard, are included in table 6 below.

Table 6. Relevant Standards and Practices

	Standard 8	**Standard 10**	**Standard 14**	**Standard 15**
Title	Selecting Projects	Examining the Property	Conservation Easement Stewardship	Land Stewardship
Standard "A land trust must…	"be selective in choosing land-saving projects."	"know the property it protects."	"carry out a program of responsible stewardship for its easements."	"carry out a program of responsible stewardship for its land."
Relevant Practices	8A. Selection Process and Criteria 8B. Consistency of Transactions with Goals and Purposes 8C. Public Benefit of Transaction 8D. Identifying High-Priority Areas	10A. Basic site inspection 10B. Identifying Conservation Resources 10C. Due Diligence for Hazardous Materials 10D. Determine Property Boundaries	14B. Easement Monitoring 14C. Landowner Contact 14D. Easement Enforcement 14E. Contingency Plans	15B. Monitoring Properties 15C.Management Plan 15D. Stewardship Administration

Standard 8: Selecting Projects

Standard 8 begins with project selection process and criteria, stating that land trusts need to establish specific written selection processes and written selection criteria.[184] The LTA recommends that land trusts establish a checklist for the selection process; they may need to establish several checklists for different projects and transactions.[185] The LTA also notes that narrative statements and flow charts might be useful to supplement the checklist, depending on the particular situation.[186] Selection criteria are used to aid the land trust in taking on only projects that meet its goals, mission and standards. These can be used in conservation planning and when considering a particular piece of property.[187] Criteria must be consistent with the trust's goals, must address the conservation values and any benefit deriving from an acquisition, must consider feasibility of acquisition and must consider the significance of the property and whether it is a priority.[188]

Practice 8D, Identifying High-Priority Projects, is a major focus area of this project. The practice of identifying priority lands, or conservation targets, is an essential component of land trust operations. The LTA stresses a proactive strategy of identification of significant lands through a conservation agenda.[189] The practice outlines several methods for identifying these areas, including conducting a resource inventory,

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[184] Land Trust Alliance, "The Standards and Practices Guidebook," 8-4.

[185] Ibid., 8-5.

[186] Ibid., 8-6 – 8-7.

[187] Ibid., 8-8.

[188] Ibid., 8-9.

[189] Ibid., 8-18.

implementing a public policy (such as city government open space plan), connecting protected lands in a matrix, or simply using community knowledge to determine priorities.[190]

Standard 10: Examining the Property

The premise of this standard is that "A land trust must know the property it protects." This standard includes the practices of site inspection, identifying conservation value, determining property boundaries, hazardous waste inspection, and completing a risk/benefit analysis for the property.[191] Land trusts should have written procedures for completing these tasks and should conduct both on-site and off-site research on the property. Examination should consider:

1. property access,
2. type, importance, and condition of conservation resources,
3. threats to resources,
4. existing land use and intensity of activity,
5. condition of existing improvements,
6. visible easements and encumbrances,
7. natural and structural safety hazards,
8. public use concerns,
9. evidence of hazardous waste,

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[190] Ibid., 8-19 – 8-21.

[191] Ibid., 10-5 – 10-19.

10. adjacent land use, and

11. property boundaries.[192]

For natural habitat inspection, the standard suggests identifying species of concern, habitat types, plant communities, and physical relation of the area to other protected areas.[193] For natural habitat, the standard suggests performing a site-specific inventory of habitat types and plant communities.

Standard 14: Conservation Easement Stewardship

Practice 14B, Easement Monitoring, suggests that land trusts annually monitor easement properties. Easement drafting is the first step in creating a monitorable situation. The Standards and Practices recommend land trusts:

1. Require clear boundaries for the easement and special use areas
2. Use measurable standards
3. If measurable standards are impracticable, refer to accepted standards
4. Require grantee approval of certain activities on the property
5. Avoid restrictions that cannot be monitored, and
6. Avoid unenforceable restrictions.[194]

Practice 14B also provides that land trusts must have adequate baseline documentation and must certify that the easement grantor has formally acknowledged its accuracy.[195]

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[192] Ibid., 10-5 – 10-6.

[193] Ibid., 10-9.

[194] Ibid., 14-10 – 14-11.

[195] Ibid., 14-11.

Baseline documentation should document all special landscape elements, including habitat, and areas affected by landowner-reserved rights. For the most part, contents of baseline documentation are tailored to protect against violations and for potential litigation.[196]

Practice 14C, Landowner Contact, stresses that the land trust must explain easement restrictions and the land trust's role to all landowners involved.[197] In addition, the practice says that land trusts should discuss the easement with new owners as soon as possible.

Standard 15: Land Stewardship

Although standard 15 was written to address properties that land trusts own in fee simple, several principles and practices are applicable to conservation easements and are within the scope of this study. Those applicable include monitoring, management plans, and stewardship administration.

Practice 15B, Monitoring Properties, provides that marking boundaries, regular monitoring, and immediately addressing encroachment issues are critical to successful monitoring programs.[198]

Practice 15C states, "For each property, the land trust has an adequate management plan that identifies the land trust's goals and how it plans to achieve

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[196] Sanjayan, "Ask an Expert: Buffer Zones, Invasive Species and More," 36.

[197] Land Trust Alliance, "The Standards and Practices Guidebook," 14-16.

[198] Ibid., 15-12 - 15-14.

them."[199] According to the LTA, management plans should include site information, management objectives, and an implementation plan.[200] The LTA makes several recommendations of what information should be contained under the three headings. See table 7, LTA Recommended Management Plan Contents.

Table 7. LTA Recommended Management Plan Contents[201]

Site Information	Management Objectives	Implementation
Identify the property	Resource Protection	Prioritized Action Plan
Acquisition History	Extended Protection Plan	Completion Dates
Natural Resources Inventory	Public Use	Updating Plan
Cultural Resources Inventory	Productive Use	
Land-Use History	Annual Obligations	
Legal Documentation	Enforcing Policies	

Practice 15D, Land Stewardship Administration, stresses that good record keeping and administration of duties are important for continued stewardship of properties.[202] The LTA recommends land trusts develop stewardship policies relating to "public access," "frequency and procedures for monitoring," "use of properties for

[199] Ibid., 15-15.

[200] Ibid., 15-17.

[201] Ibid., 15-17 - 15-20.

[202] Ibid., 15-21.

research," "use of properties for environmental education," "prohibited activities on land trust properties," and "standards for improvements."[203]

OTHER INFORMATION

Great Outdoors Colorado (GOCO) funds conservation organizations (non-profit or governmental) in both the acquisition of fee title and conservation easements. GOCO has outlined stewardship standards that organizations applying for grants must meet.[204] "Grantees must demonstrate that land acquired will be permanently protected and that the conservation values identified in the project application will be preserved by developing a stewardship plan for the property that meets or exceeds the provisions of GOCO's stewardship policy."[205] It has developed this stewardship policy with assistance of local government, land trust and state land management agency representatives. To fund projects that are acquired for natural area/nongame wildlife value, at a minimum, a baseline documentation report, a management plan for the property, annual monitoring reports, consistent procedures for review and approval of reserved rights, procedure for easement enforcement, conservation easement and land management amendment policies, and stewardship funds must be created.

As stated above, the preceding studies and information provide a methodology for addressing questions two and three of this thesis. This section seeks to inform land trusts

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[203] Ibid.

[204] Great Outdoors Colorado, "Stewardship Policy for Land Conservation Projects," http://www.goco.org/forms/os_stewardship_policy.pdf.

[205] Ibid.

on how to protect conservation value over time. In addition, this section helps address how land trusts should prepare perpetual management goals in terms of easement drafting, property selection, landowner contact and easement and property stewardship policies and procedures.

CHAPTER THREE: METHODOLOGY

PARTICIPATION

The criteria for participation in the study were that the organization is: 1) a private land trust, 2) operating inside Oregon, 3) utilizing conservation easements, and 4) utilizing conservation easements that have a main purpose of habitat conservation. Based on the criteria, there were ten potential land trusts for the study. Six of the ten organizations agreed to participate. Participants in the study remain anonymous. I have protected their anonymity through a lettering system.

RESEARCH METHODS

The study utilized both a document review and in-depth on-site interviews. These were chosen in conjunction for several reasons. First, documents do not always reflect what occurs in practice; therefore, documents alone would not be sufficient. Second, documents are the legal mechanism by which easements are enforceable and policy documents are fundamental to passing down institutional knowledge to new employees, so interviews alone would not have been adequate. The mixture of interview and document review provides a more comprehensive view of land trust practices relating to easements.

The study focused mainly on presence/absence information as opposed to specific practices of the organizations. For example, the study looked at whether or not the organizations always utilize management plans for their easements instead of a detailed analysis of each management plan. This was done in order to provide for a comparative aspect. Had the project been centered on the practices and policies of one particular land trust, a more searching review of practices would have been appropriate. In this case, it was clear that in depth analysis of actual management plans would not be beneficial as each property has unique qualities that dictate the contents of the plans.

Document Review

Each organization provided several documents for review. The documents requested were two conservation easements with habitat protection as a main goal, management plans and baseline documentation that accompany the easements, and written policies and procedures relating to easement acquisition, monitoring, stewardship practices, and landowner contact.

Easements were requested in order to analyze easement drafting, clarity of restrictions/permitted uses, and flexibility to changing environmental circumstances. Baseline reports, monitoring procedures and management plans were asked for in order to assess actual land trust stewardship practices as well as conservation success potential. Written policy documents relating to easement acquisition, stewardship, and landowner contact were requested in order to assess land trust success in planning and the ability of the land trust to transfer institutional knowledge to new staff over time.

On-Site Interviews

The interview questionnaire was adapted from numerous sources including a study by Debra J. Pentz, "Planning for Perpetuity: A Study of Colorado Conservation Easement Practices,"[206] and a study by Brenda Lind of the Land Trust Alliance, "How Strong Are Our Defenses: The Results of the Land Trust Alliance's Northern New England Conservation Easement Quality Research Program."[207] I was able to use these studies as they addressed similar questions relating to perpetuity and conservation easements. In addition, I created additional questions to specifically address this project's unique goals. This was necessary because there have not been any studies to date that address the same problem. The conservation research covered in chapter two is the basis for these questions.

Interviews were conducted at the land trusts' offices in July and August of 2003. The interviews were tape recorded and later transcribed. In addition, handwritten notes were taken during the interviews.

Substantive Analysis

A chief goal of this project was to fashion a set of criteria upon which to measure the probability for long-term conservation success of habitat conservation easements (See thesis research questions one and two). Currently, there are ways to define success in easement programs; however, none has the same focus as this study. To date, I have not

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[206] Pentz, "Planning for Perpetuity," Attachment B. See Appendix A: Written Survey and Document Request.

[207] Lind, "How Strong Are Our Defenses," Appendix B.

found a study that addresses my chief goal. Therefore, the substantive analysis was adapted from numerous sources.

Based on the literature review, I chose several broad categories of importance for perpetuity and then I assessed the land trusts and conservation easements within those categories. The general categories of focus were: easement drafting, project selection, land management and stewardship, and landowner contact. These four categories were chosen because of their ability to directly address the research questions. Other categories could have been chosen to determine organizational success, but were not selected, as they would have widened the scope of the project and decreased my ability to conduct in-depth research. Land trust staff time considerations also limited the scope of the project.

Easement Drafting

Questions regarding easement drafting focused on the use of a model easement and the contents of easements used by the land trusts. Interview questions were used to determine whether the organization utilized a model easement, whether the easement was updated frequently and reviewed by legal counsel.

Interview questions were also used to determine the contents, attachments and structure of easements currently used by land trusts. To that extent, questions included; whether easements included affirmative duties, whether easements were supported by monitoring and baseline documents, and whether the land trust has identified old or poorly drafted easements that need review.

Easement documents were reviewed for a clear statement of purpose and whether the restrictions and permitted rights were clear and monitorable. Easements were also reviewed for clarity of property boundaries and review procedures as well as the relative rights of landowners and the trusts. Addressing key questions in this thesis, easement documents were reviewed for their protection of conservation values (See section B25 in Appendix A for specific questions). Questions were aimed at determining the documents' ability to adapt to changes in the conservation value, including the use of management plans.

Project Selection

Project selection is a large part of this study for several reasons. First, because of the perpetual nature of the restrictions, land trusts must wisely select properties that are of current high conservation value. Second, the land protected also needs to be able to maintain or achieve a high conservation value over time. The criteria for land acceptance/selection were adapted from conservation planning and the principles of landscape ecology and conservation biology (See section C of Appendix A for question details). The major categories within this section were: written policies, due diligence, criteria for acceptance, prioritization, screening potential properties, and property examination (See table 8 below).

Table 8. Categories and Criteria for Project Selection by Land Trusts

Written Policies	Due Diligence	Acceptance Criteria	Prioritization	Screening Properties	Property Examination
Yes or No	Hazardous waste inspection	Use of ecological principles	Use of conservation targets	Hazardous situations	Thorough examination
Written selection criteria	Title review	Criteria development	Method of target development	Pre-existing uses	Off-site research
	Boundaries walked, surveyed, marked		Identification of species, ecological systems	Surrounding land use Zoning	Identification of conservation value
	Review by attorney, special committees		Conservation goals	Size of property in relation to conservation value	Map and description of plants and habitats
	Full board review/vote			Future conservation potential	Identification of threats to conservation values

Land Management and Stewardship

Site level management must relate to regional or landscape conservation efforts. Criteria were adapted from the Land Trust Alliance Standards and Practices and principles of adaptive management. Areas of importance within this category are: baseline documentation, monitoring, management plans, incorporation of adaptive management and written documentation of policies and procedures. Questions regarding baseline documentation and monitoring were minimal. For baseline documentation, the survey asked whether all easements have complete baseline files. For monitoring,

questions related to frequency, adequate monitoring of conservation value, and reporting of monitoring activities.

Management plans received the most scrutiny in this section. Questions regarding management plans looked at the use of management plans, review processes of plans, and the contents of management plans. Sample management plans were reviewed for thoroughly addressing conservation values, inclusion of land use history, basis in conservation sciences, and their use of adaptive management principles. Management plans were also reviewed for the presence or absence of the following: management policies, action plans, budget, monitoring system, work plans, assignment of annual obligations, clear delineation of labor, reference to stewardship policies, written history of implementation, and methods for measuring success.

The organizations were also reviewed for their use of guiding documents. The trusts were asked about their use of the following documents: stewardship policy documents, baseline documentation policy, standard baseline document, landowner contact policy, and a written monitoring policy.

Landowner Contact

Criteria for landowner contact were adapted from the LTA's Standards and Practices (see Chapter 2). In this category, I looked for the following information:

1. Whether the organization has a written policy for landowner contact
2. Whether the land trust has written educational materials for landowners
3. Whether the land trust keeps written logs of landowner-land trust interaction

General Questions on Perpetuity

The final section of the questionnaire contained a series of organization self-evaluation questions (section E in Appendix A). These questions related specifically to the questions addressed in this thesis and the land trusts' perception of their preparation for protecting conservation values of easements in perpetuity. This section was designed to fill in the gaps in the earlier sections through open ended questions.

Limitations and Applicability of Data

Land trust participants in this study did so voluntarily. It is likely that those organizations willing to participate are the same ones that continually strive to improve upon their practices. Therefore, the low range of land trust practices might not be well represented. At least one land trust was too busy to participate and another land trust was only able to partially participate due to a large acquisition project. As several land trust representatives pointed out during the study, it is difficult to assess quality of work in a study of this type. Most organizations do basic work, but not all go beyond the minimum amount of work necessary, mainly due to staffing or budgetary issues.

CHAPTER FOUR: RESULTS

PARTICIPATING ORGANIZATIONS

The participating organizations (see table 9) range in size from nine full time staff to one full time staff. There are no fully volunteer organizations, although many of the organizations rely heavily on volunteer participation. The low number of participating organizations is related to the small number of land trusts in Oregon as well as the participation criteria of this study. The organizations also vary greatly in how many volunteers they utilize, ranging from 200 to five. A comparison of tables 9 and 10 below indicates that the number of staff and volunteers does not correlate exactly to the number of easements utilized or the number of acres protected. All organizations have adopted the Land Trust Alliance Standards and Practices discussed in Chapter 3.

Table 9. Organizational Characteristics

Participating Organizations	Year Created	Full-Time Staff	Part-Time Staff	Volunteer Help	Board Members	Approx. Annual Budget	Adoption of LTA S&Ps
Land Trust A	1991	9	0	Too numerous	13	1.2 Million	Yes
Land Trust B	1995	5	2	200	15	450K	Yes
Land Trust C	1989	1	2	~10	13	273K	Yes
Land Trust D	1989	2	1	6	10	135K	Yes
Land Trust E	1987	1	1	~20	9	174K	Yes
Land Trust F	1991	3	0	5-10	13 + 7 advisory	600K	Yes

Conservation Easement Holdings

The conservation easement holdings of the organizations vary from three to eighteen (see table 10 below). Of the forty-nine total easements held by the organizations, thirty-seven have an express goal of wildlife habitat protection. These thirty-seven easements protect approximately 4,412 acres across Oregon. All of the organizations utilize perpetual easements; four out of the six organizations utilize these exclusively. Thus, the majority of easements utilized by the organizations, approximately 94 percent, are perpetual. Of all the easements held by the participating organizations, only three have been held by another land trust at some point in time. Additionally, there have only been three easement violations. None of the easements held by participating organizations have been amended.

Table 10. Conservation Easement Holdings of Participating Land Trusts

Participating Organizations	Total Easements with Wildlife Habitat Goal/Total Easements	Total Perpetual Easements	Acres Protected by Habitat Easements / Total Acres Under Easement
Land Trust A	8/10	10	400/600
Land Trust B	3/3	2	3212/3212
Land Trust C	2/8	8	6/250
Land Trust D	6/6	4	290/290
Land Trust E	4/4	4	340/340
Land Trust F	14/18	18	164/254
Totals	**37/49**	**46**	**4412/4946**

Easement Drafting

Interview questions regarding easement drafting were minimal and covered the use of model easements, whether easements contain affirmative duties, whether all easements contain a baseline and monitoring report and whether the organization has identified old or poorly drafted easements.

All but one organization uses a model easement for drafting new easements. All organizations that use a model easement responded that they update the model frequently and all have the document reviewed by counsel when updating. In addition, all but one of the organizations indicated that all easements are accompanied by baseline and monitoring reports. Four out of the six organizations have identified old or poorly drafted easements; one organization is actively working to fix the documents. The organizations vary greatly as to whether their easements contain affirmative duties. Three organizations responded with sometimes, one organization responded with never and one responded with always.

The document review portion of the easement drafting review consisted of analyzing one easement document for each land trust. Documents were analyzed for clarity of prohibitions and restrictions, content, and for their treatment of conservation values. The intent of the inquiry was to determine whether easements are written to prepare for perpetual protection and enhancement of changing habitat conservation values on easement properties.

In general, the content of the easements is very clear and concise. The organizations are proficient in clearly defining the purposes of the easements, in making

the restrictions and prohibitions clear, and in making the landowner permitted activities clear. Two areas of concern for several land trusts are in making the prohibitions and restrictions monitorable and in having clear methods delineated for notice and approval provisions in the easements. Another problem in four of the documents reviewed is either that development rights have not been extinguished or that it is not clear whether they have been extinguished. All of the documents require notice when the property is sold.

The next set of questions sought to address how the easement documents are addressing changes in the conservation value over time due to natural processes. All of the easements purport to protect and maintain the conservation values of the easement properties. However, only one of the documents discusses protection of new conservation values later emerging. That same document is also the only one to reference a management plan to be used in protecting those newly discovered conservation values and the only one to contain affirmative duties for the landowner. It is the only document to specifically reference a management plan currently in existence. Additionally, only one document discusses the facilitation of ecosystem processes on an easement property. That same document is the only one to include an assignment of water rights to protect conservation values. Three of the easements reviewed do not account for changing environmental circumstances or changes in the protected conservation values while two documents do not contain a reference to both specific and broad conservation values.

PROJECT SELECTION

Project selection is a major part of this study. Questions dealt with ministerial aspects of project selection (such as, whether boundary checks are done) to conservation policy, examination procedures, and the use of ecological principles to identify key pieces of property. The purpose of such a broad variety of questions was to gauge where the organizations are at in the evolution of protecting property. This study identified that participating land trusts are proficient in completing the ministerial tasks. However, several of the organizations are not as advanced in their use of conservation science as a guidepost for project selection.

Table 11 illustrates the level of proficiency of the organizations at performing basic project selection activities, also known as due diligence. Land trusts were asked whether they always, sometimes, or never perform a task during project selection. The answers are identified as A, S, and N in the table. All but one land trust have a formal acquisition policy and always use written selection criteria for project selection. In addition, all but one land trust always perform a title review, check for mortgage encumbrances on the property, consult a stewardship staff, have a land committee review the project, and have vote of the board before each acquisition. Areas of deficiency for several land trusts include hazardous waste inspection, boundary determination and marking, and having easements reviewed by an attorney. Additionally, not all land trusts advise landowners on the need to get their own attorney. On a positive note, all land trusts always execute and record the encumbered deeds and create files to handle easements.

Table 11. Project Selection*

Org.	Formal Acquisition Policy	Written Selection Criteria	Hazardous Waste Inspection	Title Review	Boundaries Walked	Boundaries Surveyed	Boundaries Marked
LT A	Yes	A	A	A	S	S	S
LT B	Yes	A	S	A	A	S	A
LT C	No	S	S	A	S	A	S
LT D	Yes	A	S	A	S	S	S
LT E	Yes	A	A	A	A	N	A
LT F	Yes	A	S	S	A	S	S

Table 11. Project Selection, Continued

Org.	Mortgage Encumbrance Check	Attorney Review	Landowner Advised on Legal Counsel	Land Committee Review	Stewardship Staff Consulted	Full Board Review/Vote	Executed and Recorded	Files Created
LT A	A	A	A	A	A	A	A	A
LT B	A	A	A	A	A	A	A	A
LT C	A	A	Unsure	S	N	A	A	A
LT D	S	A	A	A	A	S	A	A
LT E	A	N	N	N/A	A	A	A	A
LT F	A	S	S	N/A	N/A	A	A	A

*A = always, S = sometimes, N = never

Property Screening and Examination

The next set of questions regarded screening procedures the land trusts use. All participating organizations are very consistent and thorough in their property screening procedures. All land trusts screen properties for pre-existing uses on the property, incompatible uses on adjacent lands, development plans for the area, and undesirable commercial use in the area. However, only three out of the six organizations always screen for hazardous waste on adjacent lands.

For screening of the conservation value of properties, land trusts perform similarly well. All land trusts consider surrounding land use, regional zoning, potential for connectivity to natural areas, and the site's future conservation potential. However, only three land trusts always consider the size of the property in relation to the conservation value they were trying to protect. In addition, only two land trusts always consider information from outside sources regarding the conservation values of the site.

The organizations were also asked about their property examination procedures once they have acquired the piece of property. All organizations reported that they do a thorough examination of the property, including identification of conservation values. All but one organization always does the following when examining a piece of property: conduct off-site research, map and describe plants and habitats, and identify threats to the conservation value.

Acceptance Criteria and Prioritization

The next set of questions focused on the use of selection criteria by the organizations. Questions were aimed at determining the extent and use of conservation criteria in project selection. All of the organizations responded that they use some type of conservation criteria and ecological principles in project selection, although several of the organizations indicated that they do not use the criteria consistently and that the criteria are very broad. One land trust reported that they perform a survey to determine the extent of current conservation occurring in the region as a starting point for their criteria. All but one of the organizations reported that they have specific conservation targets and that they have prioritized those targets based on either a written plan or the level of threat to the property. Additionally, all but one organization has identified the species, communities and ecological systems in their service area.

Land Management and Stewardship

Land management and stewardship was also a major focus of this research. Questions were designed to understand the consistency and thoroughness of methods that land trusts use to manage[208] (or steward) their easement properties and protect (and enhance) the conservation values on those properties. To that extent, questions were asked regarding the use of management plans, monitoring practices, baseline documentation, and the use of written documents.

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[208] By manage, I do not mean literally run the property. Rather, I am referring to the means land trusts use to assist landowners in enhancing the conservation value. In other words, how land trusts assist landowners to manage the properties.

Monitoring Practices

Five of the organizations reported that they annually monitor easement properties, while only four perform an annual survey of the conservation value on easement properties. Only one-half of the organizations always create monitoring reports for each monitoring visit.

Management Plans

Use of management plans for easement properties by the land trusts is limited. One land trust indicated that they never create management plans for easement properties, while four reported that they sometimes do. One organization indicated that they always create a management plan for easement properties. When asked why the organization might not use a management plan, responses varied. However, it appears that the organizations would create more management plans if they had more time, money and better-trained staff. Two land trusts cited time constraints as their main reason for not creating management plans. Other responses included lack of staff competence and lack of need for management plans on the properties.

Several questions were asked solely of the organizations that use management plans. These questions looked at what plans include, how often plans are updated, and whether or not management plans address changes (or potential changes) in the conservation value. All of the organizations said that management plans are created on a case-by-case basis to conform to the easement document, the landowner's wishes, and/or the ecological conditions. Only one land trust indicated that their management plans

include considerations of landscape scale ecological values while three land trusts said their plans always include consideration of threats to the conservation values. None of the organizations reported that their management plans address natural phenomena (such as fires and floods).

The study also looked at review and revision of management plans. The organizations vary greatly in their review of management plans currently in place, varying from annually to infrequently to every 10-30 years. Additionally, no organization appears to have a defined set of criteria, principles, or processes for reviewing and revising management plans.

Management Plan Document Review

Due to the minimal use of management plans by the participating organizations interviewed, the document review section of the results is extremely limited. In fact, only one organization was able to submit a copy of a management plan, making comparison of the organizations impossible. Nonetheless, the plan received does provide insight into the practices of one land trust and may be helpful for other organizations. The criteria upon which the plan was evaluated are located in Appendix A, section D. The management plan reviewed is lacking in a few key areas. It does not contain a land use history, a history of implementation, methods for measuring success, a work plan, budget or a monitoring system. Additionally, the plan does not discuss a larger landscape scale, reference a stewardship policy, or seek to ensure that productive uses do not interfere with conservation values. Further, the plan does not address how it is to be reviewed or

revised and is not consistent with principles of adaptive management. On the other hand, the management plan does contain a natural resources inventory and indicates the conservation values to be protected as well as important features on the property. The plan also incorporates many principles of conservation science and establishes management policies, objectives and an action plan.

Baseline Documentation

Baseline documentation among participating organizations is very high. Of the six land trusts involved, only one land trust does not have a baseline document in each easement file. That land trust, however, reported that they understand it is a problem and are working on remedying the deficiency.

Landowner Contact

For this section, land trusts were asked several questions regarding their landowner contact and landowner education. The questions asked them to describe their relationships with landowners, indicate whether they have written education materials, and indicate whether they have written policies and materials describing procedures for interaction with landowners.

All but one land trust described their relations with landowners as good or close. Not surprisingly, those same land trusts said interaction with landowners is critical to conservation success. Additionally, all but one land trust has written education materials for landowners. There are significant areas for improvement in landowner contact

policies and written documents. None of the land trusts have a written landowner contact policy while only one land trust has a written policy regarding how to deal with new landowners on easement properties. In addition, only three land trusts reported that they maintain a log of every land trust-landowner interaction. These results are probably a result of the fact that only three of the organizations have had to deal with new landowners and those were all smooth transitions.

General Questions

This final series of questions was designed to specifically address the question of how land trusts are preparing for perpetuity in terms of protecting the conservation values of easement properties. The questions were also designed to understand the institutional mindset of land trusts in Oregon regarding matters of perpetuity and their perception of the role that land trusts should play in easement management.

The first set of questions asked about the methods land trusts use to ensure perpetuity in easements and in the conservation value of easement properties. When asked about the mechanisms the land trusts use to ensure perpetuity, five responded that the easement document is their main tool. Some responded that this is their *only* tool. Other organizations also responded that monitoring, a stewardship endowment, and good landowner relations are also employed in ensuring perpetuity. The next question asked the organizations how they plan to protect the conservation values of their easements in perpetuity. Two organizations replied that their monitoring program is important. Two organizations cited working with landowners as critical to maintaining conservation values. Another organization named endowment as the best means to ensure the

conservation value. Only one organization stated that conservation planning and clearly managing for conservation values is how they plan to ensure the conservation values of easement properties.

The organizations were next asked whether they felt land trusts (and their organization in particular) do(es) enough to ensure for perpetual protection of property in their easements. Responses varied regarding whether they though land trusts in general are doing enough. Many responded that land trusts are doing all they could legally, but several organizations cited specific problem areas, including adequate stewardship endowments and working with landowners. When asked whether they thought their particular land trust is doing enough to ensure for perpetuity in easements, three organizations responded negatively. Another organization indicated that they are "doing all they can," while another organization representative said "I think we're doing all we can and probably should be doing, but we don't know if it's enough for conservation goals." Another response was simply, "We do not have the resources to make sure the easements will be protected."

Organizations were next asked about their preparations for long-term ecosystem changes on easement properties, including the effects of climate change. Two organizations responded that they are not preparing for long-term ecosystem changes, while two organizations reported that they are watching and monitoring for changes. One organization responded that they allow some amount of flexibility in the easement document to account for changes. Another organization said they are attempting to link corridors, habitats and trails to provide connectivity and facilitate ecosystem changes.

None of the land trusts are preparing for the effects of climate changes on easement properties. Four of the organizations responded that they should be preparing for the effects of climate change, but that they either did not know how to or did not have the capacity to prepare.

The information presented in this chapter was derived from responses to the questions presented in Appendix A. In combination, the sections of this chapter provide a fairly comprehensive picture of land trust practices to prepare for perpetual protection of habitat values in easement properties. Additionally, inclusion of both a document review and interview section in the study helped produce results that reflect actual practices of the organizations as well as organizational strengths and weaknesses. The results are analyzed in the following chapter.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

This study set out to answer the following questions:

1. Are conservation easements in place today designed to protect their habitat conservation values in perpetuity? Assuming the goal of perpetuity is possible and realistic, what are the best means by which land trusts can achieve it?

2. How should land trusts address the goal of perpetuity in terms of easement drafting, property selection, landowner contact, and easement and property stewardship policies and procedures?

3. How are land trusts in Oregon preparing for perpetuity as it relates to the use of conservation easements for wildlife habitat protection in terms of easement drafting, property selection, landowner contact, and easement and property stewardship policies and procedures? How can land trusts improve upon this goal through practices and policies?

This study emerged from several concerns regarding land trusts' ability to protect habitat conservation values over time. Of particular concern is their ability to handle changes in fee title ownership as well as select lands that will retain significant conservation value over time. There is also concern regarding land trusts' ability to work effectively with landowners to protect and enhance conservation values and to create easement documents that respond to changing environmental realities and conservation knowledge. Current land trust literature and conservation science were used to create a methodology for analyzing the thesis questions and addressing the concerns presented. The literature review defines a set of methods that land trusts can utilize to address perpetual protection of easement properties. The literature frames the basis for the

following position: with proper policies and procedures in place for project selection, land management and stewardship, landowner contact, and easement drafting, land trusts can create a framework to increase their chances of conservation success and allow for flexible responses to changes, both human and environmental.

The findings of this study are both positive and negative. Land trusts are working toward planning for perpetuity in some respects, but seem to stagnate in others. In addition, the land trusts are at different stages in their development as conservation organizations. This fact likely affects how well they are able to protect conservation values. Overall, the positive observations of the study are encouraging. All the organizations have a process for project selection and always utilize ecological considerations in acceptance procedures. This indicates that the organizations recognize that ensuring perpetual protection of easement properties requires discrimination between properties. On the other hand, it is unclear how discriminating the organizations are in practice and how faithfully they utilize selection criteria.

Another positive conclusion from the study is that the organizations work diligently to ensure the legal enforceability of their easement documents. The results of this study indicate, however, that enforceability may be compromised over time by changes in the conservation values on the property. Few of the easements anticipate the certain occurrence of environmental changes and consequent effects on the physical condition of the property.

An area of significant concern revealed by the study is the inconsistent use of written policy and procedure documents by some of the organizations. Written

documents are important to maintain for numerous reasons. Perpetuity is (hopefully) a long time for land trusts to hold easements. Documents help to pass on institutional knowledge to new staff, provide clear guidelines for land trust activities, help create a cohesive conservation network, and aid in landowner relations, among other important functions. It is likely that the organizations do have consistent practices and are achieving the effects of written documentation. However, the nature of perpetuity counsels the importance of maintaining and utilizing written documents.

The remainder of the chapter elaborates on this brief overview and provides more in-depth analysis of the results. It is divided into the same categories as chapter four.

EASEMENT DRAFTING

> A conservation easement creates a relationship of shared control over the future of land. The perpetual nature of that relationship, designed as it is to outlast the original parties, suggests the need for a governing document in which predictable points of potential friction are anticipated and provided for and in which behavioral ground rules – for the grantee as well as the grantor – are established.[209]
>
> Barrett and Nagel, p. 4

Easement documents are the backbone of the conservation easement movement. Without well-written and properly designed easements, there is no legal mechanism for enforcement of easement obligations. The easement contains the rights of both the landowner and the land trust and serves as a guideline for other documents, including monitoring reports and management plans. The crucial aspect of many easement documents is that they are intended to last forever. Thus, easement drafting becomes even

[209] Barrett and Nagel, *Model Conservation Easement and Historic Preservation Easement*, 4.

more vital to the protection of conservation values. Easements must be enforceable, yet must also contain enough flexibility to maintain relevance over time. Easement drafting, seen in this light, becomes more of an art form than the typical legal document drafting exercise.

This study asks the question of whether or not conservation easements in place today are designed to protect their habitat conservation values in perpetuity. One way the study addresses that question is through analysis of easement documents. In chapter two, the literature illustrates that easements must be drafted carefully, must have a clear statement of purpose, must include baseline and monitoring documents, and must provide a clear delineation of rights and responsibilities to maintain relevance.[210]

In addition, protection of an evolving conservation value on the property requires somewhat flexible easement documents. Easements must clearly state both specific and broad conservation values for support and must provide for the inclusion of new or previously undiscovered conservation values in the document. Furthermore, flexibility requires an updateable management plan included by reference into the easement language. The management plan then becomes the record of past management and changing environmental conditions, and serves as the main tool for identifying new conservation values and facilitating ecosystem processes. The goal of the management plan and flexible easement documents is to prevent from writing easements that are based on outmoded models of nature that attempt to freeze a certain conception of nature in

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[210] Danskin, "Conservation Easement Violations," 7. Land Trust Alliance, "The Standards and Practices Guidebook," 14-10 – 14-11.

place. The management plan and easement documents should include affirmative duties on the part of the landowner to maintain the habitat in a natural condition.

The results of this study indicate that land trusts are working to protect easements through careful drafting. The use of model easements, attorney review of documents, and the professional nature of the documents is evidence of this. In addition, most of the easements carefully outline the rights and responsibilities of the parties involved. It is clear that the organizations are professional and strive to achieve excellence in drafting easements. Additionally, the consistent inclusion of baseline and monitoring reports furthers the goal of perpetual protection by providing for a regular evaluation of conservation values on easement properties.

However, many of the participating organizations fail to incorporate the needed flexibility into their easements and accompanying documents. Only one organization always includes affirmative duties in easement documents, while three never do. It is understandable why land trusts shy away from affirmative obligations in easements. In fact, a critique of the lack of affirmative duties may seem peculiar to some organizations. However, from a conservation perspective, affirmative duties are entirely appropriate. In many cases, affirmative action on the part of land managers is the only way to maintain and facilitate conservation values. Land trusts should re-evaluate their use (or lack) of affirmative obligations in light of conservation concerns.

The results support the general conclusion that the participating land trusts are working hard to ensure legal enforceability of the documents. They are clearly defining the purposes of the easements and making the prohibitions and restrictions clear. The

organizations are not perfect in this area, though. Many of the organizations need to ensure that development rights are clearly extinguished and that their documents include clear methods for notice and approval provisions. These are easy ways in which land trusts can stave off unfavorable development or other activities on the property in case the easements' restrictions are ambiguous.

While land trusts are working toward ensuring legal enforceability, they do not appear to be as advanced in protecting evolving conservation values of easement properties. For example, one document purports to protect a wetland environment and includes relevant conservation values for wetland habitat. The document contains no discussion of what happens if climate or hydrological changes make conditions impossible for a wetland ecosystem. If that were to happen, a landowner might have a good legal challenge to the validity of the easement because it no longer serves its intended purpose. The results indicate that only two of the six documents reviewed would be able withstand radical ecological changes on the property and still be enforceable. Considering that many scientists today believe radical ecological changes are inevitable in most locations, easements that do not "evolve" with the land may become obsolete.

Project Selection

A major goal of this project is to assess whether easements in place today are designed to protect their habitat conservation values in perpetuity. One way to assess land trusts is to analyze their project selection methods, including property screening, acceptance criteria, and prioritization. The importance of project selection is clear from

the literature review. Conservation science illustrates that priority setting on a regional scale and carefully selecting sites with important ecological features can increase chances of conservation success. In addition, consistent use of selection criteria based on the organization's goals can ensure that the organization has the resources to enforce its easement rights. Keys to good project selection include (1) conservation planning, (2) goal-setting (both broad conservation goals and identifying priority lands), (3) using a written selection process and written selection criteria, (4) consistent application of criteria and conservation planning at the site level, and (5) careful property examination.

The results indicate that the organizations are mostly proficient at performing many tasks of due diligence, such as performing title reviews, and executing and recording deeds (see table 11, page 74). These are important tasks that help ensure the legal enforceability of easements over time. It is likely that the organizations perform well at these tasks because they are emphasized in the land trust literature. In addition, these are tasks that do not require extensive training to complete. Generalizations to be gleaned from these results show that land trusts are taking the first steps in ensuring perpetuity of easements and that they are taking many steps to ensure the legality of easements.

Property screening of easement properties for general hazards and conservation values is very good. This shows that the organizations are taking the first steps in protecting conservation values over time by noting present conditions. Creating an accurate baseline of property conditions helps in the creation of appropriate management

plans and to assess changes in the property over time. The organizations could easily apply these screening results to enhance the conservation values over time.

The land trusts perform similarly well at utilizing acceptance criteria and prioritizing projects. This is especially commendable considering that it is often difficult to find willing landowners to work with and also that easements are not advertised like other real estate sales. Their proficiency at these tasks indicates that the participating organizations are likely accepting only high quality properties with significant conservation values. This makes it more imperative that the organizations have measures and practices in place to protect and enhance the values of the properties over time.

Land Management and Stewardship

The protected area management literature illustrates the need for informed and appropriate land management and stewardship. Easement properties are no exception. The reality of ecosystem dynamics, exotic species invasion, and the small size of protected properties dictates that there must be affirmative action to protect conservation values. Use of adaptive management principles and land management plans can help ensure that conservation values of habitat easements will continue to thrive and evolve throughout time. Adaptive management principles recognize that nature is dynamic and that human attempts to protect nature must be based on proper site evaluation and monitoring.[211] Land management plans are an essential means to prioritize management activities, record past management, and allow for evolving understanding of the

[211] Hirons, Goldsmith, and Thomas, "Managing Habitat for Conservation," in Sutherland and Hill, *Managing Habitats for Conservation*, 33.

particular conservation values on the site. A conservation area designed to span multiple generations must contain detailed and substantial records of successful and unsuccessful management attempts.

Land management and stewardship is essential to perpetual protection of habitat conservation easements. In this category, the organizations perform well in some respects but poorly in others. Of greatest concern is the lack of annual monitoring of conservation values by some of the organizations and the inconsistent use of monitoring reports. Most monitoring of easement properties is geared toward discovering easement violations on the part of the landowner or third parties. While this ensures that the property is not interfered with inappropriately, it does not ensure adequate protection of habitat conservation values nor does it alert the organization to natural changes in the property. Certainly, many of the land trusts are able to recognize major changes to the conservation values during monitoring visits. And it is likely that such changes are noted. Even so, regular monitoring and recording of specific conservation values is important in light of perpetuity.

Another area of concern is the virtual non-use of management plans by most organizations. Their importance is stressed in chapter three. The implication of this result is that the current management is not recorded; later landowners who are not as familiar with the land may not be as competent to conserve conservation values as earlier landowners. Additionally, it may be difficult for land trusts to help new landowners protect conservation values if they have not been involved in creating management plans with past landowners. This is one instance where perpetuity appears more of an

afterthought than a goal. It is likely that many organizations trust the landowner to continue the excellent stewardship of the land that has thus far protected species and habitats. This practice ignores the certainty that current landowners will become ill, sell the property, or otherwise be unable to steward the land. Land trusts must work to develop management plans that are sensitive to the rights of landowners but also help facilitate protection of the habitat values that make the property worth protecting in the first instance. This practice will give land trusts a greater ability to protect important habitat values over time.

LANDOWNER CONTACT

> The most advanced land trusts now understand stewardship as far more than enforcement of a legal document but a positive, long-term relationship with the land and the landowner.[212]
>
> Wentworth, p. 32

Five of the land trusts in this study believe that landowner contact is critical to the success of conservation goals. Their practical knowledge of this fact is supported in the literature. Danskin reported that easement violations could be reduced in part by having regular contact with landowners during monitoring and by maintaining good landowner relations.[213] Pentz looked at conservation easement use in Colorado and discovered that many organizations there need to improve upon education practices of new landowners to better their success.[214] Pentz suggested that land trusts "Prepare for continued transfer of

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[212] Wentworth, "Easements Are Forever," 32.

[213] Danskin, "Conservation Easement Violations," 7.

[214] Pentz, "Planning for Perpetuity," 1.

properties to new owners by ensuring proper notice of transfer and educating and establishing a relationship with the new landowner."[215] In addition, the LTA recommends that land trusts work to explain the easement restrictions and the land trust's role to all landowners involved in the property as well as meet with new landowners as soon as possible.[216]

This study analyzed land trust-landowner interaction with an eye toward perpetuity. Thus, land trusts were questioned on whether they have a written policy for landowner contract, whether they have written educational materials for landowners, and whether they keep a written log of every land trust-landowner interaction. The land trusts excel in providing written education materials for landowners. However, the land trusts seriously lag behind in creating written policy and guideline documents for landowner interaction. In addition, only three of the organizations report that they always keep a log of landowner-land trust interactions. These two areas are important when considering perpetuity because written records are important parts of the institutional memory that is difficult to pass on in training new employees.

A question presented by this thesis is how land trusts in Oregon are preparing for perpetuity in terms of landowner contact. The answer simply may be that they are not preparing for perpetuity. Preparing for perpetuity means land trusts should be thinking ahead of current landowners and preparing for situations with landowners that have not yet arisen. There is little evidence that land trusts are doing either of these tasks.

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[215] Ibid., 3.

[216] Land Trust Alliance, "The Standards and Practices Guidebook," 14-16.

General Questions

The questions in this section were designed to understand what methods land trusts are currently using, formal or informal, to ensure perpetual protection of conservation values in their easement properties. Generally, many of the organizations feel they are not doing enough to ensure perpetual protection of conservation values. At the same time many of them believe that they are limited by the nature of easements and their limited resources. The results of this section are revealing of how land trusts view the role of conservation easements. It seems as though they view easements as merely a tool to reward a landowner for his or her good stewardship, with perpetuity as a carrot to convince landowners to legally commit their property to conservation. In some organizations, it appears that preparing for perpetuity may be more of an afterthought than an up-front consideration.

Conclusions and Recommendations

In general, the project answered many of the questions presented. Ultimately, it is difficult to say whether or not conservation easements will protect their habitat values for a long time to come. The answer varies with the easements in place and the realities of the particular organization, landowner and property. Chapter two outlines what seems like the best way to protect conservation values over time. However, just as knowledge of conservation science changes over time, so will the preferred means of protecting easement properties. In the meantime, modern conservation science offers a way to protect and preserve current conservation values while keeping an eye toward the future.

The above sections of chapter five have looked at how land trusts in Oregon are preparing for perpetuity on easement properties. In general, the organizations have taken many steps along the path to perpetuity. Of course, there are many steps yet to be taken. This research and others suggests that long-term protection of easement conservation values is possible. Unfortunately, many of the organizations are limited by funding and other practical considerations that were not considered in this study.

Another goal of this project was to suggest ways land trusts could improve upon their policies and practices to strengthen protection of conservation values over time. Chapter two illustrates many of the mechanisms of flexibility that can be incorporated into land trust practice. In addition, this chapter highlights areas of concern for many organizations that can be re-evaluated in a different light. One general suggestion compelled by this project is that land trusts should evaluate their documents and practices with an eye toward perpetuity. Perpetuity should be seen more as a goal than a reality. Land trusts and landowners should not assume that easements alone will protect their properties forever. They must treat perpetual protection as a goal that they continually strive to achieve. To that extent, there should be constant re-evaluation of land trust practices, policies and documents. It is important for land trusts to remember this: "Perpetuity counsels flexibility…the need for a mechanism for adapting to the unforeseen, a capacity for stretch."[217]

This project merely looks at one slice of the conservation easement pie. Although it is an important piece, there are many other equally relevant pieces that remain to be

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[217] Barrett and Nagel, *Model Conservation Easement and Historic Preservation Easement*, 4.

analyzed. The results and conclusions of this project should be understood in that context. Readers should also recognize that the mainstream use of conservation easements has been occurring only for a couple of decades. Land trusts have significantly improved their practices in that time and should be commended. However, a community that does not continually question itself can never better its practices. Undoubtedly, this project raises questions that more scholars and land trusts may investigate further. I hope that the results of this research will be challenged in a constructive light with the end result being that conservation easement use is improved.

APPENDIX A: DOCUMENT REQUEST AND INTERVIEW QUESTIONS

I. General Survey and Document Request

A. ORGANIZATIONAL PROFILE

A1. Name of Organization: _____

A2. Contact Person:

Name: _____

Title: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

B. CONSERVATION EASEMENT HOLDINGS

B1. How many conservation easements does your organization hold? _____

B2. What is the total number of acres protected by the easements? _____

B3. How may of the easements have habitat protection or a similar goal? _____

B4. What is the total number of acres protected by these easements? _____

B5. How many of your easements were donated? _____

B6. How many were acquired through bargain sale? _____

B7. How may were acquired at fair market value? _____

B8. Are any of your easements less than perpetual? _____ If yes, how many? _____

B9. How many of your easements, if any, are co-held with other organization? _____

B10. How many of your easements have had the land subject to the easement pass to new owners? _____

B11. How many of your easements have been amended? _____

B12. How many of your easements have been violated? _____

C. Document Request

I asked each participating land trust for the following documents (if they have them):

C1. A copy of two easements that contain wildlife habitat (or similar provision) as a main goal (conservation value).

C2. Along with the easements, any management plan specifically designed for that easement (including any baseline monitoring materials). Also, any accompanying documents to the easements that describe any violations, changes to the property, landowner contact.

C3. Stewardship policy documents

C4. Baseline monitoring policy documents

C5. General policy documents regarding easement enforcement and monitoring

C6. Policy documents containing landowner education or contact

Documents Received

Sample Easements _____

Management plans _____

Baseline reports _____

Stewardship policy _____

Baseline policy _____

Landowner contact doc _____

Other _____

II. On-Site Interviews

Organization: _____

Date: _____

A. Organizational Information

A1. What year was your organization/division created? _____

A2. What year did your organization/division accept its first easement? _____

A3. What is the number of staff and volunteers regularly involved in your organization?

1. Full-time staff: _____
2. Part-time staff: _____
3. Volunteers: _____
4. Board members: _____
5. Other (describe):_____

A4. What is your approximate annual organizational budget? _____

A5. Has the organization adopted the LTAs Standards and Practices _____

B. Easement Drafting

These questions only apply to CEs that have a main goal of wildlife habitat protection

Interview

B1. Does your organization have a model easement that it used in drafting all or most of its easements?

B2. When was this document last updated?

B3. Was it reviewed by legal counsel at that time?

B4. Are all easements supported by baseline and monitoring report for the same property?

B5. Has your organization identified old or poorly drafted easements that need revision, and if so, how are you addressing this?

B6. Do conservation easements include affirmative duties? ___ Always ___Sometimes ____Never

Why or why not?

Easement Document Review

B7. Is the statement of purpose clear? ____ yes ____no ____n/a ____other

B8. Does it cite specifics to the property? ____ yes ____no ____n/a ____other

B9. Are restrictions and prohibitions clear? ____ yes ____no ____n/a ____other

B10. Are restrictions and prohibitions monitorable? ____ yes ____no ____n/a ____other

B11. Are landowner reserved rights/permitted activities clear? ____ yes ____no ____n/a ____other

B12. Does it request appropriate documentation when need to exercise notice and approvals?

____ yes ____no ____n/a ____other

B13. Require notice when land sold? ____ yes ____no ____n/a ____other

B14. Development rights extinguished?

B15. Provision dealing with water rights to protect conservation values?

B16. Does the easement contain affirmative duties? Describe

B17. Comments:

B18. Conservation matters

Does the easement account for changing environmental circumstances?

____ yes ____no ____n/a ____other

Are the landowner's affirmative duties consistent with the conservation goals?

____ yes ____no ____n/a ____other

Does the easement contain specific as well as broad conservation values for support?

____ yes ____no ____n/a ____other

Does the easement reference a management plan?

____ yes ____no ____n/a ____other

C. Selecting Projects – Acquisition and Property Examination

These questions only apply to CEs that have a main goal of wildlife habitat protection

Interview

C1. Describe the acquisition process: the steps, frequency, and who performs the task.

_____ Formal written policy	
_____ Use written selection criteria	____ Always ___Sometimes ____Never
_____ Hazardous waste inspection	___ Always ___Sometimes ____Never
_____ Title review	___ Always ___Sometimes ____Never
_____ Boundaries walked	___ Always ___Sometimes ____Never
_____ Boundary survey	___ Always ___Sometimes ____Never
_____Boundary marked	___ Always ___Sometimes ____Never
_____Mortgage/encumbrance subordination	___ Always ___Sometimes ____Never
_____LT Legal counsel review	___ Always ___Sometimes ____Never
_____Landowners advised on legal counsel	___ Always ___Sometimes ____Never
_____ Land committee review	___ Always ___Sometimes ____Never
_____ Stewardship staff/committee consulted	____ Always __Sometimes ____Never
_____ Full board review/vote	___ Always ___Sometimes ____Never
_____Executed and recorded	___ Always ___Sometimes ____Never
_____Files created	___ Always ___Sometimes ____Never

C2. What criteria does the organization utilize when selecting/accepting a property?

C3. What are the criteria based on? Who developed the criteria?

C4. Does the organization base project selection on ecological principles? Describe.

C5. Does the land trust prioritize conservation targets?

C5A. If yes, using what methods?

C6. Has the land trust identified the species, communities and ecological systems within its "service area"?

C7. Has the land trust set goals for the number and types of conservation targets it will seek? (Meaning, has the land trust limited its conservation goals to a few species, ecological system, or other conservation target)

C8. Does the land trust have specific conservation targets? If yes, what are the targets based on?

C9. Does the organization consult with other conservation organizations working in the same region on whether to accept a property?

C10. The land trust screens potential properties for:

Hazardous situations (waste dumping, underground storage tanks, etc…)

___ Always ___Sometimes ____Never

Pre-existing uses (extensive public use, hangouts, popular camping spot)

___ Always ___Sometimes ____Never

Adjacent land use concerns:

Hazardous wastes ___ Always ___Sometimes ____Never

Incompatible uses ___ Always ___Sometimes ____Never

Extensive development plans___ Always ___Sometimes ____Never

Undesirable commercial use ___ Always ___Sometimes ____Never

C11. The land trust considers the following in the acquisition process:

Surrounding land use ___ Always ___Sometimes ____Never

Potential for surrounding build out (based on zoning) ___ Always ___Sometimes ____Never

Potential for connectivity to other natural areas/reserves ___ Always ___Sometimes ____Never

The geographic size of the property in relation to the conservation value

___ Always ___Sometimes ____Never

Information in natural heritage databases or from other organizations regarding conservation value of the area. ___ Always ___Sometimes ____Never

The property's future conservation potential ___ Always ___Sometimes ____Never

C12. Examination

The land trust performs a thorough examination of the property

___ Always ___Sometimes ____Never

The land trust conducts off-site research (documents, maps, oral history) on the property

___ Always ___Sometimes ____Never

The land trust identifies the type, significance, and condition of conservation values

___ Always ___Sometimes ____Never

The land trust maps and describes plant communities and habitat plants and any species of concern

___ Always ___Sometimes ____Never

The land trust identifies threats to the conservation value through on-site and off-site methods

___ Always ___Sometimes ____Never

Document Review
Written selection criteria

D. LAND MANAGEMENT AND STEWARDSHIP

These questions only apply to CEs that have a main goal of wildlife habitat protection

Interview

D1. The land trust marks easement boundaries. ___ Always ___Sometimes ____Never

D2. The land trust regularly monitors (annually) for potential management problems (trespass, overuse, vandalism, safety problems) ___ Always ___Sometimes ____Never

D3. The land trust annually surveys the conservation values the easement is designed to protect.

___ Always ___Sometimes ____Never

D4. The land trust completes monitoring reports for each time a property is monitored.

___ Always ___Sometimes ____Never

D5. The land trust has contingency provisions for all easements in the event that the land trust ceases to exist.

___ Always ___Sometimes ____Never

D6. If yes, who is (are) the back-up(s) on your easements? _____

Management plans

D7. Do easements have accompanying management plans?

___ Always ___Sometimes ____Never

D8. If yes, what principles are the plans based upon?

D9. If yes, what considerations do the plans include?

D10. How often are management plans reviewed/revised?

D11. What are the principles/criteria by which to review management plans?

D11A. What are the principles/criteria by which to revise management plans?

D12. What is the process by which to revise management plans?

D13. How do the easements and/or management plans address natural phenomena? (Meaning, are natural phenomena encouraged or discouraged and do management plans address alternatives to natural phenomena (i.e., prescribed burns))

D14. Do management plans address threats to the conservation value?

___ Always ___Sometimes ____Never

D15. If the organization does not have management plans, why not?

Baseline documentation

D16. Does every easement have a complete baseline file, ____ yes ____ no, and if no, what are you doing to address this?

Document Review

1. Does the land trust have a stewardship policy document? ___ yes ____no
2. Does the land trust have a baseline monitoring policy document? ___ yes ____no
3. Does the land trust have a standard baseline documentation format? ___ yes ____no
4. Does the land trust have a landowner contact policy document? ___ yes ____no
5. Does the land trust have a written monitoring policy? ____ yes ____no
6. Does the land trust have a stewardship funding policy document? ___ yes ____no
7. Sample management plan; prepared by ___B ___S ___P __V

   The plan indicates the conservation value to be protected ____ yes ____no

   The plan indicates important features of the property ____ yes ____no

   The plan contains a natural resources inventory ____ yes ____no

   The plan contains a cultural resources inventory ____ yes ____no

   The plan indicates land use history ____ yes ____no

   The plan is based on principles of conservation science ____ yes ____ no

   The plan is reviewable at periodic increments ____ yes ____no

   The plan contains principles of adaptive management ____ yes ____no

   The plan establishes management policies, objectives and an action plan.

   ____ yes ____no

   The plan provides an action plan based on conservation priorities ____ yes ____no

   The plan cites authority for how to manage the conservation value appropriately

   ____ yes ____no

   The plan includes a work plan, budget, and a system for monitoring ____ yes ____no

   The plan includes a discussion of the big picture. ____ yes ____no

The plan clearly defines any productive uses and ensures that they do not interfere with the conservation value. ____ yes ____no

The plan includes annual obligations (tax, insurance, species inventories) ____ yes ____no

The plan contains a reference to stewardship policies ____ yes ____no

The plan contains a written history of implementation. ____ yes ____no

The plan provides a method for measuring conservation success. ____ yes ____no

Comment:

8. Sample Baseline Report

Comments:

E. General Questions

These questions only apply to CEs that have a main goal of wildlife habitat protection

E1. What mechanisms do you use to ensure perpetuity in your conservation easements?

E1A. How is the land trust planning to ensure the conservation value of the easements in perpetuity?

E2. Do you feel that land trusts take enough measures to ensure perpetuity in their easements?

E3. Do you feel that *your* land trust does enough to ensure for perpetuity?

E4. How is the land trust accounting for long-term ecosystem shifts?

E5. How is the land trust preparing for the effects of climate changes on easement properties?

E5A. Do you feel it is appropriate for land trusts to prepare for the effects of climate changes on easement properties?

E6. How does the land trust measure conservation success?

E7. Does the land trust have long-term conservation goals?

E8. What is the land trusts main conservation focus?

F. LANDOWNER CONTACT AND EDUCATION

These questions only apply to CEs that have a main goal of wildlife habitat protection

F1. How would you describe your relations with landowners today?

F2. How much does landowner-land trust interaction affect the success of the conservation goals?

F3. In your mind, what are the keys to success when working with landowners?

F4. Does the land trust have written educational materials for landowners?

F5. Does the land trust have a written landowner contact policy?

F6. Does the landowner keep a log of every landowner-land trust interaction in every easement file?

F7. Does the land trust have a written policy stating how to deal with new landowners on easement properties?

F8. Has the land trust had to interact with new landowners? Describe.

F9. Does the land trust have any mechanisms in place for helping landowners with conservation easements look for conservation buyers?

The End!

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