

BOOTS AND BIRKENSTOCKS: LANDOWNER ATTITUDES
ABOUT CONSERVATION EASEMENTS IN SAN MATEO COUNTY

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In

Geography: Resource Management and Environmental Planning

by

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San Francisco, California

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CERTIFICATION OF APPROVAL

I certify that I have read *Boots and Birkenstocks: Landowner Attitudes about Conservation Easements in San Mateo County* by Alexander O'Neill Roa, and that in my opinion this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirement for the degree Master of Arts in Geography: Resource Management and Environmental Planning at San Francisco State University.

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Since its inception in the 1950s, the conservation easement has become a powerful tool in the land conservation movement. The flexibility it offers both landowners and conservation agencies is appealing, and the financial benefits work for both parties. This paper explores the attitudes landowners in San Mateo County have about conservation easements, and what motivates them to adopt (or not to adopt) one for their own land. Interviews were conducted with large-area landowners in San Mateo County, and answers were analyzed in an effort to understand the attitudes about conservation easements as a tool and the motivations for their adoption. Entities interested in promoting conservation easements as a tool for land conservation in San Mateo County will encounter a general lack of knowledge about the topic coupled a mixture of deep seated resistance based on past negative experiences or bounding enthusiasm based on positive experiences or outcomes from existing agreements. These findings concur with the literature at large, despite the fact that San Mateo County is unusual in terms of its demographics.

I certify that the Abstract is a correct representation of the content of this thesis.

Chair, Thesis Committee

Date

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CHAPTER 1: Introduction

As the population expands, particularly in coastal California, the pressure on undeveloped areas is increasing and there is a need for well understood and functional tools to protect these areas (Brewer 2003; Gustanski & Squires 2000; Rissman & Sayre 2011; Merenlender *et al.* 2004).

One of the areas most threatened by population growth is the zone between wild lands and urban or suburban centers. Often called ‘working land,’ this area is characterized by natural resource extraction and agriculture. Many have called for increased research and understanding of the biological, social, and economic forces at work in such areas (Wallace *et al.* 2008; Morris 2008; Rissman & Sayre 2011; Sayre 2004). Within the context of agricultural ‘working lands’ Brunson and Huntsinger explain that “one must consider the synergies of people, environment, and institutions needed to accomplish conservation” (Brunson & Huntsinger 2008).

Since its invention in the 1950s, the conservation easement has become a powerful tool in the land conservation movement. Conservation easements are complex, but the Land Trust Alliance offers this working definition:

“The most traditional tool for conserving private land, a “conservation easement” (also known as a conservation restriction) is a legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect its conservation values. It allows landowners to continue to own and use their land, and they can also sell it or pass it on to heirs.”

The flexibility they offer to landowners and to conservation agencies is appealing, and the financial benefits work for both parties. This paper uses the term *conservation easement* (or just *easement*) to represent an idea which goes by many names including conservation easement in gross, conservation restriction, preservation restriction, agricultural preservation restriction, preservation agreement, or land use easement (Gustanski & Squires 2000). For the purpose of this study, conservation easement or easement covers all of these names for what is essentially the same tool. One term with a slightly different meaning is *agricultural easement*, and the differences will be discussed later in this paper.

The motivations behind the expansion of conservation easements are complicated and nuanced, requiring in-depth examination of many components from many perspectives. The existing literature highlights a need for additional research into the social context and interrelationships between landowners, land managers and policy makers (Rissman & Sayre 2011). In particular there is a need for qualitative research that considers the complexities of conservation easements within the social context (Newing 2011; Sayre 2004).

This paper explores the attitudes landowners in San Mateo County have about conservation easements, and what motivates them to adopt (or not to adopt) one for their own land. As part of this answer, I will consider attitudes about the agencies that provide easements, and how landowners have come to their understanding of what a conservation easement is and how it may or may not work for them. Many studies have examined the motivations for landowners who have chosen to participate in a conservation easement (Ernst 2008; Farmer *et al.* 2011; Rilla 2002), but that is precisely the issue – they have already decided to engage in an easement. I spoke with landowners who have decided easements do not fit their needs as well as those who do, and found out how they think about easements as a tool.

The central question of this study is: “What are the attitudes and motivations that guide large area landowners in San Mateo County about whether or not to establish a conservation easement on their land?” To answer this, I have interviewed large-area landowners in San Mateo County to:

- Understand their attitudes about conservation easements
- Determine what motivations exist for landowners who have sought out easements
- Determine what prohibits some landowners from not actively seeking easements
- Understand how attitudes about agencies that provide easements impact these decisions

Achieving a better understanding of landowners’ attitudes and motivations regarding easements is critical to improving interactions between private and public efforts to conserve land and protect wildlife and waterways.

CHAPTER 2: Background & Context

Why save land?

The basic argument behind conservation easements is that it is in the public's interest to conserve some land for open space uses. To some, this is an obvious argument – it is clear that society should value open lands that are used for agriculture, recreation, wildlife protection, or simply open space. To others this may not be as self-evident. Many people feel that land may be better suited for development to encourage basic economic growth. In his monumental book *Conservancy: The Land Trust Movement in America* (2003) Richard Brewer argues that there are many reasons why land should be left open, or 'saved' from development. These reasons can loosely be categorized as aesthetic, practical, or ethical/moral. Interestingly, when it comes to the main grounds for the adoption of a conservation easement these categories fit nicely.

Understanding the reasons why many people feel there is a need to conserve land is the foundation for understanding conservation easements.

The first reason Brewer suggests is simple beauty: Life is more pleasurable when there are scenic views and small ecological details that can be enjoyed by all. He suggests that there are strategic ways to leverage greenways such as long, linear strips of land along a walking path that can allow for a natural experience. Planning for and committing to open space makes life in a region more enjoyable. Another line of this argument has to do with culture, and preserving lifestyles that are only able to persist in open space. These "working land" lifestyles include ranching, farming, and forestry, all of which require swaths of relatively non-developed land to be able to flourish. The culture that surrounds these rural land uses is part of a traditional Western identity, and a bridge to the future is apparent in that working lands are increasingly acknowledged as a viable way to merge environmental and agricultural benefits (Resnik *et al.* 2006). In any event, this land is often somewhat marginal and often has very limited uses beyond ranching or suburban development. Ranching provides buffer zones between urban areas and wilderness where the public would likely clash with potential hazards such as wildlife and controlled burning (Brunson & Huntsinger 2008).

When it comes to the ethical or moral reasons for maintaining open space, Brewer cites Aldo Leopold's "Land Ethic" to describe the philosophical alternative to anthropocentrism. That is, there are actions that humans *should* take to better the world around us, such as letting wildlife persist and providing for healthy ecosystems.

Lastly Brewer says there are "practical" reasons why we should save land - reasons beyond the aesthetic qualities of land. The land provides for all of humanity, ranging from ecosystem services and natural resources to inspiration for art and literature. Brewer suggests that as humans we have an 'innate need for wildness.' He links the evolutionary processes that have propelled humans to our current elevated position to our need for nature for 'optimal functioning,' suggesting that conserving land is good for humans on an evolutionary level. Many people do have a desire to spend time in nature, choosing to live less convenient lives by living some distance from urban centers. Furthermore, many people choose to spend their free time in the outdoors, whether it that means hiking to very remote areas or simply barbecuing on the patio. Cultures around the world have embraced outdoor activities as a form of relaxation

Other researchers provide additional practical reasons why land should be conserved. When it comes to agriculture, economic forces can be strong incentives for landowners to convert or develop their land. However there are instances when developing land can actually be counter-productive to a local economy. As an example, ranching has been shown to provide greater economic value than suburban development in some areas than the alternative (Brunson & Huntsinger 2008). There is also strong evidence to suggest that conserving open space increases nearby property values (Merenlender *et al.* 2004; Mukherjee & Fernandez 2011). Brewer describes how leaving land as open space can actually save a community money, as opposed to developing it into a residential area or other low density development. He argues that building a new home on a parcel of land will in fact cause a greater tax burden to the local residents than opening a public preserve in the same location., While new development does not pay for the increase in community services it requires (fire department, infrastructure development, etc.), open space or agricultural users pay more in taxes than they use in public services (Brewer 2003).

Once one acknowledges that open space is worth conserving, the question becomes ‘what threatens this landscape?’ This study focuses primarily on the major threat to open space: development, or the subdivision of parcels of land and/or the construction of new structures in places where no buildings existed before. Development is often characterized as ‘urban sprawl’ when low-density, automobile dependent housing tracts extend beyond established service areas and offer few employment opportunities (Knight 1999). In San Mateo County (see map, page 17), the focus of this study, development pressure is strong not only at the urban fringe, but also in relatively remote areas. It is these remote areas that are of particular interest to this study. Sometimes called ‘post-productivist’ land by geographers, these areas were once used for extracting natural resources but are now in limbo, either being preserved for environmental reasons or developed into homes or other low-density exurban development (Holmes 2002). Much of the land in rural San Mateo is grassland used for ranching. Rangeland all over the West is under particular threat of development because it is already cleared, and thus easier to build on than forest land or chaparral. Additionally, and for similar reasons, it is also threatened by the demand for recreational use (Brunson & Huntsinger 2008). These landscapes provide ample opportunity for relatively easy access and therefore low-cost places for trails to be built and utilized. Both landowners and professional conservationists agree that conservation easements are one tool that has successfully stopped the development of ranches (Rissman & Sayre 2011). Although recreational uses have a relatively low level of impact on the land, it often precludes agricultural uses. This tension is very intense in the interviews completed for this study.

Public Land vs. Private Land

Public lands are generally protected under many environmental laws to provide for conservation of wild plants and animals. These environmental or land use laws¹ establish and enforce guidelines for what can and cannot be done on public land, typically with the health of the natural

¹ At the federal level, the set of laws that guards against environmental damage is commonly called NEPA or the National Environmental Policy Act (U.S. Environmental Protection Agency 2012). At a very broad level, this suite of laws provides an alignment between federal agencies regarding environmental policy, and rules for how public and private landowners can impact their land. In California, there is a similar set of laws, commonly called CEQA which stands for California Environmental Quality Act (State of California).

world as a priority. However, the land conservation movement is recognizing a need to engage *private* landowners and align the stewardship and conservation goals of public agencies and private citizens. Conservation easements are unique in that they typically establish a partnership between public agencies and private enterprises. Private land, by definition, has less oversight or control than public land. Thus, the chance of environmental damage or destruction is higher. Although many landowners steward their land just as well if not significantly better than any public agency, private land is where much disturbance occurs because it is where more humans work, play, and live – it's where nature interacts with people the most (Norton, 2000). Maintaining a focus on private land for its conservation value is important. Private land contains some habitat for 95% of all federally threatened and endangered flora and fauna, and 19% of these species exist only on private land (Wilcove *et al.*, 1996). In fact, the U.S. Department of Agriculture (USDA) has highlighted private rural land as the top priority for conservation (Brain 2008). Though the USDA is not commonly thought of as an agency likely to promote conservation, they do focus great energy on research and education in the field of land conservation.

How do we save land?

The United States has established a system of organizations charged with 'saving the land,' including public and private conservation agencies, public land managers, and environmental groups. These organizations do not have enough funding to 'save' all the land that the public has come to appreciate as open space. The outright purchase of valuable land is not always realistic, especially when competing against the all-mighty development dollar (Huntsinger & Hopkinson 1996). Conservation easements are one tool to help conserve open space values of land parcels within the context of fair market economics.

Large-area landowners in California are often "land rich and cash poor." Landowners who have inherited large properties passed down through one or more generations find themselves, as a result of rising property values, with parcels worth quite a bit of money. Taxation and other costs associated with owning large parcels, as well as a need to liquidate assets for retirement or other

life changes, can prompt landowners to sell property. The highest bidder nowadays is unlikely to be an agriculturalist, and is more likely to have intentions of subdividing and developing for maximum profit. A study of California agricultural landowners showed that out of the five most common reasons to sell their land, four of them were directly connected to finance (Ferranto, *et al.* 2011). This has led to the design and implementation of a very complicated system of conservation methods to counteract the pressures of development.

However, there are many other forms of real property conservation techniques that are used on private land. These include a range of fee purchases, bargain purchases, life estates, trusts, and common law easements (Barrett & Livermore 1983). Each of these methods presents valuable options and may be better suited for a particular situation than a conservation easement. Some of these methods are intended to completely remove the current landowner in favor of a public agency or other conservation organization. Others attempt to partner with the private landowner, providing support (typically financial in nature) to allow them to continue their operations. Conservation easements fall into this category. Conservation easements are one of the most flexible forms of land conservation in the U.S., and are rapidly becoming the most popular technique (Gustanski & Squires 2000; Land Trust Alliance, 2011; Bernstein & Mitchell 2005).

CHAPTER 3: Conservation Easements

What is a conservation easement?

Conservation easements are a tool designed to save land from development, to contain urban sprawl, and to preserve the conservation value of a piece of land (Brewer 2003). The definition of conservation value varies, but generally includes ecosystem health, scenic vistas, general open space, and wildlife corridors. In California, the Civil Code is clear about the intended conservation values (**bold** text is emphasis added) (State of California):

§815. The Legislature finds and declares that the **preservation of land in its natural, scenic, agricultural, historical, forested, or open-space condition is among the most important environmental assets of California**. The Legislature further finds and declares it to be the public policy and in the public interest of this state to encourage the voluntary conveyance of conservation easements to qualified nonprofit organizations.

§815.1. For the purposes of this chapter, "conservation easement" means any limitation in a deed, will, or other instrument in the form of an easement, restriction, covenant, or condition, which is or has been executed by or on behalf of the owner of the land subject to such easement and is binding upon successive owners of such land, and **the purpose of which is to retain land predominantly in its natural, scenic, historical, agricultural, forested, or open-space condition**.

§815.2. (a) A conservation easement is an interest in real property voluntarily created and freely transferable in whole or in part for the purposes stated in Section 815.1 by any lawful method for the transfer of interests in real property in this state.

(b) A conservation easement shall be **perpetual in duration**.

(c) A conservation easement shall not be deemed personal in nature and shall constitute an interest in real property notwithstanding the fact that it may be negative in character.

(d) The particular characteristics of a conservation easement shall be those granted or specified in the instrument creating or transferring the easement.

§815.3. Only the following entities or organizations may acquire and hold conservation easements:

- (a) A tax-exempt nonprofit organization qualified under Section 501(c)(3) of the Internal Revenue Code and qualified to do business in this state which has as its **primary purpose the preservation, protection, or enhancement of land in its natural, scenic, historical, agricultural, forested, or open-space condition or use.**

A conservation easement creates perpetual restrictions and obligations for a piece of property. Every property in the United States has a set of rights owned by a single private owner or by a government agency. Landownership includes rights such as mineral extraction, forestry practices, and development. Conservation easements remove at least the right to develop a property, and may remove additional rights, such as mineral rights. These rights are not transferred or retained, they are extinguished in perpetuity. The underlying ownership of the land remains with the original holder. The owner keeps the rights that do not encourage development or other destructive land uses and a land trust or other qualified public agency is charged with monitoring the requirements set forth by the easement. One of the tenets of conservation easements is that they are entirely voluntary, that a landowner has to be willing to enter into one with a qualified agency. The conditions are flexible, so long as they provide for protection of conservation value, and must be agreed to by both parties. The agency is expected to enforce the conditions written into the agreement, typically in part by doing an annual site visit to monitor conditions.

The primary goal of a conservation easement is to financially incentivize land conservation in an entirely voluntary way. Research shows that incentives are quite functional in getting landowners not only to abide by the law but in encouraging them to act above and beyond the law, including adopting conservation easements (Langpap 2003). In some cases financial incentives are not necessary as landowners are motivated by their environmental ethic or other values. However the technical tool of a conservation easement as written into law is designed to provide compensation for those landowners willing to relinquish their right to develop a property. The financial incentive is twofold. The first benefit to the landowner can come if they choose to sell the

easement to a land trust or other agency, which can provide a lump sum payment to improve infrastructure on the land, pay off debt, or provide funding for retirement. If the easement is donated, this exchange is considered a charitable donation for tax purposes. The second financial benefit comes from the resulting reduction in property value. As part of the acquisition process, an appraisal is completed to determine the fair market value of the property. A second appraisal is done to determine what the value of the land would be without the development rights to be locked up in the conservation easement. Once the easement is completed, the taxable value of the land is reduced to that of the land minus the development and other destructive rights (Gustanski & Squires 2000). For example, if a landowner had a ranch worth \$10 million at fair market value, they would be paying property taxes on that entire amount. However, if it is determined that \$8 million of the value of the land comes from its development potential, after a conservation easement is written and agreed upon the taxable amount would only be \$2 million. This has implications both for property taxes and for estate taxes. Conservation easements can thus serve as a way to ensure that upon the death of a landowner, the person(s) who inherit the land will be able to afford to keep it.

The use of conservation easements as a method of land conservation has grown exponentially since passage of the Uniform Conservation Easement Act (UCEA) in 1981. This law clarified some of the ambiguities that had been troubling conservation easements since their early use in the 1950s. It created a stronger suite of restrictions and allowed for affirmative obligations to be written into easements (Gustanski & Squires 2000). Affirmative obligations enable the easement to require the landowner to take action. For example, a conservation easement might say that no more structures may be built on a piece of land, but an easement with an affirmative obligation may say that the landowner must allow limited public access for one day per year.

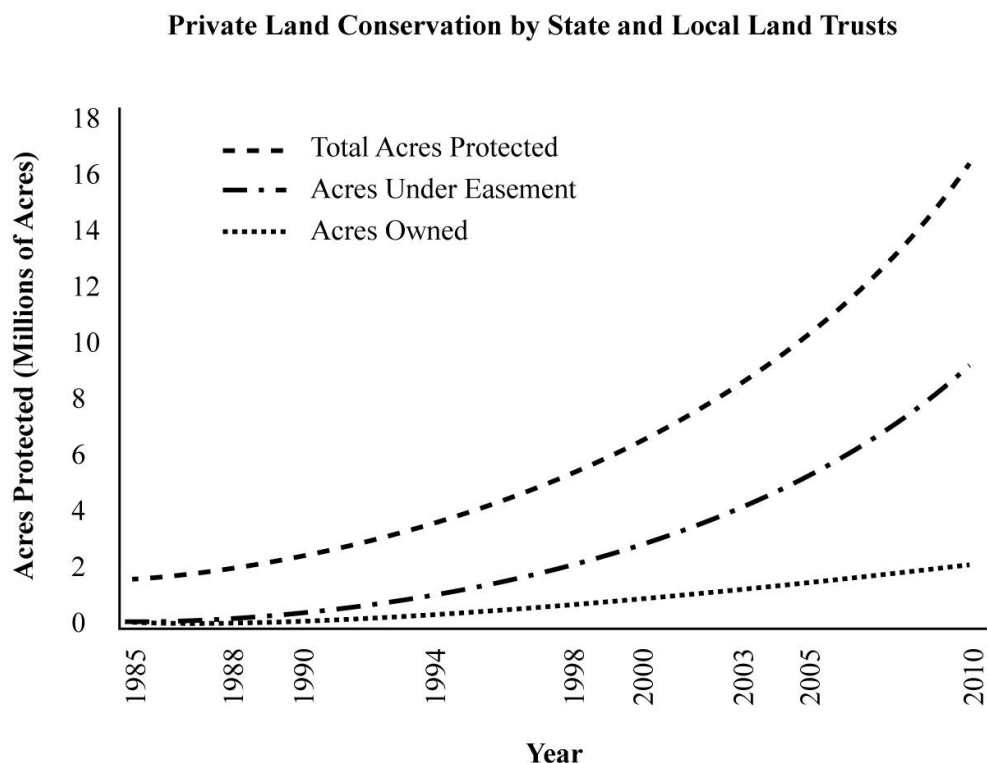


Figure 1: Private Land Conservation by State and Local Land Trusts

Adapted from (Land Trust Alliance, 2011)

Figure 1 shows that easements have become a much more significant method of land conservation than acquisition of land in fee simple, or outright acquisition of full title to the land. This dramatic increase in the use of easements has protected millions of acres of land in a very short period of time. Although the conservation community at large is excited by this growth, there are serious concerns about the long-term viability of conservation easements (to be discussed later in this paper.) Some also worry that conservation easements are in such heavy use now the concern is that the system may entirely collapse. One expert compares this growth to being in “a car with no one in the driver’s seat; indeed, one may reasonably ask whether there is a steering wheel. There’s an accelerator that seems to be stuck, but is there a brake?” (Pidot 2005)

The most pressing concern about the rapid increase in use is how the perpetual nature of easements will play out in the face of a changing climate and constant development pressures.

Despite this distress, the use of easements continues to increase. The reasons for this are diverse. Property values generally continue to rise, and small agricultural businesses are highly impacted by this in the form of rising property taxes. Some landowners simply want their land to remain as it currently exists, regardless of financial impacts. These landowners who are interested in charitable or altruistic conservation are sometimes attracted to conservation easements because they can be established with a private organization, and thus entail fewer dealings with government than other forms of conservation in the public domain (Williamson Act², life estates, etc.). Lastly, they can be personalized to meet landowner needs. From the perspective of the public and the land trusts that provide easements, increasing land values and high cost of government land management have created new needs for conservation methods beyond simple fee acquisition.

Benefits to the Public

As discussed above, the intention of easements is to provide protection for areas with high conservation value. Generally, landowners feel that the public benefits from the expenditure of tax dollars on conservation purposes is justified (Sokolow *et al.* 2003). However, although conservation easements are very popular, are they delivering the results one would hope for? In a comprehensive study, a team investigated easements held by The Nature Conservancy (TNC) and found that, in fact, the easements were sited effectively in accordance with their stated goals. Ninety-six percent of the easements they reviewed had specific biological goals, 84% were within 'priority sites' designated by TNC, and 79% were adjacent to other protected areas (trying to connect protected areas is a common goal of conservation). These numbers suggest that

² The Williamson Act, officially the California Land Conservation Act of 1965, provided a framework for farmers to enlist their land in a conservation program for a block of ten years, in exchange for lower property taxes. The goal was to keep agricultural land in agriculture instead of developing it (Press, 2002). Landowners who enroll in the Williamson Act have very little oversight and no threat of public access (Sokolow & Bennett 2004) which makes it appealing to many in the agricultural community.

conservation easements generally contribute to achieving the objectives that the conservation movement finds important. Furthermore, they found that over time the easements were getting better at meeting the goals of TNC (Kiesecker *et al.* 2007). A study looking at easements in California found that easements had been effectively targeting areas with higher levels of native plant diversity, as well as areas with more private land as compared to public land. It also found that although easements were quite cost effective, purchasing land outright was often used in counties with higher land costs (Yuan-Farrell *et al.* 2005). Additionally, another study done of California forest and rangeland owners concluded that the larger the parcel, the more likely the owner was to implement and monitor environmental management practices (Ferranto *et al.* 2011). This notion is important to when considering the public's interest in conservation easements – easements allow for owners to keep properties, but prevent further subdivision on that property.

Yet trying to assess how the public benefits from conservation easements is quite challenging. Because easements prevent change rather than creating change, it is difficult to measure their impact. Stated goals vary with easement holder and again with each separate easement written (Rissman & Sayre 2011). The benefits to be gained by the public are largely dependent on how active the easement holder is in enforcing the easement (Gustanski & Squires 2000). If the holder does regular monitoring and maintains communication with the landowner, the public can expect to benefit in very tangible ways. However if the holder simply acquires the easement, files the paperwork, and forgets about it the public may gain nothing.

A study of rural agricultural landowners in Wyoming and Colorado found they agreed or strongly agreed that agricultural land was being developed and/or being purchased by people who had no interest in maintaining an agricultural land use. These new owners were diminishing the existing culture and challenging the way of life that provides for these agricultural land uses (McGaffin *et al.* 2012). They might not have a desire to subdivide parcels and develop infrastructure or build additional homes (though they frequently do), but the simple removal of an area of land from working agriculture hampers the efforts of the local agricultural community by reducing the need for agricultural related products and services provided to a rural area. Conservation easements

are the most popular form of fighting this sort of land transformation, keeping land in agricultural production and limiting development and urban sprawl at the same time (Brewer 2003).

Concerns to the Public

Conservation easements are often agreed upon between two private parties, such as a land trust and private landowner. However, the public should care greatly about the outcome of these exchanges and should be concerned with a few hurdles that conservation easements have yet to clear in order to be secured as a viable long-term conservation solution in the United States. The conservation community has embraced this tool as a preferred method for land conservation, but there are serious concerns about the future prospects of conservation easements, and we run a risk by relying so heavily on them. Besides keeping an eye on the hopeful goals of conservation easements, the most obvious reason the public should care about how easements occur is that they are subsidized with public funds. Although the initial cost of an easement purchase by a land trust or government agency may be based on grants or donations, once the land value has been reduced to its conservation-value appraisal, the public loses tax revenue indefinitely in the form of lost property taxes, especially if the property is in a location where development would be imminent (Brewer 2003; Pidot, 2005a; Pidot 2005b).

Conservation easements do offer flexibility when it comes to the restrictions on the landowner. Although flexibility is required with such a wide range of needs and environmental factors, some have criticized easements as being too flexible, and allowing for too much leniency on behalf of the landowner. One study reviewed 119 easements held by TNC and found that on 85% of them permit some residential or commercial use, subdivision, or construction of additional structures. Of the new structures allowed, only 60% had a size limitation. Lastly, nearly half of the easements were designed around a working land framework (Rissman *et al.* 2007). The first two points seem to counter the very essence of a conservation easement – how can land be preserved if new structures of unlimited size are allowed? The idea of working lands being prominent does not come as a surprise to anybody in the West, but in some other parts of the country ‘working lands’ are badly degraded and do not offer conservation values to warrant a conservation easement. These are tough questions and remain subjects of academic and professional debate.

Another more abstract concern with conservation easements is their relative inflexibility when it comes to their perpetual nature in the face of climate change. Experts are exploring options for how to cope with certain change in environmental conditions that will drive plant and animal populations from their current habitats in the future (Jay 2012). If a conservation easement is written with the protection of one type of habitat or species in mind, what will happen if that species or habitat is no longer viable on that piece of land? This is still a troubling quandary for the legal community, but the general solution now is to be broad with easement language and try to incorporate scientific monitoring for early indicators of change (Olmsted 2011).

Lastly, monitoring easements consistently presents challenges for land trusts (Kiesecker *et al.* 2007). The concept of conservation easements is built on the idea that in exchange for financial compensation, an easement holder is expected to monitor a property and confirm that the landowner is complying with the requirements set forth by the easement. However, given that many land trusts do not prioritize their monitoring programs this responsibility frequently gets dropped. The academic community has called for higher quality monitoring, including the application of quantitative methods to monitor easements at several scales to be able to measure resource change over time (Rissman *et al.* 2007).

CHAPTER 4: Study Area

San Mateo County is part of the greater San Francisco Bay Area. Much of the Silicon Valley workforce resides in this county, which brings urban pressures and high land values. These factors restrict the ability of local agencies to conserve land, rendering conservation easements an appealing tool.

San Mateo County is a physically diverse county, with urban population concentrated on the east side and rural population spread out across the west side. The east side, which borders San Francisco Bay, includes numerous cities and municipalities with relatively fast access to San Francisco and San Jose. To the west, the Santa Cruz Mountains reach peaks of over 2,000' in elevation; as elevation increases, the land becomes less and less populated. Along the ridge runs an iconic highway, Highway 35 or Skyline Blvd. West of this ridge, the population remains largely rural, with the cities of Half Moon Bay and Pacifica forming the main population centers.



Figure 2: Map of San Mateo County

The rural portions of the County display a mixture of coniferous forests, oak woodlands, chaparral and coastal grasslands. Each of these ecological communities offers a variety of opportunities for natural resource extraction, recreation and open space values. Historically timber production has been an important economic factor in the area; today it persists primarily on the west side of the ridge, and continues down the hills until the forest turns to grassland at the coastal terrace. Along the south coast of the County, this terrace is very narrow and timber production extends almost to the ocean. Row crops have also been important for the past century or so, and are now primarily found in a few coastal valleys (e.g. Pescadero and San Gregorio) and along the terraces near Half Moon Bay.

San Mateo County has several local public agencies and nonprofit organizations that work to increase land conservation. The largest of these is the Midpeninsula Regional Open Space District (MROSD or Midpen as it is known to the locals). The MROSD owns over 62,000 acres of land, and maintains conservation easements on several hundred acres (Midpeninsula Regional Open Space District). Additionally, the Peninsula Open Space Trust (POST) also plays an important role in conservation work in the area, purchasing or adding an easement to over 70,000 acres of land on the San Francisco Peninsula and Santa Cruz Mountains (Peninsula Open Space Trust 2012). POST provides conservation easements to local landowners, and purchases land for wildlife and agricultural protection. Both of these agencies provide conservation easements to local landowners. Since the early 1970s, Midpen and POST have a history of working together to make purchases and exchange easements for a common goal of preserving land in San Mateo County. As a private agency, POST has the ability to move quickly when purchasing land and completing construction and restoration projects. Midpen, as a large public bureaucracy, moves somewhat slower and occasionally relies on POST to make initial land purchases and move projects forward. In many cases, land acquisition deals are time sensitive, so having a partner willing and able to move with greater speed is an asset to local land conservation. On the other hand, POST has limited resources for in-house land management and no significant program in

place to offer recreation opportunities to the public. Thus, Midpen will frequently take ownership of a property if recreation is the end goal for its use.

One of the reasons that San Mateo County is an interesting place to study conservation easements is that it has an unusual population. The Bay Area population in general is quite wealthy and well-educated. From 2005-2009, California had a higher percentage of people with Bachelor's degrees (30.2%) when compared with the United States at large (27.5%), and San Mateo County has an even greater percentage (43.6%). San Mateo County is the fourth most educated county (based on percentage of citizens who are recipients of Bachelor's degrees) within California, following three other Bay Area counties (Marin, San Francisco, and Santa Clara in descending order) (U.S. Census Bureau). With several universities and countless tech companies as a base, the conservation movement is both relatively well funded and highly demanded by the public. From 2006 - 2010, San Mateo County is 24th highest median income in the US (out of 3,141 counties), and in 2009, San Mateo County was 8th highest average per-capita income (\$71,753). Also important to note, housing prices are quite high in San Mateo County. From 2006-2010, the median value of a owner-occupied housing unit was \$784,800, as compared to \$458,5000 in California as a whole and the US median of \$221,800 (U.S. Census Bureau). These statistics highlight the unusual demographic qualities found in the study area. Wealth and education are frequently tied to pro-conservation attitudes, and conservation easement adoption in particular.

No studies were found that looked at the distribution of conservation easements in San Mateo County specifically, although a recent study of all nine Bay Area Counties found that, when compared to land purchased for conservation, conservation easements were more likely to conserve grasslands, oak woodlands, and agricultural land. Properties that were owned by conservation groups were more likely to protect chaparral and scrub, redwoods and urban areas. Properties that were held by private land trusts were significantly less likely to provide for recreational opportunities than publicly held land (Rissman & Merenlender 2008). Though this study is useful in determining what kind of land is conserved in the Bay Area, it does not help describe San Mateo County in particular, beyond the physical traits associated with conservation easements.

Land trusts are generally funded by a combination of private donors and public or private grants. This sort of fundraising requires land trusts to formulate specific goals to be able to solicit potential donors to give towards a specific project. This means that the land trusts are usually well rooted in the local environmental scene and have a strong grasp of the local economy and political landscape. Because conservation easements and the land trusts rely so heavily on local contacts, politics, and land management needs, every geographic area is unique and requires a close look to truly understand the complicated network of actors and environmental constraints (Merenlender *et al.* 2004; Ernst, 2008). San Mateo County should be investigated not only because it has some extraordinary socioeconomic demographics, but simply because landowner motivations have not been studied here.

CHAPTER 5: Literature Review

What do landowners think about Conservation Easements?

Conservation easements have been addressed by scholars in several disciplines, yet in-depth analysis of any one portion of the topic remains ‘scant’ (Merenlender *et al.* 2004). Due to the generally private nature of the transactions that yield conservation easements, data is often difficult to obtain (McGaffin *et al.* 2012). Furthermore, research into landowners’ perspectives on conservation easements has been limited in scope, focusing on landowners who have already adopted an easement (Mir & Dick 2012). Such research is commonly completed by way of quantitative studies such as surveys mailed to a land trust’s members, followed by statistical analysis (Rilla 2002). One study that purposefully asked landowners who had considered but declined adopting an easement found that landowners considered both the financial attributes of their land, as well as the non-financial attributes, and, not surprisingly, weighed the potential financial gain with their long-term goals for the property. Ultimately landowners must determine if the restrictions placed on their land enhance or hinder their long-term goals, and if they hinder them whether or not the financial gain is worth it (Marshall *et al.* 2003). Although these studies are limited by their pool of subjects and are somewhat diluted by the wide range of frameworks used, academic subjects considered, and study areas investigated, they offer important baseline data on landowner attitudes, motivations, and demographics regarding participation in easement programs.

Participation

A suite of socio-economic factors make a landowner more likely to want to participate in a conservation program, including conservation easements. Raymond and Brown (2011) surveyed farmers and found several factors that increased landowners’ interest in conservation programs, as shown on Table 1 below.

Factor	Explanation	Rationale
Age	Age of respondent	Younger landowners are more willing to take risks and engage in conservation behaviors
Education	The landowner's level of formal education	Education and level of knowledge about environmental processes generally encourage conservation behaviors
Sense of belonging to farming	Number of years the property on which the landholder lives has been owned or operated by the family; number of generations the family has been farming; number of years of experience farming	The longer the residence, the more likely they were to be conservation-oriented
Level of off-farm income	The proportion of the family's income earned off-farm	The higher the percentage of income coming from other sources, the higher the level of conservation behavior

Adapted from (Raymond & Brown 2011)

Table 1: Factors Impacting Landowners' Interest in Conservation Easements

The literature indicates that landowners who own large areas of land primarily for recreational reasons and those who own their land for use in agriculture generally have similar feelings about the need to promote private land protection for critical habitat and species protection, as opposed to landowners who own large areas of land for investments or other financial gain (Mir & Dick 2012)

Attitudes

Landowners' attitudes about conservation easements are important to understand, as they help guide the decision as to whether or not a landowner would ultimately adopt one. Attitudes are discussed in the literature using a number of terms and frameworks, though not succinctly or in great depth. Topics observed in the literature reflecting landowner attitudes include private property rights, ability of conservation easements to act as a conservation tool, and interactions between landowners and land trusts. Two commonly reviewed topics are the financial impacts and the conservation impacts of conservation easements.

Landowners whose primary income is dependent on agriculture, often view conservation easements first as a financial tool, and secondarily as conservation tool. Clearly conservation easements provide the potential for financial gain via lump sum payments and a reduced tax burden. The ability for a landowner to reap financial benefits appeals to many, as agricultural pursuits are often risky endeavors and a transaction that enhances financial security has appeal. A landowner who sells an easement stands to receive a lump sum in cash. This money is typically spent on non-agricultural uses such as retirement or savings, infrastructure investments, estate settlements, or reduction of debt (Rilla & Sokolow 2000). In many cases, these applications are need driven, thus death, debt or other hardships can be drivers of easements. A landowner who donates an easement can also qualify for a charitable tax deduction and, once the easement is established, the taxable value of the land drops dramatically and the landowner will pay less in taxes indefinitely.

Another financial benefit is the ability to use a conservation easement to transfer property, for example between family generations. Brunson & Huntsinger (2008) note that transfer of land is increasingly difficult for the agricultural community, particularly ranchers. Rising land prices limit the ability of new agriculturalists to establish operations; estate taxes can push heirs out of farming even if they have a strong business. Conservation easements offer a solution to an otherwise troubling problem by reducing the assessed value of the property.

Beyond the influence of a landowner's financial position, landowners are also commonly motivated by a passion for the land, especially in the case of a long-time family homestead.

Personalities play a big role in how landowners interact with land trusts, and how fairly they feel they are being treated. There is a significant amount of trust tied up in these sorts of agreements, especially when a local community may not agree with the decision being made (Rissman & Sayre 2011). This point is not to be taken lightly, and can sway a hesitant landowner towards or away from an agreement.

Motivations

The motivations that landowners hold are important to understand as they are ultimately what pushes or pulls a landowner into arranging an easement. As with anything else, motivations are framed by previously held notions or attitudes, but can act independently in certain situations. Landowners find both short-term and long-term motivations to participate in conservation easement programs. The most common short-term motivation is financial – landowners stand to gain large sums of cash upon deciding to sell an easement. The long-term motivations are more complex, and can include financial reasons, but also include altruistic ideals, personal beliefs, and goals for land preservation (Rilla & Sokolow 2000).

Several studies investigated the motivations of landowners who adopted an easement. In most cases, the results from these studies align fairly nicely, with a consistent finding that natural resource protection, financial motivation, and family or community commitments are all important. However in one local study covering agricultural landowners in Sonoma, Marin, and Yolo Counties who had adopted a conservation easement, the motivations varied dramatically from county to county. The results of this study remain typical for the totals found, but by county results appear more scattered:

Motivations cited by landowners for selling easements

Motivation	Marin		Sonoma		Yolo		Total	
	#	%	#	%	#	%	#	%
Preserving land for farming	7	5	8	35	2	100	17	46
Cash for nonfarm use	7	58	8	35	-	-	15	41
Passing land to next generation	7	58	3	13	-	-	10	27
Cash to invest in farm operations	4	33	4	17	2	100	10	27
Settling estate problems	3	25	6	26	-	-	9	24
Cash to reduce farm debt	3	25	5	22	1	50	9	24
Preserving land for open space	-	-	8	35	-	-	9	22
Numbers landowners responding	12		23		2		37	
<p>Marin = Marin Agricultural Land Trust</p> <p>Sonoma = Sonoma County Agricultural Preservation and Open Space District</p> <p>Yolo = Yolo Land Trust</p>								

(Rilla 2002)

Table 2: Motivations for selling easements

Overall ‘preserving land for farming’ was the most common motivation cited for adopting an easement, but in Marin County it was tied with ‘passing land to next generation’ and “cash for nonfarm use” (Rilla 2002). These results point to the nuanced qualities of easements and the agencies that provide them. Most sellers were quite happy with the treatment they received from

the land trusts, although they did have some concerns about monitoring and the initial negotiations. Note that this study was done by talking with landowners who had already chosen to engage in an easement, as opposed to those who had decided not to do so or were in the process of making a decision.

In one study of ranchers in Wyoming, reported motivations for adopting an easement were evenly split between conserving wildlife habitat, open space, and agricultural production (Miller *et al.* 2011). Even though all participants in this study were agriculturalists, they ranked wildlife habitat and open space as highly as agricultural production. This same group also thought the general public would rank protection priorities in a similar way, with one notable exception: they believed the public was most interested in preserving wildlife habitat in an effort to create more game for hunting and other recreational opportunities for humans. Ranchers also felt that if public access became a requirement for easements, agriculturalists would not be interested in adopting one (Miller *et al.* 2011). These types of trade-offs make conservation easements as a tool difficult to apply broadly.

A study of landowners in Colorado who had adopted an easement also found natural resource protection and community-mindedness to be the most important motivations, with family commitments, financial incentives, and a desire to maintain agricultural production also important to landowners in varying degrees (Ernst 2008). In contrast, farmers in Colorado cited business motivations as pre-eminent: maintaining viable agricultural land was the most common reason for entering into an easement agreement, followed by improving estate tax burdens, improving one's financial position or leveraging assets. Rounding out the list, with about half as many agreeing, were prohibiting development or maintaining open space, and improving environment and wildlife habitat (Marshall *et al.* 2003). A more nuanced study in Indiana investigated how different land uses may change the motivations indicated by landowners. Landowners participating in non-extractive uses (such as vacation home, hiking trails, etc.) cited their primary motivation as 'environmental' followed by 'societal' and 'sense of place,' whereas landowners who were farming their land cited 'societal' motivations, followed by 'environmental' and then

‘family’. Landowners engaged in both non-extractive use and farming reported the same motivations as those who were strictly non-extractive (Farmer *et al.* 2011).

Because motivations vary greatly between land uses, family financial situations, and geographic areas, there is a relatively large amount of literature reviewing motivations for adopting easements. Findings from these studies suggest that motivations both overlap and are wide ranging, which may help to explain the great proliferation of conservation easements in the past few decades.

General Concerns

Not everybody is in favor of using conservation easements as an instrument for conservation. Some critics view easements as a tax loophole, as shown in this quote from an editorial in the Wall Street Journal:

“One of the most exclusive tax breaks of all time... In short, the conservation easement gizmo uniquely satisfies not one but two compelling needs of premillennial Homo Liberalus Americanus: The need to reduce his tax burden and the need to make a show of doing something for the environment.” (Editorial 1999)

The Internal Revenue Service (IRS) has battled abuse of the tax code allowing for charitable donations and easement appraisal value. In fact, The Nature Conservancy, one of the largest land trusts in the United States, was investigated by the IRS and by the U.S. Congress for providing ‘wildly exaggerated’ easement appraisals and extreme tax deductions for developers (McLaughlin 2005). The results of these investigations yielded a more robust system for accreditation required of all legitimate land trusts able to hold easements. Additionally, in 2005 the Senate Finance Committee reformed the statutes allowing tax-exempt status for land trusts and imposing punishments for agencies that do not comply. Although revelations of abuse are alarming, many land trusts are staffed by volunteers and may lack access to the expertise required to complete such complicated transactions in a professional manner.

Landowners express a variety of concerns about easements. The major worries include the monitoring process and the perpetual nature of easements. These topics are addressed below.

The broad concept of the additional ‘hassle factors’ brought on by adopting a conservation easement was described by Huntsinger, and often comes up as a stumbling block for landowners. This ‘hassle factor’ includes a number of additional stressors that landowners face or think they will face upon adopting an easement. This includes public access and dealing with additional trespassing or nuisance issues (Huntsinger & Hopkinson 1996). Other concerns cited less often include the negotiation process, land trusts paying too much for easements, acquiring easements on parcels that would not likely be developed, lack of impact due to larger economic forces, problems with staff or the bureaucracy involved with the process, or land trusts that are unsympathetic to farmers (Rilla 2002).

In fact many in the legal community feel that the time has come for some significant changes to the perpetual aspect of conservation easements. The feeling is that the laws that allow for easements in most states (Maine being a notable exception) have remained relatively unchanged since their creation. In the beginning, conservation easements were an experiment, something that the environmental movement had pushed for to create another tool for saving land. However, in the past several decades they have become one of the most commonly used conservation tools. The legal system needs an overhaul, rather than the case-by-case interpretations that currently exist. If a uniform change does not occur, many people think the tax and legal structure could eventually collapse, with unknown consequences. One common concern is that the taxpayer may end up paying greatly, in dollars, in environmental damage, or both (Pidot 2005b).

Monitoring

One of the common concerns for landowners is the required monitoring of their easement (Rilla 2002). Because the easement holder is responsible for enforcing the easement, and monitoring of the property is required to be able to confirm that any restrictions or obligations are being met, there is necessarily some contact between landowner and easement holder on a regular basis. Monitoring events typically occur annually but can be written into an easement in alternate configurations if both parties agree. Because monitoring is one of the enforceable actions that the holder maintains over the landowner, these actions can be a point of contention. Monitoring

events will have some caveats, for example the landowner will have a 48 hour notice prior to a monitor arriving at the property, but ultimately the holder has the ability to come on to the property and complete an inspection of the demands of the agreement. This creates a less collaborative relationship between landowner and easement holder and is often cited as a significant reason why landowners do not want to participate in an agreement (Rissman & Sayre 2011).

Perpetuity

The concept of conservation easements ‘running with the land’ is a troubling one for many landowners, particularly for those that are in agriculture and make a living off their land. One study indicated that for many ranchers the perpetual nature of easements was a ‘deal breaker’ - without that element, adopting an easement would not have posed a problem or would even have been seen as beneficial. Most of the participants in this study intended to pass their property to their children and did not want to ‘tie the hands’ of their kids (Miller *et al.* 2011). In the Central Valley of California, landowners reported ‘perpetuity’ as the second most significant disadvantage to conservation easements (behind ‘wrong location’). Yet though the ‘forever’ concept is troubling to many landowners, some view it as a positive. In the same study, landowners also reported they viewed the perpetual nature of easements positively, as it provides for protection of wildlife, agriculture and scenic views (Rilla 2002). Occasionally landowners fear that a future landowner will bring litigation for impacts due to an easement (Brewer 2003).

CHAPTER 6: Methodology

Background and Overview of Methods

In the introduction to *Conducting Research in Conservation: A Social Science Perspective*, Helen Newing presents a compelling argument for why more social research is needed in the field of conservation. She points out that conservation science has been ruled by biologists, botanists, and ecologists, whereas in the modern world the vast majority of environmental changes are anthropogenic. The demands humans place on the natural world are driven by economic, political and cultural factors, and it is precisely these factors that social science investigates. Life scientists rarely have training in the social sciences and therefore are limited in how they choose to study conservation. Newing argues that our understanding of social issues in conservation is “fragmented and, in many subject areas, rudimentary” (Newing 2011).

When deciding how to approach the study of landowners’ perceptions of conservation easements in San Mateo County, I determined qualitative methods to be most appropriate. For the sake of this study, the definition of qualitative will be “any type of research that produces finding not arrived at by statistical procedures or other means of quantification” (Strauss & Corbin 1998). In the study of land conservation and management, several instances in recent literature highlighted a need for qualitative methods (Farmer *et al.* 2011; Huntsinger & Hopkinson 1996; Sayre 2004). Qualitative methods are especially useful when a topic or question needs to be explored in all its complexity rather than simply answered. In these situations, quantitative methods simply would not yield useful results. In a scholarly article in the *Journal of Range Management*, Nathan Sayre argues that qualitative research can reveal “social, historical, political, and economic factors that affect ranch management but have eluded quantitative studies” (Sayre 2004). He insists that qualitative methods are superior for describing the mental models used by ranchers to manage rangeland, especially considering their use of historical information frequently used by this population. In the same article, Sayre concurs with Newing that the ecological and biological dimensions of ranching are well represented in academic literature, but the social dimensions are lacking (Sayre 2004). Although Sayre is specifically referencing rangeland management, his assertions about the need for qualitative social science research are applicable to most areas of

land conservation. Rural San Mateo County contains a relatively large amount of rangeland, so Sayre's conclusions are particularly relevant to this study.

Qualitative methods provide several benefits for a study such as this one. First, open ended questions are capable of bringing to light previously unknown or scarcely considered factors which may ultimately prove to be important. Not limiting participants to a pre-determined set of answers and allowing them to respond to questions as they see fit can generate answers that were previously not considered. Secondly, qualitative methods lend themselves to the temporal and spatial scales necessary to understand a topic such as land conservation. Landowners' thoughts about land management and the processes involved in establishing an easement, and how those attitudes have changed over time, are complex and difficult to characterize using quantitative methods. Lastly, reaching out to landowners in a personal way, meeting in person when possible or at the very least via phone conversation allows for a real connection that encourages honest and open discussion. These discussions would be difficult using most quantitative methods, and the validity of the research improves if the interviewer has a personal connection with their subject.

The need for qualitative social research is specifically highlighted by Rissman and Sayre in a recent article about social relations and conservation. They express a need to understand what (if any) impacts easements are actually having on landowner views about stewardship responsibilities (Rissman & Sayre 2011). The article discusses some potential discrepancies between how conservation easements are presented and how they unfold in practice.

Conservation easements are often billed as voluntary, somewhat altruistic, collaborative, and good for the community at large. In reality, however, many landowners and perhaps members of the general public see them as restrictive and potentially a source of stress, perceptions that can overshadow any of the benefits mentioned above. Once the easement is established, a potentially rigorous schedule of monitoring and enforcement is allowed, and this can also be viewed as problematic. This study intends to ask about these kinds of concerns in an open fashion, allowing landowners to freely share their hopes and concerns. The questions asked are specifically designed to get at the differences between conservation easements on paper and in real life.

Asking about attitudes and motivations

Conservation easements can be adopted by a landowner independently, or they may be part of a property purchase. In the latter case, the new landowner may or may not be fully aware of the implications of having an easement on his or her property, and this can be problematic. Although having a generic conservation easement requires very little extra work on the part of the landowner, it does forbid many activities that they may or may not have previously been interested in. For this reason, it was important to ask landowners about their current understanding and attitudes about conservation easements, as well as their motivations for future adoption. For those landowners that already have an easement, the future motivation is less relevant, but these landowners do influence prospective landowners who consult them about their opinion.

Based on the desire to obtain answers to these complicated questions and situations, it was determined that focused interview questions would be delivered to willing participants. Questions were designed to encourage conversation and to obtain specific information. Generally, the questions at the start of the interview were designed to be simple and straightforward, in part to warm up the participant to try to create a relaxed environment, but also to help provide context for the in-depth questions. As an example, the first question reads “How long have you or your family owned the land at...” followed by the address or area connected with the interview. This develops context but also sets a non-controversial tone and elicits a clear response.

As indicated by Newing and Sayre, one of the benefits of qualitative research is the ability to answer questions or investigate topics that were previously unknown or whose importance was simply underestimated (Sayre 2004; Newing 2011). For this reason, some questions were intentionally open ended, allowing for the participant to lead the interviewer onto new ground. An example of this is “*What are the main ways you use your land?*” asked towards the start of the interview. Ultimately this question elicited a wide range of responses, including what sorts of recreation landowners allow or participate in, specific crops that are grown, or financial holdings that are tied to the land. These sorts of answers were often interesting, but often resulted in lengthy and somewhat off-topic answers. In these situations, I would attempt to steer the

conversation back towards the topic of land use as related to a conservation easement (although all of the examples above certainly relate to the research topic). I would generally allow them to continue expressing their thoughts and then ask them to return to the question when they were finished. Often I found they circled back to the original question on their own with no encouragement, but occasionally respondents would simply lose track of the question. In those situations, a subtle reminder of the question at hand was presented.

Exploring the topic of land conservation and easements with landowners elicits a tangled web of information about laws, science, best practices, old truths, culture, and emotion. Teasing these apart required the use of analytical methods loosely based on a grounded theory approach. This framework aims to move an understanding past a basic description or definition and towards a theory or model (Creswell 2007). The goal is “building in-depth description and interpretation of a situation or topic” (Newing 2011), while doing one’s best to maintain rigor and objectivity, including repeatability and describing known biases.

Data collection and analysis requires a cyclical process of input of data, analysis, and refinement. This concept is derived from the process described by Creswell as well as Strauss & Corbin, generally called Grounded Theory (Creswell 2007; Strauss & Corbin 1998). I modified this to apply to my particular research question, looking at a system as opposed to a specific core phenomenon as is typically done in with Grounded Theory. Additionally, I incorporated some of the basic principles of land conservation research offered by Newing into my data collection methods, particularly the concept of annotation and coding of qualitative responses. Using this combination of a general qualitative theory and some specifics provided by Newing, I was able to begin data collection and constantly refine my analysis based on what I understood the reality of my participants to be. One of the primary features of Grounded Theory is the ability to modify a model or understanding of a topic clearly and easily. As with any topic as complex as conservation easements, having the ability to review and adjust the analysis as necessary was essential. To do this, I would review the codes I was using to categorize my qualitative responses, and would make adjustments to the codes as needed. The interview questions did not change based on these adjustments, but my understanding of the data did. I could return to earlier

interviews and review the coding I had attached to relevant quotes to determine if they still met the descriptions I had established. In this way, I was able to continue asking the same questions, but could extract different types of data from each answer as themes or subthemes emerged.

Data Collection Process

To identify target properties for this study, I needed to determine of what size properties to study. I wanted to examine larger properties because I wanted to speak with members of the small community of very large-area landowners in San Mateo County. Landowners tend to have a good understanding of their neighbors and the issues they face, and a topic like conservation easements is likely to have been discussed at great length by at least some of these landowners with a great deal of land. To determine a property size that would yield a small enough population of 'large area' landowners I used GIS data from San Mateo County. Using ArcGIS software and parcel GIS data obtained from the San Mateo County Tax Assessors Office, I compared the number of parcels at 150, 200, 250, and 300 acres, and determined that 250 acres would create a large enough pool of landowners that I could expect to get a satisfactory number of responses, but still focus on individuals who owned substantial parcels of land. San Mateo County has 249 parcel of 250 acres or larger. 110 are owned by public agencies or by local or regional land trusts. Those parcels were eliminated, leaving 139 parcels not yet in a land trust but potentially eligible for one. Of those parcels, 63 were owned by owners who owned more than one 250-acre parcel, resulting in a total of 76 unique landowners who own parcels of more than 250 acres San Mateo County.

I relied heavily on a "Tailored Design" methodology for contacting potential participants, in an attempt to achieve a high response rate. Dillman *et al.* suggest that the best way to increase response rate is to appeal to potential participants in multiple ways, as "people's voluntary actions are motivated by the return these actions are expected to, and often do, bring from others" (Dillman *et al.* 2009). Dillman *et al.* suggest a method of five contacts for surveys, including pre-contact, the questionnaire, thank you postcard, replacement questionnaire, and a final contact via a different form. I decided to modify this method. Instead of sending a questionnaire directly, I'd ask interested landowners to contact me. Using data from the Tax Assessors Office, I generated a

list of mailing addresses for each of the 76 landowners meeting my description of a ‘large-area landowner.’ Each was sent first a letter (see Appendix B), and then two follow up postcards (see Appendices C and D), requesting help with an academic study. The letter was written to build trust with potential participants, per Dillman *et al.* I made it clear that I had obtained sponsorship by a legitimate authority (SFSU), I provided a token of appreciation in advance (sincere gratitude), I made the task appear important (explaining that I was contacting only a few large-area landowners in San Mateo County), and I ensured confidentiality and security of information. I also increased the benefits of participation by providing information about the study (a short background), asking for help or advice in completing the study, and showing positive regard (clearly stating that all opinions are useful and valid.) Lastly, I tried to make the letter interesting by adding photos and using casual language. I let them know that their neighbors were also getting the same letter, and informed them that opportunities to respond would be limited. I added a hand-written note thanking them for their time. The last time they were contacted, the postcard had an additional sticker letting them know that they would not be contacted again, and if they wanted to participate this was their last opportunity.

Dillman *et al.* also explain that making contact is only half the battle – you also need to minimize the costs of participation. This was achieved by making it convenient for landowners to respond. They had the option to mail me information via the United States Postal Service, phone me on my personal cell phone, or email me at my university email address. I also made serious efforts to avoid subordinating language, which was a challenge given the somewhat technical and cumbersome topic of conservation easements. However the greatest potential cost for landowners involved possible repercussions from their local community. Dillman *et al.* indicate that minimizing requests to obtain personal or sensitive information is critical, and for this relatively affluent population this is especially true. It was important to be able to promise confidentiality to the participants so that they would feel comfortable offering me their honest opinions and not fear that they would be found out by members of their community. This community, like other rural communities, is very well connected and opinions are widely shared. While this works to the advantage of a researcher asking questions about family and neighbors,

from the landowners' perspective this is a concern. This is especially true for any landowners who need their community connections to make a business run, particularly when it comes to a sensitive topic such as conservation easements.

The letters and postcards that were sent out had four main goals. The first was to introduce the researcher (me), and give a glimpse into my background and interests. At the suggestion of Dillman *et al.*, I added a simple photograph of myself in an attempt to connect with the recipient. I also hand wrote the addresses on the envelopes and the names on the salutation line of the letters. All letters and postcards were signed by hand, and included a "Thanks!" or "Thank you!" I explained the research question, adding that whether or not they had knowledge of the topic I was looking into, I was still very interested in talking with them. I explicitly asked for their permission, giving them some details about the demands of participation and how explaining how flexible I was in meeting those demands. Lastly I offered three ways to contact me to either participate or to ask further questions.

Of the 76 letters sent out, two were returned for bad addresses. In the first round four landowners contacted me either by email or phone call and expressed their interest in participating. Ten days after the initial letter went out, I sent out the first postcard to all the addresses except the four landowners who had already contacted me. Six additional landowners contacted me. One week after the second postcard, I sent the third and final postcard. Over the next couple of weeks a total of four more landowners contacted me about participating, for a total of 15 contacts. Out of those fifteen contacts, I ultimately interviewed 12. One of the three landowners who contacted me simply stopped returning phone calls before we were able to meet. Another declined because he did not feel he had anything to offer, despite my encouragement to participate anyway. The last decline came after having several email exchanges, where confidentiality was discussed, as was scheduling. Ultimately the landowner told me he did not have the time to complete an interview, although I was offering to meet him anywhere on the peninsula or complete it over the phone. Of the 12 interviews, 10 were done in person and two by telephone.

Great effort was taken to insure the confidentiality of the participants. Since the initial contact list included a name connected with each address, potential interviewees were already exposed to

some degree. The first letter explicitly stated that all further research could be completed in a confidential manner. Upon contact, each landowner was given a very detailed explanation of the lengths taken to ensure confidentiality, including securing all data and excluding any details that could allow a reader to identify a participant.

Interview Design

The interview design was primarily informed by the guide offered by Newing. The semi-structured interview allowed for a somewhat constrained conversation with the ability to delve into questions of interest or gloss over questions that are not relevant (Newing 2011). This was especially important for this research, as each landowner has a very unique situation and required adjustments based on how they used their land, the amount of knowledge they had about the subject, and how deeply involved in the local community they were. As discussed earlier, one of the main goals of using qualitative methods was to look for additional questions, and this open-ended interview method does just that. Newing explains that using open-ended questions allows for a great range of answers, highly descriptive answers, an understanding of a participant's actual knowledge on a subject, a glimpse into the reasoning for a feeling or viewpoint, and an ability to deconstruct very complex situations.

Eight Likert scale rating questions were asked near the start of the interview. Participants were given a statement, and asked if they “Strongly Disagreed,” “Disagreed,” “Neutral,” “Agreed,” or “Strongly Agreed.” They were also encouraged to explain their answer if they felt it required an explanation or wished to go into further detail. The questions were designed to gauge where the participant stood on a number of topics including how valuable they think open space is, their views regarding property rights, and their own connection to the land they own. They were designed to be easy to answer, to not require much background information or even thought, in hopes that this would help the participant relax and feel comfortable with the topics we were discussing.

The interviews were recorded using an iPhone App (“Recorder”), and I took limited notes while the interview proceeded. I found that participants were distracted the moment I started writing anything down, and thus decided that I would rely more heavily on the dialog captured by the

recording device. The entire digital file was transcribed verbatim, and reviewed shortly after transcription was completed. As each interview was completed, I began the analysis phase, examining each interview line-by-line, searching for relatable answers to questions. The details of this analysis are described in the next section.

Data Analysis Process

As data collection began, a framework was developed for analysis. Analyzing qualitative data is often a fluid process based on empirical tools but often meandering between data collection, analysis, and discussion. This study was no exception. My primary resources for creating the analysis were Straus, Creswell, and Newing, all of whom offer strategies and tactics for how to corral large datasets and tease out common themes and concepts (Strauss & Corbin 1998; Creswell 2007; Newing 2011). Newing (2011) provided a method for coding interview transcripts, allowing me to create a system of codes or tags to attach to each relevant quote encountered upon review. This system was refined over the course of data analysis, a concept loosely borrowed from grounded theory in order to develop themes and key concepts. Strauss and Corbin (1998) as well as Creswell (2007) describe a system (originally developed by Strauss) of using qualitative data to expand the knowledge bank on a particular topic, exploring answers to questions in a new way. According to Strauss and Corbin (1998), the purpose of this coding system is to build theory rather than test established theory. They go on to explain that a coding system is designed to cope with large amounts of raw data, and help researchers look at data in creative yet systematic ways. The end goal is to recognize, progress and connect the components of a theory. This approach is called “grounded theory” and was useful in pulling together this very diverse set of answers. As Creswell states, “a key idea is that this theory-development does not come ‘off the shelf’ but rather generated or ‘grounded’ in data from participants who have experienced the process” (Creswell 2007). This allowed for restructuring of analysis as the data collection proceeded.

Grounded theory is usually used when a researcher is attempting to explain the “abstract analytical schema of a process” (Creswell 2007), in this case the attitudes and motivations of landowners about conservation easements. It is particularly useful when a theory or model is not

available at all, or is not available for the population in question. In grounded theory, the researcher is reaching out to participants who have all somehow lived the phenomenon or process, and using their input to help create a general theory to explain their experiences. The backbone of grounded theory research is to *ground* the research in data from the field, particularly in regard to the “actions, interactions, and social processes of the people” (Creswell 2007), but also to try to move beyond current understanding when it comes to understanding these processes. This allows for a fresh look at the current trends or theories in the literature, but acknowledges that a new theory may be generated from the field work. Using literature from other geographic areas could help inform the likely conditions to be found in San Mateo County, but new information could yield an understanding of how these phenomena occur in the local area.

This refreshing of current understanding typically happens in a cyclical pattern. An instance of fieldwork is completed, the initial results are reviewed, data collection methods are adjusted, and the researcher returns to the field. Creswell describes this as a ‘zigzag process’. This pattern continues until the dataset is saturated, and new information is not being collected. This is the first point at which my methods diverged from this method. I did not have the luxury of an unlimited number of landowners to speak with, and ultimately each landowner provided a very unique perspective. So, rather than interviewing until saturation was reached, I interviewed as many landowners (who met my requirements) as I could. Additionally, the standard set of questions that landowners were asked did not change. However, as particular topics started to emerge as common threads, I would press a landowner to relate their answer to others. For example, I might ask a landowner to explain their answer in terms of how their experience with a particular agency compared with that of another landowner’s – as a simple example “I hear you expressing your positive experience with POST, but other landowners I’ve spoken with were not as pleased. Do you have any idea why that might be the case?”

The heart of the grounded theory research surrounds the question “why?” The goal of grounded theory is to explain a process by way of collecting information from those intimately involved. In my case, I was asking landowners why they were motivated, why they had the attitudes they had.

Of course I also needed to know “what” their attitudes and motivations were, but grounded theory was selected to focus on the why. The first phase in this exploration is commonly called ‘open coding.’ During this, the researcher is delineating major themes or categories of information – this is the core of the phenomenon. This can be completed as part of the literature review or as data begins to be collected. In my case, the majority of open coding occurred during the literature review phase, but some slight modifications were made once interviews began. As defined by Creswell, the intention is to look for:

- **Causal Conditions** (what factors caused the core phenomenon)
- **Strategies** (actions taken in response to the core conditions)
- **Contextual and Intervening Conditions** (broad and specific situational factors that influence the strategies)
- **Consequences** (outcomes from the strategies)

In the next phase, called ‘axial coding’, connections are made between the categories developed in open coding. Similar ideas are grouped together to begin to tell a story or to explain why participants have had the experience they have. Often a visual diagram (called a *coding paradigm* or *logic diagram*) is used to describe these connections. Lastly, the ‘selective coding’ phase is genesis of the actual theory or model being posited by the research. Frequently this is the form of a narrative (or “story line” as Creswell writes), but it can also be simply a list of hypotheses. See Figure 3 for the model of this study.

To begin this process of coding data, transcriptions were reviewed immediately following each interview. As a transcription was completed, I would compare whatever limited notes I had taken during the interview with the verbatim transcription. I would then proceed to code the interview responses using the method provided by Newing, marking sections with codes generated in anticipation of likely responses based on my understanding of the topic and, more importantly, from the literature on the topic. This list included top level codes and subcodes. Top level codes included the larger concepts of the study, generally things like “motivations” or “definition”. These codes were used during the open coding phase, to begin to group together similar thought patterns and big picture ideas. The subcode tags were specific issues or factors that landowners

were likely to talk about. These were more linked the axial coding phase, looking for connections and putting together concepts to create a cohesive theory. As I reviewed the data from interviews, I would revise this list. Occasionally I would remove a code that was not being used, but typically I was adding new codes to the list. As this happened, I would review previously coded interviews and add or change codes where appropriate.

The codes used to describe quotes can loosely be placed into the categories of open coding, as suggested by Strauss. For example, the majority of the quotes that fell within the following tags (*italics*) would be considered part of the following open coding categories (**bold**):

Causal Conditions

Financial

Connections to the land

Values

Strategies

Land management

Conservation easement or Agricultural easement

Contextual and intervening conditions

Definition

Land description or uses

Guidance and resources

Public concerns or input

Consequences

Motivations for adopting conservation easement

Pros and cons of conservation easements

Agencies

Once all the interviews had been coded, I went back through them one last time to revise any codes that needed to be updated, based on any changes to my understanding of landowners' attitudes and motivations. The final list of codes used is attached as Appendix E. I stored quotes with their tags in a spreadsheet, which allowed me to quickly and easily search and find specific

quotes, but also to sort them by tag. Furthermore I could look for pairs of codes by concatenating two or more codes. For example, as I worked on the topic of motivation, I could review all the quotes that had a tag of ‘motivation’ and then further filter out all the quotes that dealt with ‘financial’ combined with either ‘stress’ or ‘family’.

Biases and Limitations

Every study is certainly impacted by bias, and in this case the potential for bias is significant. The first hurdle was simply getting potential respondents to respond and connect with the researcher. Any study requiring hour-long interviews excludes those who do not have the resources to allow for that kind of flexibility. Furthermore, landowners who were able to spend time on the interview were further filtered by any preconceptions or biases concerning conservation easements and higher education. In particular, the subject of these interviews is sensitive and highly contentious in rural communities in general, but particularly within the realm of local politics in San Mateo. Landowners tend to have strong opinions about their land and the policies that impact it, and conservation easements are no exception. Many landowners were likely disinclined to talk with an outsider about this topic.

Although I was able to accommodate all landowners who were interested, it required coordination and effort on both ends. This presented a challenge for two landowners, both of whom ultimately declined to participate in the study. After two failed contacts, I ceased all attempts to communicate with them, in the hopes they would reach back out. These hopes were not realized. Beyond scheduling complications, many potential landowners were likely dissuaded by the topic of the study, and the very nature of academic research may have been off-putting to some in the study area. In fact, several of the landowners commented on how they thought their viewpoint might be somewhat atypical, as shown by this landowner discussing his thoughts on one of the local land trusts:

I'm a little unique. I have really good feelings about them because I feel like they showed us respect. They respected what we were doing and they wanted to see us there whereas everybody wanted to see us out of there. You're probably getting a different perspective with me.

-Second Generation Farmer

This respondent suggests that his remarks reflect unusually positive experiences, leading me to believe that at least some of the biases mentioned above are indeed active and have shaped the results of this research.

Despite the relative wealth of San Mateo County as a whole, the rural individuals I spoke with were split between those with plenty of wealth and those who were financially challenged. Some landowners have acquired land somewhat recently and are likely to be relatively wealthy. However many landowners either inherited land or purchased their land under very different circumstances and are now under great financial duress. People who are challenged and have limited resources are less likely to accept the burden of an additional task, of interviewing with a student, and thus are less likely to have replied to my request.

Landowners who responded were also more likely to have an interest in, and perhaps affinity for, conservation easements. Although the letter and postcards explicitly said the researcher was interested in any response, even if the response was simply lack of knowledge about easements or disapproval of their use, it is likely that the landowners who responded to the letter were more interested than non-respondents in the subject matter and perhaps more likely to have negotiated conservation easements for their land. Evidence to this effect comes from the California Protected Areas Database. When compared to the total 247 parcels that are more than 250 acres in San Mateo County, about 19 of them (roughly 8%) have a conservation easement (CPAD 2012). Among interviewees, four of 12 (33%) had a conservation easement. This suggests that the people who choose to respond had greater experience with conservation easements.

Another source of bias is my employment at the Midpeninsula Regional Open Space District (MROSD). At the time of the interviews, I was working as a GIS Technician, a position which has no influence over which properties are purchased, which easements are acquired, or other aspects of open space planning strategy. At the start of the interview I informed each participant of this, and allowed them to opt out if this was a concern. As part of this discussion, I reviewed the high level of confidentiality I offered. Although none of the participants declined to be interviewed, several did have questions about what information would be given to MROSD.

Furthermore, I would expect that some answers may have been tempered knowing that I was employed by a major player in the conservation movement in San Mateo County.

CHAPTER 7: Results and Discussion

I organized my questions around three broad topics:

- 1) Awareness of Conservation Easement Concepts
- 2) Factors Impacting Attitudes about Conservation Easements
- 3) Motivation to Adopt Conservation Easements

The data collected in interviews were intended to address those topics, and using grounded theory I was able to organize the responses into similarly grouped discussions and themes, which I was able to then compare and contrast. However, the interviewees had a wide range of backgrounds and land uses. To summarize the 12 respondents, this table shows several qualities each exhibited and a count for how many participants fall into each category:

Gender*		Years Property Owned		Land Use**		Do Owners Live on Property?		Is Primary Income from Property?		Have Easement on Some or All?	
Male	9	<10	1	Active Grazing	3	Yes	3	Yes	6	Yes	5
Female	4	10 to 20	2	Active Timber Production	3	No	8	No	6	No	7
		20 to 50	3	Active Row Crops	7	Sometimes	1				
		Two Generations	3	Other (Recreation, vacation, public service etc.)	3						
		More than two Generations	3								
* = There was one property where two respondents were interviewed, thus the total for people is 13. This couple own their property jointly and felt they both make equal contributions to any decisions. Their interview questions are described as Respondent 1 and Respondent 2.				** Several of the properties had multiple uses							

Table 3 – Overview of Respondent Qualities

Some results were more apparent when looking at each landowner individually. This table shows the qualities of each interviewee:

Interview Number	General Location of the Property	General Use of the Property	Knowledge of Conservation Easements	Positive or Negative Attitude in General	Positive or Negative Attitude for their Land	Prime Motivation (if any)	Do they Have an Easement?	Did they add it?
1	San Mateo Coast	Rangeland	Moderate	Positive	Positive	Conservation Value	No	N/A
2	San Mateo Coast	Row Crops, Rangeland	High	Positive	Positive	Conservation Value, Financial	Yes	Yes
3	South San Mateo Coast	Timber	High	Neutral	Negative	Financial	Yes	Yes
4	Skyline	Timber	High	Neutral	Negative	Conservation Value, Financial	No	N/A
5	San Mateo Coast	Rangeland	High	Neutral	Neutral	Conservation Value, Financial	Yes	N/A
6	Skyline	Rangeland	Moderate	Positive	Positive	Conservation Value	Yes	N/A
7	South San Mateo Coast	Row Crops, Rangeland	High	Negative	Negative	-	No	N/A
8	North San Mateo Coast	Row Crops	High	Neutral	Negative	-	No	N/A
9	San Mateo Coast	Row Crops, Rangeland	High	Positive	Positive	Financial, Conservation Value	Yes	Yes
10	East San Mateo	Open Space	Moderate	Neutral	Neutral	Conservation Value	No	N/A
11	South Skyline	Timber, Rangeland	Low	Positive	Positive	Financial	No	N/A
12	East San Mateo	Open Space	Moderate	Neutral	Negative	Financial, Conservation Value	No	N/A

Table 4 – Respondent Qualities by Interview

Given the spectrum of landowners, the challenge of organizing their responses into cohesive groups is no small task. Factors that influence one landowner greatly are of no importance to another, and each landowner faces unique land management decisions for their property. Furthermore, as with any emotionally charged topic, interviewees may have apparently irrational or unexplained attitudes or opinions which can shape their responses.

It became clear early on in the process that interviewees were not going to be easy to sort into a few groups of landowners with similar attitudes and motivations. However, using the grounded theory methodology, I was able to produce a model to help portray the themes and how they relate to one another. In general this model worked for all of my respondents. The few exceptions to this came as a result of landowners who had multiple land uses, sometimes with conflicting values or goals. In these cases, respondents likely discussed both sets of concerns, and had made decisions or formed opinions after weighing all uses. The following model summarizes my findings:

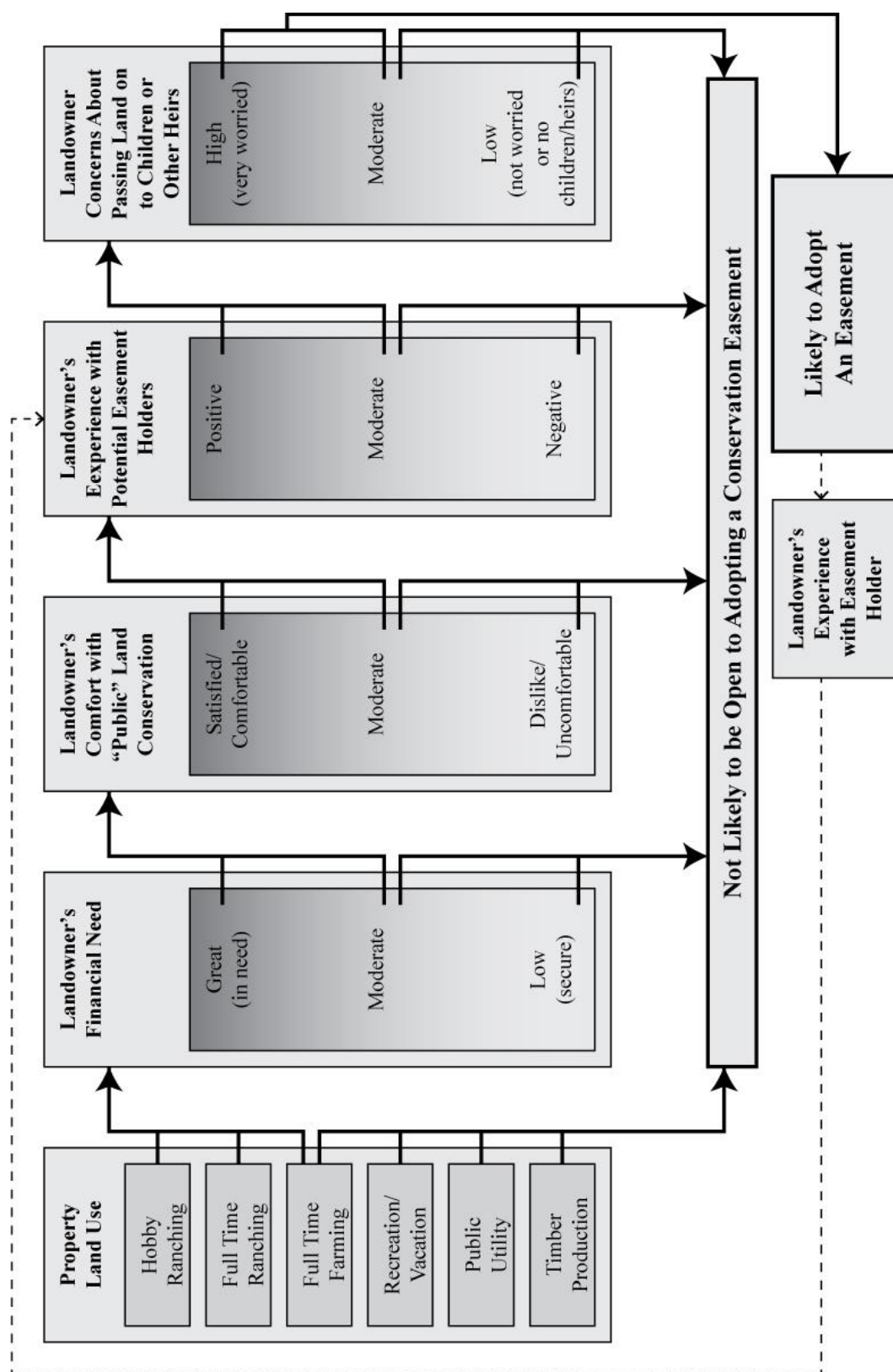


Figure 3: Paradigm Model

The following discussion identified themes developed using the grounded theory method. It is noteworthy that even though the study area exhibits some extraordinary socioeconomic conditions, the interviews repeatedly echoed concepts commonly identified within the academic literature.

Awareness of Conservation Easement Concepts

The knowledge of conservation easements varied widely among the landowners interviewed for this study. Typically landowners had a fairly accurate low-level awareness, but struggled to pinpoint specifics and occasionally were simply wrong. The areas about which they were more or less knowledgeable depended on their land use and their general attitudes about conservation easements.

- *Many landowners have a working knowledge of the basics of conservation easements, but there are very few landowners who have a strong and detailed understanding*

The level of understanding among these landowners was generally low, although most did have a basic idea of what a conservation easement was. As mentioned earlier, interviewees' knowledge of conservation easements was likely significantly greater than the typical knowledge level of San Mateo County landowners, as individuals who had little or no knowledge about conservation easements would be more likely to decline to participate. Nonetheless, some interviewees flatly denied any understanding of what a conservation easement is:

Interviewer: Okay, so how would you define a conservation easement or agricultural easement, just loosely?

Respondent: I'm not sure.

-Third Generation Rancher

Most participants were able and willing to give a working definition, generally with more details about areas that were of particular concern or interest to them. In the following quotes the landowners has a good appreciation for the concept:

So what I understand about the easement process, or what we call the conservation easement, is that it's a means of an exchange for tax benefits. It's a means of limiting or regulating so what's conservative, proper use of the land, are they allowed the use of future land. And I've seen it used in different ways, you know I've seen it used. They completely take a piece of land out of play [for development].

-Second Generation Forester

As I understand conservation easement is basically a long-term desire to maintain the land and its existing condition.

-Public Utility Provider

The second quote highlights a typical motivation for adopting an easement. This landowner is referencing the most common reason a landowner would utilize a conservation easement, often running in parallel with financial gain. This gets at an overall perspective, but lacks detail. However, several landowners were able to provide very clear and precise definitions, although they often overemphasized elements that they were especially fond of or took issue with:

The conservation easement, the way I would define it would be splitting off a certain suite of property rights and to the conservation easement holder to hold in perpetuity for the conservation or protection of whatever value they're trying to protect.

-Second Generation Forester

A conservation easement is the sale of the future right to develop, in exchange for a payment.

- Landowner, Primarily Recreational Use

Conservation easement, an area where there would be no development essentially allowed for the natural processes to work. You know, it's simple as that.

-Landowner, Primarily Recreational Use

There were a few very serious misconceptions. As an example, one rancher strongly believed that “logging” or cutting down timber would not be allowed on any conservation easement:

Obviously you can't log. I think there was an agreement made here, years before, that the cattle grazing was not worth the money for the damage that you've done, although people have said that it keeps down on some of the weeds. It's a moot point because we can't do it anyway. You can't build. You can't put up condos, not that the county would let us do it anyway because of the zoning. Logging is commercial development to me.

-First Generation Rancher

The specific restrictions mentioned may have been in force on the parcel in question, but restrictions are determined at the time each conservation easement is written and are not universal.

When asked about the differences between conservation easements and agricultural easements, interviewees displayed a greater level of confusion. In general, people understood that agricultural easements required some sort of agricultural element to be incorporated in the land use, but most did not have a strong grasp of how this was to happen. Several commented about agricultural easements being less restrictive for a landowner, such as allowing for agricultural processes or land uses that might have been prohibited under a conservation easement.

The way I understand it, is that conservation is what it is - it is conservation and that's what they want it to remain in perpetuity. Regarding ag easements, I don't think it opens the door really wide but there are less restrictions.

-Second Generation Farmer

While this may be the case, typically agricultural easements simply encourage agricultural land uses over non-productive uses such as open space or wildlife preserves. This generally entails supplementary requirements in a standard conservation easement. As one well-informed landowner put it:

Agricultural easements are, in my mind, they're trying to accomplish keeping agriculture on a property and restrict its use to agriculture or things that will enhance the agricultural viability of the property. Usually they'll try to restrict you from selling to somebody that's outside of agriculture, if you want to transfer the property to a new owner; they have to have an agricultural plan for the property too.

-Second Generation Farmer

To a large segment of the rural population, conservation easements can symbolize big government or a reduction of property rights – both of which are essentially fair critiques. As one well-informed landowner puts it:

I think they personally have struck a little bit of fear in people who maybe don't understand completely.

-First Generation Rancher

▪ ***Landowners are not aware of many of the agencies that commonly design and implement easements***

When asked specifically about what agencies provide conservation easements, interviewees named eight agencies, and two were mentioned more often than others – Midpeninsula Regional Open Space District (MROSD) and Peninsula Open Space Trust (POST). Two people mentioned the County of San Mateo and Coastside Land Trust. Trust for Public Land, Wildlife Conservation Board, Rocky Mountain Elk Foundation, Ducks Unlimited and the Pacific Forest Trust were each mentioned once, the last four by one person. All but one interviewee named one of those eight agencies as a source of conservation easements. There are strong attitudes about POST and to a lesser degree MROSD, as discussed below.

▪ ***Landowners recognize many pros and many cons of conservation easements, and are rarely completely for or against them as a concept***

Given how varied and complicated conservation easements can be, it is no surprise that landowners are often unsure of their opinions. Only one interviewee was actively trying to decide if she wanted to adopt an easement. All the others had either already set one up or had decided, at least for now, that an easement was not a viable option for them. Almost all of them had both good and bad things to say. During the interviews I asked about what they thought were the pros and cons of adopting an easement, both as a generic landowner in San Mateo County, but also for their particular property. This is an example of a common response:

So... This is where I have really mixed feelings.

-Third Generation Forester

One of the most common themes was the trade-off between the financial benefits and the additional restrictions. For landowners who view the land as an economic resource, the ‘hassle factor’ of having an additional regulatory agency and the potential for additional risk (to be

discussed later) must be weighed carefully against the financial benefits. For landowners whose income is not directly derived from the land, this tended to be less of an issue.

In some cases, the landowner had not ruled out the option of conservation easements for the future, but had decided that at the present time they were not appropriate. This landowner explains why they are not interested at the current time:

I'm going to hang back and see how things are working with people because I'm not necessarily opposed to them. I think there's a role for them and certainly my family, we're not big on seeing our land subdivided and developed. Even some day in the future if we were no longer able to afford to own them, we don't really want to see that happen and it seems appropriate given the population pressures and stuff to have some sort of protection there but it's got to make some semblance of economic sense and there has to be some sense of long term viability and it's a big step to take the way they're constructed.

-Third Generation Forester

One concern raised by two landowners was taking land off the tax roll:

I don't know if they realize that but now I don't know POST's position on it but Midpen does pay into the school district, I don't know if this is POST pay.

-Second Generation Farmer

I've been very vocal about the property being taken off the tax roll and San Mateo County losing probably hundreds of thousands of dollars in tax revenue and then access. The property is held. There's no access available. So it's held for what?

-First Generation Rancher

There is a strong argument that although a conservation easement can potentially reduce tax revenues for local governments, it contributes to the local economy in a very significant way, perhaps compensating for the loss of tax revenue (see literature review, page 14).

- ***Generally the perpetual nature of conservation easements is considered a negative quality, as landowners are concerned about the future viability of their land for their intended purpose.***

Most landowners with a significant financial stake in their property were leery of the perpetual nature of conservation easements. Landowners with a long family history on a particular piece of ground were especially sensitive to the idea of restricting use into the future.

Perpetuity - that's a long time and I've seen five different major crops move through this area. How can I make a determination now that I'm only going to use it for this, this and this sort of thing.

-Third Generation Forester

Yes. I mean how can you tie up a piece of land with perpetuity when you don't know, I don't know what's going to happen in the next five years or something like that, I have no idea.

-Second Generation Farmer

Respondent 1: Well I think our concern in general was initially that, you know, that restrictions are placed on what you can do with the land. And which may be fine at the time, but five years down the road if our needs changed or something, would we then be restricted? And at the time there was not ... five years ago POST didn't offer this yet. Or hadn't really examined that yet, whether they wanted to do agricultural easements. So it kind of put the whole thing on the backburner, because conservation easements per se ... no wait, see that's where I don't ...

Respondent 2: Well I mean we were willing to, you know, retire the density credits on the land. That wasn't a problem for us. But we didn't want to negotiate a contract, because we didn't know what the long term for this land would be. And we were worried that given that not only had we made plans, but we couldn't even predict our own needs or questions. And we just felt very uncomfortable getting into an agreement with them, although we knew we were willing to retire the density credits. We're unwilling to, like you say, tie our hands too much for fear of finding out five, 10 years down the road "Oh gosh, now we can't do X, Y and Z".

- First Generation Farmers and Ranchers³

That's always been one of my concerns with conservation easements if you get locked into something, number one if you're limiting yourself to say like timber production, who's to say that you're not going to get regulated out of existence in five years which has always been one of our big concerns. You have so many regulatory constraints already that it's becoming more and more marginal. The value of timber so you know you might have to turn to your land for some other potential income source and if you're going to continue

³ See table 3 & 4 for explanation about the respondents for this interview

to live on it and keep it, that being said, what's that going to look like? And I've pointed out to people in the past that if my great grandfather back in 1913 had decided to do something like a conservation easement on our home ranch, he would have not a clue what he was planning for or what the pressures would be or the public perceptions of whatever it was he thought was fine then are going to be in 100 years. He might have made a horrible mistake in limiting what he was going to do and assuming that he was going to continue to make a living off of his little herd of seven cows and six pigs and 40 hens.

-Third Generation Forester

Two of the most well-informed landowners I spoke with were hesitant to commit to a perpetual agreement. Both would have been interested in receiving some sort of financial benefit, similar to the Williamson Act⁴, but perhaps a bit more stable.

Well one thing is I do think that right now what the current status of regulatory oversight and constraints that are placed on private property, a lot of private property land owners are providing benefits to the public as a whole and not getting paid for them. So I do think that there needs to be incentives or something that kind of recognizes that and I know people talked about public trust benefits and all these things but I haven't seen necessarily other than the Williamson Act, haven't seen too much along those lines occur. I think there needs to continue to be some sort of recognition of that and it ought to be - I've always thought somebody ought to do some research on constructing something other than the current kind of in perpetuity easement. Maybe it's almost like a long term conservation lease where you know, you would go to the landowner and say hey, we recognize that this land could be subdivided, maybe not now but we're banking that in ten years regulations could change and it could be subdivided.

– Third Generation Forester

One landowner correctly pointed out that with the perpetual nature of easements, landowners have to consider that they are not only committing to abiding by the rules forever, that they are linked to an organization forever:

One of the issues also with conservation easements I think is you have to have a lot of trust in whoever is holding the easement. The way some easements are constructed, there's a lot of room there for interpretation. If you got in that contentious situation, you're married to that organization and these organizations, they change all the time. They get a new executive director [who] can completely change the complexion of their organization or maybe they get three new board members and take it in a totally different

⁴ See the footnote on Page 12 for definition of Williamson Act

direction and where you once had a friendly situation it's a really hostile type situation and I think that's a concern.

-Third Generation Forester

On the other hand, some interviewees thought that the 'forever' quality of the conservation easement was a benefit, as it demands preservation indefinitely. The following quote comes from a rancher who depends on the income from the cattle on her property but has other sources of income as well:

Oh it absolutely restricts what you can do with the property but it also absolutely protects it for future generations. So communities tend to decide and I think landowners need to decide for themselves what value is open space and having that kind of protection. It is personal choice. There's no question about that.

-First Generation Rancher

Factors Impacting Attitudes about Conservation Easements

As the literature indicates, many factors influence landowners' attitudes about conservation easements. These interviews offer a few generalizations, although the specifics vary greatly from landowner to landowner.

- ***Landowners are heavily influenced by what their peers think of conservation easements and by the experiences of people they trust in the community, particularly with regard to the specific people and agencies involved with easement deals.***

Not surprisingly, landowners listen very carefully to the experiences of their local community when it comes to formulating opinions and attitudes about conservation easements and the agencies that provide them. This is certainly a double edged sword, as both good experiences and bad experiences can be kept alive in a community. Often the actions of one employee or representative will be projected onto the entire agency. Over the course of his time as a landowner, one farmer had dealings with local agencies several times, and generally felt satisfied with them:

I told them my concerns, alignment issues that didn't really fit, and I got to say that both the Coastal Conservancy and Midpeninsula were willing to work with me and they were very flexible and I'm very happy with the outcome.

-Second Generation Farmer

In another instance, a farmer really seemed to feel that the local land trust (POST) had done his family and the community at large a service by helping out during a potential development of family land:

With me, you have a person who's very happy with POST. If you go back in my family's history, we owned a farm here in Half Moon Bay. We didn't own the land, my father started farming there in 1949 and he rented it from an old-time landowner that was an agriculture guy. He in turn sold it to a developer and they started plans back in the 1960s to develop the whole property. They were pretty respectful of my father, the first people that came in. They said, yeah, you could farm here but be aware in about three or four years you're going to be out. So as I grew up I always loved going to the farm but I never really felt that bond because I thought we had one foot out the door all the time. There was some zoning laws that changed, then Prop 20⁵. I think it's the one where they salvaged the coastal commission and all that and that slowed all the development down here on the coast side. If that didn't pass we would've probably been out. We hung in there, and then another group of people started talking about building golf courses on it. Less respectful, more corporate. I remember one time the local newspaper did an article about my parents, the family farm and all this and my father got called in to the landlord and said we don't want to see you again in the paper here. We're very upset that you did this because you're going to be out of here. And we don't want you having any good PR basically. That really upset him and pissed him off and it pissed me off. He felt like what am I? It's deep inside of us to want to own some land. We didn't want to be pushed around. Peninsula Open Space Trust came in and respected what we were doing with the land, they respected how we managed the property over the years. It was a really nice experience for us and they ended up acquiring the property there that we were on since 1949. We still lease that property from them today. So I feel we survived it and I still feel like we're there for the long term now, they're going to work with us.

-Second Generation Farmer

Other landowners, however, had a few negative things to say. For example, one landowner who was actively trying to decide whether or not to add an easement had asked for opinions from her local ranching community and heard disappointing news:

⁵ Proposition 20 was passed in 1972 by California voters and established the California Coastal Commission which is charged with oversight and regulating development within the coastal zone, an area ranging from several hundred feet from the ocean to several miles.

Respondent: Unfortunately the only ones I've talked to were the ones who've had negative things to say.

Interviewer: And that's okay. At this point I'm really interested in hearing all perspectives. So could you share with me some of their negative thoughts?

Respondent: Mainly trespassing and not being careful to take care of the property if they're going through it and that kind of thing and kind of even, [they've been] trying to discourage me from even thinking about it.

-Third Generation Landowner

Sometimes these negative opinions are based on one meeting or interaction with an agency that can provide easements. It seems that one negative experience can leave the landowner apprehensive for a significant amount of time:

Well I remember at one meeting we had, this is years ago, it was an Ag workshop meeting was held over at the fairgrounds and I was on the table offered. And she came up right and said, she said 'We are not in the business of supporting Ag. We are land conservation and we tie land up for non-development. And we don't support Ag'.

-Third Generation Farmer

And it's very often the tool of overzealous advocates of Open Space and other organizations that want to take ... that are still sort of militant about taking over land rights, like there's nobody else that can manage it like they can.

-Second Generation Forester

So I think everybody goes into it well intended. I just don't think everybody is willing to negotiate and find middle ground and I think that is the biggest decision. And I think only - I guess not necessarily the power side of it because of the open space movement in San Mateo County, I think there's a little bit of an attitude that they kind of muscle their way a little bit. So obviously, everybody else takes a step back.

-Second Generation Rancher

The last example highlights a theme that several interviews touched on – that there is an Open Space “movement” in San Mateo County and that farmers have developed an ‘us-versus-them’ impression of it. Some landowners who did not have negative experiences of their own could offer insight into the attitudes of others in their community:

Respondent 1: Well I think at least some of the folks who, you know, talk to us, part of it is just this classic stubborn ...

Respondent 2: "The Government won't tell me what to do".

Respondent 1: Exactly.

Respondent 2: Even though in this case it's voluntary, and it's also beneficial financially. But no, it's just been the kind of restriction, "No way, I'm my own boss, nobody puts a restriction on my land."

Respondent 1: And I think there are other people who ... you know POST has done a great job on some properties, and other properties not as good a job. And that's probably true for Midpen too. And I think in the first couple of years I remember reading about some properties that the community said the organizations had mismanaged. That their stewardship was not good, that they did some cutting they shouldn't do. Or they did some, you know they did some stuff that bothered people. And you know Midpen's in a very different situation, because they're obligated to talk to the public in a way that POST isn't, because they're receiving public funds. But I think for some people it wasn't just the, "I don't want the Government on my property". But rather, "I'm not that confident that the stewardship of those organizations is good".

Respondent 1: But it's just, you know, even if it's not the Government it's just, "I don't want anyone else telling me what to do." And I think there's also, at least with some of the people that we've met, this kind of they identify POST and Midpen ...

Respondent 2: As Liberals.

Respondent 1: As Liberals and this kind of ivy tower, intellectual. There's this anti-intellectualism.

Respondent 2: Environmentalists.

Respondent 1: Yeah they don't ranch, they don't farm, they haven't got their, you know, boots on the ground. They don't know anything about land, and therefore how can they be stewards if they're just a bunch of college kids. There's that kind of rhetoric that floats around, so I think it's a mix of a lot of things. Control that ...

Respondent 2: Yeah and I can imagine the longer land has been in their possession, or a family even, and they've managed so far. I mean why look at, you know, "If it ain't broken, don't fix it".

- First Generation Farmers and Ranchers

In a similar vein, another landowner talked about landowners who were afraid of the overreaching hand of government, saying:

I don't have a handle on it but I've been led to believe that somehow people think it's more coercive than it is, that somehow it's a bad thing and maybe it's the big green trucks and people in green uniforms. It's hard today but some... I think people get nervous about anybody telling them what to do. It's American, part of our heritage and there's a piece of that, but it looks to me like it's a fairly voluntary thing.

-First Generation Rancher

One landowner had a strong negative view of how Midpeninsula Regional Open Space District manages their land, explaining that the forestry practices and economics carried out by the District are worrisome:

They don't have the money, they don't have the resources, they don't have the political will and harvesting timber for profit is still like the third rail, they can't touch it.

-Third Generation Forester

Landowners who have been intimately involved with rural issues in San Mateo County over the years provided specific comments about how the open space agencies have changed and how well they connect with the rural community at large. One of the community leaders in the farming community along the coast thought that a deep-seated history of confrontation and tension was creating an atmosphere of distrust:

I think it's skepticism.... Soon as you get somebody that's going to put fear in your heart, you're going to close the door and you're not going to move forward. Again, going back to the farming thing, that was 30 years of almost, not disallowing but almost not allowing any farming. The mentality has changed a little bit which is going in the right direction to negotiate and allow the farmer to use that land and you wouldn't have to go anywhere to buy produce if there was enough productive land here. If I would take one thing out of all the issues, I would say it was the lack of understanding and the lack of trust.

-Third Generation Farmer

Probably more on the negative side than on the positive but my position right now, I'm not real positive but I'm kind of neutral. I used to be negative, but then working with them and seeing them change and listen to us on the Ag community. I like the people that they send to the meetings and I trust them. I like [Real Properties Manager, MROSD] a lot. He has been put on a hot seat in some of our meetings and poor guy, you could see the lump get in this sort of but he is just, I really like him.

-Second Generation Farmer

Although there may be a general mistrust of the large agencies that oversee open space, there is also room for exceptions and adjustments. In one case, a landowner had previously had a very poor experience with a representative from the Golden Gate National Recreation Area (GGNRA).

He was concerned about being able to trust what these large agencies say and the actions they take. Did they truly represent what the people want, and even if they have good intentions, are they able to follow through and make their plans happen? Such concerns, common among those interviewed, were articulated by one interviewee:

I got a person who was more motivated and talked about open space and wasn't concerned about access and I kind of feel like the downside of the whole thing is that the information is not communicated well and their image - it might be a great image to somebody who's throwing on a pack and hiking up to an area, somebody that can bike up to an area, but for me? I don't do that. I'm in my sixties and there's limited access available to somebody who wants to enjoy those places. So I think the image is not a good one. I think the promises have not been kept...

-First Generation Rancher

- ***Landowners who have arranged for an easement generally strongly value natural resource protection, rural lifestyles, and open space***

This point is demonstrated by comparing the stated reasons and motivations for those landowners who have decided on their own to adopt an easement with landowners who have not. Although there were often financial reasons that sparked a conversation, the landowners seem to have a strong desire to defend natural resources, rural lifestyles, and open space in general. All landowners who indicated during the interview that they “strongly” or “very strongly” valued natural resource protection, rural lifestyles, and open space, had a conservation easement. Not all had adopted it themselves; some had purchased land with an easement already in effect.

- ***Concerns about additional restrictions or nuisances encountered with the addition of a conservation easement are common***

Several landowners had concerns about the ‘hassle factor’ so often referenced in the literature. This ‘hassle factor’ concept appears in the literature as the general added stress and work that comes from adopting an easement. These issues are not critical to land operations or management, but when added together can be quite troublesome. Examples of ‘hassle factors’ are gates being left open by monitors or the public, phone calls and meetings with land trust staff, or having to clean up areas of a property. These landowners are either struggling to run a semi-profitable business or are looking for a very simple lifestyle, and these small demands posed by

additional regulations can seem quite serious to them. Of the landowners who raised issues about ‘hassle factors’, some had come to terms with the extra work imposed by their easements. For example,

Sometimes there's a minor issue here or there. They come out and monitor the property. They find maybe there was a piece of equipment or something in a place they didn't think was right and they'll ask me why it's there. Usually just an explanation will satisfy them. A couple of times I've rented land to people, what I thought was a low impact use - one time really, they had some questions about it, came out. We talked it over. Actually it's a little [recreational use] field out here and they ended up okaying it. They weren't crazy for it but they okayed it.

-Second Generation Farmer

I have to say sure we were reading through the easement and there were issues in there, you know - can I live with this? Some of the restrictions, one was no hunting on the property. That caused me pause, everything is legal and done right I thought that seemed like it went further than what they were trying to accomplish.

-Second Generation Farmer

I guess when you've got - well let's take me for example, where my cattle graze. The last thing you want is for somebody to come up and say oh by the way, your cattle are knocking our fences down. They were on our conservation easement so we want you to put a buffer between the conservation easement and your property. To wind up in a battle over that, I think that's the last thing that any property owner needs.

-Second Generation Rancher

Though these ‘hassle factors’ are rarely reason enough to not adopt an easement, when taken in sum they can sway a landowners opinions away from working with a land trust. However, in many cases these factors were acknowledged but were either overcome or overlooked:

I got to say all in all, it's been a very positive experience and I'm very - as far as we've gone so far, I think they've been very willing to listen to any concerns I've had about issues and we've always been able to work through any issues. Not saying that there's been any major issues but they've been more than willing to work with me and I like the people there.

-Second Generation Farmer

That was a concern I heard from other land owners too that the monitoring team wasn't professional, had biases. It's never been my personal concern. I've always had positive experiences of the land monitors. I haven't had any problems personally with land monitors. I've heard other people that have had concerns about it.

-Second Generation Farmer

In this last example, the landowner was generally happy with his experience but had heard some concerns about monitoring that gave him pause about any future easements.

One of the most common fears about future issues is that conservation easements require public access be maintained and respected. In the following two quotes, the landowners are discussing public access, and both people eventually connect the concept of public access back to the general open space movement in San Mateo County and the agencies that provide it:

Respondent 1: Yeah I think the only thing that I'm concerned about, and I don't know that POST would be interested in this, in this property as public access. On the one hand I value it, and I like people being able to access land. But people are really stupid, and if you've got an ag operation and you've got people walking through your property, you could have problems. It's just the classic, you know, the idiot who reads the sign and doesn't close the gate, that kind of thing. Now with this particular property, given that we're bounded by ...

Respondent 2: Other private properties.

Respondent 1: Other private property, who I don't think in 1,000 years would have an easement. You know most of our neighbors are ... "POST and Midpen can burn in hell" old-timers.

- First Generation Farmers and Ranchers

I'd be concerned, going back to the trail coming from the skyline to the coast⁶ you have to be concerned - is it going to be open to the public, who's going to be there, is it going to be accessible at night? You have a certain amount of privacy, a certain amount of security and then you kind of open that up and you wonder what it's going to do. Mine is a little removed but I can see other property owners out there having that issue. I really personally don't think that there's been really enough consideration given to the general public on access. I think really there's been a lot of land purchased, a lot of land bought, a lot of land brought up vacant. Not that you had access to it before because it was private and farmed but now that it's open there's limited access. There's just no access. There's no conservation easement there, very limited access.

-First Generation Rancher

Public access concerns are quite common among landowners in general, with worries about trespassing and potential litigation weighing heavily on day-to-day operations. This is heightened with the concept of easements, as they can be written to allow or even encourage public use. Furthermore, as demonstrated by the quote above, one of the many benefits that rural landowners enjoy is a certain level of privacy. Encouraging public access directly threatens this. Conservation easements do not necessitate public recreational access at all – there is only a requirement to allow monitoring by an agency representative on a very limited basis – but this is a subject of common confusion, as the following quote illustrates:

I think public access - I mean that comes with huge potential costs and risks. I've been – I've had opportunity a little bit to watch these conservation organizations, there's a group of them that have just purchased a piece of property next door to our land and they are trying to construct an easement right now for that property. It would come with a lot of power to the easement holder and it also grants them fairly wide use for research, restoration projects so you know in-stream wood projects and maybe road demolition projects, all this stuff. Allowing third party researchers to go out, they're taking funders out on field trips and all this stuff but then when you read the language in the easement that they drafted, they assume no responsibility for any of that so if they're out there doing some sort of stream project and they flip their excavator over in the creek and then you know, dump hydraulic oil into the creek and there's a tank of fish, it's not them that is on the hook. It's the person, the grantor or the landowner that has the responsibility for it and to me, that was a big red flag. I told them this is not going to work, I don't think. How are you going to sell this land to somebody? I mean, maybe somebody would buy it that way but it made me think twice.

-First Generation Rancher

⁶ There is an effort among the land conservation groups on the San Francisco Peninsula to establish a trail that would connect Skyline Blvd (Highway 35) to the ocean. As it currently exists, hikers, bikers, and equestrians can only make this trip by utilizing public roads in combination with recreational trails.

In this case, it seems the landowner recognizes that having an easement does not necessitate having public access, although that is frequently part of the contract. Other landowners thought that it was part of the package – that if you have a conservation easement, you would have the public on your land:

When it comes to my land...I don't know whether I would like... people traipsing all over. I asked the man that lives there now because he has cattle too and he also takes care of the cattle for this boss, but...he doesn't like the idea of people going through and leaving gates open and that kind of thing and that's what they've heard.

-Third Generation Rancher

▪ ***Educational levels do not seem to have an impact on the attitudes or awareness of conservation easements***

Among the 12 interviewees, education levels varied dramatically, from High School Graduate to Advanced Degree. There was no reliable association between understanding or attitudes about conservation easements and education levels, just as has been the case in other studies. I was particularly interested in this point because San Mateo County has an exceptionally high level of education, high educational levels are associated with higher incomes, and the literature indicates that income levels should impact willingness to participate in conservation programs (Raymond & Brown 2011). I was curious whether formal education had a recognizable impact on attitudes. This did not appear to be the case, as some landowners with relatively little formal education had a strong grasp of the concepts and others with much more education understood little about conservation easements.

Motivation to Adopt Conservation Easements

The literature is clear about what prompts landowners to engage in a conservation easement. One of the main goals of this research was to find out if those reasons held up in San Mateo County. I was also interested in trying to determine what repels people from conservation easements. The literature is less clear about this. My results suggest that the motivations are similar to those in other areas in the United States. The prime motivations are both financial and values based, and the concerns are mostly connected to fears of regulation and additional hassle. The answer to

why people do not take interest in conservation easement is a bit less clear, but the participants did provide a basic rationale for their lack of interest.

▪ ***Both financial need and a desire to protect land are common motivations for entering into a conservation easement***

Of the landowners who were either actively engaged in a conservation easement or who thought they would be interested in one in the future, there was a pretty even split between those who were interested for the financial reasons, and those who were motivated by a desire to protect the land. The protection they seek ranges from broad environmental goals such as wildlife or water quality protection to more specific goals such as continued use of the land for farming or other agricultural purposes. This desire to protect the land is often associated with a connection to the land, a sense of place. And, of course, occasionally these goals overlap.

I mean our primary goal is to hold it for generations.... We want a long term sustainable forest, both aesthetically and commercially so.

-First Generation Farmer and Rancher

Well we want to ... I mean we're thinking long term. I mean we're ... and I was going to say to bring back natives, or restore the land. And then there's always the question of course, "How far back do you go?" Before the Indians, or after the Indians or whatever, ice ages? But at any rate right now it's just too much thought, too many invasives, so it's at least to get on top of that to improve the quality of the land. We're definitely into doing all that.

-First Generation Farmer and Rancher

One well-informed interviewee summed up the attitudes regarding financial impacts very simply:

I would guess there's a big spread in people's opinions but I think there is kind of a sense of concern or mistrust at times. What am I going to do if in fact, I can't farm anymore or I can't harvest trees anymore? So I think that there is some level of concern depending on the individuals.... I would guess there's either people that have a lot of money that are fine with the idea of kind of locking it up and it's not an issue for them. There's probably people on the other end of the spectrum that really want to hang on their ground so badly that they're willing to do whatever it takes and that may be the last ditch effort. Then there's probably a bunch of people in the middle that are all standing there going, "I don't know."

-Third Generation Forester

As that landowner says, for some landowners generating their primary income from the land, a conservation easement was a method of continuing their lifestyle. Purchasing land that already has a conservation easement in place means the land costs less and is therefore more accessible to those with fewer financial resources. One farmer was particularly interested in the financial value of the easement, as he felt it ultimately saved his family farm. In his community, the people that had decided to adopt an easement had done so primarily out of financial need:

I'd say that everybody that's bought land with easements has bought it for economic reasons like we had. It was the only thing that worked here on the coast side to allow the type of farming we do, make it affordable to purchase land.

- Second Generation Farmer

In other cases, the desire to be economical with land purchases is strong, especially when coupled with some of the other benefits of purchasing land with a conservation easement in place:

Well, the biggest part for my family and for me was that it made the land on the coast side affordable. We could purchase the land and use it for agriculture which was never available to us before. It was always out of reach economically to try to purchase land and be able to justify it with the salary you made from agriculture. The concessions we had to make to buy the land, the restrictions and all justify the price and on the other end of it, you're restricted on what you can do with it, who you can sell it to, the potential buyers who come to buy it. That's it.

-Second Generation Farmer

Well, I guess you call it financial. It's not a need thing, but my family is mostly interested in other projects. I have a [philanthropic] foundation and my son and daughter-in-law have a foundation and if we get funds from a property it increases [dollar] amounts in the foundations... People have suggested, why wouldn't we donate to the conservation groups? Well, we are more interested in other good things... So we have our own interest and people value this land more than we value it, we are free to do other things.

-Second Generation Landowner, Primarily Recreational Use

Besides simple acquisition of funds, conservation easements can help with passing land from one generation to another, assisting both with financial arrangements and also with family dynamics:

Yeah you know the pros are money up front to be used to either pay debt, or improve the property or whatnot. Or do something else with. The cons I think are, and then, and the pros also are I think that it can sort of internally in a multiple family ownership, or multiple generation ownership, it's a way to eliminate flexibility. Which can be a good thing, because it can eliminate arguments. You know certainly one of the things that we see is, or we will face, is we will have out of, you know, there's 12 people in what will the third generation. And some of that many already in what will be the fourth generation, and not all those people will live in close proximity to, you know, the property. And at some point they'll want that money, or what they see as their inheritance, or their heritage, to go buy a house or do something else with. And so reducing that value, you know I think it's a good option to either buy those people out. Or to do it not for an advance, but you so significantly reduce the value of the property that, you know, that there is no more conversation about certain members wanting the cash value 'cause that cash value is then sold.

- Second Generation Landowner, Primarily Recreational Use

I think one of the books I read was leaving the land and fighting something out for inheritance, for children that were coming along that probably weren't going to be able to keep it. I think there's value to move in that direction and say we keep it, here's a place, I'm gone, you ever want to bail it's up to you guys but at least it's here. You're not going to default for any reason.

-First Generation Rancher

In this last two examples, the interviewee mentioned financial benefits but then began talking about the side effects of adopting an easement for monetary gain – it reduces the options on the table, and that can alleviate a significant amount of stress or potential for fighting in a family.

- ***Protecting land is commonly done both for the community at large, as well as for children or grandchildren.***

Although a few of the landowners I spoke with did not seem to have much regard for natural processes or conservation as a concept, most did. There seems to be a strong belief that conserving land is important, the debate is about methods. As one landowner put it,

You'd have to be a little bit off your rocker not to be in favor of conservation today. It's kind of like watching a guy light up a cigarette. I don't know if you smoke or not but I look at it and say Jesus Christ, with all that information out there, why is that guy lighting up? It's kind of the same thing. With all that information that's out there, all the knowledge that can be gained, you'd have to be crazy not to. So it's almost like we're all in the same boat. It's just how do you get the crew together so we're all rowing in the same direction.

– First Generation Rancher

Many landowners discussed a desire to pass their land to their children, and acknowledged that a conservation easement might make this transition easier, more efficient, or even possible at all. Even for those landowners without children, this is concept rings true:

In particular I think it saved us ... if we had kids, we might feel very differently. Because of these 50 years that you just brought up, but since we don't have any, you know, we want the best for the land. That's what matters to us, after it's not what our kids will do with it, or could do with it, and all that.

- First Generation Farmer and Rancher

Yes, it is – I want it to be – my kid's heritage you know. They love the land and I want to see it stay in private ownership and stay the way it is. I support them being able to put their homes here and live here themselves but I don't want to see 20 homes here.

- Second Generation Farmer

As mentioned earlier, some landowners had concerns about how conservation easements impact the tax roll. Landowners were generally able to separate their opinions regarding easements on their own land from opinions about the public perception of conservation easements in general. One of the most common concerns in the literature regarding the public's perspective is that adding a conservation easement to a piece of property lowers tax income for local government.

One landowner was particularly vocal about this concern, as he discussed his attitudes about conservation easements in general:

I would say they're generally negative, and criticize because they take, like private owners, because they take land off of the tax roll. It's not, you know, it's hard enough for the counties, right?

-Third Generation Forester

- ***People who were strongly disinterested in adopting easements were typically somewhat opposed to the agencies that provide them, and did not have any particular financial need. They were generally interested in environmental land management issues, but not to the same degree as landowners with an easement.***

The landowners who had a strong understanding of conservation easements but still did not believe them to be a valuable tool for their own property were certainly a minority in this study. However, of the few who fell into this category the reasons were comparatively simple – the additional restrictions were not worth the money or protection offered. In one case, the financial loss entailed was clearly the most important barrier:

In the past, you know, the ranch has been used as an asset on people's financial statements, not to put a loan against it but to use it as a significant part of their net worth. And, you know, if you have one, you know, if you sell a conservation easement to it, you're selling a lot of the worth. And you have, there are, yeah there are good reasons to do that. And there are ... My dad in particular, who has since passed away, you know carried it on his net worth. Or financial estate net which was important for, as a real estate developer, to get loans to do speculative developments. And take a property from \$X million to 10% of it, then ... Even though you'd never, you know you'd never sell it or anything you just ... anyway, that's one, one reason yeah.

- Second Generation Landowner, Primarily Recreational Use

In another case, the landowner strongly felt he would do a much better job managing the landscape than any open space agency or land trust would ever be able to. He felt that the management practices on his land were strong, and that adding another layer of regulatory limitations might hamper these efforts. The financial incentives were not great enough to warrant

an investigation. He was satisfied with his situation, but also had some serious issues with local options for conservation easement agreements:

Well, we don't have any need for it. We often hear people complain about the regulatory environment in California. But there are so many great programs, and ways to support the piece of land in the California forest which I mentioned earlier, the NP, MP non-industrial timber management plan. So most of my forest is governed by that, right? ...which is very helpful in terms of managing our long term timber management plan. And so we would have no ... we see no benefit from a conservation easement. Where I think that conservation easements get unfairly ... well people get unfairly baited with them. It's where a private landowner, maybe somebody that doesn't have the will at all or the interest to manage the forest, chooses only the tax benefits of that. Or, for instance, I know a guy that just added 100 acres to 200 acres that he already had, in order to finance that purchase. He did some kind of modified conservation where he sold the development rights over the place, and take the rest of the land with him, right? So basically he was trying to make a more of an open space bubble around his other land, and that's not just within the use of it, you know? When in fact with the Open Space land in different areas, they're more controlling of the land, open land, that we have. Not because they don't love it, not because they don't have love and attention, but because they're dealing with, you know, competing factions. They're under-funded, they never imagined the extent of human erosion on their land by opening up the gates. I mean they're problem areas, you know. I have ... my land is surrounded by open space. Land that is awful forest because it hasn't been properly forest managed. It hasn't been fanned and it hasn't ... a lot things..."

-Third Generation Forester

CHAPTER 8: Conclusion

This research yielded several common themes, each of which can be viewed as a continuum. The variety of socioeconomic and land use needs of individual landowners makes it impossible to get a simple summary of how they feel about conservation easements. However, over the course of this research it became clear that certain attitudes and motivations can be grouped together to form a broader picture of this community. Based on these interviews, it would appear that in San Mateo County much of the information a landowner has about conservation easements comes from family and neighbors. Though this is a common way for anyone to become informed on a topic, it seems that with conservation easements a strongly negative experience can permeate an entire community of people. Furthermore, misconceptions about easements are common, and this can lead to negative attitudes based on the misinformation. More often it leaves landowners with a neutral feeling, when they would perhaps be more inclined towards a more positive feeling if they had a greater knowledge base. When landowners have chosen to go outside of their normal networks for information (i.e. discussed their options with a land trust or public agency) they tend to have a more positive attitude towards easements, and seem to be more interested in adopting one. Anecdotal incidents, however, continue to cloud landowners' perceptions of easements. Of those landowners who do decide to adopt an easement, their financial situation is frequently a critical factor in their motivations. Financial need is not, however, a requirement for landowners in San Mateo County; many have decided to adopt an easement simply for the protection of their land.

For conservation easements to be successful, a healthy relationship between landowner and easement holder must exist. This requires a blend of collaboration, clear communication, and respect for both sides. In one study, the staff members of several land trusts used the terms “marriage” and “partnership” to describe the relationship between landowner and easement holder (Rissman & Sayre 2011). This implies that if the relationship sours the easement will suffer. In rural San Mateo County there are some hard feelings on the part of landowners regarding how the available local easement holders have treated the public and their own land in the past and this has caused serious doubts about working with them. The degree to which an easement successfully protects and promotes conservation values is largely dependent on this working relationship.

The results of this study indicate that agencies in San Mateo County would be wise to reach out to rural landowners and attempt to build some bridges to enhance the potential for these partnerships. Many landowners simply do not have a strong understanding of what conservation easements are, and what they can and cannot do. Unfortunately, any negative interactions with these agencies tend to persist in the collective opinions of the community, hampering any interest landowners might have in working with these agencies. The personalities and attitudes presented by the agencies have a large impact on whether landowners are interested in working with them. The networks that San Mateo County landowners use to build a knowledge bank and understand land management issues are mostly family and neighbors, although some do reach out to local government programs. Making a serious effort to access these networks would likely yield a more positive response.

Any discussions about the effectiveness or future of conservation easements must acknowledge the issue of perpetuity. This study highlighted several landowners who had serious concerns about the “forever” nature of conservation easements, and drew from recent academic literature to explain how risky the entire concept of conservation easements is as a result. Part of the appeal to conservationists is that whatever land preservation or conservation occurs with easements is permanent. To remove perpetuity entirely would severely weaken the program. Instead of eliminating this aspect, much of the legal literature suggests adding a greater level of flexibility to easement language. Many of the landowners I spoke with would likely be comforted by additional flexibility, and thus would appreciate such a response. In California, the Williamson Act provides an answer for those in the agricultural community, though other states may or may not have such a program. For landowners who do not primarily use their land for agriculture, however, the Williamson Act does not provide such relief.

Richard Brewer includes a discussion in his 2003 book *Conservancy: The Land Trust Movement in America* about the need for environmental activists to stay positive and keep moving forward. So, as a final note, there is an element of hope that permeates the remarks of some of the ‘old timers’ I spoke with that I would like to share. This was somewhat surprising to me, as these landowners are often characterized as crotchety old men, generally grumpy with the new element, and just wishing for the good old days. I went to one meeting with a group of ranchers and environmentalists discussing native grassland restoration and the impact of grazing. This group

called themselves the “Boots and Birkenstocks Gang,”⁷ referring to the traditional footwear of each group. These two groups have learned to work together, and though there is a certain tension between them in San Mateo County, ultimately most of the landowners I spoke with were generally supportive of the goals of the open space movement and of conservation, though some did take issue with the certain methods. In a nice summary, one old time rancher offered his thoughts on the next generation of conservationists:

I'm hoping that maybe this [research] is the first step to just a whole different generation of thought. Okay now you've got the land, you're in control of the land. You can do some of the conservation easements; you can do some of the things. You can nurture these landowners to come into the loop to say this is a benefit for all of California. This is a benefit for all of San Mateo County. It's just ways to present it. I think for the last 20 years it's been presented wrong... Nobody wants this place to turn into Burlingame, you know?

As a member of this ‘different’ generation, I take some pride in knowing that some of the old timers have faith in the next generation of conservationists and think we can make the conservation movement stronger and help protect local land and resources.

⁷ Where the title of this paper originates.

References

- Barrett, T., & Livermore, P. (1983). *The Conservation Easement in California*. Covelo, CA: Island Press.
- Bernstein, J., & Mitchell, B. (2005). Land trusts, private reserves and conservation easements in the United States. *Parks*, 15(2), 48-60.
- Brain, R. (2008). *Predicting Engagement in a Conservation Easement Agreement*.
- Brewer, R. (2003). *Conservancy: The Land Trust Movement in America*. Lebanon, NH: University Press of New England.
- Brunson, M., & Huntsinger, L. (2008, March). Ranching as a Conservation Strategy: Can Old Ranchers Save the New West? *Rangeland Ecology & Management*, 137-147.
- CPAD. (2012, December 21). "Protected areas data from Calif. Protected Areas Database (www.calands.org)". CA: GreenInfo Network.
- Creswell, J. (2007). *Qualitative Inquiry & Research Design*. Thousand Oaks, CA: SAGE Publications, Inc.
- Dillman, D., Smyth, J., & Christian, L. (2009). *Internet, Mail, and Mixed-Mode Surveys (Third Edition)*. Hoboken, NJ: John Wiley & Sons, Inc.
- Editorial. (1999, August 24). Vineyard Loophole. *The Wall Street Journal*, p. A18.
- Ernst, T. (2008). Characteristics, Motivations, and Management Actions of Landowners Engaged in Private Land Conservation in Larimer County, Colorado. *Natural Areas Journal*, 28(2), 109-120.
- Farmer, J., Chancellor, C., & Fischer, B. (2011). Motivations for Using Conservation Easements as a Land Protection Mechanism: A Mixed Methods Analysis. *Natural Areas Journal*, 31(1), 80-87.
- Farmer, J., Knapp, D., Meretsky, V., Chancellor, C., & Fischer, B. (2011). Motivations Influencing the Adoption of Conservation Easements. *Conservation Biology*, 25(4), 827-834.
- Ferranto, S., Huntsinger, L., Getz, C., Nakamura, G., Stewart, W., Drill, S., et al. (2011, Oct-Dec). Forest and rangeland owners value land for natural amenities and as financial investment. *California Agriculture*, 65(4), 184-191.
- Gustanski, J. A., & Squires, R. H. (2000). *Protecting the Land: Conservation Easements Past, Present, and Future*. Washington, D.C., D.C.: Island Press.

- Holmes, J. (2002). Diversity and Change in Australia's Rangelands: A Post-Productivist Transition with a Difference? *Transactions: Institute of British Geographers*, 27, 362-384.
- Huntsinger, L., & Hopkinson, P. (1996). Viewpoint: Sustaining rangeland landscapes: a social and ecological process. *Journal of Range Management*, 49(2), 167-173.
- Jay, J. (2012). When Perpetual Is Not Forever: The Challenge of Changing Conditions, Amendmen, and Termination of Perpetual Conservation Easements. *Harvard Environmental Law Review*, 36, 1-78.
- Kiesecker, J., Comendant, T., Grandmason, T., Gray, E., Hall, C., Hilsenbeck, R., et al. (2007, April). Conservation easements in context: a quantitative analysis of their use by The Nature Conservancy. *Frontiers in Ecology and the Environment*, 5(3), 125-130.
- Knight, R. (1999, April). Private Lands: The Neglected Geography. *Conservation Biology*, 13(2), 223-224.
- Land Trust Alliance. (2011). *2010 National Land Trust Census Report*. Lincoln Institute of Land Policy.
- Langpap, C. (2003). *Conservation of Endangred Species: Can Incentives Work for Private Landowners*.
- Marshall, A., Hoag, D., & Seidl, A. (2003). *Landowner Expectations and Experiences with Conservation Easements*. Papers from a Conference.
- McGaffin, G., McLeod, D., Bastian, C., Hoag, C., & Hoag, D. (2012). Landowner Preferences for Conservation Easements: Reponses from Two Intermountain States. *Journal of the ASFMRA*, 98-111.
- McLaughlin, N. (2005). Conservation Easements - A Trouble Adolescence. *Journal of Land Resources and Environmental Law*, 26(1), 47-56.
- Merenlender, A., Huntsinger, L., Guthey, G., & Fairfax, S. (2004, February). Land Trusts and Conservation Easements: Who Is Conserving What for Whom? *Conservation Biology*, 18(1), 65-75.
- Midpeninsula Regional Open Space District. (n.d.). Retrieved June 20, 2013, from Midpeninsula Regional Open Space District: <http://openspace.org/>
- Miller, A., Bastian, C., McCloud, D., Keske, C., & Hoag, D. (2011). Factors Impacting Agricultural Landowners' Willingness to Enter into Conservation Easements: A Case Study. *Society and Natural Resources*, 24, 65-74.
- Mir, D., & Dick, K. (2012). Conservation Approaches to Protecting Critical Habitats and Species on Private Property. *Natural Areas Journal*, 32, 190-198.

- Morris, A. (2008). Easing conservation? Conservation easements, public accountability and neoliberalism. *Geoforum*, 39, 1215-1227.
- Mukherjee, M., & Fernandez, L. (2011). Analysis of the Influence of Open Space on Residential Values. *ARE Update*, 14(6), 9-11.
- Newing, H. (2011). *Conducting Research in Conservation*. New York, NY: Routledge.
- Norton, D. (2000, October). Conservation Biology and Private Land: Shifting the Focus. *Conservation Biology*, 14(5), 1221-1223.
- Olmsted, J. (2011). The Butterfly Effect: Conservation Easements, Climate Change, and Invasive Species. *Environmental Affairs*, 38(1), 41-76.
- Peninsula Open Space Trust. (2012). *Protected Lands*. Retrieved August 10, 2013, from Peninsula Open Space Trust: <http://www.openspacetrust.org/whatwesave/index.html>
- Pidot, J. (2005a). *Reinventing Conservation Easements: A Critical Examination and Ideas for Reform*. Lincoln Institute of Land Policy.
- Pidot, J. (2005b, October 16). *The Case for Conservation Easement Reform*. (J. Pidot, Performer) Land Trust Alliance Rally, Madison, WI.
- Pidot, J. (2011). Conservation Easement Reform: As Maine Goes Should the Nation Follow? *Law and Contemporary Problems*, 74(1), 1-27.
- Press, D. (2002). *Saving Open Space: The Politics of Local Preservation in California*. Berkeley and Los Angeles, CA: University of California Press.
- Raymond, C., & Brown, G. (2011). Assessing conservation opportunity on private land: Socio-economic, behavioral, and spatial dimensions. *Journal of Environmental Management*, 92, 2513-2523.
- Resnik, J., Wallace, G., Brunson, M., & Mitchell, J. (2006). Open Spaces, Working Places. *Rangelands*, 28, 4-9.
- Rilla, E. (2002, January - February). Landowners, while pleased with agricultural easements, suggest improvements. *California Agriculture*, 56(1), 21-25.
- Rilla, E., & Sokolow, A. (2000). *California Farmers and Conservation Easements: Motivations, Experiences, and Perceptions in Three Counties*. University of California Agricultural Issues Center.
- Rissman, A., & Merenlender, A. (2008). The Conservation Contributions of Conservation Easements: Analysis of the San Francisco Bay Area Protected Lands Spatial Database. *Ecology and Society*, 13(1).

- Rissman, A., & Sayre, N. (2011). Conservation Outcomes and Social Relations: A Comparative Study of Private Ranchland Conservation Easements. *Society and Natural Resources*, 1-16.
- Rissman, A., Lozier, L., Comendant, T., Kareiva, P., Kiesecker, J., Shaw, M. R., et al. (2007). Conservation Easements: Biodiversity Protection and Private Use. *Conservation Biology*, 21(3), 709-718.
- Rissman, A., Reiner, R., & Merenlender, A. (2007, June). Monitoring Natural Resources on Rangeland Conservation Easements. *Society for Range Management*, 21-26.
- Sayre, N. (2004, November). Viewpoint: The Need for Qualitative Research to Understand Ranch Management. *Journal of Range Management*, 57(6), 668-674.
- Sokolow, A. D., & Bennett, M. (2004). *Conserving Agricultural Land Through Compensation: A Guide for California Landowners*. Agricultural Issues Center, University of California.
- Sokolow, A., Wright, J., Cuir, N. D., & Bennett, M. (2003). *What California Farmland Owners Like and Don't Like about Compensatory Programs for Conservation*. Papers from a Conference.
- State of California. (n.d.). California Civil Code Section 815.
- State of California. (n.d.). *CEQA: The California Environmental Quality Act*. Retrieved September 3, 2013, from California Environmental Resources Evaluation System: <http://ceres.ca.gov/ceqa/>
- Strauss, A., & Corbin, J. (1998). *Basics of Qualitative Research*. Thousand Oaks, CA: SAGE Publications, Inc.
- U.S. Census Bureau. (n.d.). *State & County QuickFacts*. Retrieved December 2, 2012, from United States Census Bureau: <http://quickfacts.census.gov/qfd/index.html>
- U.S. Environmental Protection Agency. (2012, June 5). *National Environmental Policy Act (NEPA)*. Retrieved September 3, 2013, from U.S. Environmental Protection Agency: <http://www.epa.gov/compliance/basics/nepa.html>
- Wallace, G., Theobald, D., Ernst, T., & King, K. (2008). Assessing the Ecological and Social Benefits of Private Land Conservation in Colorado. *Conservation Biology*, 22(2), 284-296.
- Wilcove, D., Bean, M., Bonnie, R., & McMillian, M. (1996). Rebuilding the ark: toward a more effective Endangered Species Act for private land.
- Yuan-Farrell, C., Marvier, M., Press, D., & Kareiva, P. (2005). Conservation Easements as a Conservation Strategy: Is There a Spatial Distribution of Easements? *Natural Areas Journal*, 25(3), 282-289.

Appendix A: Contact Letter

January 23, 2013

Dear _____

I'm a graduate student studying Resource Management and Environmental Planning in the Geography Department at San Francisco State University. Because of my personal connection with rural coastal California, my thesis research focuses on large area landowners in San Mateo County and the land management decisions they make. I am interested in talking with owners of the largest privately owned parcels in San Mateo County about their thoughts on conservation or agricultural easements and the agencies that provide them.



Alex at his home in Western San Mateo County

The parcel connected with this mailing address is one of the largest single parcels in San Mateo County. Because of this your contribution to this study is very meaningful in evaluating the attitudes of San Mateo County's few remaining large-area landowners.

I would very much like to learn your opinions regarding your land and your thoughts regarding easements. This interview would be completely confidential and won't require you to reveal your identity if you do not wish to do so. The interview will take about an hour, and can be done in person, over the telephone or by internet (Skype, WebX, etc.).

I hope you are willing to help me complete my research. Please contact me in one of the following ways:

E-mail: aroa@sfsu.edu

Cell Phone: (707) 291 - 1879

Mailing address:

Alex Roa

Department of Geography and Environmental Studies, HSS 279

San Francisco State University

1600 Holloway Avenue

San Francisco, CA 94132

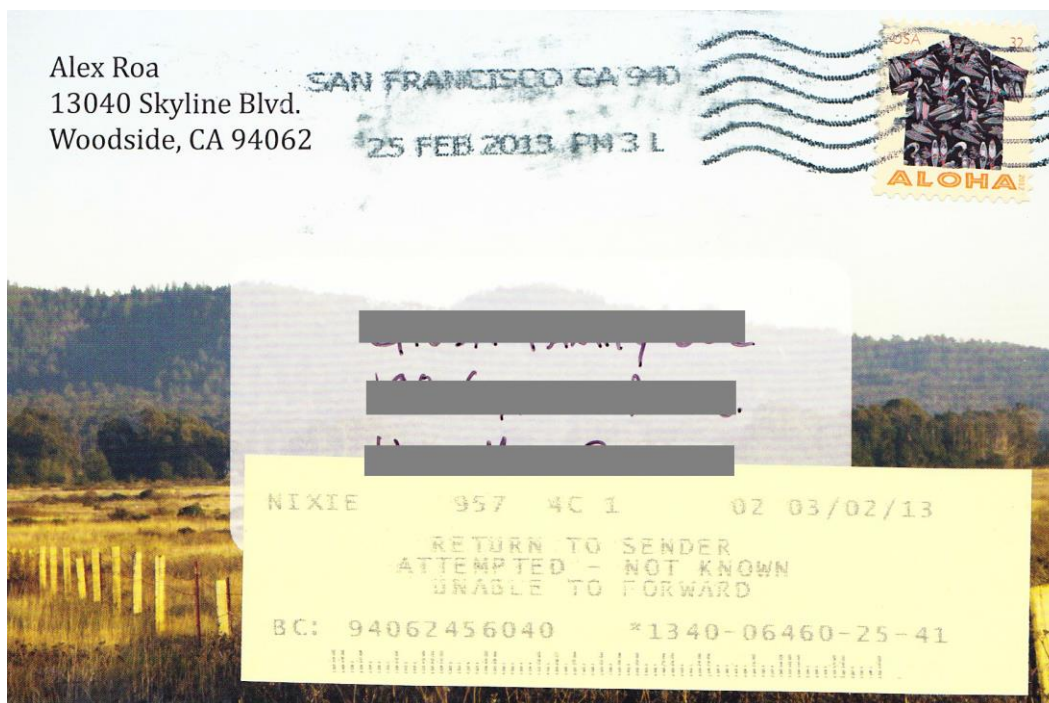
The results from this study will be useful to the academic world, but perhaps more importantly it will serve our local community by increasing the understanding of landowners' wishes and how non-profits and public agencies may or may not have a role in making those wishes a reality. I also hope that it will give you some satisfaction to increase the understanding of how landowners view these sorts of options - not to mention the satisfaction of helping out a student!

Please contact me right away - I am excited to start interviewing San Mateo County landowners' attitudes about this important topic.

Thank you for your consideration,

Alex Roa

Appendix B: Second Contact (Postcard 1)



A few weeks ago, I sent you a letter requesting your assistance completing my Master's thesis research. I haven't heard back from you, but I'm hoping you will still consider helping me.

I'm a graduate student at San Francisco State University studying Geography, focused on Resource Management and Environmental Planning. My research explores how landowners view private property rights, and in particular conservation and/or agricultural easements.

I would greatly like to interview you to hear your opinions regarding your land. This interview is completely confidential, and I will be happy to explain the steps I'll take to protect your identity. I am really interested in hearing all opinions and perspectives, even if you don't think you know much (or anything!) about those topics.

If you would be willing to help me complete my research, please contact me in one of the following ways:

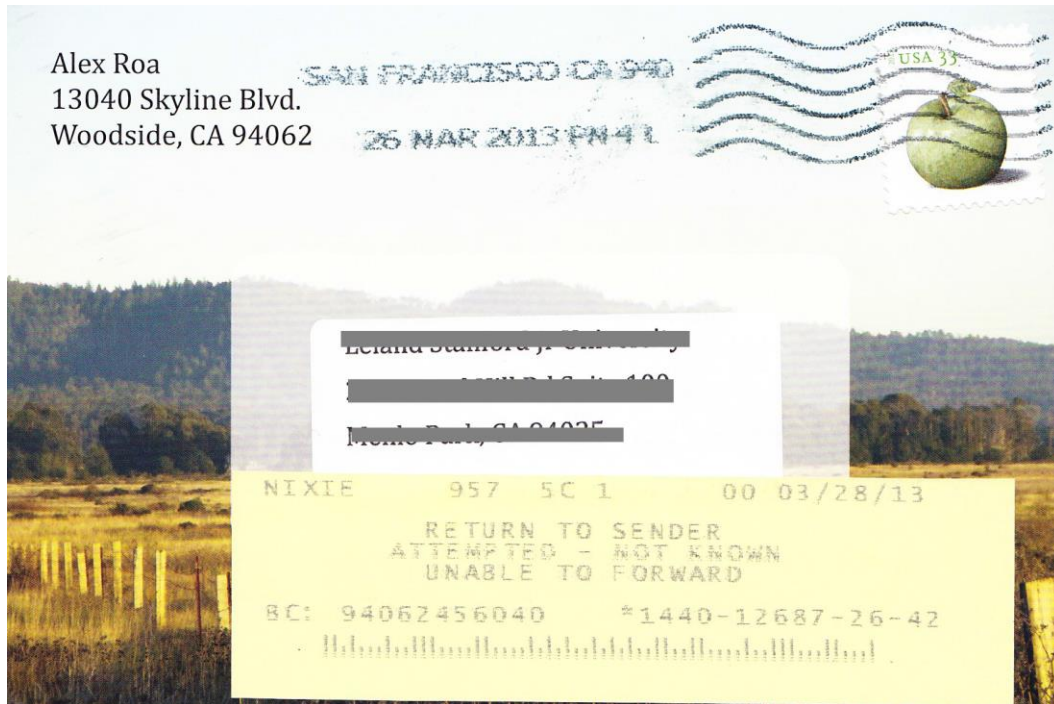
E-mail: aroa@mail.sfsu.edu
Cell Phone: (707) 291 - 1879

Thank you again for your consideration,

Alex Roa

THANKS!

Appendix C: Third Contact (Postcard 2)



A few weeks ago, I sent you a letter requesting your assistance completing my Master's thesis research. I haven't heard back from you, but I'm hoping you will still consider helping me.

I'm a graduate student at San Francisco State University studying Geography, focused on Resource Management and Environmental Planning. My research explores how landowners view private property rights, and in particular conservation and/or agricultural easements.

I would greatly like to interview you to hear your opinions regarding your land. This interview is completely confidential, and I will be happy to explain the steps I'll take to protect your identity. I am really interested in hearing all opinions and perspectives, even if you don't think you know much (or anything!) about those topics.

If you would be willing to help me complete my research, please contact me in one of the following ways:

E-mail: aroa@mail.sfsu.edu
Cell Phone: (707) 291 - 1879

Thank you again for your consideration,

Alex Roa

**This will be the last
time you hear from me.**
Please contact me if you are at all interested.
I am truly interested in all perspectives, and
the research is confidential.
Thanks for your time!

Appendix E: Tabular Results of Coding

Major Themes		Count (Theme	Count (Theme	Total
DEF	Definitions of conservation easements (CE)	23	0	23
CON	Connection to land or place attachment	8	8	16
LND	Land descriptions and uses	11	9	20
MO	Motivation for CE	20	9	29
PAC	Pros and cons of CE	28	9	37
LAT	Land trusts	1	2	3
RES	Guidance and resources for landowners	9	4	13
PEO	Specific people mentioned	3	3	6
OTH	Other conservation practices or tools	1	4	5
LIK	Likert answers	14	0	14
AGE	Specific agencies mentioned	15	16	31
Total:		133	64	197

Sub Tags		Sub-Theme 1	Sub-Theme 2	Sub-Theme 3	Total
CE	Conservation Easement	80	1	0	81
AE	Agricultural Easement	1	13	0	14
MEM	Memories	1	0	1	2
VAL	Values	7	1	0	8
FAM	Familv	6	6	2	14
FIN	Financial or money concern or topic	13	19	4	36
TIM	Time or length of ownership	13	14	6	33
USE	Land uses	13	9	5	27
DES	Descriptions	2	5	0	7
AGR	Agricultural use or topic	3	8	3	14
TMB	Timber use or topic	0	8	2	10
RSD	Residence	0	1	0	1
RNT	Renters or other occupants	3	2	0	5
HAS	Hassle factor	0	7	4	11
STC	Structures or housing	0	0	2	2
STR	Landowner stress	0	0	1	1
IMP	Improve or expand	0	0	1	1
PUB	Public concerns or input	3	5	3	11
MAN	Land management	8	11	10	29
CON	Cons	0	7	7	14
PRO	Pros	0	3	2	5
RGT	Property owner rights	5	1	0	6
NRP	Natural Resource Protection	0	1	0	1
RUR	Rural lifestyle	1	1	0	2
OSP	Open space in community	2	0	1	3
PAT	Personal attachment	2	1	1	4
IDN	Heritage or identity	0	1	1	2
Total:		163	125	56	344

Appendix F: Interview Questions

Introduction Questions

1. How long have you or your family owned the land on/at (insert general location)?
2. Do you or your family own other parcels of land in San Mateo County over 5 acres?
 - a. If yes, for how many years?
3. Is this property your primary residence?
 - a. If so, for how long?
 - b. If not, was it ever? When?

Short Answer Questions

Please rate the statements below using the following scale:

1 – “Strongly disagree”

2 – “Disagree”

3 – “Neither agree nor disagree”

4 – “Agree”

5 – “Strongly agree”

1. My primary income comes from the land I own
2. I am currently burdened by financial stress on a regular basis
3. Landowners have the right to do as they please with the land they own
4. I value natural resource protection
5. I value living a rural lifestyle
6. I value having open space in my community
7. I have a personal attachment to the land I own
8. The land I own is part of my heritage and my identity

Open-ended Interview Questions

1. Please briefly describe the vegetation on your property.
2. Please briefly describe the terrain and topography of your property.
3. Please briefly describe the water sources on your property.
4. What are the main ways you use your land?

5. How do you make decisions regarding the management of your land?
6. Who is involved with making decisions about land management for this property?
 - a. What roles does each of those individuals play?
 - b. How has the way these decisions are made changed over time?
 - c. Who do you look to when you have a question or concern about how to manage your land?
7. Have you heard of the concept of a conservation or agricultural easement?

If no, skip to question 17

If yes, continue to question 8

8. How would you define a conservation easement?
 - a. How did you come to this definition?
9. In general, what do you see as the pros of a conservation easement? What are the cons?
10. Are there particular land uses that work particularly well with conservation easements? How about particular uses that don't?
11. Do you have a conservation easement on some or all of your land at this time?
 - a. If no, move to question 12.
 - b. If yes, who is the conservation easement with and what has your experience been?
 - c. Did you adopt the easement or was it set up before your time?
 - i. If yes, did you sell or donate the easement? Why?
 - ii. If yes, what was the purpose for adding the conservation easement?
 - iii. If yes, what concerns did you have prior to adding the conservation easement? Have they been confirmed or dismissed?
12. If you don't have a conservation easement, would you please explain to me why a conservation easement does not appeal to you at this time?
 - a. Have you ever considered one?
 - b. Under what circumstances could you envision adding one?
 - c. If you would ever consider adopting one, would you be more interested in selling or donating an easement?
 - d. How would a financial incentive, either cash or tax benefits, impact this decision?

13. Without giving specific names, do you personally know anyone who has a conservation easement?
 - a. If yes, what agency is the conservation easement with and how would you characterize the landowner's experience?
 - b. If known, what was the purpose for the landowner adding the conservation easement?
14. How would you describe the overall attitudes about conservation easements for large-area landowners in San Mateo County?
 - a. In your opinion, are there groups of landowners who have the same opinions about conservation easements?
 - b. If so, how would you describe these groups?
15. What agencies are you aware of that provide conservation easement?
 - a. Do you have strong opinions about any of them and why?
16. Can you think of anybody who you think might have opposing opinions about conservation easements in San Mateo County who might be willing to talk with me?
 - a. Would you feel comfortable asking them to contact me or giving me their contact information?
17. There are a few more demographic questions, but we have completed the portion of the interview that relates to land management and conservation easements. Is there anything else that I've missed or that you'd like to share that relates to land management (or conservation easements if they've discussed this), or that you think may be useful to this research?

Wrap-up Short Answer Questions

1. What year were you born?
2. What is your highest level of education?
3. Would you like to be contacted regarding the results of this study?
 - a. If yes, is there a better method to get in touch than the address I used to originally contact you?
4. If you know of other landowners who own more than 250 acres in San Mateo County, would you please encourage them to contact me and complete the same interview at their convenience?

Appendix F: IRB Packet

San Francisco State University

Large-area Private Landowners in San Mateo County, CA: Attitudes and Motivations about Conservation Easements

Researcher's Name: Alexander O. Roa

Department: Geography and Human Environmental Studies

1. STUDY AIM, BACKGROUND AND DESIGN

a. State the research question(s) concisely in bullet form. (*Please Note:* this section should be written in simple language and avoiding field specific jargon. For any technical terms please include definitions and spell out any acronyms.)

What are the attitudes and motivations that guide large area landowners in San Mateo County about whether or not to establish a conservation easement on their land?

b. Include a brief (1-2 paragraphs), current, scholarly review of relevant literature that supports the purpose of the research study.

In recent decades, land conservation has been viewed from a biological sciences point of view, rather than from the social sciences, and as a result, the most common model of conservation is to keep humans out of an area in an effort to protect biologic resources. However, recent research indicates that this may be detrimental to the overall health of the environment, and that human interaction with the land should be included in conservation models (Newing, 2010). In particular, 'working landscapes,' where agriculture and environmental protection occur simultaneously, may provide a variety of solutions and should be considered in land conservation efforts. The study of working lands demonstrates the needs to review the interactions between the environment, people, and the agencies and institutions which tie them together (Brunson & Huntsinger, 2008).

Furthermore, culture and institutions play a significant role and provide for a variety of nuances at the local level, thus there is a need to focus on the social aspects of land conservation in order to link the policies and actions of humans with the natural environment (Newing, 2010). More

specifically, qualitative research is needed to understand the human dimensions involved with land management. Qualitative methods allow for a deeper understanding of land management topics and allow for unanticipated elements of study to emerge (Sayre, 2004).

In particular, the literature reflects a need to engage with private landowners and determine what types of activities are appealing and which options the landowner community views as effective or desirable (Poudyal & Hodges, 2009). Numerous studies have examined this topic, although they have typically focused on landowners who have already engaged in conservation. The motivations for landowners to participate in these types of programs are well-documented, and primarily reflect the landowners' need for resources such as financial assistance or a desire to protect the land from development (Ernst & Wallace, 2008; Rilla, 2002; Farmer, et al., 2011a; Farmer, et al., 2011b). One study reviewed the values landowners placed on their land, concluding that the desire to live near natural beauty was the most important, especially with those landowners with large parcels (Ferranto, et al., 2011), showing the similarity for motivations behind adding a conservation easement to a parcel. This same study also reviewed how the landowner used the land and determined that the greater the area owned, the greater percentage of the owner's income was directly derived from the land. This is relevant to any discussion concerning land management where social context is to be considered. Important to the social context, one study specifically called on researchers to investigate the needs of the local community of landowners and how they interact with the local agencies (Merenlender, et al., 2004). Another study based in California found landowners were somewhat cautious of incentives provided by agencies, as they often came with additional demands and "hassles" (Ferero, 2002). Finally, a Rilla examined the motivations of conservation easements in California, and included a "pros and cons" section, which allowed landowners to indicate some of the disadvantages of participating in such a program (Rilla, 2002). However, this study only included landowners who were already part of an agreement, and thus excluded those who did not participate. Additionally, the literature suggests that a 'critical mass' of landowners is required, in particular within the ranching community, to come together on the topic of acceptable conservation methods (Brunson & Huntsinger, 2008), but this has yet to happen. These studies serve to build an explanation of why some landowners have chosen to adopt conservations easements or other conservation methods, but generally failed to look at why other landowners did not. The proposed study offers to examine the important question of why some landowners choose not to participate in easements.

c. Provide a **brief** summary of the research including the following information.

Research design:

- Number and description of participants:
- 15-20 individuals over the age of 18

- Private landowners in San Mateo County
- Owners of parcels larger than 200 acres
 - Data collection methods:
- Audio recorded interview
- Interviews will be in person and/or via telephone call
- Interview questions will be asked, and responses will be given if so desired
- Interviews will be transcribed
 - Data analysis methods:
- Likert scale questions and basic demographic questions will be analyzed for statistical relevance using basic data management software (Microsoft Excel and SPSS)
- Common themes will be established from qualitative question answers and applied to the research question
 - How the data you collect will answer your research question:
- The answers to interview questions will directly indicate the landowners' attitudes, perceptions and motivations.

d. What is the anticipated significance of this research to the field?

- The research intends to compile and analyze the attitudes of a unique population about land conservation methods, in particular conservation easements, and the agencies that offer this option

2. PARTICIPANT POPULATION

a. Participants: Describe the participant pool

- State the number of participants.
15-20 individuals
- State the age of participants.
18 and over
- Are the participants considered a vulnerable population (e.g., prisoners, children, pregnant women, cognitively impaired, undocumented, some chronic health conditions which may impair the participants)?
No

- Are the participants already known to the researcher?

No

- b. State any inclusion/exclusion criteria used to select participants.

Participants must be private landowners, who own 200 or more acres in San Mateo County

- c. Describe the recruiting process clearly.

- Subjects will be contacted via mail by the researcher, and asked to participate in the form of a letter (please see Appendix A)
- Contact information for the researcher will be supplied by the researcher in the letter mentioned above (please see Appendix A)
- Follow up postcards will be sent by the researcher to those landowners who do not respond within three weeks, and again at six weeks

- e. State how researcher will gain access to the participants.

- Addresses for potential participants (landowners owning parcels greater than 200 acres) will be obtained from San Mateo County, via the Tax Collector (<http://www.sanmateocountytaxcollector.org/SMCWPS/pages/secureSearch.jsp>) and the San Mateo County Data Portal (<http://www.co.sanmateo.ca.us/portal/site/SMC/menuitem.e4c29a0f12f966047b830e43917332a0/?vgnnextoid=9122f9b53ff3b210VgnVCM1000001937230aRCRD&appInstanceName=default>)
- This data provides names and address, as well as spatial data indicating parcel sizes
- Subjects will be sent a letter (please see Appendix A) with the following information
 - Study background and purpose
 - Brief biography of the researcher
 - Request for participation and methods of participation
 - Contact information for researcher
- Interested subjects will contact researcher by mail, e-mail, or phone
 - A follow up postcard will be sent three weeks following the original mailing to those potential participants who haven't responded (please see Appendix A)
 - A final follow up postcard will be sent three weeks following the second postcard from potential participants who haven't responded (please see Appendix A)
- Interview times will be scheduled based on availability of participants and the researcher

3. STUDY PROCEDURES

a. Describe the details of the procedures and methodology.

- The study will be conducted by interviews, either in person or over the phone (TBD by participants)
- Interviews will be driven by a series of structured questions (please see Appendix D)
- Interviews will be audio recorded (pending participant approval) and transcribed
- Themes that emerge from the interviews will be identified based originally on the themes which exist in the literature and added to as new themes emerge

b. List procedures in which the participants will take part in a step-by-step, chronological manner.

- Subjects will be sent a letter (please see Appendix A) with the following information
 - Study background and purpose
 - Brief biography of the researcher
 - Request for participation and methods of participation
 - Contact information for researcher
- Interested subjects will contact researcher by mail, e-mail, or phone
- Subjects will be given an opportunity to ask any questions and receive any clarification they require
- Interviews will be scheduled based on availability of participants and the researcher
 - The researcher will offer to visit the property or another convenient location
 - The researcher will also offer to conduct the interview over the phone
- If research is to be done over the phone, the researcher will send an informed consent form (please see Appendix B) with return envelope with address and postage. They will also receive a copy of the informed consent form for the participant's records. They will return the informed consent via US Postal Service.
- If research is to be done in person, the researcher will bring an informed consent form and an additional copy for the participant's records. Participants will sign informed consent form prior to starting the interview.
- Participants will be asked if they would allow audio recording of the interview
- Researcher will explain interview structure, limited background information about the study, its purposes, and the goals (please see outline in Appendix C)
- Researcher will ask participant if they have any questions or if anything needs to be clarified
- Interview will commence, and is expected to take about one hour

- The researcher will ask questions, including short answer and open ended
- The researcher will only ask the questions included in Appendix D, except for additional clarification or more details when relevant
- As indicated in Appendix D, the researcher's last question will give the participant an opportunity to ask any questions, get any clarification, and add any last thoughts.
- The researcher will thank the participant for their time and input, and be sure they have contact information in case they desire to contact the researcher.
- The interview will conclude

c. Research details

- State *where* the research will take place
 - The subject will be at their own home (if in person) or at a mutually agreed-upon location or possibly unknown if the interview is to be completed on the phone
 - The subject will be wherever comfortable to talk on the telephone for an hour (if over phone)
- State *over what period of time* each participant will be involved in the research.
 - Approximately one hour
- State what *time of day* the research will take place (after school, evening, weekend).
 - Whatever time is convenient for the subject, generally during the day or evening
- State the *time* for each procedure and the *total time* commitment.
 - Each individual will likely spend roughly one hour as an interview participant
- If participants will miss class, how will they make up the work?
 - N/A
- What will non-participants do while the others are participating?
 - N/A

d. State how data collection and analysis will answer the research question(s).

The product of this study will supply insight into the thoughts of private landowners in San Mateo County with regard to their future land management decisions and attitudes about land conservation.

Interview questions will be asked and answers will be recorded. Answers will be transcribed and coded for themes and common narratives regarding land management and decisions regarding conservation easements.

4. RESEARCH RISKS

a. State the risk(s), and then state how the researcher will lessen each particular risk.

The primary risk in this study is loss of privacy. The researcher will attempt to mitigate this by providing anonymity to the subjects, and keeping only one copy of the names and contact information in an encrypted document on a password-protected computer. Any written documents or notes will be stored in a secured/locked drawer. Once the informed consent form has been signed, the researcher will refer to and reference the participant by a pseudonym if desired. The actual names and contact information will not be included in any reporting of results.

If anonymity is not protected, the risk would be social consequences for those in this tight-knit rural community. Depending on the answers supplied and how they align with the values of the community, the repercussions may be negative. Again, the researcher will attempt to mitigate this by providing confidentiality to the subjects, and keeping only one copy of the names and contact information in an encrypted document on a password-protected computer. Any written documents or notes will be stored in a secured/locked drawer.

b. Physical risks may include physical injury, aggravation of an existing condition, allergies to materials used in the research, etc.

N/A

c. Risks also include the potential loss of privacy, as well as possible psychological risk (anxiety, stress, depression), and uncomfortable emotions (anger, fear, sadness, discomfort).

Beyond what is indicated above, no additional risk or stress is expected

d. Focus groups, use of real names, video recordings and photographs require extra measures to protect against loss of privacy.

N/A

e. For sensitive research where loss of confidentiality may expose participants to excessive risk, such as undocumented workers, prisoners, etc., a Federal Certificate of Confidentiality may be required.

N/A

f. Teachers conducting research on their own classes should consider the power imbalance between themselves and their students to avoid coercion in recruiting students for their study.

N/A

g. Research in the workplace also offers risk if management has access to the raw data, or data, if identified, could result in loss of employment, rank or salary. Data should be presented to supervisors only in the aggregate, as a finished report.

N/A

5. CONFIDENTIALITY

Confidentiality refers to the security of the data.

a) Describe any coding systems that will be used to protect the privacy of the participants and the security of the data. Per SFSU policy, electronic data must be “stored in an encrypted document/database on a password-protected computer”

Subjects will be known on a first name only basis, and these will be stored in only one location in an encrypted document/database on a password-protected computer. Any written documents or notes will be stored in a secured/locked drawer.

b) For some sensitive research where loss of confidentiality may expose participants to excessive risk, a Federal Certificate of Confidentiality may be required.

N/A

c) Describe how the confidentiality of the data will be protected. Describe the storage location, storage methods and final disposal of the data. Describe methods of maintaining security.

The subjects are initially protected by using anonymity from the outset. Original audio recordings will be destroyed once transcripts are made. Additionally, once the study is completed, all contact information will be stored on a secure digital device and/or written document stored in a secure location within the SFSU geography department for a period of three years. Any written documents or notes will be stored in a secured/locked drawer. Once that time has expired, this data will be destroyed.

6. BENEFITS

If there are no direct/guaranteed benefits, state this:

There are no direct benefits to participants.

7. PAYMENT

If there will be no compensation, state this.

There will be no payment/compensation for participants.

8. COSTS

If there will be no costs, state this.

There are no costs to participants as the time and location of interviews is flexible to the subject's needs.

9. ACADEMIC CREDIT**10. ALTERNATIVES**

a. Usually, the alternative in social/behavioral/educational research is not to participate in the research.

The alternative is not to participate in the research.

b. However, if the researcher is proposing a biomedical treatment or therapy, a disclosure of appropriate alternative courses or treatments that might be advantageous to the participant, if any, is required here.

N/A

11. INFORMED/IMPLED CONSENT/ASSENT PROCESS AND DOCUMENTATION OF CONSENT/ASSENT

The subjects will get a brief overview and introduction to the researcher and topic at hand when the introduction letter is originally received. Upon contacting the researcher to express interest in participating, participants will be able to ask questions, and will be notified they will need to sign an informed consent form. If the potential participants have concerns about agreeing to participate at that point in time, they will be informed that there is no requirement to commit at the time of first contact, only that there will be time restrictions due to the length of the study. They will be encouraged to think about their decision and only participate when they feel ready and comfortable.

If the interview is to occur in person, the form will be supplied at time of interview. A copy will be supplied for their records. If the interview is to occur via phone, the form will be mailed (with self-addressed return envelope included). A copy of the form will be included for their

records. Alternatively, if the means are available a digital copy would be sent via fax or email, and returned either by fax, email, or USPS.

Once documents have been secured, the researcher will store them in a secured location until the complete of the study, at which point they will be destroyed.

b. State that the participants will receive a signed copy of the consent/assent form.

The participants will receive a signed copy of the consent document.

c. Because of HIPAA (Health Insurance Portability and Accountability Act) regulations protecting private health information, researchers must receive written permission from participants to review their medical charts or histories. Please include a HIPAA release form if necessary.

N/A

12. INVESTIGATORS' QUALIFICATIONS

a. State the researcher's qualifications to conduct this specific research project.

The researcher has studied the topic of land conservation for two years as a graduate student, as well as a significant portion of his undergraduate work. Additionally, the researcher has worked for an agency whose primary mission is land conservation. The researcher has studied the methods and techniques used to study these subjects both as an undergraduate student and as a graduate student.

b. *For students:* Briefly add the faculty advisor's areas of research expertise or relevant courses taught. (one paragraph)

My committee chair, Professor Nancy Wilkinson, was my professor for two graduate level seminars (Geog 820: Human and Social Geography and Geog 801: Scope and Method), both included discussions about methods to investigate perception and attitudes. Additionally, because of the nature of the seminars I was able to explore the topic of land conservation in my own research supporting the course description. Both members on my committee, Dr. Wilkinson and Dr. Blecha, are primarily focused on human/cultural geography, and have expertise in interview methods and frameworks for the analysis of qualitative data.

c. *For faculty*: State how any research assistants have been trained, and include their NIH course completion certificates.

N/A

13. FUNDING SOURCES

If not funded, state “No funding.” If this is contract work, please clarify what part of the contract project is research. If receiving funding for this research, please identify the funding agency.

If the project is funded, do any of the researchers have a financial conflict of interest? Please inform the committee and the prospective participants in the informed consent documents.

No funding.

14. REFERENCES

Provide the full citation (including title) for any references cited in this protocol.

- Brunson, M., & Huntsinger, L. (2008, March). Ranching as a Conservation Strategy: Can Old Ranchers Save the New West? *Rangeland Ecology Management*, 137-147.
- Ernst, T., & Wallace, G. (2008). Characteristics, Motivations, and Management Actions of Landowners Engaged in Private Land Conservation. *Natural Areas Journal*, 28(2), 109-120.
- Farmer, J., Chancellor, C., & Fischer, B. (2011). Motivations for using Conservation Easements as Land Protection Mechanism: A Mixed Methods Analysis. *Natural Areas Journal*, 31(1), 80-87.
- Farmer, J., Knapp, D., Meretsky, V., Chancellor, C., & Fischer, B. (2011). Motivations Influencing the Adoption of Conservation Easements. *Conservation Biology*, 25(4), 827-834.
- Ferero, L. (2002). *Grass, Grazers, and Tenure: A Case Study on the Shasta-Trinity National Forest (disseration)*. Berkeley, CA: University of California.
- Ferranto, S., Huntsinger, L., Getz, C., Nakamura, G., Stewart, W., Drill, S., . . . Kelly, M. (2011, October-December). Forest and rangeland owners value land for natural amenities and as financial investment. *California Agriculture*, 65(4), 184-191.
- Merenlender, A., Huntsinger, L., Guthey, G., & Fairfax, S. (2004, February). Land Trusts and Conservation Easements: Who is Conserving What for Whom? *Conservation Biology*, 18(1), 65-75.
- Newing, H. (2010). *Conducting Research in Conservation: Social Science Methods and Practice*. New York, NY: Routledge.
- Poudyal, N., & Hodges, D. (2009). Factors Influencing Landowner Interest in Managing Wildlife and Avian Habitat on Private Forestland. *Human Dimensions of Wildlife*, 14, 240-250.
- Rilla, E. (2002, January-February). Landowners, while pleased with agricultural easements, suggest improvements. *California Agriculture*, 21-25.
- Sayre, N. (2004, November). Viewpoint: The Need for Qualitative Research to Understand Ranch Management. *Journal of Range Management*, 668-674.

Appendix A – Request to Participate Letter

- This letter will be sent to potential participants, and will include a photograph of myself to attempt to add a personal touch. The photo will include the text “SFSU Researcher Alex Roa – Photo Credit J.T. O’Neill”.

Month DD, YYYY

Dear (landowner name)

I’m a graduate student at San Francisco State University studying Geography, focused on Resource Management and Environmental Planning. Because of my personal connection with rural coastal California, I have decided to focus my thesis research on landowners in San Mateo County and some of the land management decisions they must make. I am interested in talking with owners of large parcels in San Mateo County about their thoughts on conservation easements and the agencies that provide them.

I would very much like to interview you to hear about your opinions regarding your land and conservation easements. This interview is completely confidential and will not require you to reveal your identity. The interview will take about an hour, and can be done in person or over the telephone. I am happy to travel to your land if you are interested in meeting there, or we can meet at another meeting place (a home, coffee shop, etc.). Alternatively we can complete the interview over the telephone if you prefer.

I hope you are willing to help me complete my research. Please contact me in one of the following ways:

E-mail: aroa@sfsu.edu

Cell Phone: (707) 291 – 1879

Mailing address:

Alex Roa

*Department of Geography and Environmental Studies, HSS 279
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132*

*Please contact me right away - I am excited to start interviewing San Mateo County
landowners' attitudes about this important topic.*

Thank you for your consideration,

Alex Roa

- Three weeks after the initial letter is sent out, a follow up postcard will be sent with the following information (the postcard will feature a photo I took of a landscape and the text “This is a photo I took of my family’s land in Northern California –Alex”):

Month DD, YYYY (from first letter, plus three weeks)

A few weeks ago, I sent you a letter requesting your assistance completing my Master’s thesis research. I haven’t heard back from you, but I’m hoping you will still consider helping me.

I’m a graduate student at San Francisco State University studying Geography, focused on Resource Management and Environmental Planning. My research explores how landowners view conservation methods, in particular conservation easements.

I would greatly like to hear your opinions regarding your land and conservation easements. This interview is completely confidential, and I will be happy to explain the steps I’ll take to protect your identity. The interview is expected to take about one hour, and can be done in person on your land or at another meeting place (at home, coffee shop, etc.). We can also complete the interview by telephone, if you’d prefer.

If you would be willing to help me complete my research, please contact me in one of the following ways:

E-mail: aroa@sfsu.edu

Cell Phone: (707) 291 – 1879

Mailing address:

Alex Roa

Department of Geography and HES, SFSU

1600 Holloway Avenue

San Francisco, CA 94132

Thank you again for your consideration,

Alex Roa

- Six weeks after the initial letter, I will send out a third and final attempt (another postcard) to solicit landowners to participate (the postcard will feature a photo I took of a landscape and the text “This is a photo I took of my family’s land in Northern California –Alex”):

Month DD, YYYY (from first letter, plus six weeks)

A few weeks ago, I sent you a request, asking for your help completing some research I’m doing at San Francisco State University in pursuit of my Master’s degree. I haven’t heard back from you, but I’m hoping you will still consider helping me, even though you are certainly quite busy. This will, however, be the last time you will hear from me.

To refresh your memory, I would like to interview you to hear your opinions regarding your land and conservation easements. This interview is completely confidential, and does not require you to reveal your identity if that level of privacy is a concern.

If you have any interest in helping me complete my research, whether or not you intend to allow me to interview you, please contact me in one of the following ways:

E-mail: aroa@sfsu.edu

Cell Phone: (707) 291 – 1879

Mailing address:

Alex Roa

Department of Geography and Environmental Studies, HSS 279

San Francisco State University

1600 Holloway Avenue

San Francisco, CA 94132

For the last time, thank you again for your consideration.

Alex

Appendix B – Informed Consent Form

San Francisco State University

Informed Consent to Participate in a Research Study

(Large-area Private Landowners in San Mateo County, CA: Land Conservation Attitudes and Perceptions)

A. PURPOSE AND BACKGROUND

The purpose of this research study is **to learn more about how landowners feel about conservation easements and the agencies that provide them.**

The researcher, **Alex Roa**, is a graduate student at San Francisco State University conducting research for a **Master's degree in Geography with a concentration in Resource Management and Environmental Planning.**

You are being asked to participate in this study because **you are a private landowner with more than 200 acres in San Mateo County, CA.**

B. PROCEDURES

If you agree to participate in this research study, the following will occur:

- You will be interviewed for approximately **one hour about your opinions about conservation easements.**
- The interview will be audiotaped to ensure accuracy in reporting your statements.
- The interview will take place **at a time and location convenient to you, likely your home or a nearby public location, or via telephone conversation.**
- **If permitted**, the researcher may contact you later to clarify your interview answers for approximately fifteen minutes.
- Total time commitment will be **about one hour.**

C. RISKS

There is a risk of loss of privacy. However, no names or identities will be used in any published reports of the research. Only the researcher will have access to the research data.

D. CONFIDENTIALITY

The research data will be kept in the **SFSU Geography and Environmental Studies department offices**, and only the researcher will have access to the data. All electronic data will be kept on an encrypted document on a password-protected computer. At the conclusion of the study, all identifying information will be removed and the data will be kept in a locked cabinet in the researcher's office, **and destroyed three years post study**. Audio or video recordings will be destroyed at the end of the study.

E. DIRECT BENEFITS

There will be no direct benefits to the participant.

F. COSTS

There will be no cost to you for participating in this research.

G. COMPENSATION

There will be no compensation for participating in this research.

H. ALTERNATIVES

The alternative is not to participate in the research.

I. QUESTIONS

You have spoken with **Alex Roa** about this study and have had your questions answered. If you have any further questions about the study, you may contact the researcher by email at **alex.oneill.roa@gmail.com** or by phone at **(707) 291 – 1879**. you may contact the researcher's advisor, Professor Wilkinson at **nancyw@sfsu.edu** or **(415) 338 - 1439**.

Questions about your rights as a study participant, comments, or complaints about the study may also be addressed to the Human and Animal Protections at 415-338-1093 or protocol@sfsu.edu.

J. CONSENT

You have been given a copy of this consent form to keep.

PARTICIPATION IN THIS RESEARCH IS VOLUNTARY. You are free to decline to participate in this research study, or to withdraw your participation at any point, without penalty. Your decision whether or not to participate in this research study will have no influence on your present or future status at San Francisco State University.

Signature _____

Research Participant

Date: _____

Print Name _____

Research Participant

Signature _____

Researcher

Date: _____

Appendix C – Interview Structure

Interview structure, limited background information about the study, its purposes, and the goals

- Greeting/Introduction and thanks
- Quick study background
 - Looking into conservation methods, particularly focused on Coastal CA
- Researcher background
 - Grew up in Sonoma County
 - Undergrad in SLO, worked with rural population as a firefighter and disaster planner
 - Graduate program in SF, looking to learn and benefit the about the area I grew up in Interested in human dimensions of conservation – conservation has traditionally been focused on the biological realm, but there is a growing movement focused on the people
- Study background
 - Started by looking at the range of conservation methods utilized in Coastal CA, but focused on conservation easements because they are common and have typically been viewed through the lens of those who have already installed an easement
 - I’m curious about the spectrum of people and attitudes, those who have and love them to those who haven’t and never will
- Goals of the study
 - Ultimately I’m trying to get a snapshot of large-area landowners views of conservation easements and the agencies that offer them
- An important caveat
 - I work for Midpeninsula Regional Open Space District (MROSD), which doesn’t often work with conservation easements
 - Our partner agencies certainly do work with conservation easements
 - I don’t work with them at all in my job capacity, and don’t even work in the department that handles property acquisitions

- The information supplied by this interview is completely confidential and will not be shared with MROSD in any form other than the final document, which will not have owner specifics (such as names or addresses).
- They will, however, get the same document I turn into the university for my degree
- Any questions and clarification needed?

Appendix D – Interview Questions

Introduction Questions:

1. How long have you or your family owned the land on/at (insert general location of property connected to GIS database selection)?
2. Do you or your family own other parcels of land in San Mateo County over 5 acres?
 - a. If yes, for how many years?
3. Is this property your primary residence?
 - a. If so, for how long?

Short Answer Questions:

Please rate the statements below using the following scale:

1 – “Strongly disagree”

2 – “Disagree”

3 – “Neither agree nor disagree”

4 – “Agree”

5 – “Strongly agree”

1. My primary income comes from the land I own
2. Landowners have the right to do as they please with land they own
3. I value natural resource protection
4. I value living a rural lifestyle
5. I value having open space in my community
6. I have a personal attachment to the land I own
7. I think conservation easements are a potential benefit for large-area landowners
8. I know people who have conservation easements on their land who have had a positive experience
9. The land I own is part of my heritage and my identity
10. I am currently burdened by financial stress on a regular basis

Open-ended Interview Questions:

1. Please briefly describe the vegetation on your property.
2. Please briefly describe the terrain and topography of your land.
3. Please briefly describe the water sources on your property.
4. What are the main ways you use your land?
5. Who is involved with making decisions about land management for this property?
 - a. What roles do each of those individuals play?
6. Do you have family who own large areas of land?
 - a. If yes, how much of the decisions you make about your land is influenced by their opinions or concerns?
7. How would you define a conservation easement?
 - a. How did you come to this definition?
8. In general, what do you see as the pros of a conservation easement? What are the cons?
9. Do you have a conservation easement on some or all of your land?
 - a. If no, move to question 10.
 - b. If yes, who is the conservation easement with and what has your experience been?
 - c. If yes, what was the purpose for adding the conservation easement?
 - d. If yes, what concerns did you have prior to adding the conservation easement? Have they been confirmed or dismissed?
10. If you don't have a conservation easement, would you please explain to me why a conservation easement does not appeal to you?
 - a. Have you ever considered one?
 - b. Under what circumstances could you envision adding one?
11. Without giving specific names, do you personally know anyone who has a conservation easement?
 - a. If yes, what agency is the conservation easement with and how would you characterize the landowner's experience?
 - b. If known, what was the purpose for adding the conservation easement?
12. How would you characterize the overall attitudes about conservation easements for large-area landowners in San Mateo County?
 - a. In your opinion, are there major differences between particular groups or categories of landowners regarding conservation easements?

13. What agencies are you aware of that provide conservation easement?
 - a. Do you have strong opinions about any of them and why?
14. There are a few more demographic questions, but we have completed the portion of the interview that relates to land management and conservation easements. Is there anything else that I've missed or that you'd like to share that relates to conservation easements, or that you think may be useful to this research?

Wrap-up Short Answer Questions

1. What year were you born?
2. Do you have children or do you plan to?
3. Which describes your highest level of education?
 - a. Less than high school degree
 - b. High school degree
 - c. Some college
 - d. Associate's degree
 - e. Bachelor's degree
 - f. Graduate degree
4. Would you like to be contacted regarding the results of this study?
 - a. If yes, is there a better method to get in touch than the address I used to originally contact you?
5. Can you think of anybody with opposing opinions about conservation easements in San Mateo County who might be willing to talk with me?
 - a. Would you feel comfortable asking them to contact me or giving me their contact information?
6. If you know of other landowners who own more than 200 acres in San Mateo County, would you please encourage them to contact me and complete the same interview at their convenience?

Appendix E – Course Completion Certificate

