

University of California Santa Barbara Donald Bren School of Environmental Science and Management

Conserving Monterey County's Ranchland: Trends and Strategies



A Group Project submitted in partial satisfaction of the requirements for the degree of Master's of Environmental Science and Management for the Donald Bren School of Environmental Science and Management

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May 2007

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As authors of this Group Project report, we are proud to archive it on the Bren School's website such that the results of our research are available for all to read. Our signatures on the document signify our joint responsibility to fulfill the archiving standards set by the Donald Bren School of Environmental Science & Management.

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The mission of the Donald Bren School of Environmental Science & Management is to produce professionals with unrivaled training in environmental science and management who will devote their unique skills to the diagnosis, assessment, mitigation, prevention, and remedy of the environmental problems of today and the future. A guiding principal of the School is that the analysis of environmental problems requires quantitative training in more than one discipline and an awareness of the physical, biological, social, political, and economic consequences that arise from scientific or technological decisions.

The Group Project is required of all students in the Master's of Environmental Science and Management (MESM) Program. It is a four-quarter activity in which small groups of students conduct focused, interdisciplinary research on the scientific, management, and policy dimensions of a specific environmental issue. This Final Group Project report is authored by MESM students and has been reviewed and approved by:

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May 2007



Abstract

Ranching and ranchlands are an integral part of Monterey County's cultural and ecological landscape. Anecdotal evidence suggests, however, that urban encroachment, rising land prices, and other pressures are causing a growing number of ranchers to sell their land. In partnership with the Big Sur Land Trust and with support from the Dean Witter Foundation, we 1) used spatial analysis and appraiser data to assess trends in ranch conversions; 2) performed a mail survey to measure ranch-owner attitudes and pinpoint factors that influence ranchers' decisions to sell their land; and 3) interviewed ranchers, rangeland experts, and other stakeholders to identify public- and private-sector strategies to help keep ranchlands intact. We found that while the rate of ranch conversion is relatively low, it is increasing. Our survey demonstrated that financial pressures, along with social factors (such as the scarcity of next-generation ranchers), play an important role in the decision to sell. Therefore, if real estate values and population increase as predicted, the conversion rate will likely continue to grow. To help prevent further fragmentation of ranchlands, we recommend a multi-faceted, community-based approach comprised of social, political, and market-based strategies that reflect and complement the attitudes and diversity of Monterey County's ranching community.



Acknowledgements

We'd like to thank Bill Leahy, Executive Director of the Big Sur Land Trust, and Susanna Danner, former Conservation Project Manager of the Big Sur Land Trust, for inspiring us with their passion for ranchland conservation. Bill penned the initial proposal that launched the project, and provided his support throughout. Susanna introduced us to Monterey County ranchers and to the land itself. Her time with us set the tone for this investigation. We're also grateful to Joanna Devers, Donna Meyers, and the rest of the Big Sur Land Trust staff for their support throughout the project.

We'd also like to acknowledge the Dean Witter Foundation, which funded this effort. Their gift provided us with the resources we needed for internship stipends, data acquisition, survey mailings, and several research trips to Monterey County.

Our advisors Frank Davis and John Melack provided us with guidance and a perspective that can only come from many years of experience. Thanks also to the Bren School faculty who took the time to comment on our defense presentation—particularly Gary Libecap, Bruce Kendall, and David Stoms.

Our gratitude also goes out to Danny Marquis of the Natural Resources Conservation Service, who worked with us on our rancher survey, and lent his expertise in agricultural policy. In addition, we'd like to thank the professionals at University of California Extension, in particular Wayne Jensen, Sergio Garcia, and Bill Tietje. We also want to thank the American Society of Farmland Managers and Rural Appraisers for helping us understand an extremely complex problem.

Many of our fellow Bren students lent their emotional support, as well as their expertise. Laura Grant provided invaluable help with our survey analysis. Patrick Jantz answered our GIS questions and offered guidance based on his Chesapeake Bay paper.

We'd also like to extend a sincere thank you to other UCSB faculty and staff who lent their professional perspectives to our project. Janet Kayfetz helped us to channel our research findings into effective presentations. Monica Bulger helped us refine sections of our written report.

Perhaps most importantly, our thanks go out to all the ranchers who opened their ranches, offices, living rooms, kitchens, and community to us. You listened to our ideas and answered our questions, no matter how naïve. Without your insights, this project would not have been successful. We finish this project excited and hopeful that Monterey County's vibrant ranching culture can be sustained through continued hard work and collaboration.



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How to Use This Document

Document Overview

This document is designed to provide ranching organizations, conservation organizations, policy makers, and other stakeholders with information to guide decisions about future ranchland conservation strategies in Monterey County.

To ensure that this information is accessible to even the most time-limited stakeholder, our major research findings have been distilled into a relatively brief Project Report. After reading this report, those readers who want detailed information on a specific area of research (e.g., ranchland conversion trends, ranch owner attitudes, the public policy landscape, or profitability strategies) can turn to one of the document's four appendices, each of which provide complete methods for a specific research area, as well as additional findings and analyses.

In order to make this document as useful as possible to our client, the Big Sur Land Trust, we have designed it to be convertible into five independent documents. Therefore, you may notice that some information is repeated among the various sections. The document is organized as follows:

Project Report

This overview highlights and integrates the major findings of this research project. These findings focus on Monterey County ranchland extent, ranchland conversion trends, present conservation practices, pressures on ranch owners to sell their land, the factors that most influence the decision to sell, private- and public-sector strategies for improving the profitability of ranching, and possible approaches to improving the social dynamics of ranching in Monterey County.

Appendix A: Spatial and Real Estate Transaction Analysis of Monterey County Ranchland

This section describe methods, as well as additional information and analyses on current ranchland extent, ranchland conversion trends, and real estate transaction trends in Monterey County for the past 20 years.

Appendix B: Mail Survey of Monterey County Ranch Owners

This section explains the methods used to conduct a mail survey of ranch owners in Monterey County, as well as results for survey questions.

Appendix C: The Public Policy Landscape in Monterey County

This section provides an overview of federal, state, and local government policies that affect the Monterey County ranching community.



Appendix D: Improving Ranch Profitability in Monterey County

This section details several strategies Monterey County ranchers can use to improve their ranch profitability. Along with descriptions of the various benefits, issues, and factors needed for successful implementation of each strategy, the section also contains case studies of ranchers who have already put these strategies into practice.



Executive Summary

Background & Significance

Ranching and ranchlands are an integral part of Monterey County's cultural and ecological landscape. Anecdotal evidence suggests, however, that urban encroachment, rising land prices, and other pressures are causing a growing number of ranchers to sell their land, often for development or other non-ranching uses.

Conversion of ranchland to rural estates, vineyards, and other non-ranching uses can cause habitat loss, resource degradation, and cultural and ecological fragmentation. For these reasons, local and regional land trusts across the West have made the protection of ranching and ranchlands a conservation priority. Unfortunately, some of the same pressures that have created the need for this protection in Monterey County—most notably, rising land prices—are also dampening the overall effectiveness of traditional conservation tools, such as land purchases and conservation easements. Alternative strategies are therefore needed to help keep ranchland intact.

Purpose & Research Questions

This project's primary objective was to provide our client, the Big Sur Land Trust, with guidance on how to help keep Monterey County's ranchlands intact.

Providing such guidance required knowledge of ranchland conversion trends and the factors that most influence individual ranch owners' decision to sell. With support from the Dean Witter Foundation, we focused on the following three questions:

- 1. Are ranchland conversion rates and land prices increasing-and if so, to what extent?
- 2. What factors most influence ranchers' decision to sell their land?
- 3. What key elements are needed for the successful implementation of some promising public- and private-sector strategies?

Approach

To answer the above research questions, we took the following approach:

1. We used land-cover maps and appraiser data to examine trends in ranchland conversion and price per acre.



- 2. We conducted a mail survey of 300 Monterey County ranch owners to assess attitudes about the present and future state of local ranching, and determine factors that might make landowners more likely to sell their ranches. We received 98 useable surveys.
- 3. We performed a literature review and interviewed more than 30 ranchers, University of California Extension staff, real estate appraisers, and other rangeland experts. This process helped us analyze various strategies for improving the viability of ranching in Monterey County and inform our recommendations to the Big Sur Land Trust.

Ranchland Extent and Conversion Trends

There is great opportunity for proactive conservation in Monterey County. Our analysis showed that private ranchland covers about 43% of the county's total area. This land plays host to 68% of the region's annual grasslands, 50% of its oak woodland, and a number of endangered and threatened species, including the California Tiger salamander (*Ambystoma californiense*).

Land prices have increased sharply in recent years. Between 1992 and 2004, low-cost ranchland doubled in price from \$200 to \$400 per acre, while high-cost land more than tripled, rising from \$500 to \$1800 an acre. Despite this economic pressure, however, ranchland conversion has thus far been fairly limited. Between 1986 and 2004, the net loss of private ranchlands was just 2.5%.

The *rate* of conversion, however, seems to be rising. The net conversion of ranchland to non-ranching uses was seven times greater between 1996 and 2004 than in the previous decade. Most (77%) of these conversions went not to urban or suburban development—which accounted for only 7% of conversions—but to farmland. Not surprisingly, then, much of the converted ranchland is clustered around the Salinas Valley, a major farming region.

The Decision to Sell

Ranching has never been a particularly profitable enterprise. And yet, generations of ranch owners have persisted on the land despite the low income and high unpredictability of return. Ranch economists have labeled this phenomenon "ranch fundamentalism," a commitment to maintaining a ranch for the sake of the land and the independent lifestyle it affords—even in the face of low profits.

If our survey data are any indication, ranch fundamentalism is alive and well in Monterey County. Most ranchers (79%) rated their quality of life as "good" or "excellent," despite displaying some dissatisfaction with income (only 33% said they





were satisfied or very satisfied with the financial rewards of ranching). In addition, a large majority of ranchers agreed or strongly agreed that lifestyle factors and family benefits were reasons to stay on the ranch. Just 17% cited "the financial rewards" as something that might persuade them to keep ranching.

The power of ranch fundamentalism, however, can wane with urban encroachment. This shift in dynamics may create a sense of impermanence among ranchers, especially when social norms, such as the tradition of passing down the family ranch, begin to break down. As the social benefits of ranching decline, finances may begin to play a larger role in a rancher's decision to stay on the land.

When asked what factors might influence their decision to sell, ranch owners rated financial factors as among the most significant. Only over regulation was rated higher. This analysis revealed that both financial *and* social factors—such as the number of years spent on the ranch and availability of a next-generation rancher to take over the ranch—play an important role in the decision to sell.

Conclusions & Recommendations

Despite economic hardships, our survey results indicate that the majority (68%) of ranch owners in Monterey County do not want to sell their ranch. Indeed, there remains a tremendous opportunity for proactive, largescale, conservation of private ranchland in Monterey County. However, if pressures from population growth and urban encroachment continue to increase, the rate of ranchland conversion is likely to escalate.

Slowing this conversion rate will require a range of strategies and incentives aimed at improving both the financial *and* social dynamics of ranching in Monterey County. Descriptions of several private-sector strategies aimed at increasing profitability can be found in the "Selected Strategies to Improve Ranch Viability" box on the next page. In addition to these private-sector strategies, Monterey County ranchers may increase their bottom line by taking advantage of various public policies (right). These programs offer funding and tax relief to help keep ranch owners' operations afloat. To further increase the effectiveness of these policies, government agencies and other stakeholders should work to increase awareness of and funding for conservation.

Key Ranchland Conservation Policies

Policies that provide conservation incentives to ranchers are listed below:

Federal

- Pension Protection Act
- Farm Bill (Conservation Security Program, Environmental Quality Incentives Program, Wildlife Habitat Incentives Program, Farm and Ranchlands Protection Program, Grassland Reserve Program, Farmers Market Promotion Program)

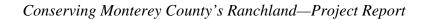
State of California

- California Farmland
 Conservancy Program
- California Land Conservation
 (Williamson) Act
- California Rangeland, Grazing Land, and Grassland Protection Act



As crucial as improving financial viability is, however, improving the social viability of ranching may be even more important. Over the years, ranch owners have shown that they are willing to put up with a certain degree of economic hardship in exchange for the independent lifestyle and family traditions associated with ranching. Keeping Monterey County's ranching community healthy will therefore mean working to maintain these factors. For a local land trust like the Big Sur Land Trust, this process translates to building solid relationships with the ranching community, supporting rancher-led, grass-roots efforts like the Central Coast Rangeland Coalition, and working to improve urban-rural relationships by encouraging outreach programs such as ranch tourism and farmer's markets.

Selected Strategies to Improve Ranch Profitability					
Strategy	Benefits	Implementation issues	Good for ranchers who:		
Conservation easement	 Cash Tax relief Maintaining the ranch Relationship with land trust 	 Lost development potential Limited pool of funding for easements Preference for short term protection Sharing control of management 	 Value cash more than development potential Have strong land stewardship ethic Value local ranching tradition 		
Ranch tourism	 New income sources; family business opportunities Positive interaction with outside community 	 Initial low financial return Time diverted from ranching Diminished ranch privacy Regulations/liability costs 	 Like interacting with public Have accessible, desirable land Have family commitment Are willing to modify business 		
Third-party infrastructure (wind turbines)	 Additional income with minimal landowner effort Minimal land requirements, non- disruptive to livestock Possibly improved roads 	 Neighbor viewsheds impacted Depends on sufficient wind resources, suitable land Encroachment of outside development 	 Have significant wind resources, suitable land Aren't constrained by viewshed or other concerns 		
Marketing cooperative	 Can charge higher price for beef Reduced exposure to market volatility Systematic collection of cattle data for business strategizing Connection to other ranchers 	 Coordination needed to ensure product consistency Time and leadership required 	 Can reach a market willing to pay for the cooperative's product Are willing to collaborate 		





I. OVERVIEW

1. Introduction

Call it a clash between the Old West and the New: Like so many other regions west of the Mississippi, Monterey County is experiencing a demographic and cultural shift away from its agrarian roots and toward a more centralized, urban community structure (Department of Conservation, 2002). Areas that used to be sparsely populated are now sprouting subdivisions. Land that was once affordable is now priced beyond some ranchers' means. And the potential for conflict between traditional ranchers and newcomers is growing.

These changes and the tensions they've bred have increased the pressure on ranch owners to sell their land. Our client, the Big Sur Land Trust (BSLT), is concerned that a growing number of ranches are being sold for development and other non-ranching uses, actions that have the potential to physically and socially fragment Monterey County's working landscapes. This trend has created a sense of unease about the future of ranching in Monterey County—an unease that may soon be shared by more than just ranchers and land trusts. Private ranchlands, after all, provide many public benefits, often serving as important habitat for threatened and endangered flora and fauna, acting as buffer zones between urban areas and public lands (Huntsinger & Hopkinson, 1996), providing urban residents with a source of local food, and offering scenic vistas that appeal to local residents and tourists alike (McLeod, Woirhaye, Kruse, & Menkhaus, 1998).

Because of these benefits, many local and regional land trusts have made the protection of ranchlands across the West a conservation priority (Clayton, 2006; Grassland Foundation, 2007). But some of the same pressures that have created the need for ranchland protection—most notably, rising land prices—are also dampening the overall effectiveness of traditional tools used for private-land conservation, such as land purchases and conservation easements (Christensen, 2004).

All of which begs the questions: Can Monterey County's ranching community survive, let alone thrive, amid the realities of the New West? And if survival of the ranching community is possible, what strategies can be used to encourage its continued viability?



2. Purpose & Approach

The purpose of this project was to advise the Big Sur Land Trust on steps it can take to help improve the cultural, economic, and environmental sustainability of ranching and ranchlands in Monterey County. Doing so required "a clear picture of the forces driving ranchland conversion, including the causes, location, and intensity of conversion pressure" (Sullins, Theobald, Jones, & Burgess, 2002).

To investigate these forces, we—in partnership with the Big Sur Land Trust and with support from the Dean Witter Foundation—took the following approach:

- We used land-cover maps and appraiser data to examine trends in ranchland conversion and price per acre.¹
- We conducted a mail survey of 300 Monterey County ranch owners² to assess attitudes about the present and future state of local ranching, and determine factors that might make landowners more likely to sell their ranches. We received 98 useable surveys.
- We performed a literature review and interviewed more than 30 ranchers, University of California Extension staff, real estate appraisers, and other rangeland experts to help round out our understanding of the state of ranching in Monterey County and throughout the West.

This approach not only helped us identify several possible economic and social strategies for improving the viability of ranching in the region, it also allowed us to forge personal connections with local ranchers. It is our hope that the knowledge we've gathered and the relationships we've developed may one day serve as the basis for a formal ranchland conservation alliance in Monterey County.

¹ Complete methodology for this part of our analysis can be found in Appendix A: Spatial and Real Estate Analysis of Monterey County Ranchlands

² For complete methodology and survey results, turn to Appendix B: Mail Survey of Monterey County Ranch Owners



II. MAIN FINDINGS

3. Extent of Ranchland

Ranching has been a part of Monterey County's physical and economic landscape since the 18th century (United States Forest Service, 2003). Today, more than 150 years after the first European cattle ranchers staked their claims in the area, ranchlands continue to occupy a significant portion of the county's territory.

Ranchland covers about 1,420 square miles of Monterey County—that's 43% of the county's total area and 60% of the county's private lands (Figure 1). Some of this ranchland is sandwiched between the public lands along the coast and the farms and urban development of the Salinas Valley. The rest is clustered in large, reasonably intact swathes along the eastern and southeastern edges of the county.

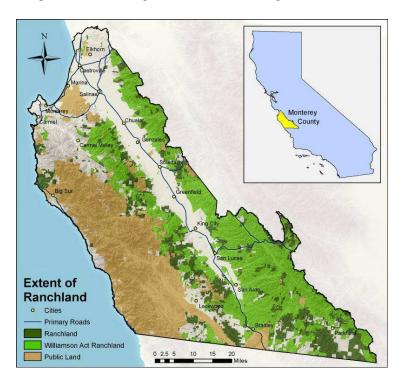
Key Findings— Extent of Ranchland

■ Private ranchlands account for 60% of private lands in Monterey County, and 43% of the county's total area.

■ 79 % of ranch owners own 180 acres or more. Almost half own a ranch greater than 1000 acres.

■ Ranchlands contain an abundance of important habitat, including 68% of the county's annual grasslands and 50% of its oak woodlands.

Figure 1 Private ranchlands cover 43% of Monterey County. Most hug the eastern border of the county or the eastern fringe of the county's public lands, which include Los Padres National Forest, several state parks, a patchwork of ecological reserves, and other government-owned areas.





To get an idea of individual ranch size, we asked ranchers in our mail survey "How many acres is your ranch?" Seventy-nine percent of respondents said that they own a ranch of 180 acres or more, while 48% stated that their ranch was 1000 acres or larger (Figure 2). These results are good news for local wildlife. In one study in exurban Colorado, researchers found that the number of human-sensitive species such as blue-gray gnatcatchers, foxes, and coyotes—decreased sharply with proximity to housing while the prevalence of human-tolerant species—such as dogs,

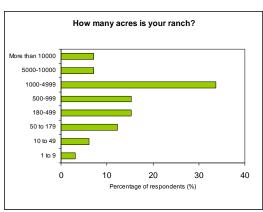


Figure 2 Survey results for "How many

acres is your ranch?"

cats, and robins—grew (Odell & Knight, 2001). In other words, increased development (and housing density) led to reduced biodiversity. And biodiversity loss is something that Monterey County citizens and policy-makers hope to minimize (Monterey County, 2006).

Of the 25 habitat types in Monterey County, 21 exist on ranchlands³, including 68% of the county's annual grasslands and 50% of its oak woodlands. These habitats host a number of endangered and threatened species, including the California Tiger salamander and Smith's Blue Butterfly (Dixon, 1999; Stebbins, 2003).

4. Conservation of Ranchland

The considerable extent of Monterey County's ranchland presents the region with an opportunity for large-scale, proactive conservation. One form of protection already in place is the California Land Conservation Act, commonly known as the Williamson Act. Under the act, owners of agricultural land trade development rights for tax relief by entering temporary contracts with municipal and county governments (Department of Conservation, 2007). Contracts automatically renew each year, unless the landowner files a request to end the contract, at which point a 20-year nonrenewal period begins (Monterey County Assessor,

Key Findings— Ranchland Conservation

■ 72% of Monterey County ranchlands have Williamson Act contracts.

Only 0.04% of ranchlands with Williamson contracts are in non-renewal.

■ Sixty-four percent of survey respondents have put all or part of their land under Williamson contract. In contrast, only 14% have, or are in the process of getting, a conservation easement.

³ For more complete information on the extent of habitat types on Monterey County ranchlands, see Appendix A: Spatial and Real Estate Analysis of Monterey County Ranchlands.



2007). Studies of several California counties have shown that the Williamson Act has played a significant role in slowing the transformation of ranchlands, even in the face of intense development pressure (Forero, Huntsinger, & Clawson, 1992).

In Monterey County, 72% of private ranchland is under Williamson contract (Figure 1). Unless something radical changes in the policy landscape, that figure should stay fairly level over the next two decades, as ranch owners have filed nonrenewals on only 0.04% of Williamson land. This low proportion of non-renewals indicates that few landowners with Williamson contracts intend to sell their ranch for urban development, at least not in the foreseeable future⁴.

Unlike the Williamson Act, conservation easements generally restrict development permanently and may come with a range of land-stewardship obligations (Land Trust Alliance, 2006). Possibly because of their temporary, less stringent nature, Williamson Act contracts are far more common in Monterey County than conservation easements. According to our survey data, 64% of ranch owners have all or part of their land enrolled in the Williamson Act, while 14% of ranch owners said that they have, or are in the process of getting, a conservation easement (Figure 3).

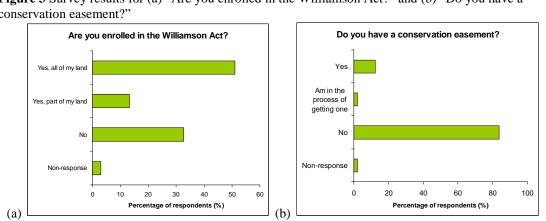


Figure 3 Survey results for (a) "Are you enrolled in the Williamson Act?" and (b) "Do you have a conservation easement?"

⁴ Under the Williamson Act, ranches may still be sold for development if some form of agricultural preserve is maintained on the land. For example, Canvon Hills Ranch, a ranchette development near King City, was able to stay under Williamson Act contract by maintaining a cattle operation on the property.



5. Ranchland Conversion⁵

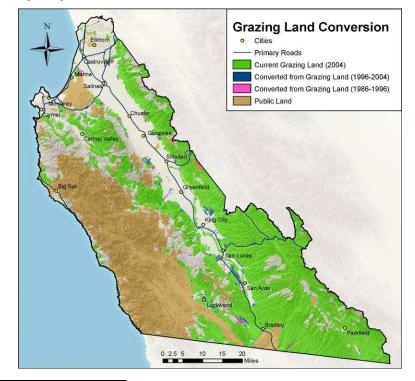
Perhaps because of the protection mechanisms already in place—or perhaps simply because most ranchers are determined to stay on the land—Monterey County has not yet experienced extensive conversion of ranchland. Between 1986 and 2004, the net loss of private ranchlands to non-ranching uses was only 23,390 acres, or 2.5% (Figure 4).

Underlying this relatively low number, however, is a troubling trend. The vast majority of the conversions during this time interval occurred between 1996 and 2004—in fact, the net conversion of ranchlands to non-ranching uses was about seven times greater between 1996

Key Findings— Ranchland Conversion

- Between 1986 and 2004, the net loss of private ranchlands to non-ranching uses was only 23,390 acres (2.5%).
- The net conversion to non-ranching uses was about seven times greater between 1996 and 2004 than between 1986 and 1995.
- Since 1986, 77% of the net reduction in ranchland has been due to conversion to farmland.
- Only 7% of the net reduction in ranchland was due to conversion to urban or built-up land.
- Most converted land was located within one mile of a road (70%) or five miles of a city (75%).
- Converted ranchlands tended to have gentle slopes and soils suitable for farming.

Figure 4 Ranchland (grazing land) conversions between 1986 and 2004



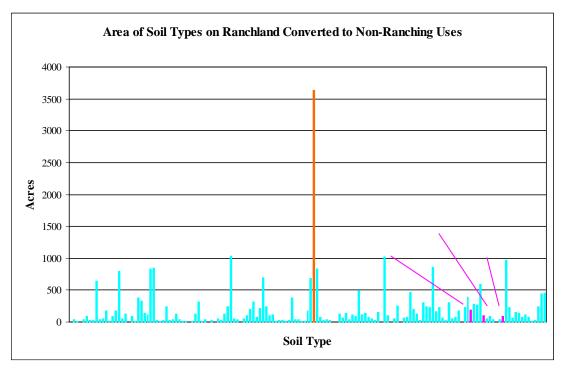
⁵ Throughout this report, the word "conversion" is used to indicate a change in land use. Thus a ranch conversion occurs when a ranch switches to non-ranching uses.



and 2004 than between 1986 and 1995. If this trend continues, the rate of ranchland conversion could soon go from low to significant.

Most of the ranchland conversion measured did not go to urban or suburban development. In fact, this type of development accounted for only 7% of the net reduction in ranchland since 1986. Instead, 77% of the net reduction in ranchland was due to conversion to farmland. This makes sense, considering the high percentage of ranchland under Williamson Act contract, because Williamson Act contracts typically require only that land stay in agricultural use, allowing ranch owners to convert to row crops or vineyards, or sell to someone who wishes to do so. Not surprisingly, then, most converted land is clustered around the Salinas Valley, a major farming region (Figure 4). In addition, we found that by far the most common soil type on converted ranchland is Lockwood Shaly Loam soil with gentle slopes of 2-9%, a combination commonly associated with farming (Figure 5). Other factors that seem to be correlated with ranchland conversion include proximity to a city (75% of converted land is located within five miles of a city) and proximity to a primary or secondary road (70% is located within one mile from a primary or secondary road).

Figure 5 Lockwood Shaly Loam, a soil type commonly found on farming land, is found on 13% of converted ranchland and only 1.6% of current ranchland. In contrast, the three most common soil types on current ranchland (Lopez Shaly Loam, Shedd Silt Loam, and Sheridan Coarse Sandy Loam) each occur on less than 1% of converted ranchlands.





6. The Pressure to Sell

Assuming that most ranch conversions occur after the ranch has been sold, identifying strategies to slow or stop the rate of conversion will depend on being able to identify the drivers of ranch sales. This section, therefore, attempts to answer the question "What factors most influence a rancher's decision to sell?"

6.1 Social Benefits of Ranching

First, it may be helpful to consider a different question: "Why aren't more ranchers selling?" After all, ranching has never been a particularly profitable enterprise. Historically, ranchers have been able to expect about a 2% return on their investment each year (Butler, 2002). And yet, generation after generation of ranch owners has persisted on the land despite the low income and high unpredictability of return. Ranch economists have labeled this phenomenon "ranch fundamentalism," a commitment to maintaining a ranch for the sake of the land and the independent lifestyle it affords—even in the face of low profits (Bartlett, Taylor, McKean, & Hof, 1989). Some researchers have called it "the most significant attitude in determining why ranchers stay on their land at the current high market prices" (Smith & Martin, 1972).

Key Findings— The Pressure to Sell

■ Though only 33% of ranchers said they were satisfied or very satisfied with the financial rewards of ranching, 79% rated their quality of life as "good" or "excellent."

■ The vast majority of ranchers agreed or strongly agreed that lifestyle factors and family benefits were reasons to stay on the ranch. Only 17% cited "the financial rewards" as a factor in their decision to stay on the land.

■ Most ranch owners (70%) agreed that over regulation might influence their decision to sell, and a majority cited state/local regulations (79%) and federal regulations (73%) as factors that might make it difficult for them to continue to ranch.

■ Between 1992 and 2004, low-cost ranchland doubled in price from \$200 to \$400 per acre, while high-cost ranchland more than tripled in price, rising from \$500 to \$1800 an acre.

■ Survey respondents were more likely to state that they would consider selling their ranch in the future if they had sold a parcel in the past, were dissatisfied with the financial rewards of ranching, or had been ranching longer. Respondents were less likely to consider selling if they owned a large herd, had a conservation easement, or were certain that one of their children were planning on taking over the ranch.

Judging from our survey results, ranch fundamentalism is alive and well in Monterey County (Figure 6). Although respondents had mixed feelings about their income—only 33% said they were satisfied or very satisfied with the financial rewards of ranching—79% rated their quality of life as "good" or "excellent," indicating that ranchers do not regard their quality of life as inextricably tied to their finances.

This conclusion seems to be confirmed by ranchers' responses to a question about the reasons for continuing to ranch (Figure 7). The vast majority of ranchers agreed or strongly agreed that lifestyle factors (including "Enjoy working outdoors," "Connection to land," "Enjoy working with animals," and "The independent lifestyle") and family benefits ("Good place to raise a family" and "Maintaining a family tradition") were reasons to stay on the ranch. Only 17% cited "The financial rewards" as a factor that might persuade them to keep ranching.



Figure 6 Survey results for (a) "How do you rate your quality of life as a rancher in Monterey County?" and (b) "How satisfied are you with the financial rewards of ranching?"

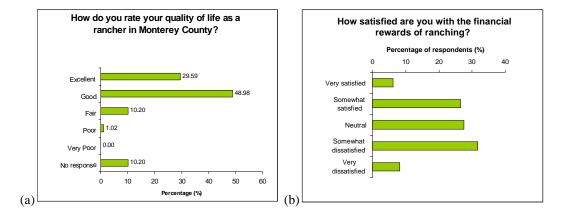
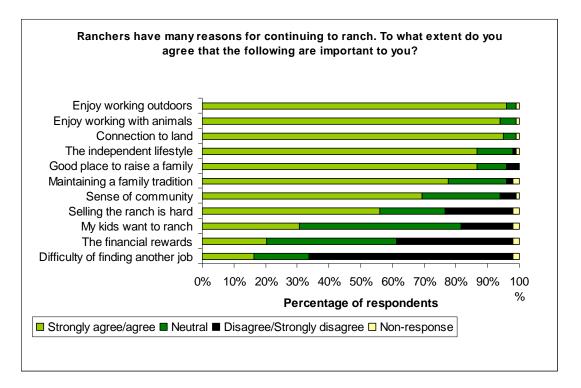


Figure 7 Survey results for "Ranchers have many reasons for continuing to ranch. To what extent do you agree that the following are important to you?"



The power of ranch fundamentalism, however, can wane with urban encroachment. An influx of new neighbors with different sets of values and priorities can spark urban-rural culture clashes, disruptions in ranching-community interactions, and changes in social



norms. As these "transitional effects" become more and more commonplace, ranchers may become increasingly willing to sell their ranch (Huntsinger & Hopkinson, 1996). In one study, researchers compared the attitudes of California ranchers in a rural county (Tehama) with those in two relatively urban counties, Alameda and Contra Costa (Liffman, Huntsinger, & Forero, 2000). In general, the ranchers in urban counties cared less about the fate of their land after a sale than rural ranchers did. "As urbanization proceeds," the authors suggest, "a point is reached where ranchers recognize the social, ecological, and economic landscape as urban and see it as no longer suitable for ranching. Expecting to sell for development, and/or expecting zoning change to allow it, becomes the rational view."

6.2 Social and Economic Pressures

So how do ranchers view the social and economic landscape of Monterey County?⁶ Certainly, many are concerned about the increasing urbanization of the region. Several survey respondents commented on the increasing development activity in their area, and one even mentioned a dispute with a non-ranching neighbor. These kinds of interactions will only increase as the population of Monterey County continues to grow. According to the Association of Monterey Bay Area Governments (AMBAG, 2000), the number of residents in the county is projected to rise from 401,321 in 2000 to 602,731 in 2030—a 50% jump.

In addition, many ranch owners are grappling with the issue of the next-generation rancher. Ranch owners often find that their children are not interested in taking over the family business, preferring instead to take a job in an urban area or pursue a different livelihood. Because family tradition is one of the primary social benefits that ranch owners associate with ranching (Figure 7), not having a child who wants to take over may reduce landowners' determination to stay on the ranch and increase the appeal of selling for a high price.

Along with population pressures and the next-generation issue, ranchers consistently cite land-use regulation as a major pressure. According to survey data, 70% of Monterey County ranchers agreed or strongly agreed that over regulation might influence their decision to sell (Figure 7), and a majority cited state/local regulations (79%) and federal regulations (73%) as factors that might make it difficult for them to continue to ranch (Figure 8).

The reason for ranchers' concern about regulation seems to be both social and economic. Socially, ranch owners' independent nature often leads them to reject the idea of government intervention because they fear it will mean continued government control over their management practices. Economically, because their land is their largest asset, ranch owners may regard any interference with the use of that land as a

⁶ Ranchers' view of the *ecological* landscape of Monterey County is beyond the scope of this report.



threat to their very livelihood. For example, the Community General Plan Initiative, which will appear on the June 2007 ballot in Monterey County, could limit ranchers' ability to sell individual parcels of land for subdivision—a strategy that ranchers often use to pay off estate taxes or stay afloat during hard times.

Figure 8 Survey results for "To what extent do you agree that the following could influence your decision to sell?"

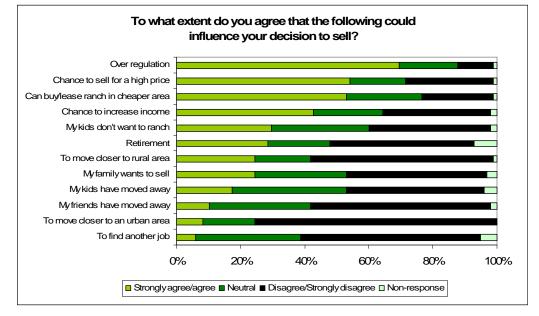
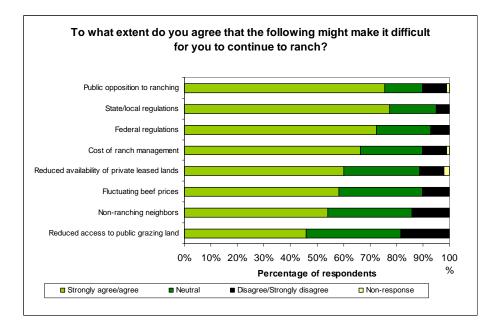


Figure 9 Survey results for "To what extent do you agree that the following might make it difficult for you to continue to ranch?"





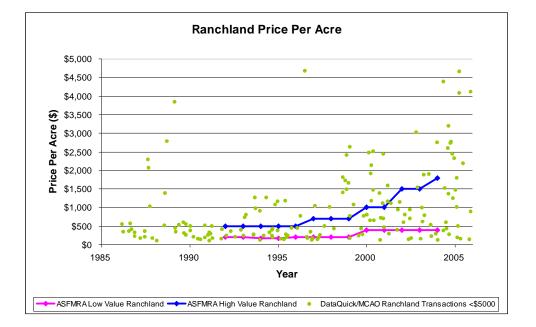


Figure 10 Price per acre of rangeland sold between 1986 and 2005.

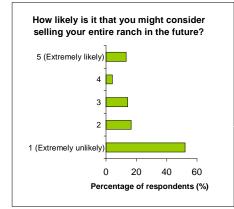
Perhaps the most acute economic pressure on ranches, however, is the rise in land prices (Figure 10). Between 1992 and 2004, low-cost ranchland in Monterey County doubled in price from \$200 to \$400 per acre, while the price of high-cost ranchland more than tripled, rising from \$500 to \$1800 an acre. These rising prices not only make it difficult for ranchers to pay property and estate taxes, but they may also make it harder for a rancher to say no to a purchase offer—especially if a rancher co-owns the land with family members who want to cash out.

To assess which factors most influence a ranch owner's decision to sell, we asked

respondents the question "How likely is it that you might consider selling your ranch in the future?" (Figure 11). Most (68%) said that they were unlikely or extremely unlikely to consider selling. However, the 17% who said that they *were* likely to consider selling in the future had several characteristics in common:

First, though finances don't play a large role in a rancher's decision to stay on the land, they appear a large factor in the decision to sell. Ranchers who stated that they felt dissatisfied with the financial rewards of ranching were more likely to consider selling in the future. Likewise, those who said that they'd sold a parcel in the

Figure 11 Survey results for "How likely is it that you might consider selling your ranch in the future?"





past—a strategy often used to deal with economic downturns—were more open to selling. On the other hand, ranchers with a larger herd size or a conservation easement on their land were less likely to sell, possibly because of the increased income and the reduced estate and property taxes, respectively.

Social factors also play an important role in the decision to sell. Ranchers who have children willing to take over the ranch are significantly less likely to consider selling than those who don't. In addition, older ranchers are more likely to consider selling, probably because they're nearing the age of retirement and must soon choose what will happen to their land after they're gone. The fact that these factors play such a significant role in the decision to sell underscores the importance of considering social dynamics before devising a ranchland conservation plan.

7. Profitability Strategies

The good news is that there are still many large, intact ranches in Monterey County. The bad news is that that the number is shrinking. Conversion rates to farmland and other land uses are increasing, the social satisfactions of ranching are in decline, and the economic pressure to sell is on the rise. It seems inevitable, then, that many ranchers may soon be at the point where the financial rewards of selling the ranch will outweigh the social and financial benefits of holding onto it.

The question, then, is—how can we shift or even reverse this trend? What strategies can we find to ease some of the financial pressures while also shoring up the social foundations that have made ranchers so committed to staying on the land in the past? What approaches can help to support and restore the non-monetary benefits that ranchers value so dearly?

After analyzing our survey data, talking with ranchers across the Central Coast, and consulting rangeland experts all over the West, we've concluded that there is no silver bullet for conserving ranchland. The ranching community is simply too diverse to respond positively to a single approach. Improving the viability of ranching will therefore require a *range* of strategies—some economic, some social, some aimed at the individual rancher, and some focused on the overall dynamics of Monterey County.

7.1 Benefits and Limitations of Conservation Easements

Currently, one of the primary tools for ranchland protection is the conservation easement (Table 1). With an easement, a landowner agrees to relinquish development rights in an agreement with a government agency, conservation organization, or land trust, through a sale, donation, or combination of both. From a conservation point of



view, the advantages of an easement are that it allows for permanent protection from development; and may require improved land stewardship practices. For ranchers, benefits may include monetary payment and tax relief for foregone development rights and the knowledge that their property will stay in ranching—or, at least, in a recognizably undeveloped state—beyond their lifetime (Anella & Wright, 2004).

Despite this seemingly win-win arrangement, however, only 17% of our survey's respondents have sold or are in the process of selling a conservation easement. There are two likely major reasons for this relatively low number: First, land trusts and other organizations simply don't have the funding to purchase as many conservation easements as they would like, especially considering the recent rise in real estate prices. Second, many ranchers fundamentally oppose the idea of giving up any portion of their property rights, no matter what the financial compensation.

In our survey, we asked the question, "The following have been suggested as ways to improve the profitability of ranching in Monterey County. To what extent do you agree that the following strategies might make a significant difference?" (Figure 12) Conservation easements proved to be one of the most polarizing options on the list, with 34% of respondents agreeing or strongly agreeing and 38% disagreeing or strongly disagreeing that an easement might make ranching more profitable. Only organic farming, with its associated red tape and logistical hassles, was deemed less effective by ranchers.

Figure 12 Survey results for "The following have been suggested as ways to improve the profitability of ranching in Monterey County. To what extent do you agree that the following strategies might make a significant difference?"

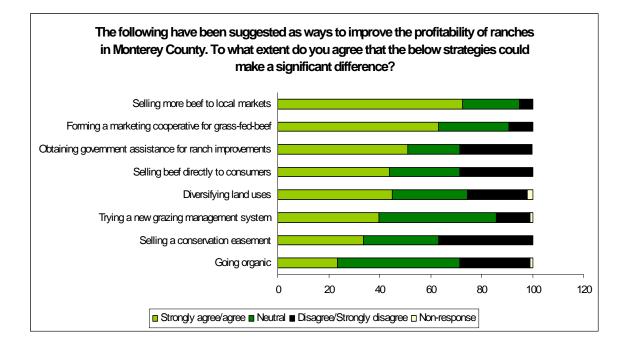




Table 1 A sample of conservation strategies in use or being considered for	use in Monterey County

Strategy	Benefits	Issues	Good for ranchers who…
Conservation easement	 Permanent protection from development Cash and tax relief for ranchers Maintenance of ranch for future generations 	 Loss of partial property rights for rancher Expensive for conservation organization High transaction costs on both sides Reluctance on many ranchers' parts to participate 	 Value immediate cash more than potential revenue from future development Have strong land stewardship practices Want to maintain the local ranching tradition Plan to pass on the land as a working ranch to their children
Diversified land use— Ranch tourism (e.g., hunting, recreation, farm stays)	 Additional income for rancher Chance to foster urbanrural relationships 	 Initial financial return may be limited Diversion of time and resources away from ranch operation Reduction of privacy Regulations and liability costs related to tourism activities 	 Like interacting with the public Own land that's desirable and accessible to guests Have a family who is committed to involvement in the business Are either willing to take time away from ranching or willing to hire additional labor
Diversified land use— Third-party infrastructure (e.g. cell phone towers, wind turbines)	 Additional income with minimum effort for landowners Possible improved road access for rancher 	 Difficulty in meeting siting requirements (e.g., sufficient wind resources, minimum road access) Possible obstructions to neighbors' viewsheds, conflicts with local regulations, and environmental impacts Increased landscape fragmentation due to road construction 	 Meet siting requirements Have appropriate sites on their land that do not obstruct their neighbors' viewshed Can successfully address environmental concerns and local regulations
Marketing cooperative	 Reduced risks and costs for individual ranchers Improved negotiating power in the marketplace Increase in cohesion of ranching community Source of local beef Access to niche markets 	 Requires coordinating with the other members, Need to ensure product consistency Need to devote time and leadership to get the cooperative running 	 Are willing to work with other ranchers Want to market their beef locally but don't have the expertise or time Want to disengage from commodity beef production Operate in an area with a willing target market for their products.



These results indicate that while it may be possible to increase the coverage of conservation easements in the county, the room for growth is limited, not only by financial constraints but also by the value systems of many ranchers. Clearly, there is a need for alternative conservation strategies in Monterey County.

7.2 Strategies for Improving Ranch Viability

A number of the ranchers we spoke to around the Central Coast are already making efforts to increase profitability. The strategies that they have chosen or are in the process of investigating require varying levels of effort and involvement (Table 1), and many mirror the list of options presented in our survey (Figure 1). For example, several ranchers have told us that they have diversified or are trying to diversify their land use through ranch tourism, third-party infrastructure, and other supplemental businesses. There is a high level of interest in more ground-breaking strategies, as well (See "Cutting-Edge Strategies").

Interestingly, while some ranchers we've spoken to have expressed doubts that a marketing cooperative could work in the area, "Forming a marketing cooperative for grass-fed beef" was one of the most popular strategies listed in our survey. Sixty-three percent of respondents agreed or strongly agreed that forming a cooperative could help improve the profitability of ranching, while only 9% disagreed or strongly disagreed. In addition, "Selling more beef to local markets"which would most likely be a key component in any regional cooperative—was strongly supported, with 72% of ranchers agreeing or strongly agreeing that this approach could help improve profitability and only 5% disagreeing or strongly disagreeing.

Cutting-Edge Strategies

Grass Banking Ranchers agree to protect wildlife habitat on their land in return for being allowed to graze their cattle on land beyond the ranch. This strategy allows ranchers to expand grazing to land they couldn't afford to buy and allows land conservancies to preserve more habitat than they could pay for (Robbins, 2006).

Alternative Cattle Revenue Prather Ranch, located east of Mt. Shasta in northern California generate revenue by selling cows to a biotech company, which creates surgical implants from the cows' biological tissues (Prather Ranch, n.d.).

Carbon Markets Under California Assembly Bill 32, the state is establishing market-based strategies for reducing CO_2 emissions to combat global warming. There is potential for creating a California market for the emissions reductions associated with keeping ranches from being developed (American Farmland Trust, 2006b; Department of Conservation, 2002).

Private Equity Funds Groups like Beartooth Capital buy lower-priced rangeland, convert some of the land to recreational uses, and capture the economic value of ecosystem services (Beartooth Capital Partners, 2005). With a membership in the Chicago Climate Exchange, Beartooth is the first rangeland offset aggregator in the carbon market. The company helps to register ranchers in the carbon-offset market, so that they can be paid for the carbon capture in their

How well would a marketing cooperative work in Monterey County? There are signs that the answer to this question is "very well indeed." A 2004 survey of Central Coast consumers found that the two qualities that local food shoppers most like to see on product labels are "humane" and "locally grown"—both terms that could easily be used to market grass-fed beef from Monterey County. Another consumer study,



performed by a fledgling ranching cooperative called the Central Coast Home Grown Meat Alliance, found similar results. This group has already taken the initial steps needed to form a regional cooperative, including creating a marketing plan. Unfortunately, delays in the opening of a mobile slaughterhouse, a necessary ingredient if the cooperative is to remain truly local, have slowed the group's initial momentum. Strong leadership within the ranch community is needed to get the project back on track.

7.3 Public Policies

As economic and cultural pressures on ranchers in Monterey County increase, more and more ranchers will turn to government policies to help keep their ranches afloat. Policies provide three general types of opportunities for ranchers. Several programs, such as the Environmental

Key Ranchland Conservation Policies

Policies that provide conservation incentives to ranchers are listed below:

Federal

Pension Protection Act

Farm Bill

Includes initiatives such as the Conservation Security Program Environmental Quality Incentives Program, Wildlife Habitat Incentives Program, Farm and Ranchlands Protection Program, Grassland Reserve Program, Farmers Market Promotion Program

State of California

California Farmland Conservancy Program

•California Land Conservation (Williamson) Act

•California Rangeland, Grazing Land, and Grassland Protection Act

Quality Incentives Program, provide payments to ranchers for implementing conservation practices on their land. Policies such as the Williamson Act offer financial incentives to ranchers in exchange for an agreement to temporarily limit development rights. And other policies, such as the California Farmland Conservancy Program, are designed to preserve land in agricultural use forever, through purchase of permanent conservation easements.

Many ranchers in Monterey County have been successful in increasing their revenue by taking advantage of government policies designed to support ranchers (Marquis, D., personal communication, January 22, 2007). Despite these success stories, however, many ranchers resist the idea of partnering with government agencies. If political support for conservation programs is strengthened and government agencies continue to conduct outreach to earn rancher trust, government programs may play an increasingly important role in maintaining the viability of ranching in Monterey County.



III. CONCLUSION

8. Improving Social Dynamics

Increasing the profitability of ranching is certainly one important element of a ranchland conservation plan. But strengthening the *social* viability of ranching may be even more crucial. As discussed earlier, many owners are willing to accept the low rate of return inherent in ranching in exchange for the profession's non-monetary benefits. But urban encroachment, increasing ranch conversions, and restrictive land-use policies may breed a sense of impermanence among ranchers—especially when social norms, such as the tradition of passing down the family ranch from generation to generation, begin to break down.

As demonstrated in our survey results, the question of the next-generation rancher can play a significant role in a rancher's decision to sell. It must also, therefore, play a central role in the design of social strategies for ranchland and ranching conservation. There seem to be two main ways to address this problem. The first is to tackle it head on with direct, focused approaches, such as workshops on estate tax planning and certification programs for young ranchers (see "Next Generation" sidebar). The other is by taking a holistic approach and working to improve the financial and social dynamics of the entire ranching community by helping both parents and children increase their profits, strengthen their relationship with the urban community, and forge nontraditional alliances with conservation organizations and others interested in sustaining the health of ranchlands in Monterey County.

Next-Generation Rancher Training Programs

Since 1956, Texas Christian University (TCU) has been running an intensive nine-month ranch management program aimed at equipping aspiring ranchers with the skills necessary to manage a ranch (Wright, 2006). The program covers everything from business management principles to land and animal care (Texas Christian University, 2005).

No such intensive program currently exists in California. Next-generation ranchers seeking formal training must either spend four years earning a degree in agricultural management at California Polytechnic Institute (Cal Poly) or pursue short-term, less intensive training through a California Farm Bureau Federation (CFBF) networking association called the Young Farmers and Rancher Program. Clearly, there is the need for a program that combines *both* short -term and intensive training so new ranchers can attain the expertise needed to run a largescale ranching operation without enrolling in a four-year college program.

Unfortunately, the historic distrust between ranchers and conservation organizations has meant that these two sides often work against each other rather than joining forces to achieve their mutual goal—the continued health and conservation of ranchland in the American West. One organization that is working to overcome this tension is the Quivira Coalition, which is based in Santa Fe, New Mexico. In the years since it was established by a rancher and two environmentalists, Quivira has sought to provide an open forum for stakeholders to discuss their concerns and collaborate on new solutions to the ranch conversion problem. To help promote this kind of dialogue, the



organization runs an annual conference, numerous workshops, a small grants program, and several outreach activities.

Modeling itself after Quivira, a California-based group called the Central Coast Rangeland Coalition is working to increase science-based dialogue about land stewardship methods and rangeland health indicators in Monterey County. Because it is a grassroots, rancher-led group, its efforts and the efforts of its conservationminded members may have more credibility than those initiated by conservation groups alone. Joining such coalitions may help land trusts, such as the Big Sur Land Trust, build a foundation of trust with the ranching community, opening the door to discussion rather than conflict and smoothing the way for cooperation on many of the strategies outlined elsewhere in this report.

Perhaps even more important than bridging the rancher-conservationist divide, however, is bridging the urban-rural divide, a cultural chasm that is at the root of many of the tensions that characterize the New West. Urban residents value ranchland for its aesthetic qualities, regarding it as a public benefit that must be conserved, often through prescriptive regulations. Rural residents, on the other hand, inhabit a world of informal rules that are enforced by community and cultural traditions rather than by the law. But, in Monterey County, most ranchland is *private* property. Thus, its owners may regard any public claim or restriction on their land use as a threat to their very livelihood.

How best to heal this division? Perhaps county policy makers should take a cue from the Williamson Act. As we've seen, Williamson Act contracts do not prevent ranchers from selling or converting their land to farmland or ranchette developments. Yet the vast majority of ranch owners are still ranching instead of tending vineyards or building exurban housing developments. Why? One reason may be that the mechanisms of the Williamson Act function less as barriers to development and more as incentives that make it financially feasible for ranchers to continue ranching. In other words, when it comes to keeping the ranching community intact, carrots work better than sticks.

9. Recommendations

There remains a tremendous opportunity for large-scale, proactive conservation of ranchlands in Monterey County. Accomplishing this goal, however, will require a cooperative, community-based effort that makes use of a broad range of strategies. Ranchland, after all, is *private* land. Thus, any sustainability strategy must be designed in collaboration with the *owners* of that land.



The Big Sur Land Trust can play a role in helping to highlight the common ground that exists among the stakeholders in Monterey County. After all, most of the stakeholders involved want the same thing—to keep the region's ranchlands intact. For example, the urban-rural relationship could be improved by encouraging outreach on both sides through farmers markets, direct marketing initiatives, and on-ranch events.

Specifically, we recommend that the Big Sur Land Trust, policy makers, and other stakeholders take the following steps:

- Focus efforts on supporting rancher-led, grass roots efforts, such as the Central Coast Rangeland Coalition and the Central Coast Home Grown Meat Alliance.
- Encourage cooperative initiatives that take into account the attitudes, values, and social norms of the ranching community.
- Work to improve public perception of the ranching community within urban Monterey County.
- Join the Central Coast Rangeland Coalition in undertaking science-based assessments of traditional ranchland management practices.
- Seek out strong leaders in the ranching communities who can motivate other ranchers to put innovative strategies into practice.
- Develop strong relationships with young ranchers. They are the future of ranching, not only because they will determine whether local ranchland stays in ranching or is sold into development but because they will be the source of progressive ideas on how to sustain ranching in Monterey County in the years to come.

Though these recommendations seem simple, they are necessary first steps to building a collaborative ranchland conservation plan for Monterey County. Implementing them will go a long way toward reconciling the outlook of the Old West with the realities of the New West.

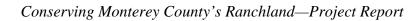


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