Conservation on the Edge:
Understanding Landscape Scale Conservation at
Colorado's Urban-Rural Interface

by

Peter Ericson

Submitted to the Department of Urban Studies and Planning
in Partial Fulfillment of the Requirements for the degree of
Masters in City Planning

ABSTRACT

Landscape scale conservation is an emerging framework that refers to the ability
to conceive, plan, finance and manage projects with significant natural
conservation value while incorporating the cultural and economic activities of
people situated in those landscapes. This framework is examined within the
context of shifting conceptions of the mechanisms, scale, purpose and rationale
behind land conservation, as well as in consideration of the concurrently evolving
thought and practice of sustainable development. The goals of this exercise are
twofold. First, drawing upon a literature review and three case studies this thesis
seeks to introduce landscape scale conservation as an emerging field of
expertise with relevance to issues of community growth and character, economic
opportunity and environmental quality in Colorado. Second, this thesis seeks to
glean insights, both positive and negative, from three case studies that may in
turn lead to policy and/or programmatic recommendations for how landscape
scale conservation efforts can achieve their ambitious goals.

The central assertion of this thesis is that innovative projects consistent with
landscape scale conservation are being undertaken in Colorado at the urban-
rural interface. However, significant challenges remain and the cases examined
in this thesis reveal limitations of landscape scale conservation and affirm
ongoing efforts to address these limitations, and point to complimentary policies
– such as growth management – that should be given consideration. The
efficacy of these conservation efforts should be of interest to planners,
conservationists, government agencies and private citizens who frequently have
vested interests in the many environmental, economic and socio-political policies
that landscape scale conservation implicates.

Thesis Supervisor: William Shutkin
Title: Lecturer, Department of Urban Studies and Planning
ACKNOWLEDGEMENTS

First of all, I am truly thankful for having been given the opportunity to spend two years at MIT. I am indebted to all the professors, staff, and my fellow students at the Department of Urban Studies and Planning for providing a great opportunity to develop the practical skills and underlying knowledge to tackle professional endeavors. Exposure to such smart, creative, and motivated people should be commonplace, but I recognize it for the privilege that it really is and hope that this thesis reflects some of the knowledge I have gleaned from this community.

I would like to thank, foremost, Bill Shutkin for his help and encouragement in all facets of my time at MIT – including the formation and writing of this thesis – for a candid opinion, great sense of humor and his generous support. I am truly appreciative of his willingness to take a “flyer” on a ski bum with an interest in planning and the environment. Jim Levitt graciously agreed to add his considerable expertise on the subject and field of conservation for this thesis and, as such, I would like to thank him as well. I would also like to thank the busy professionals in Colorado who agreed to speak with me regarding their work, and have made themselves available beyond the scope of this thesis.

Much love to my family. Mom, Dad, Ben, Grandma & Grandpa Ericson, Grandpa and Grandma Denslow, and Debbie and Pat have provided me with an abundance of support, encouragement and their own interest and I can’t ever thank them enough. And to Sarah, I love you for keeping me honest, “Quit whining and just write it,” among other things.
TABLE OF CONTENTS

Chapter 1: Introduction..................................................................................................................5
Chapter 2: Conservation in Context..............................................................................................11
Chapter 3: Growth and Conservation in Colorado and the West.................................................34
Chapter 4: Case Study Methodology...........................................................................................46
Chapter 5: Case Studies
  Case 1: South I-25 Conservation Corridor................................................................. 51
  Case 2: Mesa County Community Separator................................................................. 66
  Case 3: The Chico Basin................................................................................................. 85
Chapter 6: Case Study Analysis..................................................................................................102
Chapter 7: Recommendations and Conclusions........................................................................123
Appendices
  Appendix A: Interview Protocol.........................................................................................130
  Appendix B: Chico Basin Ranch Philosophy.....................................................................134
Works Cited.............................................................................................................................136
Chapter 1: Introduction

"The pregnant question facing conservationists in the early twenty-first century is, 'What advanced practice or revolutionary innovation can we implement that is both commensurate with the complex challenges at hand and likely to leave a lasting impact on the landscape?"\(^1\)

As an arena of the environmental movement land and resource conservation has a relatively long and distinguished history. The writing, thinking, and actions of conservation pioneers such as George Perkins Marsh, John Wesley Powell, Teddy Roosevelt, Gifford Pinchot, John Muir, and Aldo Leopold established a firm a base for the growth of environmentalism and conservationism. In time these constituencies earned a permanent seat at the table. However, after thirty years of "environmentalism," including diversification and fragmentation of the movement into a variety of subsets, a number of factors have recently contributed to a reconsideration of the goals and scope of conservation practice. This reassessment is being played out through larger societal debates over optimal approaches to natural resource management and environmental regulation in general. In regards to land conservation, these factors include theoretical and practical reevaluation of conservation goals, recognition of limitations in financial resources, reassessment of the depth and diversity of supporters which, by extension, questions the equity and applicability of the conservation movement, and critical examination of the different locations

---

and scales at which land conservation ought to be pursued. Collectively, these trends are precipitating significant changes and spurring innovation in policy, strategy, and practice.

It is widely recognized that conservation will need to address historical challenges of environmental degradation and fragmentation, as well as emerging “complex challenges.” Steady population growth, shifting demographic patterns, continued economic expansion, rising personal affluence, and acceleration of technological networks (like the internet) present additional formidable hurdles in regards to conservation of land and biological diversity. These questions need to be understood in the wider context of the evolution of environmental policy and natural resource management where environmental protection has assumed a fairly safe position in the public conscious, but only to the extent that economic pain or personal sacrifice is either not called for or largely hidden.

In this thesis I will explore these ideas by examining one emerging area of conservation practice, so-called “landscape scale conservation” projects in one location – Colorado – and consider how these projects are addressing one manifestation of these “complex challenges,” namely, above average population growth in the state over the last decade. The underlying goal of this line of questioning is to discern how landscape scale conservation projects undertaken at Colorado’s urban-rural interface are different than past approaches, how these approaches are faring in their efforts, and what emerging challenges are being brought into focus as a result. What, if anything, can be learned from these projects in regards to conservation policy, strategy, and practice in Colorado?

Why Colorado and the West?

This thesis operates under the proposition that by limiting the investigation to one particular location – Colorado – within a more broadly defined region – the West – which share important commonalities in climate, land use and ownership

---

dynamics, economics, politics, demographics, history and character, some lessons and knowledge regarding the pursuit of landscape scale conservation schemes at the urban rural interface may emerge.

I believe that landscape scale conservation efforts in Colorado are acting as de facto growth management tools, in addition to their primary purpose of conserving land for various ends. As a corollary to this trend, and in the context of ongoing changes in environmental policy and management regimes, conservation advocates are expanding into areas that have traditionally fallen within the purview of disparate professional "silos." This expansion is necessitating new strategies, relationships, and policies, as well as placing more onerous demands on organizations and individual projects. By examining three case studies I intend to investigate this tendency and the resultant challenges, hoping that they may provide valuable guidance for shaping projects and related policies in the state and region going forward.

While attempting a full defense of a regional Western perspective is not the aim of this thesis, there are a number of reasons for this focus. For one, there is a strong literary and scholarly focus on the American West and the need for a regional perspective. Leading scholars contend that Westerners have a deep sense of the unique qualities of the region, engendered at least partly by a robust collection of regional literature by authors prominent and obscure. Academic programs in natural resources, law, and policy that focus on the sizeable geography and policies of the West exist in some form at virtually all of the region's universities. Various foundations and think tanks such as the Sonoran Institute and the Center for the Rocky Mountain West pursue distinctive academic agendas. Vibrant Western-centric journalism and opinion presented through outlets such as *High Country News* and *Headwaters News* fosters a sense of shared concerns and challenges to those who are inclined to pay attention. In sum, these factors contribute to, as University of Colorado Law School Professor Charles Wilkinson explains, "an emerging determination – bred
of social, as well as environmental, judgments – to respect and protect the fragile distinctiveness of the region."³ My personal background as a Westerner – native of Colorado, three year resident of Utah, frequent visitor to Wyoming and Nevada, and a strong professional interest in pursuing a career in planning and conservation in this region – have contributed to a desire to investigate one facet of this emerging determination: the interaction of land conservation and urban growth in Colorado – while remaining mindful of the region as a whole and the lessons that may be applicable at this wider scale.

An internship with The Nature Conservancy of Colorado in the summer of 2003 gave me first hand insight into one of the leading organizations in the field of conservation. During this period TNC was coming under significant scrutiny for some of their policies and practices, highlighted by a series of Washington Post exposes and culminating in Congressional inquiries. Despite the controversy surrounding the national organization, there was little doubt in my mind that TNC's sophisticated conservation planning strategy, known as "Conservation by Design," combined with their considerable financial wherewithal and able staff and leadership were allowing them to undertake inspiring projects. This internship provided excellent exposure to both competing and collaborating organizations and individuals within the state and region.

Learning of the existence of the Program on Conservation Innovation at the Harvard Forest and exposure to James Levitt's research, writing and efforts to convene leaders in the field of conservation further clarified the ideas and issues of landscape scale conservation as a distinct and coalescing niche of practice and study. At the same time, studies at MIT's Department of Urban Studies and Planning provided wide exposure to contemporary debates regarding interconnected issues of sprawl and growth management, environmental justice, 'green' development and affordable housing, and all the exigencies of development and growth in urban and suburban contexts. I

became increasingly aware of and intrigued by these large scale conservation projects and the relatively small universe of academics and practitioners driving the field and attempting to address these persistent issues through conservation.

As a result, this thesis is an attempt to synthesize academic and professional sources of information, road trip observations, carefully directed thought, and abundant campfire and barstool ramblings – my own and others – regarding trends in the landscape and character of Colorado and the West. Exposition on the incredible menu of places, issues and mechanisms implicated above is far beyond the scope of any one discipline or investigation, at least one I am capable of elucidating in this thesis. As a result, I will focus on one particular reaction to this slate of pressures in the hope that it may provide knowledge that is valuable in generating policy and programmatic goals in Colorado and the region as a whole. I am not alone in believing that these are important areas of inquiry, and my ambition is that these sources can be combined into a coherent and cogent investigation of the role that conservation can play in city and regional planning, growth and economic development, and definition of community character in the Rocky Mountain West. The focus of this thesis is, therefore, personal and pragmatic, though justified on more objective academic grounds that will be detailed in short order.

I will present my argument in seven chapters. With the conclusion of this introductory chapter, chapter 2 seeks to place evolving conservation strategy and practice in historical context and relate it to broader questions of environmental policy. I will fully introduce landscape scale conservation as an emergent framework and briefly detail some areas where innovation is both anticipated and desired. Chapter 3 presents background on demographic changes and growth, trends in land conservation activity, and thoughts on the intersection of these trends in Colorado and the West. Chapter 4 will explain the methodology I used in selecting the respective cases. The case studies will be presented in Chapter 5. I will detail the origins of each project, relevant actors, financing and
acquisition strategies, goals and benefits, conservation mechanisms, pertinent management concerns, and challenges or shortcomings encountered. Chapter 6 will provide analysis of the three case studies. I will close in chapter 7 by discussing recommendations of interest to policy makers, conservation advocates, and government agencies.
Chapter 2: Conservation In Context

Conservation in the Context of Environmentalism

While it is impossible to pinpoint the exact genesis to the conservation movement in the United States, the tradition has developed a robust ethic and central place in the country's environmental consciousness over the last 150 years, if not longer. It is difficult to separate the ideas of conservation, natural resource management, and environmentalism over the course of the last century as the three have evolved and regenerated around each other, and the aim of this thesis is not to delve deeply into the history and evolution of conservation and environmentalism as there is abundant literature on the subject. However, in order to develop a proper understanding of landscape scale conservation, some background in necessary.

In short, the ascension of the environment as a salient and actionable political issue in the late 1960s and early 1970s fundamentally changed the landscape of conservation, natural resource, and public land management. As the general public and a growing field of civil society actors coalesced around the issue, politicians responded by laying the statutory cornerstones of modern environmental law and policy. The spate of new polices featured expansive citizen suit provisions, taking advantage of evolving views of who had “standing” in the eyes of the judicial branch in regards to environmental harm or injury. At the same time, conservation groups and politically active “environmental” groups became synonymous, and tax exempt status enabled them to expand their activities and take advantage of the ambitious, media specific, top-down environmental laws which were being enacted. This convergence of events
produced a bold and aggressive environmental movement which was both enabled by and identified with the federal government (vs. state), was suspicious or dismissive of the objections of big business, was highly inflexible in its application, and could, through the courts, effectively insinuate itself into a broader slate of policy and management decisions than imagined by legislators.  

While it is largely agreed that these laws paid substantial dividends in terms of environmental quality in the short and medium term, they also galvanized virulent opposition and largely determined the initial rules of the 'game' and the chief points of contention for the next twenty years. The courts became the primary battleground where environmental issues came to be decided or, more accurately, came to be continually contested. Objections to the underlying principles of conservation, environmental regulation, and natural resource management efforts, as well as the means of agenda setting and legitimacy of enforcement were brought to the fore of debate. The backlash first found widespread expression during the Regan administration and evolved to include sophisticated legal underpinnings and litigation capabilities that were meant to match the prowess environmental groups had developed in the courts during the 1970s. Likewise, policy advocates and think tanks developed public relations capabilities and strategic alliances with business – extractive industries, utilities, and development interests – in order to advance their anti-environmental agenda legislatively. Dedication to free market capitalism and property rights tied in nicely with antipathy towards 'big government' and regulation. Anti-environmental legislative efforts took longer to come to fruition, and had decidedly mixed results at that. These measures largely fizzled as the environment continued to resonate with the public as an issue.  

---

Thus, at the close of the twentieth century society increasingly has to confront "puzzling paradoxes" involving environmental protection, conservation, and resource management. Environmental values are widely but not deeply held; a general antipathy towards "big government," top-down, one size fits all regulation is held by both sides of the ideological fence (at least in word, if not deed); lawsuits continue to be the dominant way to seek redress; the incremental cost of environmental quality is recognized as steep; and the old policies and tools for achieving these gains are seen as inappropriate or utterly inept, but difficult to abandon for uncertain alternatives. Within this rather frustrating milieu, fundamental questions of the structure of America's democracy resonate with an emerging "radical center" that advocates for collaborative, innovative approaches to conservation and resources management. The radical center believes that political and legislative gridlock is beneficial neither to pro-environment civil society nor to business or development interests that aren't categorically anti-environmental. Scholarship on "strong democracy" that is decentralized, flexible, and highly idiosyncratic, emphasizing true participation rather than symbolic representative government and the status quo are being examined as especially relevant to questions of conservation, natural resource management, and environmental quality in the face of these paradoxes.\footnote{Benjamin Barber, \textit{Strong Democracy} (Berkeley, CA: University of California Press, 1984).}

**Conservation in the Context of Sustainable Development**

A broader lens through which contemporary conservation scholarship, policy and, ultimately, action should be understood is that of sustainable development, a concept which remains something of a moving target despite voluminous academic exposition on the subject. In shorthand, sustainability is the belief that environmental and many other realms of policy, law and societal discourse should incorporate ecological, economic and cultural well being into their calculus on terms which emphasize the interrelations between each. In
order to better understand landscape scale conservation and the broader environmental policy arena in which it has been developing, a brief examination of sustainability and its primary themes is presented here.

Speaking in the broadest terms, political Scientists Daniel Mazmanian and Michael Kraft have characterized three epochs of environmental policy. These epochs consist of the rise of environmental regulation, a period of flexibility and regulatory reform and the emerging trend toward sustainability as an overarching principle in the third epoch.

The first epoch encompasses the "pillar" pollution control and prevention regimes and many other command and control policies and regulatory programs which arose as a reaction to the burgeoning environmental movement of the 1960s and 1970s. The Clean Air Act, Clean Water Act, Endangered Species Protection Act, National Environmental Protection Act, Federal Land Policy and Management Act, Safe Drinking Water Act, Toxic Substances Control Act, Resource Conservation Recovery Act and the Comprehensive Environmental Response Cleanup and Liability Act are all examples of this epoch. These regulations and related policies tended to be focused on individual issues or media (i.e. water, air, toxics, land use), fragmented from one another, and reactive or 'end of pipe' in nature. These programs were seen as 'top down' in that they had their origin and authority firmly rooted in the powers of the federal government. These regimes pursued results though punishment of violators and often imposed significant, though not necessarily inefficient, costs on industry and were responsible for many of the significant improvements in environmental quality that have been enjoyed to date. This epoch also demanded new bureaucratic institutions such as the Environmental Protection Agency and entailed significant administrative, enforcement and scientific capabilities.\(^8\)

\(^9\) Ibid.
The second epoch featured a halt to expansion of polices and programs in favor of refinement of established programs and attempts to address objections and backlash from the first epoch. This included a shift away from stringent command and control towards more flexible regimes that explicitly sought to address economic concerns of industry and private property owners as well as philosophical objections to what were perceived as onerously heavy-handed and centralized federal government regulation. Deregulation as a wider trend in economic policy undoubtedly seeped into conceptions of environmental law and policy during this period, roughly contiguous with the 1980's and the twelve year reign of the Regan-Bush White House. This epoch saw the rise of cost benefit analysis, risk assessment and market driven mechanisms such as pollution trading permits that frequently emphasized flexibility in their application. Business interests influenced policy heavily during this period, trumpeting "predictability" and "consistency" as the determinants of whether environmental regulations and policy was worthy of pursuit.\textsuperscript{10}

Despite the revolutionary nature of the first epoch and concerted refinement of the second, problems of environmental degradation continued and in some cases worsened despite nearly twenty five years of effort. As business and civil society actors – government agencies and non-profit advocacy groups, primarily – gained expertise over time, new threats and issues emerged which were clearly not being adequately addressed via the frameworks and thinking of the first two epochs. A partial list reads like a menu of contemporary, troublesome policy debates: non-point source pollution from automobiles and agricultural; continued loss of wetlands and other valuable habitat through unchecked urban sprawl and other mechanisms; bio-accumulation of toxic materials; intimidating backlogs of abandoned land worthy of Superfund or brownfield designation; persistent disparities in public health and environmental risk in minority and low income communities; continued population growth and

\textsuperscript{10} Ibid.
subsequent land and resource consumption. When combined with global issues that have implicit environmental components and present some of the most pressing policy questions ever posed, the inadequacies of the first two epochs come into sharp focus. This expanded slate of concerns includes exponential population growth, global warming, trans-boundary pollution, and changing demographic patterns, declining ocean fisheries, and decommissioning of nuclear facilities and waste disposal.\(^{11}\)

A common thread running through many of these issues is that crafting solutions will only be possible by employing approaches which are capable of crossing the boundaries of environmental media, social effects and economic motivations. The third epoch is one of sustainable development where an explicit understanding of the complexity and interdependence of environmental protection defines the slate of solutions that can be brought to bear. While tools and systems from the first two epochs are incorporated – centralized regulatory and market based systems remaining valuable and viable in many instances – the newest epoch seeks to employ a variety of approaches and innovative ideas. Areas of focus include pollution prevention, industrial ecology, smart growth, robust and widespread market incentives, green building, organic agriculture, and, directly relevant to the subject of this thesis, collaborative ecosystem based management of which landscape scale conservation might be understood as a component or compliment. In the interest of efficacy, the third epoch of policies intentionally blurs the lines between environmentalism and economic development, public health, democracy and justice. This is not to imply that these goals are always going to be in agreement. There are undoubtedly activities which are irreconcilably juxtaposed, and in these instances the third epoch seeks engagement and reasoned discourse in order to emerge with best

case scenarios. As such, productive partnerships between previously isolated government, business, and civil society sectors are necessary, if not mandatory.

**Strategy and Practice Evolution**

So, while conservation has gained a firm seat at the table and is widely accepted as an intrinsic subset of the environmental movement, cracks in the body of conservation thought and practice have become increasingly clear, coinciding with wider trends in environmental policy and natural resource management in general, including an emphasis on a new “epoch” of sustainability that infuses many discussions on the subject. By implicating fundamental limitations of environmentalism as a social project in general – and traditional conservation strategies in specific – deep fissures that begged serious reflection in the academic community emerged. This peaked in the early to mid-1990s with publication of volumes such as *Uncommon Ground* edited by William Cronon and *Losing Ground: American Environmentalism at the end of the 20th Century* by Mark Dowie.\(^{12}\) This academic reckoning largely reflected ongoing trends in conservation practice. Some on the ground at land trusts and conservation organizations had already acknowledged certain limitations and were actively seeking new avenues of action. The evolving goals of conservation in the broadest sense – protection of a wide variety of landscapes, functional ecosystems, and biological integrity – was deemed by important players to be rarely attainable in the context of traditional realms of conservation strategy and focus. The perceived tendency was to focus on pristine wilderness (or as close to that troubled construct as possible) and certain species or landscapes, sometimes derided as a focus on baby seals and high mountain peaks. In the interest of relevance and efficacy, re-conception was undoubtedly necessary and leading organizations consciously pushed themselves in this direction.

Assessing prospects for success in the late 1980s and early 1990s, leading groups such as The Nature Conservancy (TNC) came to the conclusion that there would simply never be enough money, organizational capacity or political support for strict conservation of the vast majority of priority lands, irrespective of legitimate biological or general conservation value (i.e. open space). In addition, activities outside conserved parcels were affecting ecosystem health and contiguity within and TNC was forced to reexamine and ultimately adopt new, more proactive and comprehensive strategies rather than merely acquiring and protecting increasingly disjointed parcels of land for placement in their preserve system. TNC President and CEO John Sawhill wrote of this strategy evolution:

"Instead of working to protect small parcels of land through fee acquisition, the Conservancy began to work at much larger geographic scales, with the intent of maintaining or restoring the natural processes – forces like wildfire and floods – that helped shaped these ecosystems in the first place." 13

Likewise, The Trust for Public Land (TPL), another leading national conservation organization, re-emphasized a dedication to "conservation as knitting together cities, suburbs, farms and wilderness." This new focus explicitly demonstrated TPL’s commitment "to consistently re-examine and re-invent its work."14

This general trend away from strict preservation was both robust and defensible. Increasingly, traditional conservation strategies that focused on preservation of scenic vistas or economically important species to the exclusion of human activity were deemed fundamentally questionable in their ability to

---

Chapter 2: Conservation in Context

achieve conservation objectives.\(^\text{15}\) The political, legal and cultural hurdles to overcome in such scenarios frequently limited outcomes to piecemeal successes. Additionally, these efforts were at least failing to engage or, at worst, antagonizing “logical allies.”\(^\text{16}\) In this regard, shortcomings of conservation were implicitly tied up in justice critiques of the environmental movement. According to this line of thought, conservation and environmentalism, broadly defined, was the domain of privileged, generally white and rarely working-class Americans.\(^\text{17}\) As a result of this constituency, only certain environmental issues were addressed – strict conservation/preservation being high on that list – while issues of concern to marginalized groups, such as economic opportunity, equity and health concerns related to the environment and natural resources were neglected.\(^\text{18}\)

As with environmental justice concerns, urban residents, particularly minority and lower income groups were obviously implicated in this critique of conservation and environmentalism, but a broader set of actors was implicated in regards to conservation. These groups include extractive industry-based rural communities, ranchers and farmers, many private landowners, natural resource sectors and Native American communities, among others.\(^\text{19}\) These groups were thought to be “logical allies” due to the fact that they supposedly possess intimate place-based knowledge and have vested economic and cultural interests in


Chapter 2: Conservation in Context

Crafting effective conservation strategies that foster ecologically functional and productive ecosystems.20

Challenged to redefine or, at the very least, expand conceptions of land conservation goals and appropriate strategies, advocates have increasingly turned to collaborative efforts which embody an expanded scale of conservation, seeking the inclusion of these logical allies. The many details regarding the genesis of ecosystem management, as well as current academic and professional debates over its efficacy are largely outside the limited focus of this thesis. However, they are most definitely relevant. The underlying point is that while ecosystem management has gained adherents from many ideological and political quarters, the specifics of its efficacy and equity as applied are at the forefront of current environmental policy and management debate.21 Indeed, Lynn Scarlett, Assistant Secretary for Policy in the Department of the Interior under President George W. Bush characterized the current administration’s resource management policies as explicitly geared towards removing barriers and facilitating decentralized collaborative conservation efforts that have reached the point of inevitability.22 Setting aside legitimate debate over whether and how these policies are pursued and enacted in any given political administration, coming from the third ranking official in the Department of the Interior this is an incredibly powerful indication that conservation thought and practice have undergone fundamental change in the preceding decade, with collaborative conservation measures inextricably bound up in this evolution. Collaborative

ecosystem management schemes will most likely be a prominent feature of conservation thought and practice going forward.

As the title makes clear, these management regimes are supposedly being undertaken at the scale of ecosystems, with watersheds being a logical and common organizational unit from many standpoints. Individual landscape scale conservation deals or projects are one tool in the kit of overarching ecosystem management efforts. As a result, these conservation efforts demand that practitioners are open to the inclusion of human activities deemed compatible or complimentary to the many other concerns of resource management including concerns that are explicitly social and economic, in addition to the underlying concern for ecological integrity that conservationists would likely advocate above other concerns.

As noted Western statesman and regionalist Daniel Kemmis has written in regards to collaborative conservation and the future of the Intermountain West, this could be, at best, “the sagebrush rebellion done right,” a reference to repeated calls for decentralization of resource management and ownership from Washington to Western states. As envisioned by optimists and in the best case scenario, ecosystem management and landscape scale conservation that includes sustainable economic development and respects the cultural identity of the West could be an avenue towards an independent and mature region capable of stewardship over the massive amounts of private and public land. At worst, these efforts may portend nothing more than a warmed over and re-outfitted approach to exploitive and damaging economic activities, antithetical to sustainable natural resources management, land use and economic development. These calls have traditionally been motivated less by a genuine regard for the land and desire for stewardship than by the desire for economic hegemony over resources and knee jerk antipathy towards distant Federal regulation and management.23

In order to stretch traditional agendas and be more inclusive of the logical allies mentioned previously, new partnerships and methods were identified as necessary in the early 1990s. Bridging cultural and organizational gaps between conservationists and ranchers, for instance, became commonplace. Indeed, ranchers have become increasingly visible and important conservation advocates in the West, as witnessed by the rise of agricultural land trusts, such as the Colorado Cattleman’s Agricultural Land Trust, and an increasing focus on “working lands” conservation by many groups.\(^2\) While cattlemen have come to be seen as increasingly valuable by some, certainly not all environmentalists and conservation advocates share this opinion.\(^2\)

In a similar fashion as pioneering ranchland conservation schemes emerged – The Malpai Borderlands and Valle Grande grass bank in New Mexico being ready examples – a second generation of novel conservation partners and strategies are currently developing. Just as species diversity is recognized as one measure of ecosystem health, conservationists are recognizing that diversity of advocates and methods may result in more robust and lasting outcomes. To perpetuate any number of questionable stereotypes, the conservationist tent is attempting to expand and its shape may or may not be inclusive of groups with the following characteristics: Stetsons and their herds of grass fed, “holistically” managed Herefer cattle; lumberman’s hard hat and sustainably managed stands of timber; developer’s khakis and well sited real estate ventures; financier’s pin stripes and access to market capital. Landscape scale conservation, as will be discussed shortly, is the medium through which these aspirations are being explored.


Chapter 2: Conservation in Context

Backlash and Struggles

Sustainability as a policy regime or epoch helps to place evolving conservation strategy in a wider context where it is clear that law, policy, and practice are responding to critiques and reassessments as necessary. With this dynamic process in mind, and prior to examining landscape scale conservation as an emerging field, it is necessary to consider some of the backlash and objections that a changing, expanding conservation movement has inspired.

As collaborative conservation undertaken at landscape scale has gained momentum, conservationists have also had success developing and advocating for policies and tools to advance their mission which are not focused on collaboration per se, though they often dovetail nicely with these efforts. These include the use of the tax code to provide significant financial incentives for conservation, application of public revenue streams from self-assessed taxes and the issuance of bonds, and frequent cooperative projects between private non-profits and government agencies – be it local, state or federal – which often transfer private property to public ownership and management. While heralded by conservationists and their allies, this slate of tools reads like The Communist Manifesto to a vocal slice of the conservative political spectrum. Critiques of regulation and the environmental “agenda” emerged forcefully with the election of Ronald Regan. While the sagebrush rebellion was a popular expression of this sentiment, sophisticated legal, social, and political capabilities were developed even after the sagebrush rebels were placated. These institutions and ideas have endured during the 1990s, enjoying resurgence via the Republican dominated 105th Congress’ “Contract with America.” Even when widely rejected by the public and defeated legislatively, the underlying foundation of this critique of environmentalism and conservation has endured.26 Ultimately, conservatives and libertarians deride land conservation and attendant polices as antithetical to sound fiscal policy, property rights, the interests of rural Americans, and the

26 Layzer, 256-259.
workings of unfettered and effective free markets, particularly those for real
estate.  

This point is well illustrated by looking again at The Nature Conservancy and the incisive scrutiny they received in a three part exposé published by The Washington Post in May, 2003. To implement previously discussed shifts in conservation goals and motivations TNC broadened its conservation strategies during the 1990s. This diversification included an emphasis on new management regimes at TNC preserves, the use of increasingly sophisticated financial transactions, a continued commitment to engagement of corporate partners on a "non-confrontational" basis, and reliance on high power and high net worth board members and donors to carry out aspects of their mission. Some of their internal policies and practices seemed to outpace the knowledge and understanding of elected officials, skirting the bounds of transparency and legitimacy that such a prominent organization depends upon.

As a result of the frequent use of tax incentives in various states, questionable incentive packages for senior staff, dependence on "conservation buyers" who frequently had close ties to the organization, and the pursuit of a small number of ambitious and ultimately failed "compatible economic development" schemes were painted in an extremely unfavorable light by The Washington Post stories. Concurrent corporate scandals, highlighted by the spectacularly depressing implosions of Enron and Arthur Andersen Accounting, heightened the atmosphere of antipathy towards well endowed organizations that appeared to be 'getting away with something.' Regardless of the propriety or legality of policies and projects, the Post played up this angle, labeling TNC as "something of a corporate juggernaut, Big Green," and attributing to them $3 billion in assets without making serious effort to put this net worth in the context

---

of accomplishments or financial development expertise. TNC, which in 2001 estimated their revenue at $576 million, can tout protection of over ten million domestic acres of land and has utilized CEOs from a variety of fortune 500 companies on their national board of governors, undoubtedly made a convenient "corporate" non-profit target upon which conservative politicians could focus their ire.

Embarrassing and potentially mission-sapping Congressional hearings which sprung from the expose reveal that being recognized as the proverbial eight hundred pound gorilla in the conservation game can serve to focus unwanted scrutiny on evolving policies and strategies on one organization, even though these issues are largely endemic in the conservation and land trust community. Innovative conservation, even when done in a non-confrontational manner, using "market strategies" such as purchasing easements with private funds, or — even more controversial — public funds, in a manner inclusive of traditional opponents (i.e. ranchers) runs the risk of inciting powerful ideological opponents on principal, let alone fiscal and policy grounds.

What is Landscape Scale Conservation?

Despite backlash and some tension towards evolving conservation strategies and outcomes, practitioners and academics have identified innovations regarding where conservation practice can and should be headed for greatest effectiveness and relevance in the 21st century. As three of the National Park Service's most knowledgeable staff on the subject recently wrote:

“There are shifts in understanding and perception, in scholarship and practice and among the larger public...as conservation stewardship evolves from a historical emphasis on objectives

29 Sawhill and Williamson, 372-373.
30 Peter Dittmar, Protection Project Manager, Jackson Hole Land Trust, telephone interview, February 5, 2004.
dealing with efficiency, development of material resources and preservation of selected wildlands to an emphasis on objects more closely tied to the public amenity, quality of life, social equity and civil society."

The underlying belief that in many instances fee simple land conservation and strict preservation have come to be seen as a somewhat anachronistic, generic and limited conception of stewardship and environmentalism is borne out by looking at the stated goals of leading conservation organizations. Human action within the context of urban, pastoral and even some ‘pristine’ landscapes and ecosystems is increasingly recognized as not only an intractable reality, but as perhaps the best way to achieve lasting conservation objectives and more, counseling conservation advocates to plan and act in accordance. It is in this context that landscape scale conservation is emerging as the cutting edge of contemporary conservation thought and practice.

Arrival at this point in conservation strategy and practice leads to the heart of this thesis. In order to do this subject justice, some clarification on the most current thinking on the definition of landscape scale conservation is in order. An important series of conferences and writings on the subject of innovation in conservation emerged at the turn of the millennium. In the fall of 2001, the newly formed Conservation Study Institute of the National Park Service, the Woodstock Foundation, Trust for Public Land and University of Vermont’s School of Natural Resources held a series of seminars gathering a wide variety of academics and practitioners, ultimately spawning the edited volume Reconstructing Conservation which is perhaps the most comprehensive and prescient look at the status and direction of the conservation movement at that moment. Following a year later, The Lincoln Institute of Land Policy and the Program on Conservation Innovation at Harvard’s Kennedy School of Government convened a conference.


32 Cash, 119.
entitled "Conservation Leadership for the Twenty First Century," soliciting the input of yet another group of leading academics and professionals. Four key areas for innovation were highlighted, with landscape scale conservation or "building the green matrix" being one of the primary areas of emphasis. A follow up conference was convened in July 2003 entitled "Landscape Scale Conservation: Grappling with the Green Matrix," attempting to further hone cutting edge conservation thought in the United States. A significant component of this exercise was to elicit responses from the thirty participants on the definition, scope, scale and particular challenges of landscape scale conservation as practiced by disparate organizations and individuals.

Whether adopting the term "working landscapes," "green matrix," "conservation based development" or, as this thesis has chosen "landscape scale conservation," these are simply different expressions of a singular theme, revealing the extent to which this idea has taken root. At best, these frameworks and definitions represent avenues via which collaborative conservation will be sketched large and successful, blending resource conservation, economic and social health, and true democratic stewardship of resources at the most local of levels.

The participants of the conference represented an impressive cross section of conservation leaders, and as such, their definitions and understanding of the definition of landscape scale conservation are as good, if not better, than any. This assemblage of academics, practitioners, financiers, and others bring a variety of viewpoints to the discussion, but a general consensus is apparent from studying materials from the conference.

Many approached the term from a particular academic background, referencing ideas most commonly associated with geographer Karl Sauer that landscapes are areas defined by the interaction of people with their environment over time. More eco-centric definitions also exist. The Nature Conservancy’s

33 Levitt, July 2002, 6-7.
Chapter 2: Conservation in Context

California chapter defines landscape scale conservation as, “Conservation of areas large enough to contain functioning ecosystems in which crucial natural processes take place. Processes like fire, flooding, and wildlife migration are all essential to the health, biological diversity, and long-term sustainability of an ecosystem.”

While human management and activity is certainly not precluded in this definition, the emphasis is more firmly placed on “natural processes” within a broadly defined landscape.

The extent of a landscape can vary widely, the emphasis for conservation purposes falling on functionality rather than extent. This focus on the interaction of nature and culture translates into conservation that seeks the ability to function in the context of unifying ecological characteristics spread across multiple land uses, ownership status, and management regimes. Most seemed to agree that the definition of landscape scale conservation is inherently idiosyncratic. While landscape scale conservation does not necessarily have set geographic or even ecological sizes requirements, the scale tends to be larger and the projects more ambitious than past efforts. This “up-sizing” of ambition and complexity is a result of “the recognition that in spite of the conservation movement’s successes at conserving individual tracts of sensitive lands over the last 50 years, many initiatives have been piecemeal and incomplete, often failing to comprehensively address the inputs that affect ecosystems and their component parts.”

Above all, landscape scale conservation ought to focus on “development of integrated actions and policies, both public and private, designed to sustain the natural and cultural environment of a coherent, identifiable, relatively intact system of lands and waters of significant public value.”

---

36 Gene Hocker, “Participant Biographies and Responses to Advance Questions,” Conservation Leadership Dialogue: Landscape Scale Conservation, Grappling with the Green Matrix
Key Areas of Innovation for Landscape Scale Conservation

With a brief examination of the origins of this line of academic and professional inquiry and key issues of nuance in definition, scope and scale, I will finally touch on some specific questions and innovations that this framework faces at the current time. The three conferences and subsequent publications provide ample perspective on how landscape scale conservation might serve as a medium to address both persistent and emerging challenges in conservation thought and practice, and this thesis seeks to examine whether and how the above conceptions of landscape scale conservation, as well as the following areas of innovation, are playing out on the ground in Colorado.

An exhaustive list of recommendations regarding innovation or conservation would be somewhat of an oxymoron, for innovation by definition can not be prescribed. However, the following three points have been recognized as likely areas of innovation. These points are broad and by no means exhaustive, touched on briefly here, though they will serve to inform examination of the case studies.

Infusion of capital into conservation via identification of sophisticated market mechanisms

One of the most powerful and anticipated trends within the field of conservation is "experimentation with entrepreneurial models of conservation economics [that are] encouraging new ways of working and new relationships that actuate a more sustainable development path."37 According to leaders in this emerging niche, access to market capital may be the key mechanism that allows conservation to think at the landscape scale, effecting outcomes which address multiple environmental issues include critical land use and management

decisions and factor in social and economic calculus as well. In order to do this on a scale proportional to the threats from accelerated land fragmentation, population growth and demographic change, the infusion of market capital is seen as fundamental. How to attract and sustain this input while achieving significant conservation outcomes is one proverbial nut that leading academics and savvy practitioners are currently trying to crack. Timber investment management organizations (TIMOs), limited development real estate offerings, carbon sequestration credits, transferable conservation easement tax credits, and ecologically minded community development banks like the partnership between ShoreBank of Chicago and Ecotrust are just a few examples of a growing effort to enhance flows of market capital to conservation applications.

Characterize and present conservation as accessible, achievable and fundamentally in concert with desirable communities and economies: “Winning the hearts and minds”

As already discussed, a chief criticism of past conservation practice was that it was limited in scope. While the trend towards collaborative conservation efforts on working landscapes is a prominent response, there is still space for innovation in terms of the kinds of activities that constitute conservation, who they serve, and how these efforts are made to resonate as deeply as possible, enlisting supporters from a wider audience. The community of conservation practitioners has predominantly made this shift and takes this wisdom as axiomatic. Society as a whole, particularly those segments prone to reflexively reject conservation as anti-development and antithetical to economic stability and personal freedom, however, remain to be convinced. This is an area rife for innovation in

marketing, education and ultimately engagement in democratic processes that will demand conservation as a fundamental activity of both public and private sectors.\textsuperscript{40} The conservation movement will be well served by not being so stark in its presentation. Rather, framing of environmental and economic choices need to be emphasized as a spectrum of possibilities and examined as such. Innovation in presenting meaningful discussions that characterize conservation as accessible, achievable and fundamentally in concert with desirable communities and economies are badly needed.\textsuperscript{41} This brings to the fore the need for tools that might be more cost effective than fee simple acquisition or easements. Advocating for complimentary land use policies, building organizational capacity in state and local government to evaluate potential developments, undertaking public education and outreach efforts, focusing the attention of the land trust and conservation communities on common areas of greatest need, and seeking to develop standards of practice for important conservation activities like appraisals are all areas where innovation is occurring and can be expected to continue. In order to undertake landscape scale conservation, particularly in locales where conservation is an uphill battle due to political factors, land use patterns, and economics, the ability to present compelling rationale that will capture the attention of the public, and thus spur elected officials to lobby for land use or other policies that are conservation friendly.

\textit{Emphasizing and expanding on stewardship responsibilities}

Innovation in the stewardship of lands is also called for in the coming decades. While conservation activity has increased in the last decade, the ability to properly monitor, manage, and protect these acres is an acknowledged area of

\textsuperscript{40} Levitt, \textit{Land Lines (July 2002)}, 8.

great importance. Furthermore, the potential to put additional emphasis on restoration and reclamation of land for the purposes of conservation is emerging. This is not to imply that proactive conservation should be laid by the wayside in favor of restorative efforts. Indeed there are abundant efforts needed in both contexts. Rather, by expanding the purview of practice to include abused landscapes that can be made to serve valuable conservation roles, advocates can potentially have greater impacts and serve a wider constituency.\textsuperscript{42} In one illustration of this theme, the evolving policy and practice arena of brownfields might actually intersect with conservation in interesting ways.

\textbf{Conclusion}

This chapter has endeavored to put landscape scale conservation in its proper context. Landscape scale conservation fits within broader trends in environmental and natural resource policy, including an emphasis on sustainability as a defining – if not necessarily well understood – goal. Furthermore, it is my contention that landscape scale conservation is the medium through which evolutions in conservation strategy and practice are being expressed. Landscape scale conservation seeks to be a flexible framework capable of integrating humans and the natural world with an emphasis on functionality of ecosystems across land uses, ownership status, and management regimes. These are ambitious efforts in terms of complexity and size, but there are identified areas where innovation is anticipated and desired in order to further refine this framework in the face of emergent challenges such as sprawling urban growth. These evolutions have and will likely continue to inspire some backlash from critics who are dismissive of conservation in general – and the expansive purview of landscape scale conservation in particular – as

antithetical to private property rights, sound fiscal policy, and traditional political and cultural arrangements.

While this chapter sought to establish that scholars and practitioners have identified the front lines in the conservation effort and are actively assessing what tools and strategies are best suited to this struggle, the following chapter presents census and other data regarding sprawling, consumptive growth at the periphery of metropolitan areas in Colorado and the Intermountain West, as well as indicators of the conservation response that has developed in roughly the last decade. Chapter three seeks to serve as a link between these broad themes and a focused investigation of on-the-ground landscape scale conservation cases in Colorado, presented in chapters four through seven.
Chapter 3: Growth and Conservation In Colorado and the West

A Decade of “-ions”: Population and Conservation Expansion

In defining the scope of this thesis, I believe that a Colorado-centric, western regional perspective is appropriate because Western communities share important demographic and land use patterns which directly implicate conservation practice. The first step in examining the relationship between conservation and growth in Colorado is to briefly detail demographic and land conservation trends, recent trends in growth management and conservation legislation and finance, and some resultant economic and social dynamics.

Demographics

The 2000 United States Census provided vivid statistical evidence of demographic changes that in large part defined the Intermountain West at the close of the twentieth century. The Intermountain West was the fastest growing region in the country in the 1990s, claiming the top five spots in terms of percent population growth at the state level for that decade. Zooming in to a tighter scale reinforces the notion that western growth is a potent factor in regards to conservation and land use. Ten of the fifteen fastest growing counties in the country were found in the Intermountain West. Six of those ten were found in Colorado, with Douglas County, south of Denver, leading the pack with a 191% population growth rate. At an even finer scale, six of the fastest growing fifteen metropolitan statistical areas were spread throughout the West. Lest this be dismissed as urban specific growth confined to, for instance, the Front Range in
### Table 3.1: Top 10 States by Percent Population Growth, 1990-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nevada</td>
<td>1,998,257</td>
<td>1,201,833</td>
<td>796,424</td>
<td>66.3</td>
</tr>
<tr>
<td>2</td>
<td>Arizona</td>
<td>5,130,632</td>
<td>3,665,228</td>
<td>1,465,404</td>
<td>40.0</td>
</tr>
<tr>
<td>3</td>
<td>Colorado</td>
<td>4,301,261</td>
<td>3,294,394</td>
<td>1,006,867</td>
<td>30.6</td>
</tr>
<tr>
<td>4</td>
<td>Utah</td>
<td>2,233,169</td>
<td>1,722,850</td>
<td>510,319</td>
<td>29.6</td>
</tr>
<tr>
<td>5</td>
<td>Idaho</td>
<td>1,293,953</td>
<td>1,006,749</td>
<td>287,204</td>
<td>28.5</td>
</tr>
<tr>
<td>6</td>
<td>Georgia</td>
<td>8,186,453</td>
<td>6,478,216</td>
<td>1,708,237</td>
<td>26.4</td>
</tr>
<tr>
<td>7</td>
<td>Florida</td>
<td>15,982,378</td>
<td>12,937,926</td>
<td>3,044,452</td>
<td>23.5</td>
</tr>
<tr>
<td>8</td>
<td>Texas</td>
<td>20,851,820</td>
<td>16,986,510</td>
<td>3,865,310</td>
<td>22.8</td>
</tr>
<tr>
<td>9</td>
<td>North Carolina</td>
<td>8,049,313</td>
<td>6,628,637</td>
<td>1,420,676</td>
<td>21.4</td>
</tr>
<tr>
<td>10</td>
<td>Washington</td>
<td>5,894,121</td>
<td>4,866,692</td>
<td>1,027,429</td>
<td>21.1</td>
</tr>
</tbody>
</table>


### Table 3.2: Top 15 Counties by Percent Population Growth, 1990-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Douglas County, CO</td>
<td>175,766</td>
<td>60,391</td>
<td>115,375</td>
<td>191.0</td>
</tr>
<tr>
<td>2</td>
<td>Forsyth County, GA</td>
<td>98,407</td>
<td>44,083</td>
<td>54,324</td>
<td>123.2</td>
</tr>
<tr>
<td>3</td>
<td>Elbert County, CO</td>
<td>19,872</td>
<td>9,646</td>
<td>10,226</td>
<td>106.0</td>
</tr>
<tr>
<td>4</td>
<td>Henry County, GA</td>
<td>119,341</td>
<td>58,741</td>
<td>60,600</td>
<td>103.2</td>
</tr>
<tr>
<td>5</td>
<td>Park County, CO</td>
<td>14,523</td>
<td>7,174</td>
<td>7,349</td>
<td>102.4</td>
</tr>
<tr>
<td>6</td>
<td>Loudoun County, VA</td>
<td>169,599</td>
<td>86,129</td>
<td>83,470</td>
<td>96.9</td>
</tr>
<tr>
<td>7</td>
<td>Paulding County, GA</td>
<td>81,678</td>
<td>41,611</td>
<td>40,067</td>
<td>96.3</td>
</tr>
<tr>
<td>8</td>
<td>Summit County, UT</td>
<td>29,736</td>
<td>15,518</td>
<td>14,218</td>
<td>91.6</td>
</tr>
<tr>
<td>9</td>
<td>Boise County, ID</td>
<td>6,670</td>
<td>3,509</td>
<td>3,161</td>
<td>90.1</td>
</tr>
<tr>
<td>10</td>
<td>Eagle County, CO</td>
<td>41,659</td>
<td>21,928</td>
<td>19,731</td>
<td>90.0</td>
</tr>
<tr>
<td>11</td>
<td>Collin County, TX</td>
<td>491,675</td>
<td>264,036</td>
<td>227,639</td>
<td>86.2</td>
</tr>
<tr>
<td>12</td>
<td>Washington County, UT</td>
<td>90,354</td>
<td>48,560</td>
<td>41,794</td>
<td>86.1</td>
</tr>
<tr>
<td>13</td>
<td>Clark County, NV</td>
<td>1,375,765</td>
<td>741,459</td>
<td>634,306</td>
<td>85.5</td>
</tr>
<tr>
<td>14</td>
<td>Archuleta County, CO</td>
<td>9,898</td>
<td>5,345</td>
<td>4,553</td>
<td>85.2</td>
</tr>
<tr>
<td>15</td>
<td>Summit County, CO</td>
<td>23,548</td>
<td>12,881</td>
<td>10,667</td>
<td>82.8</td>
</tr>
</tbody>
</table>

Colorado, rural areas in the Intermountain West grew by 18% from 1990-1998, a pace significantly faster than the national average. Three of the five fastest growing small counties (population under 10,000) were in Colorado in 2001, with the remaining two in Idaho.

Population growth in the West results in consumptive land uses. This explosive population growth has on the ground impacts, chiefly expressed through sprawling urban and semi-urban (or, more appropriately, semi-rural) patterns of development which are largely antithetical to conservation of land for open space, wildlife habitat, productive agricultural land, robust supplies of water and a host of other environmental concerns. Imposition of urban and suburban land uses on formerly undeveloped or rural landscapes has been a persistent and consequential force. For example, one recent study estimated that over one million acres of ranch and farmland had been lost to sprawling development patterns in Colorado in the last five years alone. At the same time, the number of farms in the state purportedly climbed. This growth in farms most likely reflects the prevalence 35 acre “ranchette” development that is classified as agricultural for tax purposes.

**Concurrent Growth in the Land Conservation Movement**

The pace and ubiquity of growth and development in the Intermountain West in large part defines the need for an active conservation community, and as the abundance of local and national conservation organizations attest, robust

---

support for innovative conservation practice that can address the needs of the region have emerged. The land trust movement has matured into a formidable constituency in the last decade. Conservation activity in the West has mirrored population growth and land consumption, and this constituency is instrumental in driving landscape scale projects at issue in this investigation. According to the Land Trust Alliance's (LTA) 2000 Census, the Southwest Region saw a 1646% increase in total acreage conserved between 1990 and 2000, far above the national increase of 226%, while the Northwest region saw a 265% increase in conserved land during the same decade, slightly above the national average.47

Table 3.4: Regional Increases In Acreage Protected, 1990-2000

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>2000 Acres Protected</th>
<th>1990 Acres Protected</th>
<th>Increase Acres Protected 1990-2000</th>
<th>% Increase Acres Protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Southwest (AZ, CO, NM, UT)</td>
<td>705,403</td>
<td>40,403</td>
<td>665,000</td>
<td>1646%</td>
</tr>
<tr>
<td>2</td>
<td>South Central (AR, LA, OK, TX)</td>
<td>105,967</td>
<td>7,341</td>
<td>98,626</td>
<td>1343%</td>
</tr>
<tr>
<td>3</td>
<td>Southeast (AL, FL, GA, KY, MS, NC, SC, TN)</td>
<td>396,701</td>
<td>107,861</td>
<td>288,840</td>
<td>268%</td>
</tr>
<tr>
<td>4</td>
<td>Northwest (AK, ID, MT, OR, WA, WY)</td>
<td>678,184</td>
<td>185,604</td>
<td>492,580</td>
<td>265%</td>
</tr>
<tr>
<td>5</td>
<td>Pacific (CA, HI, NV)</td>
<td>1,264,015</td>
<td>388,387</td>
<td>875,628</td>
<td>225%</td>
</tr>
<tr>
<td>6</td>
<td>Midwest (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI)</td>
<td>309,200</td>
<td>117,475</td>
<td>191,725</td>
<td>163%</td>
</tr>
<tr>
<td>7</td>
<td>Northeast (CT, MA, ME, NH, NY, RI, VT)</td>
<td>1,735,971</td>
<td>602,575</td>
<td>1,133,396</td>
<td>188%</td>
</tr>
<tr>
<td>8</td>
<td>Mid-Atlantic (DC, DE, MD, NJ, PA, VA, WV)</td>
<td>1,022,369</td>
<td>452,651</td>
<td>569,718</td>
<td>126%</td>
</tr>
</tbody>
</table>


47 LTA's placement of states within regions can be seen in Table 3.4.
While the acreage protected is perhaps the most telling story, there was a concurrent increase in the number of conservation organizations in the last decade. The Southwest saw a 119% increase in the number of land trusts, second in the nation, while the Northwest saw a 38% increase in number. While the Southwest and Northwest regions account for fewer than 10% of the total number of land trusts, a full 20% of the total conserved acreage is found in Western states, excluding California.

Table 3.5: LTA Regional Increases in Land Trusts, 1990-2000

<table>
<thead>
<tr>
<th>Rank</th>
<th>Region</th>
<th>2000 # Land Trusts</th>
<th>1990 # Land Trusts</th>
<th>Increase # Land Trusts 1990-2000</th>
<th>% Increase # Land Trusts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South Central (AR, LA, OK, TX)</td>
<td>25</td>
<td>11</td>
<td>14</td>
<td>127%</td>
</tr>
<tr>
<td>2</td>
<td>Southwest (AZ, CO, NM, UT)</td>
<td>57</td>
<td>26</td>
<td>31</td>
<td>119%</td>
</tr>
<tr>
<td>3</td>
<td>Southeast (AL, FL, GA, KY, MS, NC, SC, TN)</td>
<td>115</td>
<td>62</td>
<td>53</td>
<td>85%</td>
</tr>
<tr>
<td>4</td>
<td>Pacific (CA, HI, NV)</td>
<td>139</td>
<td>79</td>
<td>60</td>
<td>76%</td>
</tr>
<tr>
<td>5</td>
<td>Mid-Atlantic (DC, DE, MD, NJ, PA, VA, WV)</td>
<td>174</td>
<td>105</td>
<td>69</td>
<td>66%</td>
</tr>
<tr>
<td>6</td>
<td>Midwest (IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI)</td>
<td>186</td>
<td>119</td>
<td>67</td>
<td>56%</td>
</tr>
<tr>
<td>7</td>
<td>Northwest (AK, ID, MT, OR, WA, WY)</td>
<td>69</td>
<td>50</td>
<td>19</td>
<td>38%</td>
</tr>
<tr>
<td>8</td>
<td>Northeast (CT, MA, ME, NH, NY, RI, VT)</td>
<td>497</td>
<td>433</td>
<td>64</td>
<td>15%</td>
</tr>
</tbody>
</table>


Colorado is the only western state (again, California treated as something of an anomaly) among the top ten states in terms of numbers of land trusts with 35, while the total of 339,122 acres of land under protection in the state as of 2000 was the sixth highest total, with Montana and New Mexico also ranking in
the top ten. Combined with the demographic figures presented, the underlying thrust is that population growth and a robust conservation response have been observed in the West in the last decade. While Colorado is not necessarily a "typical" locale, the state certainly has been an active laboratory for growth and conservation over the last decade, presenting ample reason to focus on it as a test case applicable to the rest of the region.

**Conservation, Growth Control and Community Character**

The growth and conservation trends cited above are intricately related and an important part of contemporary debates over the nature of development and community character in Colorado and the West. There is undoubtedly value in conservation of Western landscapes. Indeed, powerful arguments have been advanced that place conservation and the somewhat ineffable calculus of "quality of life" as central to the population growth and economic strength of the Intermountain West. The strength of the region, so the argument goes, arises not from "old economy" extractive industry or from the sprawling, consumptive development patterns advocated by fiscally near-sighted or revenue starved local and county governments, transportation and construction interests, or property rights ideologues. Rather, the "natural amenities" of open space, abundant wildlife habitat and (sometimes) compatible recreational opportunities, a favorable climate, and a robust conservation ethic are what attract increasingly valuable "new economy" businesses and their employees to the region.

The same qualities that attract people to Colorado and the West are those that are threatened by explosive growth.

A direct mechanism to deal with conventional but often maligned growth would be some form of state wide "smart growth" legislation, exemplified by


Chapter 3: Growth and Conservation in Colorado and the West

Legislatively enacted programs in Oregon, Maryland, and most recently New Jersey. However, in the last decade Colorado has consistently failed to reach any consensus on legislation or ballot initiatives that advance this agenda. This aversion to centralized growth management and planning culminated in a landslide defeat of Amendment 24 in 2000, a ballot initiative that would have mandated municipalities to produce maps where urban growth would be directed, to define the types of growth that would be allowed, and to submit these growth maps to a vote in each community. As prominent Denver polling firm Ciruli Associates wrote in 2001,

"Amendment 24 focused the attention of state political leadership on the need to address growth issues. The ballot initiative began with high voter support but was defeated 30 percent to 70 percent in the November 2000 election after an expensive and negative campaign. It was initially seen as an antidote to the decade of rapid growth and attendant problems. But the initiative was largely devoid of support from business, local government, elected officials and the state's editorial pages. It was seen as too rigid and inappropriate as a State Constitutional amendment and too extreme because it required a public vote in all growth plans and changes. However, its initial popularity and the high amount of campaign funds required to defeat it convinced business and political leaders that the 2001 legislative session was the best opportunity to pass legislation and head off a 2002 ballot initiative."

The legislature took up the issue during the 2001 legislative session, but in light of the strong rejection of Amendment 24 failed to come to any agreement. In the dour economic climate since then, growth management has largely disappeared from the political radar. Both the defeat of Amendment 24 and subsequent neglect of growth management as an issue belie widespread understanding and support for some effort to deal with sprawling development. A 2001 poll by Ciruli Associates, "Colorado Voters Disappointed With Growth Legislation Failure, Public Continues To Demand Action," (June 25-28, 2001), http://www.ciruli.com/archives/specialgrowth.htm.
Associates reflected almost the exact opposite of the Amendment 24 vote, with 68% of those surveyed expressing disappointment that the special session of the legislature was unable to advance the debate on growth management at all and found that growth remained the number one issue the public believe state political leaders should concentrate their energy upon.51

While growth management has struggled to gain footing, ballot initiatives pushing conservation in the face of continued urban growth and encroachment on rural areas have thrived. The Trust for Public Land and Land Trust Alliance’s LandVote program tracks financing for conservation via ballot initiatives across the country, consistently document approval rates for conservation financing in the 70% to 80% range nation wide since 1998, with dollar values consistently over $1 billion, soaring to as much as $8.3 billion in 1998 and $7.5 billion in 2000. Colorado is an acknowledged leader in this wider trend, with the specifics of recent conservation financing initiatives presented below. To be clear, these are initiatives where voters elect to raise their own taxes in the interest of conserving land for open space, the protection and creation of parks in urban and rural settings, and wildlife habitat, among others. The robust and consistent financing and public support for conservation makes possible ambitious and innovative landscape scale conservation partnerships.

Table 3.6: Conservation Financing Trends in Colorado: 2000-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Total # Measures</th>
<th>% Passed</th>
<th>Total $ Value Measures Passed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>13</td>
<td>54%</td>
<td>$272,300,000</td>
</tr>
<tr>
<td>2001</td>
<td>12</td>
<td>75%</td>
<td>$192,397,940</td>
</tr>
<tr>
<td>2002</td>
<td>11</td>
<td>90%</td>
<td>$337,000,719</td>
</tr>
<tr>
<td>2003</td>
<td>9</td>
<td>89%</td>
<td>$350,400,000</td>
</tr>
</tbody>
</table>


51 Ibid.
It is the juxtaposition between substantial and continued support for conservation and an impasse in regards to growth management legislation or action that makes landscape scale conservation in Colorado so intriguing. Explicit efforts to control or limit growth, to attack the underlying development patterns that necessitate conservation in the first place, are rejected as overly harsh, centralized, and bureaucratic and engender well funded political opposition more than willing to demonize progressive land use planning.

Into this vacuum steps conservation, specifically landscape scale conservation. The public is more than willing to pay for conservation so long as it is voluntary and they understand the benefits that will be received: parks, open space, wildlife habitat. As Adam Eichberg, the Associate National Director of Conservation Finance for the Trust for Public Land, stressed, conservation finance measures in Colorado — and the nation as a whole — operate via the voluntary acquisition of land, largely avoid rights property conflagrations, work in concert with market forces rather than attempting to tinker with them, and are easily understood and supported by the public and business interests alike.52 However, the underlying need for serious efforts at growth management and planning in the face of population growth does not change. Conservation is then thrust in to the role of a de facto growth management tool, in addition to its primary purpose of conserving land for various ends. The concurrent explosion in land trusts and acres of land preserved in Colorado and the Southwest reveal that a broad constituency is at least attempting to step into this void and counteract the perverse effects of being such an attractive region of the country without the political will to confront the underlying issue of growth in a coordinated fashion.

Chapter 3: Growth and Conservation in Colorado and the West

Changes in the Conservation Constituency

In addition to the burgeoning number and ambition of conservation advocates and often sizeable sources of funding, the field has become increasingly varied in terms of its membership, presenting the opportunity – and sometimes necessity – for innovative approaches to overcome traditional roles and contemporary economic and demographic circumstances. A non-exhaustive list includes foresters, ranchers and farmers, real estate developers, financiers, hunters and fisherman, Native American tribes, and traditional “green” environmentalists. In light of questions posed in this thesis regarding conservation and its de facto role as a growth management tool, the important point is that these disparate western stakeholder groups are at times collaborating to achieve conservation outcomes that address their individual goals and achieve outcomes that are broader in conception and application than traditional piecemeal efforts pursued individually.

Stereotypes regarding the roles and interest that certain groups have in terms of development and conservation have often evolved for legitimate reasons, but the ability to change is certainly never precluded. For instance, while the ranching community has perpetrated some serious abuse on Western range land, ranchers espousing “holistic management” have become increasingly numerous, visible and important conservation advocates, particularly in defining the need for agricultural and working lands conservation in the face of sprawling urban and resort communities. On the flip side, conservation minded members of the real estate, homebuilding and transportation industry are still few and far between. “Limited” or “conservation based” real estate offerings are a growing in number, though the jury on their role within the field of conservation is definitely still out. The case studies will explore three examples where these actors and other private and public sector stakeholders are implicated.

There are still large swaths of undeveloped private land contiguous with vast amounts of at least nominally protected public lands that hold conservation
and economic value in equal abundance in the West. While it is indisputable that these often iconic landscapes hold tremendous value, the methods of recognizing and extracting this value is frequently at the heart of persistent (though not always accurate) conservation vs. development, liberal vs. conservative, environmentalist vs. blue collar squabbles. Extraction of minerals, oil and gas, timber and forage, uncoordinated sprawling real estate development, and intensive recreational use are all tried and true ways to capitalize on the spectacular natural resources of Colorado and the West.

When conserved, these lands provide significant benefits that are being quantified and monetized, but can not be recognized as the preferred sources of value at this time, particularly when compared to established extractive activities mentioned above. The value of open space, sufficient habitat and viable wildlife populations, unadulterated view sheds, water filtration, and water storage capacity are just beginning to be quantified and compared. Add to this list a number of experimental or theoretical “values” that conservationists with decidedly market oriented approaches are attempting to attribute to land for conservation purposes – amount of solar insolation, wind fetch, carbon sequestration, ecological or biological diversity credits – as well as the inherently difficult subject of how to value healthy, self-respecting communities which engender diverse, stable economies and engaged citizens. These values are non-existent at this point or nowhere near as bankable as energy exploration, the sacrosanct and ubiquitous 35 acre ranchette, or the speculative master-planned gated golf course community, for example. But, as this thesis will attempt to demonstrate, landscape scale conservation has emerged as one tool that aims to obviate the strict separation of economic health, social welfare and ecological integrity. The question then becomes, “Is conservation a capable and viable actor in this ambitious role?”

**Conclusion**
The back and forth between these three poles – old economy resource extraction, unadulterated new economy driven growth and sprawl, or concerted efforts to identify and channel the benefits of the new economy in ways that maintain the natural amenities of the region while strengthening the viability and sustainability of individual communities and greater metropolitan areas – is where we find ourselves at the present time.\(^{53}\) It is this ongoing dialogue between economy, ecology and culture in Colorado and the West that lends a vibrancy and urgency to conservation and its role in advancing this debate. The challenge and purpose of this thesis is to investigate how an emerging land conservation framework is being pursued in the face of this growth and whether conservation is capable of handling this ambitious dual role. The first step in this process was to gain a fuller understanding of the tradition from which landscape scale conservation emerged, followed by a discussion of its present and anticipated characteristics and abilities, as well as its relationship to broader questions of the arc of domestic environmental policy, tasks that were addressed in the preceding chapter. With an examination of recent trends in growth and conservation in Colorado concluded, I now turn to the presentation of three case studies for the opportunity to investigate these and other elements of landscape scale conservation on the ground.

Chapter 4: Case Study Methodology

Methodology

In order to examine how landscape scale conservation projects undertaken at Colorado’s urban-rural interface are faring in the face of significant challenges, I used a case study approach, considering three factors to arrive at the case studies in this chapter.

First, I sought to identify case studies that might fit within the framework of landscape scale conservation as identified by knowledgeable scholars and practitioners, described in chapter three, in order to determine if indeed this framework is finding expression in Colorado. The scale and characteristics of these projects are unique and to identify “on the ground” examples, I performed an informal scan of ongoing or recently completed projects in Colorado. This phase of the research consisted of a combination of considering personal knowledge of ongoing conservation projects, inquiring with professionals “in the know,” and searching websites, press releases and newspaper accounts of projects for cases that fit with the definition and scope as defined.

Next, I considered regional distribution. Colorado is divided into five regions by the Demography Section of the Colorado Department of Local Affairs (DOLA), a state-level community development and planning agency. The regions are the Eastern plains, the Front Range, the Central Mountains, the San Luis Valley, and the Western Slope. This regional breakdown reflects historical development patterns, reinforces political divisions within the state, and frames geography, landscape variety, and land use in a simplistic but effective fashion. I felt that this regional perspective was a logical basis from which to examine
conservation activity in multiple areas of the state, yielding the greatest variety of insights.

This thesis directly concerns itself with an approach to conservation in the face of population growth and subsequent land use changes. Therefore, it seems axiomatic that the case studies should attempt to reflect the spectrum of growth rates, something that was possible at a regional level. I used population growth as a simple proxy for pressure on land and resources and a driver of conservation. Colorado as a whole grew an estimated 30% from 1990-2000.\textsuperscript{54} This average, of course, masks significant variation. From negative growth rates in some Eastern Plains counties to the highest county growth rate in the country for that decade, variation existed within the state. I wanted case studies that reflected this variation.

I also wanted case studies that might reflect the programmatic and geographic priorities of organizations that have strategic, state wide perspectives. The Colorado Conservation Trust, Colorado Open Lands, Trust for Public Land, The Nature Conservancy, and The Conservation Fund are five organizations that fit this description. There are other organizations that have a statewide focus, but I chose not to focus on those that are singular or limited in their focus (i.e. American Farmland Trust, Rocky Mountain Elk Foundation) in favor of those that encompass the spectrum of conservation areas and issues. While these conservation organizations have widely divergent methodologies and capacities for pursuing their work, their areas of emphasis and geographic purview were undoubtedly shaped by regional considerations, a complimentary feature for the purpose of this thesis.

Furthermore, these are exactly the stakeholders likely to have the skill and capacity to initiate, undertake or coordinate landscape scale efforts. As will be demonstrated in the case studies, landscape scale conservation efforts have fairly high barriers to entry due to cost and complexity. Undertaking this thesis

inherently biased the possible case studies towards national organizations with state field offices and the more established local organizations, as judged by number of staff, variety of programs, and funding. This is certainly a relevant observation because it indicates that not every land trust or community group is likely to have the capabilities necessary to pursue these projects and policies on their own. Additionally, because this scale and framework for conservation is ambitious and innovative and the projects are ongoing, the "finish line" is a constantly moving destination. I was not concerned by whether the projects are "done," believing that wherever the efforts lie will offer information on policies, strategies, and process of undertaking conservation in the face of growth pressures.

Table 4.1: Case Study Summary

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Region</th>
<th>Counties</th>
<th>1990-2000 County Growth Rate</th>
<th>Lead Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>South I-25 Conservation Corridor</td>
<td>Front Range</td>
<td>Douglas</td>
<td>191%</td>
<td>GOCO, The Conservation Fund, Douglas County</td>
</tr>
<tr>
<td>Fruita/Mesa County Community Separator</td>
<td>Western Slope</td>
<td>Mesa</td>
<td>24%</td>
<td>Mesa County, Town of Fruita, City of Grand Junction, Mesa Land Trust</td>
</tr>
<tr>
<td>Chico Basin</td>
<td>Eastern Plains</td>
<td>El Paso/Pueblo</td>
<td>31%*</td>
<td>The Nature Conservancy, CO State Land Board</td>
</tr>
</tbody>
</table>

* As the urban growth related to this case is almost exclusively attributable to El Paso County, only the El Paso growth rate was considered relevant.

Through this admittedly subjective process and as a result of these considerations, I arrived at three case studies summarized in Table 4.1.

With these three factors in mind, I believe that the following characteristics of the three case studies provide an appropriate, if not rigorous, sample for the purposes of this thesis.

- Distributed in three of the five regions in the state;
- Address the range of priority conservation areas and programmatic foci identified through a scan of state wide organizations and provides the opportunity to compare organizational differences;
- Are found in areas where population growth has been slightly below (24%), almost exactly even with (31%), and significantly above (191%) the statewide growth average (30%) from 1990-2000.

During research I sought to detail the origins of conservation efforts, relevant actors, financing and acquisition strategies, organizational arrangements and outcomes to date or prospects for each case. Information came from interviews and conversations with accessible conservation professionals, planners, and relevant government officials involved in each of these initiatives. I structured interviews and acquisition of information around the strategic and practical issues encountered when undertaking landscape scale conservation efforts in proximity to expanding urban centers. The interview protocol was designed to solicit information from subjects that fell under the following headings, and can be found in Appendix A:

- Background and Context
- Project History
- Planning, Acquisition and Management
- Past Difficulties and Future Challenges
- Stakeholder Groups
- Relevant Strategies and Policies
- Conservation Benefits

Publicly available documents, websites, and press releases also figured prominently in obtaining information about each case study.
Once the case studies were compiled, I examined them for commonalities, differences, and interesting responses to the subjects bulleted above. Combined with personal observations and written materials, I then analyzed the process and outcomes to date, paying particular attention to practical and policy implications. Based on this analysis, I will present recommendations applicable to future landscape scale conservation undertakings in Colorado that will have relevance to the wider region.

Figure 4.1: Colorado Case Study Locations
Chapter 5: Case Studies

Case 1: South I-25 Conservation Corridor

Figure 5.1: South I-25 Conservation Corridor Location

Background and Context

Book-ended by Pueblo in the south and Fort Collins in the north and centered on the Denver-Boulder metropolitan statistical area (MSAs), the Front Range is indisputably the economic, cultural, and political engine of Colorado, though one ought to be careful when telling that to someone from the Mountains.
or Western Slope. Colorado’s population has become increasingly urban or suburban in the recent past, with over 80% of its residents living in areas classified as urban environments. Furthermore, the Front Range contains the overwhelming majority of this population, with twenty five of the thirty most populous municipalities and over 81% of the population found in the swath of land that extends roughly forty miles east from the mountains and a distance of two hundred miles from north to south.\textsuperscript{55}

This growth has taken place in spurts, with the most recent and concerted phase occurring in the last decade to fifteen years. A hard economic crash in the early 1980s due to Colorado’s close association with the oil and gas industry preceded a relative period of calm until Colorado was “re-discovered” in the late eighties and early nineties by a variety of economic and lifestyle immigrants. A favorable climate, relatively low cost of living, and diversification into high technology sectors of the economy are but a few of the many factors that funneled growth into Colorado and the Front Range in the 1990s. The U.S. Highway 36 corridor that linked Denver and Boulder, and the Southern suburbs, including the nascent Denver Technological Center, became focal points for economic development. Cable telecommunications and information technology companies led the way, along with distribution and transportation activities centered on Denver International Airport, one of the largest and busiest in the nation. With quality jobs and a willing and able development industry at hand, population boomed along the Front Range, including the highest overall growth rate in the nation between 1990 and 2000, an astonishing 191%, found immediately south of Denver and its inner suburbs in Douglas County.\textsuperscript{56} This included one of the largest planned communities in U.S. history to date, Highlands Ranch. Covering over 22,000 acres, currently housing more than 75,000 people in 26,000 residences, with 90,000 people in over 30,000

residences anticipated at build out, Highlands Ranch represented the front line in debates over the character, size, and ultimate result of sprawling growth along Colorado’s Front Range, ultimately being one of many projects that graphically illustrated the dire need for a conservation response along the Front Range.\textsuperscript{57}

While Douglas County was the highest end of the spectrum, it is telling of the general way in which growth along the Front Range had traditionally occurred. This is as much a convergence of history and geography as it is of contemporary economic and demographic changes. The foothills of the Rocky Mountains are an obvious and powerful presence to the West, limiting large scale urban or suburban growth. The expense of infrastructure provision and construction in rough terrain, the simple fact that land in the foothills is often reserved for uses such as in the National Forest, and problems of access and distance to jobs conspire to keep the \textit{preponderance} of growth from extending west.

With western growth largely proscribed, the Front Range tended to push north-south along the I-25 corridor. Annexations by expanding cities and incorporation of areas that had been rural in character were ongoing up and down the Front Range in the 1990s. The term “conurbation” might very well have been invented with the Colorado Front Range in mind. An unappealing vision of uninterrupted, mostly low density urban and suburban land uses following I-25 from Fort Collins – if not Cheyenne, Wyoming – south through the greater Denver-Boulder MSA, to the second largest MSA in the state, Colorado Springs, and then on to Pueblo was, and still is, a distinct possibility.

These cities had developed as autonomous urban centers, generally around water sources and natural amenities in the last quarter of the nineteenth century; Denver at the confluence of the Platte River and Cherry Creek, Fort Collins along the banks of the Cache La Poudre River, Colorado Springs at the


base of Pikes Peak near Cripple Creek, and Pueblo where the Arkansas River exits the mountains through the Royal Gorge. The landscape in between these cities was dominated by ranching and agricultural land uses, remaining largely rural in character. Over time, agricultural and ranching operations became marginalized as economic mainstays of the state and steady, though not astronomical, population growth chipped away at portions of the Front Range's alternating city-rural open space-city pattern.

The explosive growth of the late 1980's and early 1990's brought into sharp focus the fact that ranch, viable agricultural land, and open space could not possibly compete with subdivision, roads, and malls. The historical separation of cities and towns was in jeopardy, if not already moribund. Many recognized that there would be consequences for the Front Range (and therefore the vast majority of the state's population) in terms of quality of life that inspired immigration and provided an important locational advantage to the regional economy, not to mention the state's image and conception of itself. At the same time, an historical or even cultural aversion to centralized regional planning seemed to point toward the fait accompli of a single two hundred mile-long metropolitan area.\textsuperscript{58} This potential outcome was enough to spur action, for nothing could be more disturbing to Coloradans than the specter of stereotypical Southern Californians – a convenient scapegoat in the early 1990s – descending on the state like the Mongol horde, importing the worst stereotypes of the L.A. lifestyle and landscape wholesale to the Front Range.\textsuperscript{59}

Within the context of this rather bleak picture, land conservation gained traction as a public policy issue. Public investment in open space and conservation were not new to Colorado – the City of Boulder was the first local government to pass a dedicated tax for acquisition and protection of open space in 1967 – but passage of dedicated sources of revenue for conservation became

more widespread throughout the 1990s. Counties and municipalities stepped up the pace and volume of voluntary taxes for conservation purposes. In 1994, Douglas County voters approved the one-sixth of one cent Open Space, Trails, and Parks Sales and Use Tax. While this tax was instrumental in getting the Department and its predecessors established, the need for greater amounts of money resulted in a vote in 1996 that gave the County commissioners permission to bond against this tax revenue, raising the amount of money that was accessible for conservation purposes. 1995 also saw the establishment of the County Open Space Advisory Committee (COSAC) a key mechanism to involve commissioners and citizens in identification and ultimately support for conservation efforts.

The sales and use tax paved the way for the Department of Open Space and Natural Resources (a department that had previously drawn expertise from the community development and parks and recreation departments) and generates an estimated $6 million annually for the preservation of open space, the creation of trails, and the development of parks in the County. As Brooke Fox, the director of the department from 1997-2002, explained, the ability of this department to distinguish itself from others was extremely important for a number of reasons. Community development was perceived or associated with yes/no decisions on permits, land uses, and development—a traditionally confrontational relationship with landowners. Parks and recreation was expected to concern itself with provision of public access to parks and recreational facilities. Open Space and Natural Resources' mission and modus operandi as imagined was to engage landowners in negotiations and dialogue regarding conservation of land for uses that go beyond pure recreational uses and in many

---

61 Douglas County Open Space and Natural Resources Department, “Open Space and Natural Resources,” http://www.douglas.co.us/DC/Manager/open_fact.htm.
cases would not even involve public access. For this reason, separation of this department into its own entity was seen as an important step.62

Local initiatives were increasing, revealing a growing recognition of the significant downsides of unadulterated sprawling development, but the most significant step in regards to landscape scale conservation in Colorado was the creation of the Great Outdoors Colorado Trust (GOCO) in 1992. Through Amendment XVIII to the State Constitution, 50% of annual lottery proceeds (up to $35 million FY 1992, adjusted for inflation) are earmarked exclusively to GOCO for parks, wildlife, outdoor recreation, trails, and open space. The span of programs and activities that GOCO is enabled to fund is quite broad, so long as they relate back to the central mission of conservation for the above mentioned purposes. Thus, matching grants are made available for fee simple land acquisition, conservation easements, trails, infrastructure at local and state parks, and local government planning and capacity building. Actual revenue from the lottery exceeded anticipated revenue by nearly $8 million and, as a result, GOCO created a new category of grant: “Legacy Initiatives.” Legacy initiatives were envisioned as a program that would funnel steady and significant funding to specific geographic areas in a manner that would integrate many or all of GOCO’s grant categories while leveraging other private and public funds.63 Legacy initiatives were designed to tackle Colorado’s largest and most complex conservation challenges, and to date fifty seven grants have been made on twenty seven projects, with total award value of over $171 million. While GOCO is a state wide organization, the combination of a regionally concentrated polis and accelerating north-south growth made it abundantly clear that one of GOCO’s first Legacy Initiatives would and should concentrate on a portion of the

62 Brooke Fox, former Executive Director, Douglas County Division of Open Space and Natural Resources, telephone interview, April 2, 2004.
Project History

The early 1990s saw GOCO emerge as an unprecedented state wide resource and Douglas County's conservation capacity coalesce, presenting the opportunity to confront the heretofore inexorable march of Denver and Colorado Springs towards one another. The battle ground had long been eyed by astute politicians, developers, and conservationists, former state Treasure and later Governor Roy Romer having engaged groups such as TNC in conversations over the fate of southern Douglas County as early as 1980. The landscape in this part of Douglas County is as beautiful as it is uniquely Coloradoan in nature. High rocky bluffs, rolling grasslands and intermittent forests of scrub oak and ponderosa pine actually rise to the east and south above the Denver Metro area, cresting at the 7,352 foot summit of the Palmer Divide on the Douglas-El Paso County line. Some of the most expensive and sought after real estate on the Front Range sits in similar terrain at the northern end of Douglas County, including the communities of Castle Pines and Lone Tree, home to the International Golf Tournament and many of the city's professional athletes, doctors, and corporate executives. Suffice it to say that potential development outcomes were fairly clear.

What was at stake? The landscape provides important habitat for deer, elk, black bear, pronghorn antelope, and other wildlife and one of the few remaining direct links between the mountains and the eastern plains. Expansive views of Pikes Peak and the Rampart Range and miles of open space are reminiscent of etchings and descriptions done by the first Anglo explorers to Colorado in the 1820s, and the beauty of the area is on clear display to an

---

64 Chris Leding, GOCO Communications Director, telephone interview, March 24, 2004.
estimated twenty million motorists per year. These factors undoubtedly contributed to GOCO's description of the main parcel within the region, Greenland Ranch, as "perhaps the most significant piece of open space in Colorado."\(^{66}\) This designation, combined with the almost certain development outcome, prompted a concerted effort to combine political will, emerging public policy focus, and newly obtained fiscal powers in Douglas County.

**Planning, Acquisition, and Management**

GOCO was eager to use the excess revenue on a project commensurate with the Legacy Initiative program's vision of integrative conservation where wildlife, recreation, working lands, open space, and viewsheds were addressed. The Conservation Fund, a national organization with a small Colorado office, was actively pursuing relationships with GOCO and Douglas County during this time in an effort to bring southern Douglas County, an obvious candidate area, to the top of the state and local agenda. Sydney Macy, Colorado Director of the Conservation Fund, was former head of The Nature Conservancy and had been involved with Governor Romer in the initial 1980 talks regarding conservation in the area, and as a result The Conservation Fund possessed as much knowledge and sustained interest in southern Douglas County as anyone.\(^{67}\) GOCO promptly provided funds in 1994 for The Conservation Fund to undertake an assessment and formulate a plan of action for protection and acquisition of key parcels in the County.\(^ {68}\) The Conservation Fund submitted the *South I-25 Conservation Corridor Plan*, giving the project a name and defining the geographic focus as ranch land and open space extending along both sides of the interstate from the small town of Larkspur to the Douglas/El Paso County line, a distance of twelve miles. *The I-25 Plan* focused on gathering the most pressing baseline data on the area. This included undertaking natural resource

---


\(^{68}\) Leding, March 24, 2004.
inventories; generating maps on ownership patterns, land use, zoning, views
sheds, and critical habitats; conducting preliminary appraisal work and a survey
of recent real estate transactions; initiating landowner contact; developing
recommendations on land protection strategies; and identifying potential public
and private funding mechanisms. An overarching vision as well as specific
actionable tasks were identified and recommended in the document, with
permanent protection via real estate transactions, both fee simple interest and
easements, being at the top of these lists.

Based on submission of the I-25 Corridor Plan a Legacy Grant was
awarded. The Conservation Fund, in partnership with Douglas County, was then
able to begin pursuing properties in the project area, inking the first modest
$90,000 deal for the historic Greenland town site in 1996. This small start belied
the scale of conservation to be achieved and funds to be spent. Individual
parcels within the larger corridor were acquired through a variety of conservation
mechanisms and dedicated to a variety of land uses consistent with the overall
Corridor Plan. Douglas County made fee simple purchases on four parcels,
supplementing recreation opportunities for the public in addition to maintaining
viewsheds and wildlife habitat. Five conservation easements, paid for by The
Conservation fund, Douglas County, GOCO, and private donors were conveyed
to the county, the Colorado Cattleman's Agricultural Land Trust, the Douglas
County Land Conservancy, and The Conservation Fund, permanently proscribing
development or mandating cluster type limited development, and keeping land in
active agricultural production where management responsibility remained with
private parties. The Legacy grant eventually totaled over $13 million, a sizeable
stick with which a variety of public and private funding sources could be
leveraged. With this guaranteed source of funds in place, Douglas County would
eventually contribute approximately $14.6 million to the Southern I-25

---

69 The Conservation Fund, South I-25 Conservation Corridor Plan, (Denver, Colorado: The
Conservation Corridor, a sizeable investment, but one that engendered equally as significant results, with County dollars being matched at a ratio of $2.56 to $1, and a total outlay of over $80 million for all aspects of the project.\textsuperscript{70}

The crowning achievement of the South I-25 Conservation Corridor came in 2000 with The Conservation Fund closing on a deal to protect the 21,000 acre Greenland Ranch, the largest remaining private tract of undeveloped land along the Front Range. Consistent with this special status, this parcel came with what is speculated to be the highest price tag for a conservation or open space deal ever in the state – $70 million – in 2000.\textsuperscript{71} The lion’s share of this money – $50 million – was obtained from an anonymous donor and an anonymous conservation buyer who agreed to place 17,400 acres of working ranchland under a conservation easement, while Douglas County, GOCO, The Conservation Fund, Colorado Division of Wildlife, and Colorado Department of Parks & Outdoor Recreation contributed the remaining $20 million.\textsuperscript{72} Financial details of this transaction were handled by The Conservation Fund and, as might be expected, negotiations and fundraising were a drawn out and difficult process.

\textit{Past Difficulties and Future Challenges}

The South I-25 Conservation Corridor has likely been the most ambitious undertaking and resounding success for conservation on the Front Range to date. Over a ten year span, 33,000 acres were permanently protected and – depending on accounting – somewhere between $80 and $90 million dollars were spent on conservation in the project area. Difficulties are axiomatic in a project with large numbers of stakeholders and many separate complex transactions, and the I-25 Corridor proved no different.

\textsuperscript{70} Douglas County Open Space and Natural Resources Department, “Summary of Open Space Protection Efforts,” http://www.douglas.co.us/DC/Manager/summary_of_open_space_preservation.htm.
\textsuperscript{71} Sprengelmeyer, A28.
Among those challenges identified by knowledgeable parties, the difficulty of financing this project can not be under-emphasized. This project included the largest investment of GOCO dollars to date, impressive amounts of funding from Douglas County obtained through the open space tax and bonding measures, and yet there was still a need to secure nearly $50 million dollars in private philanthropic and conservation dollars to close the signature deal. Expectations and pressure for landowners to contribute to the success of the project through participation in “bargain sales” were often times not sufficient.

Another important source of tension that required considerable effort and expertise was the consistent outlay of political capital necessary to hold together a complex coalition of private non-profits, state and local government, and citizens of the region. Ranchers and private citizens could often be quite wary of Douglas County’s desire for their properties to fit within a larger open space plan. A further challenge that the Open Space and Natural Resource staff had to consider was the potential to become sidetracked when unrelated or non-priority deals emerged. By maintaining a close relationship with the Conservation Fund, and due to the fact that Douglas County had largely adopted the Corridor Plan, and was therefore capable of sticking to the priority properties, county staff was able to circumvent what was seen as a political morass of opportunistic acquisitions. Thus, the overarching goal of the project – protection of a coherent landscape – remained accessible.

While the project is officially considered complete by GOCO as of February 2003, this administrative designation belies the fact that a variety of work and challenges remain. Chief among the challenges identified is maintaining political will for conservation at the county level. While the core properties are now under easement or county ownership, some are still threatened by sporadic subdivision at their buffers. Secondary properties that can potentially link the core area to other conserved land such as Castlewood

---

73 Fox, April 2, 2004.
Canyon State Park in the east and directly to National Forest land to the west are being closely watched and in some cases conservation buyers and easements are being negotiated. One parcel owned by the State of Colorado has been of particular interest, though a deal with the management entity, the State Land Board, has not been forthcoming (the State Land Board’s role in conservation is addressed in considerable depth in the final case study and subsequently in Chapter 6). Along with the political focus and will, Douglas County may find it financially difficult to maintain their past levels of financial dedication. Having invested heavily in conservation in the last decade Douglas County may have trouble raising additional funds for conservation purposes while they are supporting outstanding bonds used to fund past acquisitions.

**Stakeholder Groups**

The South I-25 Conservation Corridor project was pursued chiefly by the following organizations:

- The Conservation Fund
- Douglas County
  - Division of Open Space and Natural Resources
  - County Commissioners
  - County Open Space Advisory Committee (COSAC)
  - Community Development and Parks and Recreation Departments
- Great Outdoors Colorado (GOCO)
- Colorado Division of Wildlife
- Colorado Department of Parks & Outdoor Recreation
- Douglas County Land Conservancy
- Colorado Cattlemen’s Agricultural Land Trust
- Anonymous conservation buyers and anonymous donors

**Relevant Policies and Strategies**

What relevant policy decisions or statutes have contributed to this project and what are the mechanisms or strategies through which these policies or organizations have expressed themselves?

---

74 Macy, April 2, 2004.
Chapter 5: Case Studies

- Establishment of GOCO through Constitutional Amendment
- Establishment of GOCO Legacy Initiatives Project
- Establishment of Douglas County Open Space, Trails, and Parks Sales and Use Tax as well as bonding authority
- Public Private Partnerships: application of revenue, expertise, political will
- Fee simple purchase
- Conservation Easements

Primary Sources of Project Enabling Funding

- GOCO Legacy Initiatives
- Douglas County
  - Open Space, Trails and Parks sales tax
  - Bonding authority
- The Conservation Fund: Privately raised dollars and donations
- Significant Anonymous Donations

Conservation Benefits

The benefits to date of this project from a conservation perspective include:

- Preservation of biodiversity or wildlife habitat
- Preservation of open space / view-sheds
- Increased Public access/recreation
- Preservation of agricultural/ranching operations
- Limit urban growth
- Link with existing parks/open space
- Improved management capabilities: i.e. consolidation of in-holdings

Contacts

Chris Leding
Communications Director
Great Outdoors Colorado

Sydney Macy
Colorado State Director
The Conservation Fund

Brooke Fox
Former Director
Douglas County Division of Open Space and Natural Resources
Table 5.1: South I-25 Conservation Corridor Summary

<table>
<thead>
<tr>
<th>Property</th>
<th>Mechanism</th>
<th>Land Use</th>
<th>Year</th>
<th>Acres</th>
<th>Source of Funds</th>
<th>Amount Current Year ($)</th>
<th>$/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenland Townsite</td>
<td>Fee Title</td>
<td>Historic Site</td>
<td>1996</td>
<td>15</td>
<td>Douglas County</td>
<td>$90,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>Christensen Ranch</td>
<td>Easement</td>
<td>Open Space</td>
<td>1997</td>
<td>313</td>
<td>Douglas County</td>
<td>$100,000</td>
<td>$319</td>
</tr>
<tr>
<td>Allis Property</td>
<td>Fee Title</td>
<td>Open Space/Trail</td>
<td>1997</td>
<td>148</td>
<td>Douglas County</td>
<td>$140,000</td>
<td>$946</td>
</tr>
<tr>
<td>Columbine Open Space</td>
<td>Fee Title &amp; Easement</td>
<td>Preserve/Trail Corridor, Wildlife Habitat</td>
<td>1998</td>
<td>711</td>
<td>GOCO, Douglas County, TCF, Douglas County Land Conservancy, Donors</td>
<td>$745,000</td>
<td>$1,047</td>
</tr>
<tr>
<td>Douglas Heights</td>
<td>Fee Title &amp; Easement</td>
<td>Ag. Open Space</td>
<td>1998</td>
<td>1,075</td>
<td>GOCO</td>
<td>$2,000,000</td>
<td>$1,860</td>
</tr>
<tr>
<td>JA Ranch</td>
<td>Easement</td>
<td>Open Space, Wildlife Habitat</td>
<td>1999</td>
<td>6,200</td>
<td>GOCO, Douglas County</td>
<td>$5,000,000</td>
<td>$806</td>
</tr>
<tr>
<td>Lake Gulch Open Space</td>
<td>Fee Title &amp; Easement</td>
<td>Open Space, Wildlife Habitat</td>
<td>1999</td>
<td>1,000</td>
<td>Douglas County</td>
<td>$1,200,000</td>
<td>$1,200</td>
</tr>
<tr>
<td>Greenland Ranch</td>
<td>Fee Title &amp; Easement</td>
<td>Open Space, Wildlife Habitat, Open Space/Trail</td>
<td>2000</td>
<td>21,000</td>
<td>GOCO, Douglas County, TCF, Anonymous Donor, and conservation buyer</td>
<td>$70,000,000</td>
<td>$3,333</td>
</tr>
<tr>
<td>True Mountain</td>
<td>Easement</td>
<td>Open Space/Wildlife Habitat</td>
<td>2003</td>
<td>577</td>
<td>DOCO, Douglas County</td>
<td>$1,600,000</td>
<td>$2,772</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td>31,039</td>
<td></td>
<td>$80,750,000</td>
<td>$2,031</td>
</tr>
</tbody>
</table>

Chapter 5: Case Studies

Figure 5.2: Douglas County Open Space Map

Case 2: Mesa County Community Separator

Background and Context
Exiting the high country via a dramatic break in the Book Cliffs, the Colorado River enters the Grand Valley in west-central Colorado. The margins of this valley are defined by the mesas and canyons of Colorado National Monument – part of the larger Uncompahgre Plateau – to the southwest and the thousand foot heights of the Book Cliffs which isolate Grand Mesa – one of the world’s largest flat top mountains – to the northeast. Descending from the high country to the west into the valley and joining with major tributaries including the Gunnison River, the mighty Colorado begins its torturous descent through the canyon country of far western Colorado and southern Utah where additional rainfall and runoff is sparse, on the order of just under nine inches per year in the Grand Valley.
The Grand Valley is synonymous, though not absolutely coterminous, with Mesa County, the political, demographic, and economic anchor of the second region I will consider, Colorado’s Western Slope. This proximity to precious water and irrigable land, combined with the mild high-desert climate, means that Mesa County in particular is a fertile agricultural region known for hosting a variety of unique production sectors, including Colorado’s small but vibrant wine industry, a number of orchards, peaches being the prized crop, row crops such as alfalfa, corn and wheat, and “niche” products including organic garden herbs sold at local farmer’s markets. Mesa County’s seat is Grand Junction, the state’s only designated metropolitan statistical area not located on the Front Range, home to 122,463 people as of July 2002. Grand Junction is Colorado’s fifteenth most populous municipality while Mesa County is Colorado’s eleventh most populous county, having experienced a 24% growth rate for the 1990s, a significant population increase, but below Colorado’s robust 31% average.75 Agricultural operations stretch from the northwest corner of the valley down through the small but growing town of Fruita, into the outskirts of Grand Junction, and east through the unincorporated but densely settled Clifton area and into Palisade where the county’s wineries are concentrated and the Colorado River emerges from the Book Cliffs.

The dramatic landscapes that define and frame the Grand Valley are recognized for their recreational, open space, and wildlife values as well. Grand Mesa hosts abundant wildlife and the subsequent quality of its hunting and fishing draw outdoorsmen; the Colorado National Monument is administered by the National Park Service and is on par with the famous national parks farther west in Utah for canyon scenery and overlooks of the Colorado River; Fruita has earned a reputation as an international mountain bike destination with trails on BLM land at the base of the Book Cliffs west of town as well as east of town adjacent to the National Monument; skiing is available less than an hour east at

Sunlight and two hours away at the four Aspen Skiing Company mountains in the Roaring Fork Valley.

Grand Junction and the smaller towns of Mesa County are, to the pride of Western Slope residents, distinctly different from Colorado's Front Range megalopolis while still providing amenities including a regional airport, college campus, and the only full service hospital facilities between Denver and Salt Lake City. Front Range-Western Slope schisms in the state are important political and economic reality, with the issue of large scale water reclamation and inter-basin transfers from mountain and Western Slope Rivers to the suburbs of the Front Range being a traditional flash point. Given this historical and ongoing tension it is little wonder that conservation on the Western Slope has explicitly sought to learn from the Front Range and avoid what are seen as past shortcomings of planning, growth management, and conservation that have resulted in undesirable congestion and crowding. As a planner for small town Palisade candidly stated, “We looked over the mountains to Denver where it all runs together and decided we didn’t want that.”

Agriculture flourishes in the region due to the mild sunny climate, availability of water, and prime valley bottom land. The climate and landscape also enable ample recreational opportunities. A small town ethic contrasts nicely with the opposite slope of the mountains. With this list of factors it should come as no surprise that there has been steady population and subsequent growth pressure. Mesa County citizens, and conservation and planning advocates have demanded an active response to questions of growth and landscape conservation. Lead by planning staff from Mesa County, Grand Junction, and Fruita, the Mesa Land Trust, a significant volunteer resource — the Technical Resource Advisory Committee (TRAC) — comprised of local citizens, and receiving funding support from a variety of sources including GOCO, the Colorado Division of Local Affairs (DOLA), and National Resource Conservation

---

Service (NRCS), and American Farmland Trust (AFT), the Mesa County Community Separator is the subject of this case study. Relying on incentive based regulatory mechanisms and a high degree of cooperation and interaction between different political jurisdictions as well as a variety of funding and support mechanisms, this project blurs the line between landscape scale conservation and growth management most completely, revealing the possibilities of coordinated regulation and policy for large scale acquisition and conservation goals, but raising interesting land use, planning, and conservation issues as well.

The Western Slope has benefited from being slightly removed in the pace and timing of growth pressures, but planners, conservationists, and local government recognize that luxury as long gone and have stepped up the pace in tackling these concerns in a manner carefully tailored to the Western Slope. Involvement of specialty conservation organizations like the AFT, as well as programmatic focus on agricultural conservation and rural land use planning by local planning staff and conservation advocates such as the Mesa Land Trust show that conservation and growth management in Mesa County are attuned to the concerns and desires of the region. While wildlife habitat, open space, and recreation are still enormously important rationale that are considered when pursuing cooperative projects or easements, the manner in which agricultural land is affected by and affects rural development patterns has undoubtedly emerged as a focal point for conservation and land use planning in the face of population growth and development pressures.

Project History

The early 1990s saw an increase in annexation of unincorporated land by the City of Grand Junction. Due to ongoing disagreements between Grand Junction and Mesa County a lawsuit was eventually filed regarding annexation and provision of sewer services, earning this contentious period the moniker of the “annexation wars” by planning staff from the different jurisdictions. The threat
of losing the clearly defined boundaries between urban and agricultural areas separating Fruita and Palisade from Grand Junction became a reality. The potential for Mesa County to mimic Front Range patterns of urban agglomeration spurred action.

Fruita had undertaken a comprehensive planning exercise in 1994 and the preservation of agricultural land and rural character was a high priority. Likewise, a growing recognition that the Colorado River Corridor represented an unmatched resource for recreation, wildlife habitat, open space, and scenery was driving discussions and action from an impressive alphabet soup of natural resource management agencies and government. This growing desire to capitalize on and protect this resource spurred coordinated planning exercises that involved, at various times, Mesa County, Fruita, Palisade, Grand Junction, BLM, Bureau of Reclamation, National Park Service, U.S. Fish and Wildlife, Colorado Division of Wildlife, Colorado State Parks, The Nature Conservancy and their close local partners the Mesa Land Trust.

The underlying result was to give nascent form to the Community Separator Project. The project, as it would eventually come to be understood, elucidated the mutual desire for a well defined system that could serve to buffer Mesa County’s communities from one another while tying in more traditional conservation activities that would allow for conservation of agricultural land, protection of wildlife corridors between public land at the margins of the Grand Valley, and conservation of land along the Colorado River corridor for recreation, open space, and wildlife purposes. Overall, the Mesa County Community Separator project represented an ambitious slate of goals that represents the full purview and complexity of landscape scale conservation.

**Planning, Acquisition, and Management**

The initial tool that emerged to address contentious growth issues and that served as the effective beginning of coordinated landscape conservation in Mesa County was the intergovernmental agreement (IGA). As conceived, the
goal of IGAs was to provide incentive-based programs to reduce sprawl and
preserve open space in lieu of the political will or ability to pursue down zoning or
direct conservation of land through purchase. Much of the agricultural land in the
valley was zoned at one house per five acres, making sprawling rural housing
development the default land use pattern if a farmer chose to subdivide or sell off
land proximate to any of the more urbanized areas.\textsuperscript{77} Mesa County did not – and
to this day does not – have a dedicated open space or conservation funding
mechanism in place, nor was it seen as the most accessible mechanism to
address conservation of working agricultural land. In effect, the County turned to
IGAs as a viable stop-gap measure that would allow them to engage the
bellicose municipalities while more fully exploring planning, regulatory, and
traditional conservation mechanisms (i.e. easements or acquisition) that could be
utilized throughout the county.

The first IGA was signed by Mesa County, Fruita, and Grand Junction in
1996. This interim IGA was set to last eighteen months, clarifying areas of the
county that were to fall in the purview of a joint planning area and agreeing that,
"Within the cooperative planning areas, no annexations or service extensions will
take place, and the county will provide an opportunity for review of proposed
developments."\textsuperscript{78} The second IGA, agreed to in 1998 by Mesa County and
Grand Junction, resolved a pending lawsuit regarding extension of sewer service,
mandated joint policy making for development in the cooperative planning area,
effectively proscribed future annexation of land by Grand Junction if that
annexation was not in concert with the countywide land use plan and amenable
to all parties, and directed the two jurisdictions to align the cooperative planning
area already established to coincide with urban growth boundaries – clearly

\textsuperscript{77} Montana Smart Growth Coalition, “City of Fruita/Mesa County Transfer of Development Rights
Program & Community Separator Program,” http://www.mtsmartgrowth.org/CS\&Rpub/CS/Fruita-
Mesa.doc.

\textsuperscript{78} Colorado Department of Local Affairs, \textit{Colorado Heritage Report: Best Practices in
Intergovernmental Agreements} (December 1999), http://www.state.co.us/smartgrowth/\textit{Media/IGA.pdf}. 
designated buffers of land – "community separators" – between Fruita, Grand Junction and Palisade, the eventual shape of which can be seen in Figure 5.2.\(^{79}\) The IGAs established an interim mechanism to try to prevent development at urban densities, but the omnipresent need for sensitivity to property rights concerns and the political infeasibility of pursuing "heavy handed" regulatory methods such as down zoning limited the nature of permanent solutions that Mesa County might employ. Land within the separators remained zoned at one unit per five acres, still allowing subdivision and sprawling rural development.\(^{80}\)

While the IGAs effectively laid the groundwork for the overarching Community Separator project, Mesa County and the relevant municipalities were also successfully pursuing Legacy Initiative funding from GOCO. These funds were obtained as part of the Colorado Riverfront Greenway Legacy project, a larger but complimentary effort at conservation in Mesa County that would eventually provide over $9 million of state funds that were used to leverage an additional $7.3 million from state and local government, BLM, U.S. Fish and Wildlife, and other sources. Consistent with Legacy funding this money was used for capacity building and planning exercises, provision of infrastructure for parks and recreation areas, fee simple acquisition and preservation of open space, and protection or enhancement of wildlife habitat up and down the Colorado River corridor from Palisade to Fruita and beyond.\(^{81}\) The bulk of GOCO funding was used for land acquisition or provision of parks and facilities immediately adjacent to the river itself. However, due to the complementary purposes of the Community Separator project, particularly as it related to integrity of agricultural land and community separation, as well as wildlife corridors between public land on opposite sides of the valley, $300,000 in GOCO funds

\(^{79}\) Montana Smart Growth Coalition.

\(^{80}\) Keith Fife, Director, Mesa County Long Range Planning Division, telephone interview, April 14, 2004.

\(^{81}\) Please refer to Case 1 for a fuller discussion of GOCO and the origin and philosophy behind GOCO Legacy Initiative Projects.
were used to jumpstart a purchase of development rights (PDR) program for land in the separators.

With the two signed IGAs and the Legacy Initiative designation in place, significant momentum was building for the Community Separator project as an integrated effort at growth management and conservation. Mesa County sought to build on this momentum, and to increase support within the community by initiating the TRAC. TRAC defines itself as, "A group of local, volunteer experts who help landowners explore land use options." TRAC volunteers were drawn from the ranching, agricultural, banking, tax and land use law, conservation, planning, and wildlife management fields. This volunteer entity, through free consultation services and active outreach and education efforts available to Mesa County residents and land owners, aimed to increase the use of flexible and creative land use solutions in the face of sprawling and disjunctive development patterns. Because the emphasis of TRAC’s efforts is education, assistance, and creativity, this entity was seen as a highly effective way of transferring ownership of the Community Separator Project from the exclusive prerogative of local and county government to citizens, thus expanding the reach of its efforts and increasing the odds that traditional – and continual – skeptics of conservation and planning might be assuaged by sound advice from people they know and trust.

Mesa County, in cooperation with the Mesa Land Trust, initiated the PDR program in 2000 with the GOCO funds, seeking to guarantee the integrity of designated separator lands. Mesa County contracts with the Mesa Land Trust to administer the program in consultation with a PDR Committee that consists of representatives from the four municipalities – Fruita, Grand Junction, Palisade, and Mesa County – and one member of the TRAC. The PDR Committee sets priorities for conservation via a formula that considers a variety of factors,

---

83 Ibid.
emphasizing high quality agricultural land in strategic locations, and approves disposition of GOCO and other grant money, which generally must be matched by a minimum of 25% local funding. GOCO’s $300,000 “first money” was used for acquisition of 72 acres of in the separators, which in turn prompted the donation of another 75 acres. To date, the PDR effort has acquired rights on 400 acres of land and had the positive effect of spurring interest from rural land owners, such that sufficient funds were not available to meet growing demand. This effort at funding innovative and proactive growth management and land use regimes was seen as an expansion in focus for GOCO, while other funding sources for acquisition of development rights include matching dollars from local municipalities and NRCS – via the Federal Farm Bill – appropriations. Funding for program development also came from the Governor’s Office of Energy Management and Conservation, a novel source of conservation funding, revealing a wide reaching effort by local planers to secure assistance.

One of TRAC’s most significant roles was to consult and provide guidance to Mesa County and Fruita planners as they initiated the most challenging piece of the project, a transferable development rights/credits program (TDR/C). The TDR/C program sought to increase incentives for conservation of land within the actual swaths of land that were designated as community separators. Fruita and Mesa County sought funding capacity from another state level office, the Colorado Department of Local Affairs (DOLA), and their Colorado Heritage Planning Grant (CHPG) program. DOLA awarded Fruita and Mesa County a CHPG grant in 2001, providing $30,500 for the planning effort. DOLA would subsequently, in 2003, award the Mesa Community Separator Project a Governor’s Smart Growth Award.

84 Tom Latousek, PDR Program Manager, Mesa Land Trust, telephone interview, April 9, 2004.
85 Lofholm, B8.
TDR/C programs are not new within Colorado or the nation, but this effort to import the tool to Colorado’s Western Slope was a first. The program builds on preexisting transfer capabilities found in the county wide land use plan. The county allows a 20% bonus for transferring density from any rural area in the county to a municipality, but this ratio has not been enough to spur developers to use it, and did not address where the additional density would be accommodated. The TDR/C program seeks to correct this limitation by designating both rural “sending” areas in Mesa County and urban “receiving” areas within the City of Fruita. Sending areas for the program include the designated Fruita/Grand Junction Community separator and a 1-mile radius around Fruita’s urban services boundary. Receiving areas designated to absorb the transferred development rights and increased residential or urban land use includes the downtown design district and currently undeveloped regions within the proposed urban services boundary in Fruita. After density has been transferred, the sending site can be developed only to the residual density, development must be clustered, and no rezoning is allowed. Figures 5.2 and 5.3 present maps of the Community Separator Project and the outlines of the different TDR/C program zones.

At heart, TDR programs are efforts to take advantage of market forces and redirect growth, though in practice they have proven difficult to perfect. As a result, Fruita made efforts to incorporate best practices in their assessment, incorporation into larger planning and land use documents, and eventual implementation. The Fruita Futures community planning conference introduced the concept to residents, and TRAC was instrumental in deciding the many technical and procedural questions involved in a TDR/C program. The Fruita Community Plan 2020, adopted in 2001, included explicit provisions for the TDR/C program, assuring that both the city and county land use code was capable of accommodating this tool. Fruita and Mesa County signed the agreement in 2003 and adopted amendments to their land use codes that
Chapter 5: Case Studies

implemented the program. Mesa County continued to emphasize education and outreach as vital to this program, developing a TDR/C Program Manual aimed at landowners and development interests implicated by the program. The Manual presents background information, definitions, sample documentation, maps and descriptions of the location of sending and receiving areas, and criteria and process requirements for individual transactions.87

Past Difficulties and Future Challenges

The Mesa Community Separator project is an ongoing and in all due respects a young program. The PDR program has been operational since 2000 while the TDR/C agreement was finalized in 2003. This short history, however, has revealed fundamental difficulties that are specific to Mesa County and the conservation tools employed in the project, as well as broader challenges that resonate across the state.

The total size of the two community separators is roughly 10,000 acres – 4,000 in Palisade and 6,000 in Fruita – and there are approximately 100 separate qualifying landowners in this patchwork of land. The PDR program has been modestly successful with 400 acres or 4% protected via nine separate transactions to date. While the amount of land is modest, a promising sign is that Mesa Land Trust has had contact with 60 of the qualifying landowners, 26 of whom have been authorized by the PDR Committee for transactions.88 Four landowners are under contract in early 2004 and another six transactions are anticipated for 2004. The high number of landowners reveals the fact that the Grand Valley has relatively few large contiguous chunks of land that would present maximum “bang for the buck.” The largest parcel within either of the separators is 600 acres while the average size of parcels is around 10 acres in

87 Town of Fruita & Mesa County, Fruita/Mesa County Transferable Development Rights/Credits User Manual (Fruita, CO: June 2003), http://www.co.mesa.co.us/longrangeplan/fruita_mesa_tdr/TDR.htm.
88 Qualifying landowner who are authorized for transactions refers to the process by which the properties land possesses priority characteristics as identified by the PDR Committee, including size, type of land, location, soil type, etc.
Palisade and 20 in Fruita. The PDR Committee's threshold for pursuing a deal is 10 acres. The small size of land and high number of property owners results in a phenomenon likened to "eating an elephant piece by piece," where high transaction costs associated with many small deals presents an additional challenge to program administrators.\(^8^9\) While Mesa Land Trust and Mesa County pursue these transactions to their maximum ability, the rate of subdivision of land in the separators – representing further fragmentation of potentially viable parcels of greater than 10 to 20 acres – has continued at a depressing pace, roughly twice that of the rate of purchase. This is particularly true in the Fruita separator where row cropping is not as lucrative as wineries and orchards that comprise the Palisade separator.\(^9^0\) Much broader questions of the viability of agriculture and ability or necessity of farm families to have multiple sources of income to remain in production are recognized as crucial in this regard. In the Fruita area, alfalfa hay is seen as one of the few viable crops while niche markets such as organics and herbs are being pursued, if only as supplemental income. As growth pressures continue to drive speculative real estate markets in the Fruita area, agricultural operations will continue to struggle.\(^9^1\)

High transaction costs associated with a multitude of individual and time consuming transactions are particularly onerous in the face of a predictable hurdle for the PDR program: steady funding. Mesa County's lack of any dedicated conservation funding mechanism mandates that the program is dependent on modest allocations of local discretionary funds to match money secured though grant sources, such as the highly competitive GOCO process, funds from the National Resource Conservation Service ("Farm Bill funding") or private contributions raised by Mesa Land Trust. These local funds are discretionary. Mesa County uses their annual appropriation of GOCO lottery

\(^8^9\) Latousek, April 9, 2004.
\(^9^0\) Fife, April 13, 2004.
\(^9^1\) Bennett Boeschenstein, City of Fruita Community Development Department, telephone interview, April 15, 2004.
proceeds that every county and municipality in the state receives while Fruita, Grand Junction, and Palisade contribute from their general funds. These sources of money are tenuous at best, particularly in light of the typical slate of competing local funding priorities including schools, libraries, a regional park, and a county events center. Likewise, because of tight funding, the program puts emphasis on working with landowners who might be willing to offer bargain sales — hardly a contingency that can or should be planned for over long periods of time. Discussions around pursuing a dedicated revenue source at the county level are being pursued by a sub-committee of the county commissioners — including a planned survey in summer 2004 regarding attitudes towards funding for conservation — and advocated for by Mesa Land Trust and the Trust for Public Land’s conservation finance program. Again, the prospect for convincing a conservative political base to fund conservation through additional taxes is not optimistic. Just as the allocation of funds must compete for attention, the public is presented with pleas for dedicated tax funding for a variety of uses, and in a conservative community like Mesa County these pleas often fall on deaf ears. Without an assured source of funding, Mesa Land Trust and Mesa County will continue to accrue the interest of private property owners who wish to participate in the PDR program well in excess of their ability to fund them, and the pace of protection will not increase significantly above the roughly four to six transactions per year that have been secured to date.

The availability of funding and subsequent pacing of deals speaks to another challenge of the program: maintaining the support of county commissioners and other elected officials. The PDR program is assembling a track record that is extremely valuable in terms of showing landowners and elected officials that there is measurable value in the process. For political and practical purposes the TDR/C program needs to be a functioning on-the-ground reality that the county and local municipalities can point to as having the desired

affect of limiting conurbation while compensating rural land owners at the same time. The worse case scenario is a program on the books that is underused, unforced, or unfunded for lack of results and subsequent lack of political currency.\textsuperscript{94} Support for more robust funding sources and continuation of – ideally – protection of a majority of the separators is heavily dependent on this political support.\textsuperscript{95}

As a brand new and slightly different tool, the TDR/C Program does not have even the modest the track record that the PDR program has assembled and is still awaiting its first transactions. Without delving too far into the complex details of TDR/C mechanisms, suffice it to say that developers are wary of testing the waters when the value of the development credits has not been firmly established or is inconsistent from parcel to parcel. To deal with inconsistencies in the program as it was passed and reticence by the development community to fully their options with TDR/C the county is considering a variety of technical amendments. Unforeseen contingencies such as the desire for developers to transfer development credits from industrially or commercially zoned land found in the buffers to residential parcels in receiving areas must be confronted. Fruita, Mesa County and Mesa Land Trust are considering ways to better coordinate the PDR and TDR/C programs so that the exchange of information and administrative aspects of the two programs work in concert. This would most likely happen by shifting administration of the TDR/C program to Mesa Land Trust. Mesa Land Trust has proven adept at coordinating deals and matching funds and willing sellers in the PDR program and the hope is that those willing to participate in PDR might consider the TDR/C program so long as willing buyers of the credits can be found. The possibility of establishing a TDR bank that would purchase TDR/C credits and convey these credits to developers is being considered as a way to “jump start” the TDR/C program. As imagined, this would

\textsuperscript{94} Boeschenstein, April 15, 2004.
\textsuperscript{95} Latousek, April 9, 2004.
take some of the pressure off private developers to be the first to use the program, allowing it to establish a track record while purchasing development rights that will continue to appreciate with real estate values. Mesa County owns land in the Fruita separator, and their donation of rights to the bank is seen as one potential route to seeding this program.\footnote{Boeschenstein, April 15, 2004.}

While adjustments in formulas, ratios and other technical elements of the TDR/C program are important, there are larger planning and land use issues that are recognized as important to the future of a viable Community Separator project. Mesa County planners are eyeing adjustments to the boundaries of the separators so as to make them better coincide with county wide plans. Likewise, efforts to forge agreements with unincorporated areas of the county – and particularly providers of utilities like sewer services – that will strengthen the community separator zones are seen as imminently important. Finally, Mesa County is exploring a more comprehensive definition of what rural character looks like on the ground and investigating the possibility of creating overlay districts that would better protect viable agricultural land by incorporating design and clustering guidelines. Given the need for continual deference to private property concerns and insistence on voluntary incentive based mechanisms, these investigations must be undertaken with delicate steps.\footnote{Fife, April 14, 2004.}

\textbf{Stakeholder Groups}

The Fruita/Mesa County Community Separator project has been primarily pursued through the actions of:

- Mesa County
  - Planning and Community Development Department
- The City of Fruita
  - Community Development Department
- City of Grand Junction
  - Community Development Department
- Town of Palisade
• Mesa Land Trust
• Mesa County Technical Resource Advisory Committee (TRAC)
• Great Outdoors Colorado (GOCO)
• The Colorado Department of Local Affairs (DOLA)
• Governor's Office of Energy Management and Conservation (OEMC)
• National Resource Conservation Service (NRCS)
• American Farmland Trust
• Colorado State Parks
• Colorado Division of Wildlife
• Bureau of Land Management
• U.S. Fish and Wildlife Service
• U.S. Bureau of Reclamation

Relevant Policies and Strategies

What relevant policy decisions or statutes have contributed to this project and what are the mechanisms or strategies through which these policies or organizations have expressed themselves?

- Intergovernmental Agreements (IGA)
- Establishment of TRAC
- Purchased development rights program (PDR)
- Transfer of development rights/credits program (TDR/C)
- Establishment of GOCO through Constitutional Amendment
- Establishment of GOCO Legacy Initiatives Project
- Fee simple acquisition
- Conservation Easements
- Outreach and education

Primary Sources of Project Enabling Funding

- GOCO Trust Fund Appropriations via local appropriations
- GOCO Legacy Initiatives
- Locally appropriated general funds
- DOLA Colorado Heritage Planning Grants
- Governors office of Energy Management and Conservation
- Privately raised dollars and donations

Conservation Benefits
The benefits to date of this project from a conservation perspective

- Limit rural subdivision and sprawling growth
- Preservation of agricultural/ranching operations
- Preservation of wildlife habitat
- Preservation of open space / view-sheds
- Provision of park and recreation facilities and access
- Link with existing parks/open space
- Economic benefits to community: negated development costs
- Reclamation and restoration of habitat

**Contacts**

Tom Latousek  
PDR Program Manager  
mesa Land Trust

Keith Fife  
Director, Mesa County Long Range Planning Division

Bennett Boeschenstein  
City of Fruita Community Development Department
Figure 5.4: Mesa County Community Separator Project

Figure 5.5: Mesa County/Fruita TDR Program Areas

Case 3: The Chico Basin

Figure 5.6: Chico Basin Location

Background and Context

Interstate highways 70 and 76 exit metro Denver at its northeastern fringes, while a variety of lesser state, county, and national highways strike out east, linking the Front Range to small and medium satellite towns of the Eastern Plains: Sterling, Fort Morgan, Limon, Burlington, and La Junta. The spectacle of endless miles of crops and open range along these roads is bested only by the expansiveness of the horizon. John Denver-esque Colorado quickly gives way to the reality that nearly half the state has more in common with the plains landscapes of extreme southeastern Wyoming, western Nebraska and Kansas,
the Oklahoma panhandle, and the northeast corner of New Mexico than with any “Rocky Mountain High.”

Because “traditional” growth pressures trended north-south, these Eastern Plains landscapes were largely on the periphery of Front Range growth pressures up through the 1980s. Depending on the availability of water and proximity to a major transportation corridor, farm land and open range remained viable land uses in relatively close proximity to the eastern fringes of the urban centers up and down the Front Range. Yet, as explained in the first case study, growth in a westerly direction was largely infeasible and the north-south trend was reaching “build out” in terms of available land, exacerbated by the desire (strongly demonstrated by the South I-25 Conservation Corridor) to keep the Front Range from becoming a Los Angeles-like agglomeration on its north-south axis.

The obvious release valve for this growth pressure was onto the Eastern Plains, a trend most vividly demonstrated by the fact that Elbert County, southeast of Denver, logged a 106% growth rate, the third fastest rate in the entire country during the 1990s.98 Coloradans derisively but begrudgingly accept that if one is to live at the expanding eastern fringe of Denver in Elbert County, you might as well commute to Lawrence, Kansas and root for the Jayhawks rather than to Boulder to root for the Buffaloes. This example foreshadows the fact that Front Range expansion onto the Eastern Plains is, in terms of sheer numbers, the ascendant locale in Colorado’s ongoing urban growth vs. conservation battle.99 Elbert County is the epicenter of eastern growth on the Front Range and conservation is not a particularly high priority in this locale. The Colorado Springs metropolitan area in El Paso County is somewhere that landscape conservation is given at least a fighting chance of stemming the tide of urban

---

99 See Ingold, 2004; and Olinger, 2003.
growth, and as such will serve as a slightly less extreme example of eastern-trending urban growth for this final case study.

Colorado Springs began as a tourist mecca, an idyllic second city at the base of Pikes Peak touted by boosters for its clean air and remarkable natural surroundings. While holdovers of this era such as the Broadmoor Hotel remain, Colorado Springs and El Paso County now draw their identities from a sizeable military presence – the U.S. Air Force Academy, North American Radar Air Defense, Schriever Air Force Base, and Fort Carson all situated within thirty minutes of one another – and a decidedly conservative political culture. The climate, scenery, and job prospects remain strong drawing cards, and El Paso County experienced a stout but not astronomical – by Colorado standards, anyway – rate of population growth of 31% during the 1990s.100 Much of this growth was taken place in a north-south orientation, but low density suburban sprawl to the east has become increasingly significant. Rather than massive planned communities akin to Highlands Ranch in Douglas County, El Paso County planners recognize 35 acre “ranchette” subdivision, exempt from local level planning review by state statute, as the predominant threat to conservation and landscape integrity, with 33% of all existing 35 acre parcels in the county created between 1996 and 2001. Colorado Springs is oozing east into the rural and historically sparsely settled Ellicot, Hanover, Highway 94, and South Central planning areas.101

El Paso County is particularly ill prepared for – if not purposefully predisposed to – this trend. The conservative political culture manifests itself in this regard, with property rights held sacrosanct and an ingrained aversion to progressive planning frameworks that might enable the county to take land conservation and its many potential benefits into account in development deliberations. County commissioners make no bones about favoring the

development of transportation corridors and resultant subdivision of the landscape in the rural parts of the county over the majority of competing land uses. During revision of a recent planning document, planners were quite blunt in the assessment provided to El Paso County commissioners on this matter:

"Unlike many Colorado counties with rapid growth rates, El Paso County does not have a plan to ensure protection of environmentally sensitive areas or to permanently preserve open space. Lakes and shorelines are not protected from development or preserved from use by area residents. Wetlands and riparian habitats are often lost during construction, wildlife corridors are not seriously considered as part of the development review process, and there is no plan that specifically addresses preservation of open space. Priority open space lands were identified in the County's adopted Parks Master Plan (1997). This designation merely identifies potential desirable sites and does not plan for their preservation or confer any specific plan for regulatory control and should not be interpreted to mean any given area will ultimately be designated and protected as open space. Most often these lands have been prioritized because they possess significant environmental, picturesque, historic or cultural values."  

In this local-government conservation policy vacuum, the far south-eastern planning areas are feeling the brunt of El Paso County growth and are most susceptible to compromise of significant conservation-worthy attributes. These planning areas are at the core of a coherent landscape comprising roughly 500,000 acres in El Paso County and Pueblo County to the south, defined by the last water source for many miles to the east – Chico Creek – and known to the historically sparse agglomeration of ranchers and residents of the region as the Chico Basin. Despite the fact that county level political channels and planning exercises seem to offer little hope for recognition or protection of

---

open space and un-fragmented landscapes, the absence of water and people have had the effect of allowing the Chico Basin to remain remarkably intact to date. As a result, the Chico Basin has become the site of a major landscape scale conservation initiative. Lead to date by the Colorado State Land Board and The Nature Conservancy (TNC), a unique partnership of local ranchers and citizens, conservationists, academics, and government agencies are engaged in an ongoing effort to protect an often overlooked short grass prairie landscape while augmenting the ability of a teetering rural economy and ethic to sustain itself in the face of low density urban sprawl.

Project History

Explicit interest in the Chico Basin for conservation purposes began in the early 1990s with action commencing from a novel source, the Colorado State Land Board (Land Board). The Land Board is the agency responsible for management of nearly three million acres of land and four million acres of mineral rights granted to Colorado by the Federal government upon statehood in 1876. Ninety-two percent of the total acreage and all 215,000 acres of Land Board holdings in the Chico Basin are dedicated to providing income for the State School Trust. This is done via royalties on minerals, grazing leases, commercial leases, agricultural leases, and accumulated interest on the trust fund. This income stream generated $42 million in FY 1999-2000.104

Much of the Land Board's acreage on the Eastern Plains was from original 640 acre land grant sections. However, in the early 1990s the Land Board aggressively sought to consolidate these scattered section 16 and 36 holdings on the eastern plains and within the Chico Basin in particular. This policy was seen as a better investment for the school trust as larger contiguous parcels would translate into higher levels of income from rents charged to more sizeable and

thus stable ranching operations, would be less susceptible to depreciation from
development pressure, would offer more diverse opportunities for revenue
generation, and were more likely to appreciate over time with greater size.\textsuperscript{105}

This expanded presence in the Chico Basin was related to significant
changes in the structure and management of the Land Board in the mid 1990s.
As Charles Bedford, former State Land Board executive director wrote, "From
these projects (referring to Chico Basin and others) one can discern an ethical
and practical sea change in the way that the Board does its work."\textsuperscript{106} The Land
Board's mission was fundamentally changed by Amendment 16 to the Colorado
Constitution, passed in 1996. Prior to 1996, the Land Board's sole mandate was
to maximize economic returns from these lands. In the same fashion as GOCO
had codified conservation as an important state-level policy priority, backers of
Amendment 16 argued successfully that the Land Board should preserve and
protect unique portions of state land holdings in addition to – or, in a
complimentary fashion to – funding the school trust. The Amendment established
the 300,000 acre Stewardship Trust Program which "represents a judgment that
certain state trust lands may be more valuable in the future if they are kept in the
trust land portfolio rather than disposed of with an eye to short term gain." The
specific constitutional language directs the Board to "...include in agricultural
leases terms, incentives and lease rates that will promote sound stewardship and
land management practices, long-term agricultural productivity and community
stability" within a context of providing "reasonable and consistent income over
time."\textsuperscript{107} Management of Stewardship Trust lands will "maximize options for
continued stewardship, public use or future disposition" by taking account of

\textsuperscript{105} Larry Routten, "The Colorado State Land Board and the Chico Basin," in \textit{Chico Basin
Symposium: A Landscape of Diversity}, (Colorado Springs: The Nature Conservancy of Colorado,
\textsuperscript{107} Colorado Constitution, article IX, §10.
“beauty, natural values, open space and wildlife habitat” on these lands. The Land Board responded to the new provisions of Amendment 16, as well as ongoing research into range land health, by developing a suite of policies that would eventually find expression in the Stewardship Incentives Program. This program aims to achieve the overall ecological health and value of the trust lands through cooperative partnership leases and would come to play an important role in the Chico Basin.

The Land Board’s consolidation push in the Chico Basin, coupled with the dictates of the Stewardship Trust, resulted in a flurry of activity. As the Land Board was a relative novice in managing and conserving land for its biological and open space values, they sought to engage competent partners. Due to familiarity between Land Board members and senior staff at TNC, mutual attraction to large contiguous parcels of land in the Chico Basin, and an emerging commitment to landscape management capable of integrating economic realities, social factors, and significant conservation value, the Land Board and TNC were soon engaged in a collaborative effort on the expanding fringe of metropolitan Colorado Springs.

Planning, Acquisition, and Management

As one of the largest conservation organizations in the world, TNC has developed sophisticated means for identifying and pursuing their work. Beginning in 1996, TNC modified its approach to conservation planning. Using a broad geographical focus TNC identified sixty three discrete “ecoregions” as the foundation for identifying and protecting land and biodiversity. TNC defines an ecoregion as "large units of land and water delineated by large-scale abiotic and

---

biotic factors that broadly shape the structure and function of biological communities within them," a definition that lacks the explicit human element, but could otherwise quite comfortably be employed as a working definition of the focus of landscape scale conservation. At the urging of a TNC board member and local rancher named Kirk Hanna, and using this ecoregional framework, TNC assessed and subsequently pegged the 500,000 acres of the Chico Basin as the vital heart of the central shortgrass prairie ecoregion.

The central shortgrass prairie spans 90,800 square mile from just east of Colorado's Front Range into Nebraska, Kansas, Oklahoma, New Mexico, and Wyoming. TNC has found that this ecoregion contains 59 shortgrass species that are classified as either imperiled or vulnerable, shelters globally endangered species including the piping plover, lesser prairie chicken, black tailed prairie dog, and swift fox. The Chico Basin is particularly interesting to TNC as it "harbors a large, unfragmented example of high-quality sandsage prairie. Due to a long history of excellent land stewardship, this sandsage prairie is some of the best known in the entire Central Shortgrass Prairie Ecoregion." In addition, a proud ranching heritage infuses the region. Consistent with broad trends in conservation and environmental policy discussed at length in Chapter 3, the Chico Basin presented an opportunity to engage these "logical allies" in ways that would incorporate the dictates of livelihood and community in a conservation project. In this context, the Chico Basin became a priority project area for TNC, administered chiefly from the South East Colorado office in Colorado Springs.

Already holding considerable land in the area, The Land Board rededicated itself to consolidation in 1994 with its biggest acquisition, 50,609 acres of the Chico Basin Ranch, for which it paid $4.2 million. During the next seven years the Land Board would add nearly 75,000 acres of shortgrass and sandsage prairie, place over 90,000 acres of their total Chico Basin holdings into

the newly formed Stewardship Trust Land category, and issue two twenty-five year leases. TNC was actively involved in acquisition and leasing arrangements, buying the Bohart Ranch and adjacent parcels on the private market and subsequently selling it to the Land Board as well as actively advocating for inclusion of these parcels in the Stewardship Trust portfolio. Consistent with Stewardship Trust status, the Land Board agreed in 1998 to lease the 41,000 acre Bohart Ranch back to TNC contingent on adoption of a resource management plan consistent with early visions of the Stewardship Incentives Program, at which point TNC sub-leased the land to a longtime local ranching family headed by Dick Tanner. The Tanners are responsible for the day to day workings of the ranch in consultation and cooperation with TNC scientists and staff, Colorado Natural Heritage program staff, Colorado Division of Wildlife and others.

The Land Board then sought takers for management of the Chico Basin Ranch, at 86,000 acres the largest trust land parcel in the state and the largest undeveloped tract in the I-25 corridor. The Land Board formed a management advisory committee in cooperation with local community members. This committee developed a "Request for Management Proposals" that emphasized the community’s desire for management activities that would encourage diversification of the ranching operations, provide education and recreation, still earn reasonable income through lease payments, and be an early model for the Stewardship Incentives Program.112 TNC initially pursued this lease as well, but Box T Partners LLC emerged as the winner. Box T’s managing partner, Duke Phillips, came from a long time Colorado ranching family and proved – to the delight of TNC – to be among the strongest advocates and participants, if not outright leaders, in the broader basin-wide conservation effort, actively partnering

---

with TNC, Colorado Natural Heritage scientists, and many other stakeholders in an effort to improve the health of the landscape, its species, and his operation.\textsuperscript{113}

While the planning and acquisition arrangements are important to understanding what is happening in the Chico Basin, management is at the heart of landscape conservation in this case. The leases on the Chico Basin and Bohart Ranches anchored conservation efforts in the basin by making a twenty five year commitment to working ranches covering nearly 140,000 contiguous acres. Two abutting land uses in the Chico Basin – the U.S. Army’s 23,000 acre Pueblo Chemical Depot and the U.S. Department of Transportation’s 33,279 acre Transportation Technology Facility – and a host of scattered Land Board parcels swell the acreage that might be considered part of a functional landscape to nearly 200,000 acres, though management decisions at these Federal facilities and sporadic ranch holdings are undertaken in light of physical and jurisdictional separation not easily overcome.

The focus for parties in the Chico Basin has been advancing activities and management regimes where conservation might pay for itself. Despite the fact that the Chico Basin conservation efforts are composed of and anchored by ranches, diversification of land management and expansion of the slate of services that a viable modern ranch might provide are fundamental strategies. As a result, both the Bohart and Chico Basin ranches utilize holistic management, a system of range management that emphasizes large ungulates – cows in this case – as central to stabilization of ecosystems that evolved with large herds of animals such as bison, antelope and elk. A successfully implemented holistic management regime requires vigilance and skill in animal husbandry in order to achieve superior financial returns through a healthy landscape and healthy herds of cattle, though vigorous debates over the legitimacy and accessibility of holistic management remain.\textsuperscript{114} In the case of the

\textsuperscript{113} Brian McPeek, South East Colorado Program Manager, telephone interview March 26, 2004.
\textsuperscript{114} See, Wuerthner and Yoneko-Matteson..
Chico Basin, holistic management is utilized for ecologic benefits, but in the service of a specific, value added end product which the ranch attempts to market at a premium. Lasater Grasslands free range beef refers to a partnership between The Chico Basin Ranch and the Lasater Ranch in Matheson, Colorado. Owned jointly by the Phillips and the Lasater families, this brand of beef is raised entirely on natural grass without any antibiotics, hormones, or animal by products. These cattle are processed at small plants and never enter large feedlots, an important distinction in a climate where beef production and husbandry practices are coming under increased scrutiny. Phillips' underlying rationale is to establish a link between urban markets and proximate rural producers in the belief that regional agriculture can be an effective tool to address nagging land use and growth issues, including the fiscal necessity for struggling rural producers to accede to 35 acre ranchette subdivision.

Cows are one means toward ecological benefit and business viability, but management efforts in the Chico Basin are seeking to unhitch sources of income from cattle alone in an effort to tap a broader constituency that will advocate for protection of a landscape and lifestyle at risk of fragmentation and failure. For instance, in accordance with the dictates of the Stewardship Trust and management plans that emphasize education, TNC partners with the Colorado Division of Wildlife to bring science teachers onto the Bohart Ranch where they can utilize this “living laboratory” to comprehend and later teach about prairie ecosystems. Chico Basin ranch has a slate of alternative income-producing programs, including “working” ranch vacations, holistic management seminars, hunting and fishing membership clubs, riding clubs, bird watching enthusiasts, camp and education offerings for individual children as well as groups such as

---

115 For a discussion of the cattle industry and its role in the character of Colorado and the West, including a fuller description of the Lasater Ranch operations and philosophy, amongst other topics, see Eric Schlosser, "Epilogue: Have it Your Way," in Fast Food Nation (New York: Perennial, 2002) 255-257.

the Boy Scouts, and artists in residence who hold art shows that provide a valuable community forum where proceeds are partially shared with the ranch. In sum, Box T Partners seek “compatible cottage industries that will encourage community employment opportunities and infrastructure, compatible and appropriate recreation, and supportive external grant possibilities.”

The State Land Board, TNC, and associated ranchers in the Chico Basin are embracing a vision of conservation and ranching that stretches far beyond pure acquisition and protection. The final piece of the conservation picture in the Chico Basin to date has been forays into formulating and advocating for complimentary public policy at the state and county level. In the summer of 2003 TNC initiated an investigation of whether a transferable development rights (TDR) program in either El Paso or Pueblo Counties might be a viable way to relieve urban growth pressure on the Chico Basin while further strengthening the rural foundation of the Chico Basin. TDR ultimately was not seen as politically or administratively feasible in El Paso County or necessary in Pueblo County, but this effort by TNC reveals that forays into areas where a conservation organization have not traditionally tread – county level planning, development, and land use policy – are well within the scope of activities that constitute a robust landscape scale conservation effort. Whether these or similar efforts prove to be fruitful pursuits over the long term is an open question.

**Past Difficulties and Future Challenges**

As an appointed political body, the State Land Board’s commitment to conservation in the Chico Basin is subject to the vagaries of change in the Governor’s office. Stewardship Trust land can conceivably be removed from this designation and leases might not be renewed at the end of their 25 year term. This uncertainty is realistically ameliorated by the fact that it is a long term

---

question and the likelihood of the Land Board abandoning twenty five years of conservation efforts in the Basin is seen as remote and a huge political liability now and in the future. However, from a legal and policy perspective, this uncertainty is something that many would like to see remedied in time. This gets to more daunting question of reform of the State Land Board, an entity whose detractors impinge its competency and efficiency. The Board earns very poor returns on its considerable assets and is a likely source of scrutiny in ongoing debates over state fiscal solvency and higher education funding. Ultimately, questions of how the Land Board might either liquidate its land holdings for more lucrative investment vehicles or take a more active role in management in an effort to increase returns might be confronted. How to engage these questions without leaving conservation and stewardship in the lurch is a political question of daunting proportions, but one that is on more than a few minds in the state.

The subdivision of 35 acre lots and platting of subdivisions continues apace in the Chico Basin. The stakeholders are beginning to get a handle on what might be considered the second round of conservation activities where the incremental effort, expense, and complexity of the Chico Basin come to the fore. While the ecological value of the landscape has by now been well established and a core of conserved land exists on the Chico Basin and Bohart Ranches, something of a "wall" has been hit. One factor mentioned is that prairie ecosystems seem to struggle to attract the attention of conservation organizations and, more importantly, potential public and private funding sources. The Chico Basin has been described as "an acquired taste" due to its aridity, lack of topography, and the subtleties of its conservation value. Promoting this landscape and attracting more funding and attention is a challenge that is showing some signs of life with the Colorado Conservation Trust, a community

foundation with exclusive conservation focus, recently initiating broader conversations on El Paso County conservation priorities.\textsuperscript{120}

In the immediate tense, the isolation of scattered Land Board holdings – some quite sizeable – and subdivision of adjacent private ranches is the most significant challenge that TNC and other conservation organizations are seeking to tackle, often with little help from a Land Board that has changed significantly in its interest in and commitment to conservation under the current governor’s administration. The fact that these parcels are scattered and quickly rising in value makes pursuit of creative deals that might result in easements or purchase of development rights very difficult. For example, rather than working in concert with a sympathetic or enthusiastic Land Board and proximate private rancher on one 10,000 acre deal which would likely result in better conservation and management outcomes, TNC is forced to contend with ten 1,000 acre properties and the exponential increase in time and effort to initiate, negotiate, and close any such deals.\textsuperscript{121}

A concurrent factor in this regard is the difficulty of continually engaging community members in an effective manner. The first round of conservation activity in the Chico Basin was an exciting time for many, offering hope that rural ranching life could remain a vibrant part of El Paso County and the greater Pike’s Peak region. Leadership from local families such as the Tanners, Phillips, and Frosts, but particularly from local rancher Kirk Hanna, was seen as enormously important. Hanna was a respected local leader and former TNC board member who first brought the organization’s attention to the area. Hanna was able to focus attention on the possibilities of conservation, got people to the table to consider options, and elucidate a grander vision of the future of the Chico Basin. Tragically, Kirk Hanna passed away in 1998, but momentum that he was instrumental in generating played a large role in the success of TNC’s Chico

\textsuperscript{120} McPeek, March 26, 2004.
\textsuperscript{121} McPeek, March 26, 2004.
Basin Symposium held at Colorado College in 2001 where recent attention and enthusiasm for conservation in the basin peaked. Post-symposium, there was a sense that momentum was lost, some of it attributed to a lack of strong, uniting local leadership and diminution of common purpose among local ranchers. The physical demands and financial exigencies of running a ranching operation make it impossible to fault a hard pressed rural community, and it remains a challenge today.

**Stakeholder Groups**

Conservation in the Chico Basin is a cooperative effort that has involved a wide variety of public, private, and government stakeholders. Significant parties include:

- The Colorado State Land Board
- The Nature Conservancy of Colorado
- Box T Partners, LLC and Duke Phillips at the Chico Basin Ranch
- Dick and Sandra Tanner at the Bohart Ranch
- The Colorado Natural Heritage Program at Colorado State University
- The Rocky Mountain Bird Observatory
- USDA Natural Resources Conservation Service
- US Fish and Wildlife Service
- Colorado Division of Wildlife
- Pueblo County
- El Paso County
- Colorado College
- U.S. Army – Pueblo Chemical Depot
- U.S. Department of Transportation’s High Speed Test Facility

**Relevant Strategies and Policies**

What relevant policy decisions or statutes have contributed to this project and what are the mechanisms or strategies through which these policies or organizations have expressed themselves?

---

• Fee simple acquisition and consolidation of land holdings by State Land Board
• Colorado Constitution Amendment 16: Establishment of State Stewardship Trust Lands
• State Land Board Stewardship Incentives Program
• The Nature Conservancy Ecoregional designation
• Change in Management Activities: Cooperative science and management
• Outreach and education
• Efforts at conservation easements and fee simple acquisition
• Policy advocacy: TDR investigation

**Primary Sources of Project Enabling Funding**

• The Colorado State Land Board
• The Nature Conservancy
• Lease payments by private ranchers or partnerships

**Conservation Benefits**

The benefits to date of this project from a conservation perspective include:

• Preservation of biodiversity or wildlife habitat
• Preservation of open space / view-sheds
• Preservation of agricultural/ranching operations
• Improved management capabilities: i.e. consolidation of inholdings

**Contacts**

Brian McPeek  
South East Colorado Program Manager  
The Nature Conservancy

Charles Bedford  
Associate State Director  
The Nature Conservancy  
Former Director  
Colorado State Land Board

Joe Gorney  
Comprehensive Planner  
El Paso County Planning Department
Figure 5.7: El Paso County, Colorado: Regional Uses Highway 94 Location Map

Chapter 6: Case Study Analysis

Case Studies within the Landscape Scale Conservation Framework

In order to gain a better understanding of the case studies presented in chapter five and to connect them to the discussions presented in the first half of this thesis, this chapter offers analysis in the following areas. First, I will detail how these cases are consistent with the landscape scale conservation framework as previously defined. Through exploration of these definitional nuances, I will touch on some key observations regarding the makeup of stakeholder groups, relevant policies and strategies, and funding sources and consider implications of each, as well as areas of innovation. Finally, I will consider the challenges and difficulties encountered in the cases.

Consistency with Definitions

An important first step in the analyses is to explicitly place these three case studies in the framework of landscape scale conservation, observing first how they meet or fail to live up to established definitions and then examining them in light of the anticipated areas of innovation as laid out in chapter two. To reiterate from chapter two, a succinct definition of landscape scale conservation is “development of integrated actions and policies, both public and private, designed to sustain the natural and cultural environment of a coherent, identifiable, relatively intact system of lands and waters of significant public value.”\(^{123}\) I contend that these three case studies undoubtedly meet the definition of landscape scale conservation and each demonstrates anticipate

\(^{123}\) Hocker, 2003.
innovations, though the scope of each of the cases demonstrates that widely divergent rationale and methods can be used to arrive at projects that vary in scale, priorities, and efficacy.

"...development of integrated actions and policies..."

All three of the cases demonstrate integrated actions and policies initiated and pursued cooperatively by both public and private actors. Table 6.1 summarizes the primary stakeholders and sources of funds, the nature of these stakeholders (i.e. state vs. local for both category), and policies or actions for each case. While it is clear from this summary table is that while all three of these projects depend on multiple actors in order to gain financial solvency, organizational and political capacity, or legitimacy in policy development and implementation, the cases seem to suggest that integration between certain actors – namely local and state government – is of particular importance.

State government funding, technical support or sympathetic policies stand out in all three cases as necessities. GOCO is an obvious state level mechanism for providing funds in both the I-25 Conservation Corridor and the Mesa County Community Separator, while less obvious and powerful entities including the Department of Local Affairs and Governor's office of Energy Management and Conservation played important if small roles in Mesa County. Recent changes in the Colorado State Land Board's policies and modus operandi were equally important in enabling efforts in the Chico Basin. Yet, while funding from state government or quasi-governmental entities such as GOCO and the Land Board provide a fundamental necessity – capital – for getting the projects moving or establishing a physical basis (in the case of the Chico Basin), the cases suggest that an equally important role of state level actors is to empower and focus local jurisdictions like Douglas and Mesa County and private conservation organizations like TNC, The Conservation Fund, and Mesa Land Trust in their efforts at coordinating policy and action.
This is most patently true in the I-25 Corridor case where the GOCO stick was the primary mechanism used to lever sizeable financial resources and incalculable political and organizational support from Douglas County. In Mesa County, the impetus for landscape conservation has largely come from local level actors – city and county planners in particular, but also certain local politicians and certainly citizens such as the TRAC – but they have consistently had to look outside of their own jurisdiction for the financial resources necessary to develop and implement their effort in the face of a constantly shifting political priorities, funding uncertainty, and continued landscape fragmentation. In the case of the Chico Basin, actions of the State Land Board have both spurred and complimented significant action by a private conservation group – TNC – and local community members.

"... to sustain the natural and cultural environment..."

The three cases also demonstrate that the scope and character of these landscape scale projects vary from case to case, reinforcing the notion that an emphasis on functionality and coherence of natural and cultural environments can define landscape scale conservation efforts, rather than size alone. All three cases demonstrate the "upsizing" of focus, involving areas large enough to implicate multiple political jurisdictions as well as numerous private property owners and a wide variety of management regimes. As detailed previously, it is important to recognize this “up-sizing” of ambition and complexity as a rejection of the “piecemeal and incomplete” efforts of the past and an attempt to address more of the inputs that affect ecosystem health.124

---

### Table 6.1: Summary of Actors, Funding Sources and Mechanisms

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Primary Actors/ Sources of Funds</th>
<th>Level of Funding Origination</th>
<th>Policy or Mechanisms</th>
</tr>
</thead>
</table>
| South I-25 Conservation Corridor | • GOCO Legacy Initiatives  
• Douglas County  
• Open Space, Trails and Parks sales tax  
• County Bonding authority  
• The Conservation Fund: Privately raised dollars and donations  
• Anonymous Donations and Conservation buyers  
• Douglas County Land Conservancy | Government  
• State  
• County  
Private  
• Local private  
• National private | • Planning and capacity building  
• County fee simple purchase and ownership  
• Provision of parks and open space facilities  
• Conservation easement purchase; held by various groups  
• Conservation buyer purchase |
| Mesa County Community Separator | • GOCO Trust Fund Appropriations  
• GOCO Legacy Initiatives  
• DOLA Colorado Heritage Planning Grants  
• Governors office of Energy Management and Conservation  
• Privately raised dollars and donations | Government  
• State  
• County  
• Local  
Private  
• Local Private | • Planning and capacity building  
• County fee simple acquisition  
• Conservation easements purchase, held by various groups |
| The Chico Basin             | • The Colorado State Land Board  
• The Nature Conservancy  
• Lease payments by private ranchers or partnerships | Government  
• State  
Private  
• National private  
• Local private | • Fee simple acquisition and consolidation by SLB  
• Fee simple acquisition and disposition by TNC  
• 25 year leases |
It is interesting to note that in each case there are unifying features which establishes the extent of the landscape targeted for conservation. These unifying themes vary in each of the case studies, suggesting that – consistent with the landscape scale framework – natural or cultural factors can serve as the non-exclusive basis for conservation and can play a large role in determining the extent and features of a project. The acceptance of cultural factors – ranches, agricultural lands, viewsheds along transportation corridors – as legitimate rationale for conservation implies or even demands the participation of a wider scope of stakeholders and would seem to validate the contention that “logical allies” are indeed being consulted and considered in landscape conservation efforts in Colorado.

For example, the South I-25 Conservation corridor was largely defined in its extent by cultural designations – the title of the effort bearing the name of an interstate highway, a focal point being the area’s ranching heritage, and efforts limited to a single political jurisdiction – but significant natural features including wildlife habitat, open space, viewsheds, and geography were also incorporated. This contributes to a functional and coherent natural and cultural landscape where a number of ranchers remain on the land, some development has been deemed appropriate, and public access and recreational use has been expanded, all in the context of protection of excellent wildlife habitat and distinctive bio-geography.

Of the three cases, the Mesa County Community Separator project is the most focused in defining the landscape and ultimately its goals in terms of cultural features while the natural values of the landscape are in some ways incidental. The unifying theme and reason for integrated policy and action in this case is agricultural community character found in the rural areas between growing municipalities. In this case, ranchers, farmers, and members of the real estate community have joined planners, conservationists, and natural resource managers in actively shaping the scope and character of a landscape scale
conservation effort, again validating the growing importance of non-traditional stakeholders. Natural conservation priorities including wildlife corridors, habitat, and open space are largely subservient to the cultural considerations of an economically functional agricultural landscape, but this is not precluded within the landscape framework.

The effort at the Chico Basin is the most conscious and focused on natural conservation values. The presence of significant flora and fauna, important wildlife habitat and unique hydrologic features of the Chico Basin define it as a functional landscape, and were paramount in TNC's planning process. However, the ranching heritage of the region and progressive local ranchers have been enormously important in defining and implementing this effort, with ongoing management efforts, support, and ultimately funding for the project via lease payments intricately linked to the survival of enlightened ranching and their ability to make cows and other complimentary activities support conservation. It is apropos that the physical centerpieces of this effort incorporates in its title a natural hydrologic designation, the “Chico Basin”, and a cultural designation, “ranch.”

The gradation between natural and cultural focus of landscape scale conservation efforts also reflects on the character and diversity of stakeholders in each case. Just as the degree of integration in policy and action discussed in the preceding section is related to the variety of actors, I posit that both the variety of actors and the degree to which leadership roles are shared is tightly related to how each project's extent and features were defined, and its level of success to date.

For example, the I-25 Corridor project's primary advocates were GOCO, Douglas County and The Conservation Fund, representing a state-level quasi-governmental entity, local government, and locally focused, nationally-capable private conservation group, respectively. Each entity brought the ability to assume leadership roles which they were uniquely capable of handling, be it
capacity building and enabling by GOCO, coalition building by Douglas County, or assessment and private fundraising by The Conservation Fund. As a result of the perspectives and expertise that these three groups were able to bring to bear, I would describe the I-25 Corridor project as the most robustly defined and – perhaps more importantly – implemented landscape scale conservation project of the three. Significant natural features such as prime wildlife habitat and corridors, view sheds, and distinctive flora and geography are reconciled with the area’s agricultural heritage, expanded recreational opportunities, a major transportation corridor, continual private ownership and management, and limited development opportunities. While the threat of fragmentation at the edges of the project area remains, the underlying goal of the project – prevention of uninterrupted semi-urban development between the Denver metro and Colorado Springs metro regions – has largely been achieved.

The Mesa County Community Separator’s primary advocates have been city and county planners, with the assistance of a private conservation organization, the Mesa Land Trust, and significant support from local citizens via TRAC. In addition, funding has come from a variety of state level and local sources. As a result, it should come as no surprise that city and county planners have focused this landscape scale effort on cultural elements such as farmland protection and community separation. It also should not come as a surprise that one of the strengths of this proponent mix is that each of these proponent groups can serve a vital role, be it transactional work for Mesa Land Trust, relationship building for TRAC, and resources and authority from the Fruita and Mesa County. This effort has garnered attention as an example of an initiative that is sensitive to the needs of the specific locale, both in terms of conservation priorities and the sensibilities of the community. Despite modest success with the PDR portion of the program, and not track record for the TDR in its short history, the Mesa County Community Separator won a Governor’s Smart Growth Award in 2002, perhaps reflecting more on the variety of actors, the degree to
which leadership roles are shared, and the ability to focus on a predominantly cultural environment as legitimate grounds for conservation.

While the Chico Basin may be the most conscious and focused of the three cases on natural conservation values and contains a robust cultural scope via the Chico Basin and Bohart Ranch operations, it has also involved the fewest number of truly invested organizations and resulted in the smallest commitment of time and money by a diverse group of stakeholders. This is not to discount the contributions of any of the many stakeholders who have participated and continue to participate. Rather, this seems to serve as an indicator that while involvement of many parties is beneficial, there are certain parties – El Paso County – that should be understood as mandatory. TNC’s focus on natural features of the landscape – biodiversity and critical habitat – are unassailable, and the involvement of local ranching outfits including Box T Partners and the Tanner family reveal that there is an impressive mix of natural and cultural considerations contributing to this effort. However, the lack of pragmatic assistance at the county level and unsteady participation by the State Land Board seem to lead to continual difficulties in sustaining and expanding the effort to its full vision, a fact that will be discussed more fully later in this chapter.

**Areas of Innovation**

Each of the three case studies demonstrates that it is fundamentally in tune with the definitions and current thinking on the characteristics of landscape scale conservation, but collectively the cases also demonstrate, at the very least, cognizance of some of the anticipated areas of innovation. While none of these cases present any spectacular breakthroughs in these areas, all of them take informed stabs at one or more of the three innovation premises and point to the incremental pace of change. So, though these cases may not prove revolutionary, they are informative as to the underlying validity of landscape scale conservation as a framework and confirm that the areas of innovation are indeed legitimate and challenging. I will examine each of the three cases in light of
Chapter 6: Case Study Analysis

Table 6.2: Summary of Landscape Scale Conservation Innovations

<table>
<thead>
<tr>
<th>Engagement of Market Mechanisms</th>
<th>Favorable Presentation and Characterization</th>
<th>Focus on Expanding Stewardship Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-25 Conservation Corridor</td>
<td>• Conservation buyer</td>
<td>• None observed</td>
</tr>
<tr>
<td></td>
<td>• TDR/C voluntary density incentive</td>
<td>• Delegation of program administration</td>
</tr>
<tr>
<td></td>
<td>• Management advisory committee</td>
<td>• Stewardship Incentives program</td>
</tr>
<tr>
<td>Mesa County Community Separator</td>
<td>• Market leases</td>
<td>• TRAC</td>
</tr>
<tr>
<td></td>
<td>• Ranch diversification scheme</td>
<td>• Delegation of program administration</td>
</tr>
<tr>
<td>The Chico Basin</td>
<td>• Departmental organization and outreach</td>
<td>• None observed</td>
</tr>
<tr>
<td></td>
<td>environmental incentives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• COSAC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diversified ranch outreach and education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>component</td>
<td></td>
</tr>
</tbody>
</table>

these innovations, highlighting areas where each effort has demonstrated or made efforts at addressing these innovations, a summary of which is presented in Table 6.2.

Infusion of capital into conservation via identification of sophisticated market mechanisms

Of the three areas of innovation, activity concerning market mechanisms and increased capital for conservation is the most readily apparent. There can be little doubt that public revenue streams are growing in their popularity and are fundamentally important to landscape scale conservation efforts. Public revenue streams or financial capabilities were central in each of the three cases, with GOCO Legacy Initiative grants, Douglas County sales tax and bonding
measures, GOCO Trust Fund appropriations, and State Land Board acquisition capabilities enabling much of the significant progress that has been made. Privately contributed dollars and in kind support from conservation organizations should also not be ignored. This mix of state, local and private funding sources is consistent with the definition of landscape scale conservation where the responsibility for policies and action – in this case, funding – is shared across sectors. However, in each case, public revenue streams and privately donated funds have proven insufficient to achieve the full vision of landscape scale conservation, particularly in light of continual growth and subsequent hikes in real estate values. As such, each of these cases demonstrates attempts to identify and engage market mechanisms and secure more capital in the service of conservation.

Market mechanisms are readily identifiable in the I-25 Corridor case. The signature deal of the I-25 Conservation Corridor was made possible by public funds, the generosity of an anonymous donor who contributed $30 million – accounting for over 40% of the total funds for that transaction – and through participation of a conservation buyer. Conservation buyers have emerged as a viable – albeit rarified – real estate market, and in this case the ability to identify a buyer willing to fund roughly 30% of the total acquisition price for the Greenland Ranch while also agreeing to the donation of an easement on the property was instrumental in closing the deal.

Conservation buyers can be reasonably placed with "cluster," "limited," or "conservation based development" as an emerging niche category of real estate development and investment. In other locales, such as the Pacific Northwest and New England, the timber industry is demonstrating its ability to serve as a viable means to extract value from land while enabling landscape scale conservation through easements and sustainable forestry management.
practices.\textsuperscript{125} While timber in the arid Intermountain west is not sufficiently profitable to enable these schemes, the underlying thrust is exactly the same for real estate, which is, not surprisingly, emerging as Colorado’s dominant market based mechanism for conservation, particularly in regard to ranch properties.\textsuperscript{126} In short, ranch owners or investors will to attempt increase the return on investment by lowering their cost basis in land – effectively reclaiming equity – through sale of conservation easements to private organizations or government entities, through disposition of carefully chosen and cited parcels for residential development, enhancement of natural features for recreational development, by taking advantage of tax incentives such as Colorado’s transferable conservation tax credit, and ultimately through sale of the ranch to conservation buyers.\textsuperscript{127} As ranching has become a marginal economic activity unto itself, lands are increasingly valued by wealthy conservation buyers or investors for health and natural amenities rather than as agricultural or pastoral revenue generators. Many local and national conservation organizations and land trusts utilize conservation buyer programs. However, as demonstrated by TNC’s recent difficulties where conservation buyer transactions were one of numerous subjects under scrutiny, these programs must walk a fine line where allowing development and engaging in complex real estate transactions on one hand must not jeopardize the legitimacy of conservationists or come at the expense of underlying conservation goals. The fact that the Greenland Ranch deal included a significant conservation buyer transaction is telling in regard to the continual development of a conservation based real estate market in Colorado, a market and business that is already drawing savvy investors and will continue to present

\textsuperscript{125} See, for example, Betsy Z. Russell, “Easement to keep homes off Mica Creek land; Bill contains money to buy Potlatch’s development rights to 25,000 acres,” \textit{Spokane Spokesman Review} November 12, 2003 A1; and Trust for Public Land, “Connecticut Headwaters Campaign (NH),” http://www.tpl.org/tier3_cd.cfm?content_item_id=7140&folder_id=258.


the opportunity for further innovations, as well as the growing importance of this market to large scale conservation efforts. The compatibility, efficacy, and equity of this trend remain sources of speculation and call for further investigation.

The TDR/C program of the Mesa Community Separator is also an attempt to tap the real estate development industry for purposes of conservation. While the program has yet to yield any results, attributed largely to the fact that the specifics are still being perfected, TDR programs are market based mechanisms. By incentivizing development in designated areas of a city or county development can – at least theoretically – help pay for conservation of land in surrounding agricultural areas. TDR programs are not new, but finding ways to make them work does demand innovative and creative thinking on the part of planners and, in this case, local citizens and conservationists at the Mesa Land Trust. If this program can be perfected to the point where it is capable of demonstrating the actual value of increased development and density in Fruita, it will represent a promising marriage of conservation and market mechanisms. At this time, it would be premature to come to conclusions regarding the efficacy of TDR in Mesa County.

The Chico Basin also demonstrates strong efforts to enlist market mechanisms and make conservation pay its own way. Both the Bohart and Chico Basin ranches make regular lease payments to the Colorado State Land Board and are run as for profit entities – though running cows is at best a difficult way to make money. Bohart Ranch manager Dick Tanner estimated annual return on investment in the Chico Basin to be between 4.2% and 4.8%, hardly a business likely to attract significant investment. The State Land Board’s stewardship incentives program and the terms of the leases are attempt to encourage and reward good management and stewardship practices and ultimately raise this rate of return such that ranching can be stabilized and

---

allowed to operate on state land for the foreseeable future. However, Duke Phillips’ effort to diversify his operations and tap different revenue streams represents the real innovation in this case. While the underlying rationale behind conservation real estate is to make money by decreasing the basis in land via mechanisms that do not compromise conservation value, ranch diversification efforts in the Chico Basin are attacking the other side of the return on investment ratio by attempting to increase revenue via environmentally benign or even beneficial activities. Thus, Duke Phillips’ and Box-T Partners slate of programs – education, recreation, holistic management, and value added products such as grasslands beef – need to be properly understood as an attempt at building an innovative ranching business that both depends upon and furthers conservation. While state land can not currently be placed under easement, a ranch on private land could address both sides of the return on investment ratio by combining the ranch diversification strategy from the Chico Basin – increasing revenue – while also decreasing basis in the land by extracting equity through any of the means mentioned above – easements, tax credits, etc. – possibly producing a viable conservation-focused investment vehicle.

Characterize and present conservation as accessible, achievable and fundamentally in concert with desirable communities and economies: “Winning the hearts and minds”

Whereas conservation has in the past been criticized as limited in scope and relevance, and has been unfairly saddled with false dichotomies between conservation and economic or social stability, landscape scale conservation anticipates a broader definition of practice that more fully connects conservation to issues of healthy communities and economies and positions conservation as a pivotal and fundamental activity of both the public and private sector, not something that is alienating, elitist, or representative of a government or private land grab. In each of these cases, conservation is being explicitly linked with quality of life, retention of an area’s character – largely rural in all three cases, in
direct response to urban or semi-urban growth pressures – and healthy economies. It is interesting to note that innovations in this category are accomplished through what might at first glance appear to be minor administrative or organizational decisions. The lesson that can be taken away is that innovation need not always be grand or all encompassing in nature. Rather, innovation can be found in the details and other seemingly minor arrangements.

In both Douglas and Mesa, the ability of county-level government to engage private property owners in innovative ways that were neither intimidating nor alienating was recognized as important. The separation of Douglas County Open Space and Natural Resources into its own department capable of pursuing good faith negotiations with voluntary sellers was seen as the most important step in ameliorating suspicions and enabling the county and Conservation Fund to engage in the complex negotiations that were necessary to obtain easements and fee interest in priority conservation properties. Likewise, constitution of the County Open Space Advisory Committee (COSAC) was seen as an effective mechanism for engaging commissioners and the public, increasing support and buy-in for conservation efforts.

In Mesa County, there were two innovations that have proven instrumental in achieving the modest level of success to date. First, Mesa County chose to delegate administration of the PDR – and potentially the TDR/C program in the future – to Mesa Land Trust. Mesa Land Trust has worked hard to build relations in the valley with land owners and is capable of presenting a compelling case to landowners for conservation that is complimentary with a unique rural agricultural landscape and community. Second, the TRAC is a notable and innovative outreach effort. TRAC’s emphasis is on education, assistance, and creativity provided by local experts. This entity is seen as a highly effective way of transferring ownership of the Community Separator Project from the exclusive prerogative of local and county government to citizens, thus expanding the reach of its efforts and increasing the odds those traditional – and continual – skeptics
of conservation and planning might be assuaged by sound advice from people they know and trust.

The Chico Basin likewise offers evidence of activity in this sphere of innovation. The State Land Board's effort to convene the management advisory committee was instrumental in defining the terms of the two twenty-five year leases and subsequently determining the scope and character of ranching activity and was an innovative new approach to lease disposition. Further outreach and education efforts culminated with TNC's presentation of the Chico Basin Symposium in 2002 during which time press coverage of efforts in the Basin peaked. Duke Phillips diversified ranch operation and philosophy continues to emphasize outreach and education as a fundamental necessity to building a constituency of urban residents who will support robust protection of a landscape and lifestyle that is different from their own, but appreciated as such. As intimated in earlier discussions of the expanding character of the "conservation tent," some ranchers are increasingly important in elucidating a robust understanding of broader social trends, attitudes towards changing rural and urban environments and the relationships between the two, and implications for conservation and the business of ranching alike.\textsuperscript{129}

\textit{Emphasizing and expanding on stewardship responsibilities}

Innovation in stewardship speaks to the ability to properly monitor, manage, and protect conserved acreage and landscapes. The State Land Board's development and implementation of the Stewardship Incentives Program in the Chico Basin clearly speaks to this point as an innovative arrangement. Prior to implementation of this program, good stewardship of state land had the perverse effect of increasing the value of the land and thus raising the rent, an obvious disincentive for ranchers.\textsuperscript{130} In its place, Amendment 16 directed the Land Board

\textsuperscript{129} Please see Appendix B, Chico Basin Ranch Philosophy.
\textsuperscript{130} Bedford, 2001, 363.
to offer incentives for good stewardship that would "Encourage and maintain sound stewardship on all state trust lands held within the agricultural portfolio, thereby creating an appreciating asset for present and future generations of trust beneficiaries." Incentives include "longer lease terms, increases in carrying capacity without additional rental expenditure, protections from competing bids, and first priority for financial assistance for improvement and weed management projects, among others" and inclusion in the program mandates a resource management plan that is approved by the Land Board, a feature that has been implemented at the Chico Basin and Bohart ranches.

Innovations in stewardship can also pertain to an emphasis on restoration and reclamation of land for conservation purposes. While this section is not attempting to catalog many "what ifs" regarding innovation, there is one example in the Chico Basin that is begs mentioning if only as an idealistic aside. The contiguous Pueblo Chemical Depot has recently been decommissioned and a planning process for facility reuse is underway. The base has multiple sectors where past land use and resulting contamination have varied widely. The potential to absorb conservation worthy sections of the facility into an improved stewardship status while pursuing reclamation efforts on other areas of the base might present a fascinating opportunity to expand the scale of a contiguous Chico Basin landscape and the scope of conservation activity. TNC has been understandably reticent to engage this daunting task, choosing to test the water through surrogates, including the Trust for Land Restoration, a thus-far unproven organization focused on conservation and reclamation of mining and other abused landscapes. This represents a challenging opportunity to explore how landscape scale conservation might be capable of overlapping with the evolving policy and practice arena of brownfields redevelopment, an intersection that

132 Ibid.
could further integrate conservation into a wide variety of communities where conservation is not seen as compatible or interested. Needless to say, this is not a likely area of action in the Chico Basin in the near future. The potential pitfalls and added complexity of dealing chemical munitions and with military stakeholders might prove too much.

Neither Mesa County nor the I-25 Corridor project demonstrates any innovative stewardship activities of note. This is not to imply that stewardship requirements are absent. Conservation easements are held by three organizations in the I-25 Corridor – the Douglas County Land Conservancy, The Conservation Fund, and the American Farmland Trust – and by the Mesa Land Trust in the Community Separator case. Each of these organizations have stewardship standards attached to the acceptance of easements, but no particular feature of any of these stewardship requirements stood out in terms of innovation. In Mesa County funds from the NRCS make conserved land subject to their stewardship responsibilities, but nothing in NRCS language is inconsistent or more stringent than standard easement language already employed by Mesa Land Trust.

**Policy and Practice Challenges**

While innovative policies and actions can be observed in each of the three case studies, significant and daunting challenges remain. Despite the growth of the conservation movement, concerted efforts of professionals from the private and public sector, and unprecedented funding at the state and increasingly at the local level for conservation, fragmentation of the three landscapes or immediately adjacent lands continues at a rapid clip. The following section will touch on three particular challenges that are brought to light by these cases, challenges that foreshadow the recommendations and conclusions which close this thesis in chapter 7.
Maintaining or Engaging County Level Interest

Landscape scale conservation depends on actions and policies from a variety of stakeholders, but after examination of these three case studies it is clear that county level involvement is of particular importance. Acknowledgement that relations with elected county officials have and will in the future present formidable challenges runs through each of these cases.

For instance, the dearth of interest in or assistance by El Paso County in the Chico Basin is recognized as a fundamental problem for this effort. TNC, elements at the State Land Board (or, individuals who were at one time at the State Land Board) and the local community have collaborated to define a landscape project and expansive program for how to address both natural and cultural environments that is consistent with a landscape scale effort. However, implementation difficulties of this program reflect a relative paucity in the breadth of stakeholders, highlighted by the absence of sympathetic local-level government expertise and perspective that might well change the definition, scale, or scope of the project, or might fill out the goals of a functional and strong eastern plains ranching economy, ecosystem, and rural community. So long as this disinterest remains, the challenges and struggles in protecting a coherent landscape are likely to persist. As their recent forays into county level planning and politics demonstrates, TNC recognizes this issue and is actively seeking routes to expand the scope of actions and policies to include fundamentally necessary local level government. Nascent efforts by the Colorado Conservation Trust, a unique conservation focused community foundation, to engage El Paso County and established stakeholders like TNC in conversations regarding more coordinated and integrated policies also seems to point to the conclusion that county level government is seen as indispensable for successful landscape scale projects.

Douglas County was central to the success of the I-25 Conservation Corridor. County Commissioners, the County Open Space Advisory Committee,
and the Division of Open Space and Natural Resources contributed through political support, a massive expansion of funding for conservation, and development of significant expertise. However, after such a large effort there is concern about maintaining the support of county commissioners over the long haul. Encroachment and development at the edges of conserved parcels continues. In order to maintain the integrity of the landscape these incremental threats will have to be confronted at the county level which implicates a continued commitment to the rural and open feel of this part of the county and policies and actions to match this vision. Having invested heavily in conservation in the last decade Douglas County may have trouble raising additional funds for these purposes while continued growth makes competing demands in other parts of the county.

Transactional Costs Associated with Fragmentation

In both Mesa County and the Chico Basin, the continued fragmentation of property presented obstacles to conserving parcels of land sufficient in size to warrant the outlay of time and money transacting a deal. The Mesa Land Trust has minimum acreage requirements in the two designated community separator areas, but they are finding that the number of viable parcels is decreasing at a much faster rate than they are able to raise money and fund transactions. The Chico Basin demonstrates the exact same dynamic – though on a larger scale – where the difficulty of identifying and carrying through with conservation transactions is further hampered by fragmentation and rising costs. In such a bind the question of how to maximize the use of the scarcest resources – time and money – in order to secure the largest and most coordinated conservation outcomes is that much more difficult to answer. The two unfortunate choices that emerge from this dilemma are either to concentrate purchasing power on fewer projects that are judged to be more worthwhile for whatever reason – essentially capitulating in areas that are “too far gone” – or spreading financial and
organization resources over a greater number of smaller yet equally complex, expensive and (at times) debatably worthy initiatives. In either scenario, landscape scale conservation suffers.

**Tension Between Public and Private Benefits**

In gauging public support for conservation there is a tension between benefits that the public can readily access and understand – access to open space, wildlife habitat, or recreation, for example – and benefits that are more difficult to quantify and represent; benefits like range health, the stability of a rural community, and viability of diverse local agricultural sector linked to proximate urban areas. In addition, the fact that private parties can reap clear financial benefits from conservation – through easements, tax credits, purchase of development rights, or fee purchase – makes this a complex subject. This observation is borne out in all three of the case studies. In Douglas County, there was an explicit recognition by The Conservation Fund, GOCO and the county that not all conserved lands, even those paid for with public money, would be publicly accessible for recreation or any other use, and indeed the public would in some cases pay private parties to simply not develop. Mesa County is paying to keep ranch in agricultural production, there has never been any recognition that the majority of these lands would be publicly accessible. This may be axiomatic to conservationists as a legitimate use of funds, but to taxpayers – and therefore politicians – at all levels it remains something of a hurdle. Innovations in outreach and education – selling conservation as relevant to and interconnected with the form and substance of communities – are surely related to this point, but there are deeper issues of how the public actually derives value from private land conservation. As a general research topic, this is an active area for further innovation with cost of community service studies, research agendas that assess the financial benefits of open space, and attempts  

to directly link the economics of western regions to the integrity of the landscape called for in order to present a more compelling argument in favor of conservation.

**Conclusion**

While the cases are consistent with definitions of landscape scale and demonstrate certain innovative features, these three cases also illuminate some common, significant challenges and shortcomings of landscape scale conservation in Colorado. As detailed in case study descriptions themselves, as well as in the preceding section of this chapter, some challenges have spurred innovative policies or actions that have attempted to surmount a given hurdle, while other challenges intrinsically related to continual growth pressure and landscape fragmentation remain to be addressed. These challenges largely form the basis for consideration of a more effective conservation and growth management agenda for Colorado, recommendations for which are presented in the concluding chapter.
Chapter 7: Recommendations and Conclusions

Limitations of Landscape Scale Conservation

The underlying goal of this thesis has been to discern how ambitious conservation projects undertaken in the context of rapid population growth at Colorado's urban-rural interface are faring in their efforts, what emerging challenges are being brought into focus as a result, and what can be learned from these projects in regards to conservation policy, strategy, and practice. Ultimately, the contention has been that landscape scale efforts represent innovative approaches to conservation and hold promise for more expansive and successful outcomes that incorporate the natural and cultural elements of a given landscape. Upon consideration of the three case studies, I contend that these Colorado efforts are legitimate examples of the emerging field of landscape scale conservation that recognize and incorporate anticipated aspects of innovation.

At the same time, these cases contribute to an understanding of common, significant challenges and shortcomings of conservation in Colorado. Despite ambitious conception, demonstrated innovation, a steady increase in funding, a growing field of professionally diverse and dedicated conservation experts and an expansion in the scope of "logical allies," all three cases face ongoing struggles to fulfill their vision of conserved, functionally integrated landscapes. This fundamental limitation, I believe, is intrinsically linked to the fact that conservation efforts are being asked to assume the ambitious dual role of reactive conservation and proactive growth management at the same time, a task which is beyond their capability. This conclusion leads to a brief discussion of three overarching non-exclusive strategies that are seeking to address landscape scale conservation's limitations vis-à-vis persistent growth pressures.
Taking Conservation to Scale: Further Developing Funding Capacity

In order to be more effective, conservation needs more money. This statement is obvious to the point of being trite, but it is important to recognize that this is one route to enable conservation to go to a fuller scale in the face of growth pressures. Innovative market mechanisms are an attempt to address this need in a diffuse fashion, but as these case studies have shown, state level funding and policy support for landscape scale conservation is enormously important for coordinated and scalable efforts. While engaging market mechanisms is undoubtedly important – and will continue in the fashions described in the case studies – there are deeper seated problems with ranching and agriculture that lead to the belief that they are not a viable means of taking conservation to scale, and the ultimate compatibility and quality of conservation real estate ventures are questions that deserve more attention. In more immediate time frames, and in regards to increasing funding as a means to allowing conservation to compete with development interests, the real action in Colorado is – and should remain – on increasing and solidifying public revenue streams at the state level.

GOCO is sometimes cited as the envy of the conservation community for carrying out landscape scale projects, and is applicable in two of the three case studies here, making it an obvious and powerful base on which to build out state level funding capacity. That said, GOCO funds have proven insufficient to meet the many grant requests it receives every year and has come under recent scrutiny for its disbursement of funds. Some contend that under the administration of Governor Bill Owens – in office since 1998 and responsible for appointing the current GOCO Board of Directors – GOCO funds have been under used or misused at a critical time.134 As critics point out, GOCO’s enabling legislation is fairly clear in its intent that lottery money should be used primarily

134 Susan Greene, “State shifts land preservation fund’s focus under Owens, GOCO buying fewer sites,” The Denver Post, Monday, November 10, 2003, 1A.
for acquisition of land, with provision of facilities, legitimate planning and capacity building activities that are consistent with preservation of land also recognized as complimentary. Enabling legislation and various legal opinions since then have expressly forbid the use of lottery funds as general operating funds for various state agencies and departments, but nagging questions as to whether this re-purposing of GOCO funds is occurring remain. These questions need resolution to assure that the maximum amount of funding is indeed reaching on-the-ground conservation efforts like the South I-25 Conservation Corridor, a GOCO project that will undoubtedly be appreciated and valued by future generations of Coloradoans as a wise investment of public monies.

Another source of consternation in the face of steady land fragmentation and growth is that fact that in 2001 GOCO was granted bonding authority for up to $115 million, but this authority has, inexplicably, yet to be used almost three years later. Political pressure to engage this mechanism is building and will continue to do so, but it should be a priority of conservation advocates and their allies as it promises to inject significant and much needed funds into the state.

**Strategic Coordination and Cooperation**

The growth in the number of land trusts in Colorado in the 1990s has resulted in a huge increase in conserved acres and many of the benefits and innovations that have already been discussed in earlier chapters of this thesis. However, this growth has also had a perverse outcome in two regards. First, there are more organizations competing for limited funds and attention. GOCO disburses money to all communities on a regular basis through the trust fund, but the most significant dollars – through legacy or other initiatives – are awarded as competitive grants. While this may be beneficial in that it will tend to bring scrutiny to prospective projects and result in well vetted grants, it also may encourage unnecessary competition over turf. The land trust community is tightly knit, but the potential for redundancy does exist in focus and, perhaps more importantly, competition for funds. Of particular importance is the ability of
national organizations to work cooperatively with local land trusts, county officials and coordinating organizations who are attempting to take a strategic view on conservation state wide.

The second perverse outcome of the growth in the land trust and conservation attendant conservation real estate professions may be a lack of qualified organizations and individuals capable of undertaking the due diligence necessary to complete complex these transactions. Concern has recently been expressed about the quality of appraisals, standard policies and actions at land trusts around the state, and the potential for abuse of incentives such as the Colorado conservation tax credit.\(^{135}\)

Both of these perverse outcomes point towards strategic coordination at the state level as an emerging and important facet for ensuring that conservation is as lean and competitive as possible, accomplishing all it can with insufficient funds. Major partnerships between national organizations, local land trusts in targeted areas — particularly the Gunnison and Wet Mountain Valleys — are showing that coordination and cooperation are well worth the effort. The emergence of the nation’s first conservation focused community foundation, the Colorado Conservation Trust, reveals an explicit recognition that there is a need and place for an organization with a strategic state-wide purview. Despite some skepticism, there does seem to be a need for an organization that is capable of focusing funding and attention on particular places or issues, and able to bring reticent parties to the table if efforts are proving difficult. To directly tie this point into these case studies, Colorado Conservation Trust has attempted to bring more attention and pressure to bear on El Paso County officials regarding the pace and scope of conservation in the county, a step that is consistent with analysis of that case and its struggles. Despite some understandable skepticism — a skepticism possible born of being large and undeniably successful in what

they do – The Nature Conservancy sees this incursion into their "turf" as a positive, as they should if they wish to bring to bear all the resources they can muster to address the stubborn nut that is El Paso County government.

As for the lack of qualified professionals and the potential for easements that are either of questionable conservation value or even patent rip offs, oversight of funds from organizations like GOCO and efforts to ensure that land trusts adhere to standards of practice as laid out by the Land Trust Alliance or the Colorado Coalition of Land Trusts should be encouraged. This necessary scrutiny may go a long way in ensuring the public that conservation is not a route to fleecing taxpayers or non-profit funders, and is worthy of continual financial and policy support.

Addressing the underlying problem: Growth Management Legislation

After examining these case studies, I ultimately believe that conservation is fighting a foe which it can not defeat as the rules of the game are currently set up. Increased funding through either better use of GOCO funds or full usage of GOCO's bonding authority and strategic coordination and cooperation are two ways that conservation advocates can increase the pace and scope of work. However, these policies still skirt the underlying issue of unabated urban, semi-urban and semi-rural sprawling growth. I believe that conservation leaders and like minded politicians should revisit the possibility of coordinated, state-wide growth management legislation that would better address the root of the problem and serve as a compliment to increased conservation funding. What this effort might consist of is beyond the scope of this thesis to consider, but I believe that the three case studies show that efforts to both reactively conserve land and proactively manage growth are beyond the scope individual projects, regardless of how robust they are in conception, implementation, and funding.

I believe that by heeding lessons from the 2000 defeat of Amendment 24, combined with a concerted effort to capitalize on the recognition that growth is an issue in all parts of the state and remains a concern to voters, a coalition of
conservationists, newly minted allies who might be growing more open to comprehensive growth management solutions — such as the ranching community in the Chico Basin and certain county commissioners in Mesa and Douglas County — like minded public sector interests, and even members of the business community might be brought to the table where a politically feasible agenda could be explored. This ties in nicely with the second area of innovation detailed in chapter 6, where outreach and education are making inroads in connecting conservation to the form and function of the landscape that people see everyday.

Conservation leaders shied away from growth management in the 2000 debate, perhaps not wanting to endanger continued support and funding for conservation by coming too close to the hotly contested issues of growth management. It is striking that only the Trust for Public Land and a handful of local land trusts signed on as partners of the Colorado Environmental Coalition, an expansive group that supported Amendment 24 in 2000 and continues to push for action on growth management. While the particulars of whether the failed bill was unwieldy or overly harsh are open to debate — and might be proffered as a legitimate reason for withholding support — the fact that there was an almost utter absence of conservation advocates willing to lend their voice to formulation of this agenda or their support to this coalition or legislation is startling. As the record amounts of money spent to defeat Amendment 24 demonstrated, development interests that tolerate conservation — so long as it is paid for by sales taxes and lottery proceeds that do not directly implicate their bottom lines — would not stand by idly in the face of any growth management efforts, and there might be political repercussions. In this regard, this reticence is understandable but ultimately self defeating, as sprawling growth and attendant fragmentation of the landscape will continue to test the capacity of conservation, regardless of conceivable funding levels and concentration of organizational capacity. Leading national, state and local conservation organizations active in Colorado should assess how they might contribute to a concerted effort to forge
a viable smart growth agenda and workable legislation. This action would be complementary to pursuing funding increases and strategic coordination, allowing the large scale conservation efforts examined in this thesis a better shot at fulfilling ambitious goals reflective of the magnificence of Colorado landscapes.
Appendices

Appendix A: Interview Protocol

Introduction
Hello, my name is Peter Ericson. I am a graduate student in the Department of Urban Studies and Planning at MIT in the Environmental Policy Group. I'm writing my thesis on the subject of how landscape scale conservation projects are faring in the face of significant growth pressures in Colorado. I am hoping to use (project name) as a case study and understand that you or your organization played an integral role in this project. I was hoping that you could spend about 30 minutes answering some general questions regarding landscape scale conservation and specific ones about this project. I would appreciate scheduling some time that is convenient for you for a phone interview.

Interview
Thanks for taking the time to talk with me about (project name). To reiterate, I am particularly interested in the strategic and practical issues encountered when undertaking landscape scale conservation efforts in proximity to expanding urban centers. In order to better understand your project I am going to ask you some questions about the origins of the project, relevant actors, planning, financing and acquisition strategies, and outcomes to date or prospects for each case. Before we begin, are there any questions you have?

Background and Context
1. Can you give me a brief summary of your role in the project, i.e. when and in what capacity you or your organization are (or have been) engaged with this project?

Project History
2. Where did the impetus come from to pursue this project? What was the process or event through which this project first "got legs?"

Stakeholder Groups
5. Who were the stakeholder groups that became engaged in this project?
6. Did these groups stay engaged throughout? Why or why not?
7. What did the coordination of different interest groups consist of?

Strategies
8. What were the goals for the project upon inception and initial efforts?
9. What are (were) the mechanisms through which this project is pursuing its goals? (check all that apply)
   a. Fee simple purchase
   b. Leases
   c. Easements
   d. Zoning changes
   e. Change in Management Activities
   f. Outreach and education
   g. Other, please describe

10. Have the strategies (i.e. the mechanisms used, partnerships undertaken, funding sources used) remained the same throughout the project?
11. If no, why not? If yes, why have they been successful?

Planning and Acquisition Process
12. What was the planning process for this parcel/project? I.e. how was this project identified and prioritized?
13. What kind of process did you/do you undertake in identifying the order of deals to pursue? For instance, do you "cherry pick" in an effort to build
confidence in your organization and/or process, test the waters, build partnerships? Or is the process of acquisition more opportunistic and straightforward?

14. What was the process for identifying/dedicating funding sources for this acquisition?

15. What were the sources of funding that were identified and utilized?

16. Were there any special acquisition public ordinances, laws, or policies that were particularly helpful or instrumental?

Benefits and Goals

17. Which of the following rationale for land conservation most directly relate to the goals of this project, and which if any was most important?

Protection of land for (check all that apply):
   a. Habitat/Wildlife
   b. Open Space/Recreation
   c. Working Lands/Economic: Agricultural or Ranching
   d. Forestland
   e. Urban Buffers
   f. Watershed protection
   g. Other, please describe

18. What have been the real benefits to date of this project from a conservation perspective?

   a. Preservation of biodiversity or wildlife habitat
   b. Preservation of open space / view-sheds
   c. Public access/recreation
   d. Preservation of agricultural/ranching operations
   e. Limit urban growth
   f. Link with existing parks/open space
   g. Improved management capabilities: i.e. consolidation of in-holdings
   h. Economic benefits to community: negated development costs, etc.
   i. Other, please describe

Challenges and Shortcomings of the Project
19. What, if any, opposition was engendered by the project?

20. What were the funding difficulties or challenges that the project faced, and how were they overcome or addressed?

21. Are there any areas where the project has failed to live up to its goals?

22. Are there emerging challenges that could undermine the viability of the project or compromise the benefits?

23. What are the prospects for the long term viability of this project?

24. Do you think that landscape scale conservation efforts or projects are equipped to function as efficient growth management tools?

**Contacts**

25. Can you suggest other key parties involved in the project that I might contact?
Appendix B: Chico Basin Ranch Philosophy:

"As an ongoing family ranching operation in an increasingly competitive and changing world, the Chico Basin Ranch is working on a daily basis to find financially viable ranching and land management practices that build upon our western heritage. Our business practices combine traditional methods with innovative ideas. We work collaboratively with neighboring ranches and with people and organizations in the local community and nearby cities to establish relationships that enhance the ecological and economic stability of this ranching operation.

The Chico Basin Ranch (CBR) is a working ranch which comprises 87,000 acres located 35 minutes southeast of Colorado Springs, Colorado. Duke Phillips, his wife Janet, and their family, live on and manage the ranch. CBR is leased by Box T Partners from the Colorado State Land Board for a 25-year term which began November 1, 1999. Today, Box T Partners maintains a traditional cow/calf operation as its primary business. Additionally, it farms approximately 375 acres.

Box T operates under the assumption that ranching, as it has been known in the United States, is entering a new era. The American West is being purchased by individuals such as Ted Turner, larger corporations like Enron, and conservation groups such as the Rocky Mountain Elk Foundation. The new owners' interests are not limited to agriculture and include recreational uses, habitat and species preservation, water supply for urban consumption, and portfolio diversification. Traditional uses of the land, such as cattle grazing, are having an increasingly difficult time financially and, although cattle will always be an important income producer, they will move toward the background economically. Innovative business approaches will create non-traditional enterprises that are supported by a major shift of the American public's perception and concern for the well-being of the natural world and the health of the food that is produced from it.
Today's rancher is no longer the mythic figure trotting his horse over the endless landscape. The modern day rancher is a business person who views the "encroachment" of the American public into what has always been the private "domain" of the rancher, as a reality. He accepts it as an eventuality which he views as an opportunity. He communicates as well with the cowboys riding their horses across the prairie as with executives in Lear jets screaming across the sky. He knows land and cattle and how to enhance his ranges ecologically through grazing management, as his predecessors have. He understands that managing a ranching business which encompasses the new public presence builds business stability and profitability that is becoming harder and harder to achieve in a strictly traditional ranching operation. The new rancher realizes that ranching is continuing to evolve, and just as horses and wagons were replaced by machines, traditional values and ways of doing business have to change and adapt in order to survive.”

Works Cited

Books, Articles, and Websites


Colorado Constitution, Article IX, §10.


Works Cited


Mitchell, Brent and Jessica Brown. “Stewardship and Protected Areas in a Global Context: Coping with Change and Fostering Civil Society,” in


Russell, Betsy Z. “Easement to keep homes off Mica Creek land; Bill contains money to buy Potlatch’s development rights to 25,000 acres.” Spokane Spokesman Review, November 12, 2003 A1;


Works Cited


Interviews and Presentations


Boeschenstein, Bennett, City of Fruita Community Development Department. Telephone interview, April 15, 2004.


Fife, Keith, Director, Mesa County Long Range Planning Division. Telephone interview, April 14, 2004.

Fox, Brooke, Former Executive Director, Douglas County Division of Open Space and Natural Resources. Telephone interview, April 2, 2004.

Gorney, Joe, El Paso County Planning Department. Personal communication, June 6, 2003.

Latousek, Tom, PDR Program Manager, Mesa Land Trust. Telephone interview, April 9, 2004.


