AN ABSTRACT OF THE THESIS OF

Tami McMillen Torres for the degree of Master of Science in Forest Resources presented on October 19, 2001. Title: The Influence of Cultural Identity on Resident Perceptions of Recreational Boating and the BLM: A Case Study from a Gateway Community.

Abstract approved:	Signatu	re redacted for privacy.	
		Joanne Tynon	

Conflict among residents of a gateway community regarding the breadth of perceptions of impacts from commercial whitewater rafting and the need for mitigating policies persists despite an intensive planning process and implementation of policies to mitigate negative effects. With an overarching purpose of exploring the nature of conflict, specific study objectives are 1) to characterize Pilar resident perceptions of recreation and the BLM, 2) to describe how Pilar as a community adjusts to recreation, and 3) to characterize Pilar resident expectations of BLM regarding recreation impacts. Methods include coding interview transcriptions, participant observation summaries, meeting minutes, and public comments on an environmental impact statement. Findings suggest that perceptions of recreational boating are influenced by factors such as occupation and place attachment and that these factors also determine group interaction and reactions to commercial boating and BLM policies.

©Copyright by Tami McMillen Torres October 19, 2001 All Rights Reserved

The Influence of Cultural Identity on Resident Perceptions of Recreational Boating and the BLM: A Case Study from a Gateway Community.

by

Tami McMillen Torres

A THESIS

Oregon State University

in partial fulfillment of the requirements for the degree of

Master of Science

Presented October 19, 2001 Commencement June 2002

ACKNOWLEDGEMENTS

I am immensely grateful to the participants of this study. Thank you for warmly accepting me into your homes and willingly sharing your viewpoints and sentiments. Your interviews were both fascinating and enlightening. I also appreciate the Pilar Community Association graciously allowing me access to meeting minutes.

I'm delighted for this opportunity to share a particularly deep sense of gratitude to the Department of Forest Resources for their vital and generous research funding from the Richardson Family Fellowship. I owe a special recognition to members of my committee for their guidance throughout my graduate studies and advice on rough drafts of the thesis. Thank you Jo Tynon, Lori Cramer and John Bliss. To Jo Tynon, I greatly appreciate your extraordinary confidence in my abilities. Thanks also to Kearstin Edwards whose thoughtful questions always sparked a renewed energy and creativity for writing.

Finally, I'm deeply appreciative of my Bureau of Land Management supervisor and coworkers. Thank you John Bailey, Mark Sundin, and Laura Graves for taking an interest in my project. I also want to thank Lora Yonomoto for assistance with historical records and Patricio Martinez for designing the map of Pilar and the lower gorge.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	
A Portrait Of Pilar	
Physical Setting	
Historical Context	
Social Setting	(
The Boaters, the Village, and the BLM	
Purpose of Study	10
Description of Subsequent Chapters	11
Definitions of Terms	11
CHAPTER TWO: LITERATURE REVIEW	12
Loss of Land Grant Commons	12
Definition of Community Grants	13
The Surveyors General Adjudication System.	
The Court of Private Land Claims Adjudication System	
Contemporary Views of Hispanic Land Loss	
Sense of Place	
Place Attachment	19
Place Dependence	
Place Identity	20
Measurement of Place Attachment in a Recreation Setting	21
Resident Perceptions of Recreation	
Noise and Privacy Issues	. 02
Limited Resources and Cultural Preservation	
Economic Dependency	
Place Attachment and Length of Residency Coping Strategies	
Definitions of Terms	
CHAPTER THREE: RESEARCH DESIGN	
Paradigms	30
Quantitative versus Qualitative Data	30
Case Studies	31
Purpose	

TABLE OF CONTENTS, Continued

Methods	32	
Data Collection	32	
Interview Sample Selection	34	
Data Analysis		
Validity		
Summary	38	
CHAPTER FOUR: FINDINGS	40	
Description of Social Groups	40	
Perceptions of Recreation	41	
Resident Perceptions of Recreation Impacts	41	
Traffic	42	
Private Property	43	
Rural/Cultural Values	44	
Environment and Wildlife		
Boater/Angler Conflicts		
Economic Benefits		
Impacts Identified from Document Analysis		
Community Description and Adjustment	50	
Values both Common and Diverse	50	
Boating Community Values	51	
Native Pilarian Values.	52	
Water Conditions		
Character of the Community		
Group Perceptions, Trust Deficiency, and Community Division		
Car Clouting	57	
Compensation		
Participation	61	
Resident Perceptions of BLM		
Perceptions of BLM Recreation Policies		
Trip Limits	00 	
BLM's Allocation Policy.		
The Quiet Zone		
Use Fees in Orilla Verde Recreation Area	72	

TABLE OF CONTENTS, Continued

Dynamics Affecting Perceptions of BLM Actions	
Awareness of Stewardship Role and Legal Authority	74
Trust and Contact with Personnel	75
Questions of Fairness	
Historical Context and Perceptions of Powerlessness	78
Resident Expectations of the BLM	79
CHAPTER FIVE: CONCLUSIONS	81
Propositions and Themes	82
What are perceptions of positive and negative impacts of recreation?	82
How has recreation affected the community?	83
What is the solidarity in forms of adjustment to recreation?	84
What are perceptions of BLM recreation related policies?	85
What are the perceptions of BLM's role in minimizing negative recreation impacts?	
What recreation impacts have not been addressed?	87
Limitations of the Study	87
Implications of the Study	88
Summary	89
BIBLIOGRAPHY	90
APPENDICES	98
APPENDIX A: MAP OF THE STUDY AREA	99
APPENDIX B: INFORMED CONSENT FORM	100

LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.	Data Source and Units.	37
2.	Analysis by Unit and Proposition.	37
3.	Identification of Negative Recreation Impacts.	42
4.	Participation by Residency Status	63
5.	Split Allocation for the Pilar Segment: Winter and Shoulder Seasons	70
6.	Split Allocation for Pilar Segment: Summer Season	70

DEDICATION

To my patient and supportive husband, Art, for whom my love and respect grows each day.

You are my home.

PREFACE

"The concepts "culture" and "environment" overlap as do the concepts "man" and "nature."" (Tuan 1974: 59).

"to be human is to live in a world that is filled with significant places" (Relph 1976: 1).

"It is even possible to know, through love, a place, a certain landscape, a river, canyon, mesa, mountain. (Nobody ever fell in love with a rock, you say? Nonsense. Bullshit. Many of us have fallen in love with rocks." (Abbey 1979: 57).

"Where is your Rock?... a juniper on a ledge of rock; overhead, wild clouds in a violet sky; far below, the river; and east, west, north, south—the distant mountains" (Abbey 1994: 65).

The Influence of Cultural Identity on Resident Perceptions of Recreational Boating and the BLM: A Case Study from a Gateway Community.

CHAPTER ONE: INTRODUCTION

A Portrait Of Pilar

Contentious issues divide people in the small New Mexican village of Pilar. The historical and social context of Pilar is key to understanding the nature of conflict between the boating community and native Pilarians, and residents' distrust in government. Some of these issues can be linked to changes in land ownership after New Mexico became a U.S. territory. I will discuss how the Bureau of Land Management (BLM) and the dramatic increase in river recreation by whitewater enthusiasts affect Pilar and its people.

In the subsection, 'Physical Setting' I describe the location and character of the village. Within 'Historical Context' I offer a brief timeline including: human occupation first by Native Americans, then Spanish settlers and U.S. military personnel, the series of events leading to loss of Spanish land grant commons, and the current situation of outdoor recreation use and BLM management. In the 'Social Setting' subsection I describe how the economic base of Taos County and Pilar have changed and provide a snapshot of social activities and events in Pilar. I end this chapter with an example of conflicts occurring between boaters and Pilar residents and explain the purpose of this study.

Physical Setting

The village of Pilar is located in north central New Mexico within Taos County. Pilar sits west of State Highway 68 at the intersection of Highway 570, 51 miles north of Santa Fe and 19 miles south of Taos (See Appendix A). This area lies immediately west of the Sangre de Cristos, the southern most range of the Rocky Mountains.

The village is composed of original adobe or adobe-style homes and mobile homes, small orchards, gardens and pasture, two cemeteries, a church, two galleries, a few businesses associated with river rafting, a horse stable, and a Bureau of Land Management (BLM) visitor center. Most of the businesses and the visitor center are located just off Highway 68. The remainder of the village is situated away from the main highway along both banks of the lower gorge of the Rio Grande. The dominant landscape features here include the Rio Grande and Pilar Mesa, dotted with *pinon* and juniper. The Rio Grande flows 1,885 miles (Arreola, 2001) from headwaters in the San Juan Mountains in southwestern Colorado through the middle of New Mexico and forms part of the Texas and Mexico border before draining into the Gulf of Mexico. For nearly 72 years Rio Grande water has been apportioned according to stream flow by an interstate agreement, called the Rio Grande Compact, between Colorado, New Mexico and Texas.

Like most northern New Mexico villages, Pilar has a system of ditches used for irrigation called *acequias*. The village owns the right to divert some water from the Rio Grande. A weir dam, constructed of stones and branches, is located in the village on the Pilar segment. There are two ditches in Pilar, the north and the south, each with a *mayordomo*, or ditch boss, charged with the task of collecting fees and making sure every neighbor, or *parciente*, along the ditch gets their water.

Historical Context

Many towns and villages located in northern New Mexico were first formed as Spanish 'military outposts' around the mid-1700s (Knop and Frank 1984). The primary duty of these Spanish settlers was to guard land granted by the Spanish government against attack by various bands of nomadic tribes such as Comanches and Apaches. The purpose of establishing the Town of Cieneguilla (now Pilar), granted in 1795 by Governor Fernando

Chacon (Bowden 1969, Ebright 1994, USGAO 2001), was no different. According to a court document from a petition to confirm the grant, it "placed twenty grantees in royal possession" (Bowden 1969: 1015). The individual agricultural parcels and village commons collectively totaled 43,961.54 acres (Griffin and McMullen 1877). When the area was ceded from Mexico to the United States in 1848, the Treaty of Guadalupe Hidalgo ensured that Mexican citizens already living in the territory would be able to retain their property upon adjudication of land grant claims. The claim for the Town of Cieneguilla grant was eventually rejected by the Court of Private Land Claims. This resulted in the loss of land held in common by the village. Petitioners of this grant provided oral testimony and a certified copy of the grant made in 1826 by the Ayuntamiento (local governing body) of the Pueblo of Taos (Bowden 1969). In 1872, after examining witnesses, Surveyor General Spencer recommended confirmation of the Town of Cieneguilla land grant based on testimony of the existence of the town, possession of the land, and a certified copy of the Act of Possession (Bowden 1969). In 1886 Surveyor General George W. Julian reexamined the case when petitioners provided a document concerning a group of Jicarilla Apaches requesting "permission to settle at the Town of Cieneguilla" (1018). Surveyor General Julian found that although there was no legal proof of a title, he didn't want to recommend rejection of the claim (Julian 1887). He felt a claim might be justified under equitable title (ibid.). Congress never took action on the claim. And it was eventually reviewed and rejected by the Court of Private Land Claims in 1896 for lack of documentary proof of possession of the original document. In Peralta v. United States in 1866 the Supreme Court ruled that documentary evidence and oral testimony "would not sustain the claimant's burden of showing that a valid grant had been made if there was no evidence of the grant in the Spanish and Mexican Archives" (Bowden 1969: 1017).

Several native Pilarian's claim they descend from the Ute or Apache who occupied seasonal encampments near Pilar. Six Athapascan groups that migrated from the Canadian Mackenzie Basin are known to have first occupied New Mexico sometime between 1300 and 1500 (Tiller 1983). By 1700 an identifiable group known as the Jicarilla had emerged (ibid). They hunted and roamed an expansive area.

"As their homeland, they chose the region bordered by the Arkansas River in southeastern Colorado, the northeastern plains region drained by the tributaries of the Canadian River, the flatlands of the Pecos River Valley, and the area northwest of the Rio Grande in the Chama River Valley of New Mexico" (Tiller 1983: 4).

The Jicarilla were allies with the Spanish and served in their army as a form of protection from their enemies the Utes and the Comanches (Tiller 1983). Their vulnerability was due to the Comanche's acquisition of guns and ammunition from French explorers (ibid). Later, however, the Utes and Jicarillas became allies. For example, not long after New Mexico was claimed as U.S. Territory, Pilar was the site of a battle between soldiers and an Indian war party (Brooks and Reeve 1948, Quaife 1966, and Tiller 1983) of both Jicarilla Apache and Ute Indians. Colonists and military personnel became increasingly apprehensive of the Jicarilla after a band led by Chief *Lobo Blanco* (White Wolf) had murdered a Santa Fe merchant named White and kidnapped his wife, daughter, and female negro servant (Taylor 1969). *Lobo Blanco* was also believed to be responsible for attacking members of a mail party and his band was blamed for robbing cattle (Taylor 1969). Hostility by the Jicarilla may have been caused by failure of Governor Meriwether to come through on his predecessor's promise of food provisions in efforts to parlay a peaceable agreement (Tiller 1983 and Taylor 1969). In exchange, the Jicarilla, were to stay 50 miles

from any settlement (Tiller 1983). Unfortunately, they had become dependent on trade and hunting "buffalo on the plains was difficult in view of the hostility of the Plains tribes" (Taylor 1969: 274).

On March 29, 1854 sixty dragoons tracked the Jicarilla to a marshy area called Cienegilla (near Pilar) in the Embudo Mountains. While camped for the night, a soldier in the battle, Dragoon James A. Bennett, wrote in his diary:

"Major Blake came galloping into our fort with the news that the Indians would not come to terms but had run away from him. We were, 60 of us, to saddle up immediately and pursue the band to prevent them from crossing the Rio Grande and joining the Chachon band of Apaches. At the same time that Major Blake came in a Mexican also came riding in saying that 1500 head of cattle were driven off by the Indians and two herders were killed. We mounted and left at 11 o'clock that night. Encamped on the banks of the Rio Grande at Cienequilla (sic), where there are five mud houses. Heard of Indians" (Brooks and Reeve 1948: 53-54).

The next morning, March 30, 1854, they found themselves "surrounded by about 400 Indians" (54) according to Dragoon Bennett (Brooks and Reeve 1948). James F. Meline who toured several states including New Mexico in 1866 described the battle with the Jicarilla apaches, as "one of the most desperate fights in our Indian record" (Meline 1867). The soldiers were forced to retreat with 36 wounded and 22 killed (ibid.). After this display of open hostility, Indian Agent Kit Carson and General Cook led soldiers in pursuit of the Jicarilla but they were never able to apprehend them (Taylor 1969, Tiller 1983). After years of negotiating with the US federal government, the Jicarillas finally were given a reservation at Dulce, New Mexico (Tiller 1983).

New Mexico became the 47th state in 1912. In 1918 the Town of Cieneguilla became officially known as Pilar (Pearce, Cassidy and Pearce 1965:121). Today Pilar is a gateway to four segments of the Rio Grande Wild and Scenic River (WSR) as well as popular campgrounds, fishing spots, and hiking trails managed by the BLM Taos Field Office. This

WSR stretch of the river from Taos Junction Bridge to Velarde Diversion Dam includes the Orilla Verde Recreation Area (Orilla Verde or OV) and is managed as one unit called the 'Lower Gorge' (See Appendix A). The Rio Grande is one of eight charter rivers designated with the passage of the Wild and Scenic Rivers Act in 1968 (Zinser 1995). At that time 50 miles of the Rio Grande, from the Colorado state line to the Taos Junction Bridge, were designated as 'wild' and 2.2 miles near John Dunn Bridge and Taos Junction Bridge were designated as 'scenic', (USDI 1998). In 1994, Congress added 12 'scenic' miles downstream from Taos Junction Bridge and another eight-mile segment extending to Velarde Diversion Dam south of Embudo was designated for study (ibid.). The 12 mile addition includes three segments with different swift water ratings for boating: Orilla Verde (Class II), Pilar (Class II), and the Racecource (Class III-IV). The Pilar segment, with homes and fields bordering both banks, is the only one included in the scope of this study.

Social Setting

The majority of the 29,979 people who live in Taos County are either White,

Hispanic or Latino, or American Indian and Alaska Native (US Census Bureau 2000).

Whites make up 67.3% of the population, while 57.9% are Hispanic or Latino, and 7.6% are categorized as American Indian and Alaska Natives (ibid.).

Agriculture and ranching were the two predominate industries in north central New Mexico until about 1930 (Leonard and Cleland 1976). Although the traditional Pueblo Indian/Spanish settler practice of small scale farming through the use of a community acequia system persists, the dependence on crops and livestock ranching for subsistence is being replaced by a cash economy and the provision of services related to the tourism industry. In 1997 thirty-five percent of the population in Taos County was employed in Services, 23% in Retail trade, and 13% in Government (Bureau of Economic Analysis

1997). By comparison, three percent were employed in farming (ibid.). Now, north central New Mexico has numerous art galleries, souvenir and apparel shops, and several museums. The rich culture of art, history, and Spanish American and Pueblo people along with the scenic beauty of forest, mesa, and river attracts tourists from across the United States and from other countries.

The population of the village of Pilar is approximately 100. Pilarians, or *Pilarenos*, are a mix of native residents who are either Spanish American or Spanish/Native American, Anglo newcomers, or permanent and seasonal residents employed in the recreation/tourism industry.

Most of the native residents either currently work in other towns or are retired. Some retain permits for livestock grazing and/or farm small parcels of alfalfa. A few native residents rent office or living space to Anglo business owners. All but one of the five recreation related businesses are owned and operated by Anglo newcomers or Anglo seasonal residents. There are many newcomers and native Pilarians who are either full time or part time established artists. Income earned from art and recreation fluctuates with the tourist season; it is highest between Memorial Day to Labor Day weekends.

Pilarians interact socially through organized events and around routine work schedules. While informal social activities seem to be structured according to whether residents are native Pilarians, newcomers, or members of the boating community, there are several opportunities for groups to mingle. Permanent and seasonal residents from the boating community, newcomer artists, and visitors stopping in to purchase pictures from their rafting trip typically occupy the café and shuttle-service known as the Pilar Yacht Club. And occasionally seasonal residents such as guides and outfitters meet for a barbecue in the Orilla Verde recreation area. On the other hand, native Pilarians meet for the annual

celebration of the patron saint, Nuestra Senora de los Delores (Our Lady of Sorrows), for whom the church in the village is named. Also many native Pilarians individually enjoy fishing, hiking or hunting in the lower gorge.

Organized activities in Pilar such as fund raising events for ditch maintenance, annual ditch cleaning, a Christmas mass and feast, and a summer potluck are attended by members from all groups. An annual artists' studio tour features the art and craftwork of *Pilarenos*. There is intensive planning and preparation among local artists for this event. Members of each group also participate in the Pilar Community Association (PCA) representing the village in the Taos County neighborhood association. PCA meetings are held once or twice a month as the need arises to discuss and vote on local issues.

The Boaters, the Village, and the BLM

Participation in boating-related activities in the U.S. has increased dramatically in the last five years. Preliminary results from a study conducted by the USDA Forest Service indicate that, in the year 2000, 20.1 million people engaged in rafting, tubing, or floating compared to 7.6 million five years ago (Cordell, Green, and Betz, forthcoming). The Forest Service estimates participation in canoeing is 19.7 million, up from 7 million in 1994-95 (ibid). There are five times more people kayaking rivers than the 1.3 million reported in 1994-95. Last year, an estimated 6,600,000 people kayaked U.S. rivers (ibid.). BLM recreation personnel estimate the average use in Orilla Verde between 1992 and 1998 to range between 80,000 and 90,000 visitors annually (USDI 1998).

As whitewater rafting has become more popular on the Rio Grande, conflicts between boaters and property owners has intensified. The worst conflicts between boaters

and property owners occurred in 1995, a high water year when it seemed there were more people on the river than ever before. Streamflow below Taos Junction Bridge peaked at 6,970 cubic feet per second (cfs) for two days in early July (USGS 1995). With summer flows that were too high for rafts to safely float under the bridge in Pilar, rafting guides, and presumably private boaters as well, portaged at the bridge, trespassing, causing property damage, making noise, and generally disturbing the peace and privacy of local residents. Residents felt that their 'sleepy little village' was being invaded.

Conflicts between boaters and residents who own land adjacent to rivers are not a unique problem to the Rio Grande and the village of Pilar. American Whitewater, a kayaker's advocacy group, receives reports of conflict every year (O'Driscoll 2001). Examples come from Cincinnati Creek in New York, the Santa Ynez River and Butte Creek in California, John's Creek in Virginia, the South Platte River in Colorado, the Rio Brazos in New Mexico, Laurel Hill Creek in Pennsylvania, and the South Fork of the Flathead River in Montana (ibid.). Landowners have directly blocked access, put up 'no trespassing' signs, and/or threatened boaters; they complain of "trespassing, loss of privacy, noise, littering and vandalism" (O'Discoll 2001:3A). Recreation planners try to minimize conflicts and prevent crowding on the river by promoting river etiquette and establishing appropriate limits on use.

BLM got more involved in the issues when they began a 15 year plan and Environmental Impact Statement (EIS) for 94 miles of the Rio Grande Corridor from southern Colorado and extending through northern New Mexico. The plan includes management actions for all resources including recreation. A 'quiet zone' was established through the village, voluntarily by the outfitters to begin with, and later institutionalized and enforced by BLM. Limits have been established on the

number of trips and passengers allowable on the Pilar segment. In general, Pilar residents and rafting outfitters have different goals: residents want noise levels from boaters and the associated traffic stopped or at least reduced and outfitters want a solution that will not reduce their income.

Purpose of Study

Controversy among Pilar residents and rafting outfitters regarding the breadth of perceptions of recreation impacts and the need for mitigating policies continues today despite an intensive BLM planning process. The purpose of this case study is to discover and explain the nature of conflict between the boating industry and the village of Pilar. Research questions from general to specific are:

- Do residents perceive effects from recreation?
 - 1. What are perceptions of positive and negative impacts of recreation?
- How does the community deal with effects?
 - 1. How has recreation affected the community?
 - 2. What is the solidarity in forms of adjustment to recreation?
- What are resident expectations of the BLM?
 - 1. What are perceptions of BLM recreation related policies?
 - 2. What are perceptions of BLM's role in minimizing negative recreation impacts?
 - 3. What recreation impacts have not been addressed?

Initial propositions of my research are:

- Residents will identify impacts.
- Residents believe that BLM should be involved in actions taken to adjust.
- There will be differences in perceptions according to group characteristics.
- There is solidarity in actions taken to adjust.

Description of Subsequent Chapters

In the following chapter I provide a review of the literature relevant to major themes that emerged from my research. In chapter three I explain the details and rationale for the methods I used. I provide results from interviews and document analysis in chapter four in narrative form, using the words of respondents. In the final chapter I offer conclusions and recommendations for further research.

Definitions of Terms

<u>Acequia</u>: Use of the word acequia could refer to a single physical channel, a system of ditches, or the associated political organization. Ditches are used for irrigating individual parcels of land. The system includes a headgate, diversion dam, and side channels. The association consists of a ditch boss and commissioners who manage allocation of water to landowners and all participate in paying dues for maintenance and operation.

<u>Ayuntamiento</u>: "The ayuntamiento was the local governing body or town council authorized for villages having a population of at least 1,000" (Ebright 1994:312).

<u>Cubic feet per second (cfs):</u> A measure of the volume of water by length, width, and depth over time. The U.S. Geological Survey measures cfs at gauging stations along rivers and streams. Cubic feet per second is typically recorded in mean flow per day or year.

Mayordomo: Ditch boss for an acequia association.

Swift water ratings: Ratings are indicators for a scale of difficulty ranging from Class I to Class VI. Moving water in streams is judged based on criteria such as: the height of waves, the maneuverability and extent of obstacles, and the length of rapids.

Scenic Rivers: A class of river or river section recognized by the Wild and Scenic Rivers Act as free of impoundments, largely primitive and undeveloped but accessible in some places by road (Hendee, Stankey and Lucas 1990).

<u>Wild Rivers</u>: A class of river or river section recognized by the Wild and Scenic Rivers Act as free of impoundments, inaccessible except by trail, and primitive (ibid.).

CHAPTER TWO: LITERATURE REVIEW

I reviewed the literature according to the following topics that emerged as major themes influencing resident perceptions in Pilar: adjudication of Spanish land grants in New Mexico, sense of place, and resident perceptions of tourism impacts. I conducted the majority of my review of literature following my analysis of results. However, I did undertake a preliminary review of the tourism literature to compare issues in Pilar with impacts identified in other communities and to guide formation of research questions.

Loss of Land Grant Commons

In 1848, the Treaty of Guadalupe Hidalgo symbolized the end of the war between Mexico and the United States that waged over "disputed boundaries and the payment of various claims" (Van Ness and Van Ness 1980). For \$15 million Mexico ceded California, Nevada, Utah, New Mexico and parts of Arizona, Wyoming, Kansas, Oklahoma, Texas and Colorado to become US territory (USGAO 2001). Article VIII of the treaty was written so that established Mexicans, who suddenly found themselves US citizens, could retain their property (US Senate 1848). Lawyers, academians and especially land grant heirs question the US government's process in their execution of the treaty. The literature portrays a widely held judgment that the US violated provisions of the treaty (Knowlton 1976). This view holds that land grantees lost out through fraud by land speculators, and inappropriate application of Spanish codified law instead of Spanish common law (Knowlton, 1972 and 1976, Ebright 1994, Meyer and Brescia 1998). Years of political activism, led by Ries Lopez Tijerina, and the ultimate notorious courthouse raid gave voice to the resentment felt over land lost by grantee heirs in New Mexico (Rodriguez 1995). Tijerina founded the

Alanzia Federal de Mercedes in the early 60s with the mission of bringing the land grant issue to international attention as a violation of the Treaty of Guadalupe Hidalgo (ibid.). However, according to Knowlton (1976) some have argued that because the US "did set up a legal and judicial system to legitimate land grant titles, it can't be accused of treaty violations" (4).

Definition of Community Grants

Meyer and Brescia (1998) suggest that the major cause of rejection of many claims was a misunderstanding by US courts of Spanish customary law pertaining to land granted to communities. They explain that "land in Spain could be owned by monarchs, by communities, or by individuals" (323). Once community grants were conveyed, "The land no longer belonged to the State but instead became the private property of the community and was set aside to be used, in perpetuity, for the benefit of that community" (ibid.). In order to settle New Mexico, "Spain and Mexico issued grants of land to individuals, groups, towns and pueblos" (USGAO 2001:7). Within the community grants are individual plots, typically a strip running from a river to foothills, for private homes and gardens (Ebright 1987). These are held in fee simple, meaning they can be bought and sold (Meyer and Brescia 1998). But the lands set aside as commons, called ejidos, were to be shared by residents for recreation, disposal of refuse, pasture (prado), and hunting, fishing and wood gathering (montes) (Meyer and Brescia 1998). The commons, owned by the community (Ebright 1987), could not be bought or sold (Meyer and Brescia 1998). Knowlton (1972) made the point that "among the Spanish Americans, title to the land was, and is, based more upon custom and tradition than upon written documents" (121). Ownership was defined by generations of use without challenge (Knowlton, 1967).

Others illustrate how Anglo settler and Hispanic land values run contrary and highlight differences between their land tenure systems (Knowlton 1972, Van Ness and Van

Ness 1980). Van Ness and Van Ness (1980) describe the Anglo system of land tenure as placing the primary value of land as an economic commodity. There are no transfer restrictions as there are with the Spanish and Mexican commons (ibid.). The Hispanic system placed highest value on "social principles of class, kinship, and local community membership. Economic considerations regarding landholding are those of use-value for the subsistence of resident populations, in contrast to the commercial exchange-value important to non-resident land speculators" (9).

The Surveyors General Adjudication System

In 1854, six years after the treaty was signed, Congress appointed a surveyor general in New Mexico (Van Ness and Van Ness 1980). In addition to his duty of partitioning land into townships for disposal (Westphall 1965), he was to review grant claims and make recommendations to Congress for confirmation or rejection through the Secretary of the Interior (Knowlton 1972). After reviewing grant documents and listening to testimony in grant claims, the surveyor general typically recommended confirmation with certain presumptions of evidence. For example, if a community existed as stated in grant papers he presumed evidence of possession (Ebright 1987). And he presumed that the official making the grant and signing the documents had the authority to do so. Moreover, commons were understood to be protected along with other property by the treaty and so judged by the Supreme court in the 1866 Greeley vs Townsend case (Meyer and Brescia 1998).

Many have recognized the job of reviewing "295 grants in New Mexico" (USGAO 2001:7), as an overwhelming if not impossible task for one man to accomplish effectively (Ebright 1994, Van Ness and Van Ness 1980, Westphall, 1965). Meanwhile, the land grants became a temptation for speculators such as attorneys, cattle barons and timber companies (Meyer and Brescia 1998). They were indeed able to purchase commons within

the legal system and with fraudulent schemes. One deceptive method land-grabbers used was to "purchase the principle settler's, poblador principal, interest in a community grant" (Ebright 1987: 37). Ebright (1987) gives two separate examples where confirmation was sought using the name of only one community member so that an attorney or corrupt surveyor general could turn around and purchase the grant. Claimants had the burden of filing a claim, hiring an attorney, and presenting evidence to prove their grants were legitimate(Ebright 1987). In 1876 the New Mexico territorial legislature enacted the partition statute (ibid.). This law entitled attorneys in land grant claims to take a division of land as payment (ibid.). The fee they typically charged was 1/3 of the grant (ibid.). If the property could not be divided without decreasing its value, then it was required to be sold (ibid.). The grant would then be bought for a low price. The partition suit was typically applied to commons even though they couldn't be bought or sold under Spanish and Mexican law (ibid.). The success of these methods depended on the collusion of many individuals within the territorial social system in the 1870s and 1880s. Ebright (1987) suggests that the Santa Fe ring, composed of surveyors general, attorneys, New Mexico governors, judges, and even Hispanos and priests, is responsible for the corruption of the surveyor general system of land grant adjudication.

After hearing of the disorder over the situation, Congress appointed Surveyor

General Julian in 1885 (Wilmsen 1997) to break up the Santa Fe ring (Ebright 1987).

Ebright (1987) states that in his enthusiasm to correct the corruption of the system, Julian was much more conservative in adjudicating claims (ibid.). Of the "35 claims he reexamined, he rejected 22 that had been recommended for confirmation" (Ebright 1987: 40).

Ebright (1987) believes Julian is responsible for eliminating presumptions that previously eased the burden of proof on claimants.

The Court of Private Land Claims Adjudication System

According to Wilmsen (1997) Congress had not yet acted on the recommendations of the surveyors general when they appointed a Court of Private Land Claims (CPLC) in 1891. Composed of five federal judges from outside New Mexico (Ebright 1987, Knowlton 1972, Van Ness and Van Ness 1980), the CPLC served as yet another means to correct the abuses that occurred in the surveyor general system. The court was set up on an adversarial system where the claimant had the burden of proof and was challenged by the court attorney (Ebright 1987). Unfortunately for the grant heirs, the strict interpretation of law by the land claims court led to more rejections (ibid.). Furthermore, the presumption of the authority of grant officials was eliminated in 1898 when the Supreme Court ruled on Hayes vs. the United States (ibid.) Basically, the court's interpretation that only the governor had authority to make grants led to rejection of many claims in which an alcalde or ayuntamiento made the grant (ibid.). The claims court extended the Hayes determination to question the authority of officials making copies of grants. They decided that only an escribano had the authority to make a certified copy. But Ebright (1987) argues that under Spanish customary law alcaldes and ayuntamientos did have the authority to make grants. Moreover because there were no escribanos located in New Mexico at the time, it was customary and legal for alcaldes to make certified copies (ibid.).

The final blow to the potential success of community grant claims came with the 1897 US vs. Sandoval decision that commons were the property of Spain and Mexico, reversing the earlier Townsend vs. Greeley (1866) decision. But after 1897, each claim of community grants was rejected and the commons relegated to US public domain (Ebright 1987, Wilmsen 1997). Most of this acreage now comprises the Carson and Santa Fe National Forests (Ebright 1987).

Recall from Chapter One that in 1872 Surveyor General Spencer originally recommended confirmation of the Town of Cieneguilla community grant. He recognized existence of the town, history of possession in 1846, and a certified copy by the secretary of the *ayuntamiento* as acceptable evidence in the claim (Bowden 1969). When Surveyor General Julian re-examined the case in 1886, he noted that the copy fell short of proving existence and the copy didn't show the grant was recognized by the governor (ibid.). However, he was reluctant to reject the claim because existence of the town was clear (ibid.). Congress never did take action and in 1896 the CPLC rejected the claim because they felt the copy was made by an unauthorized person and that it lacked documentary proof in the Spanish and Mexican archives. The requirement that documents be found in the archives, determined in 1879 *Peralta vs. United States* (ibid.), was but one more legal technicality. This is also a source of controversy because of Spanish documents in the Santa Fe governor's office that were lost and destroyed when Pile was Governor. Some claim that grant documents were destroyed intentionally to get rid of evidence (Horn 1963).

Contemporary Views of Hispanic Land Loss

Legal and academic experts have criticized the way the US carried out their obligations under Article VIII of the Treaty of Guadalupe Hidalgo. Critics have suggested that if the courts would have recognized Spanish and Mexican customary law rather than Anglo and Spanish codified law, community property of Spanish Americans would have been protected more effectively.

For example, the US could have simply accepted all land holdings recognized as legal by Spanish and Mexican governments (Knowlton 1972). Instead, the US government required each land claimant to prove legal ownership (ibid.). Others are of the opinion that the US should compensate the community grantees (Meyer and Brescia 1998, Rodriguez

1995). Meyer and Brescia (1998) go so far as to invoke the Fifth Amendment of the US Constitution. Their position is that although grantees were afforded due process through the CPLC and the Supreme Court, the commons were taken for public use without compensation (ibid.). To date, there hasn't been a case of commons being returned to community grantee heirs. But under the 1924 Pueblo Lands Act, the federal government gave land back to Taos Pueblo (Rodriguez 1995).

New Mexico Senators Dominici and Bingamen have pressed Congress to look into the land grant adjudication process because it's still the source of such intense and wide-spread debate and unrest throughout the state. The Government Accounting Office recently published the first in a series of documents communicating results of research into New Mexican community land grants. They have begun by defining community land grants as those containing common lands. They used the following criteria to determine that approximately 52% of all New Mexico land grants can be classified as community grants: language referring to 'common lands', 'pasturage' and 'water in common', establishment of a town, and grants issued to ten or more settlers (USGAO 2001).

The Spanish Americans were dependent on attorneys to help them prove the legitimacy of the community grants. Unfortunately adjudication systems that included corruption and that were focused on codified law led to rejection of community grant claims. Eventually the commons of those grants became the public domain of the United States. The perceived lack of fairness of the adjudication systems could explain the current distrust of the BLM and the boating industry and feelings of powerlessness to control recreation impacts.

Sense of Place

Both Relph (1976) and Tuan (1980) use the condition of rootlessness or placelessness to describe the concept and awareness of a sense of place. Sense of place "implies a certain distance between self and place that allows the self to appreciate a place" (Tuan 1980: 4). The contemporary American longing for roots further describes this appreciation (Tuan 1980). Rootedness, Tuan (1980) states, requires a "long habitation", "incuriosity toward the world", and an "insensitivity toward the flow of time" (4). People develop a sense of place when they become emotionally attached to a location through meaningful experiences. Tuan's (1974) characterization is that space becomes place after human experience. Tuan (1980) gives examples such as sharing stories, rituals, building structures, and giving names to landscape features to characterize place creation.

Furthermore, Tuan (1974) uses the term topophilia to define the human love of place. It includes "all of the human being's affective ties with the material environment" (93).

Possible responses to the environment are categorized as: visual or aesthetic, through physical contact, from memories, and by means of gaining livelihood (Tuan 1974).

Relph (1976) describes sense of place in terms of psychological, functional or spiritual links to a place through experiences. Similar to rootedness, his description of sense of place included a sense of belonging and a source of identity. Rootedness is a human need and people are apt to show care or commitment for a place entrenched in past experience and future expectations (ibid).

Place Attachment

Altman and Low (1992) define place attachment as an umbrella term encompassing 'several aspects of people-place bonding' such as: sense of place, rootedness, place identity,

and topophilia. "Place attachment is more than an emotional attachment, and includes cultural beliefs and practice that link people to place" (Low 1992: 165).

Place Dependence

Stokols and Shumaker (1981) define a place dependent person as one who is attached to a setting or type of setting because it possesses features or attributes that help them fulfill an activity goal. Specific areas as well as certain types of areas may be judged and compared according to their suitability to meet these goals (ibid.). Endurance and frequency help to define the variety of place dependent relationships among occupants in a setting who are not always aware of their dependence until a disturbance occurs (ibid.). At that point they may become "motivated to preserve their generically similar place options" (463).

Place Identity

A place can become a part of the identity of an individual or group when it holds symbolic or emotional meaning (Proshansky, Fabian and Kaminoff 1983). Place identity can arise from important childhood memories, land ownership, or loss or destruction of a place (Low 1992). It includes those conditions for which groups may be attached to a location which forms part of their cultural identity (ibid.). A place where one was born, grew up or experienced major events can become part of individual or cultural identity (Relph 1976).

"A cultural definition implies a transformation of the experience of a space or piece of land into a culturally meaningful shared symbol" (166). Setha Low (1992) lists six types of symbolic linkages to land: genealogical, loss or destruction, economic, spiritual/mythical, cultural and religious events, and narrative (ibid.). According to Low (1992) genealogical linkages would entail a historical identification established over centuries, by being born in

an area, or getting married and staying in an area. Losing land or a home by destruction, forced relocation, or lack of access is often recreated through memory and may be grieved over (ibid.). Giuliani and Feldman (1993) explain that the effects of loss of an attachment can include anger, revenge, isolation, anxiety, insecurity, depression, and grief. An economic link may be established through purchase or exchange of land or by working in a place or with resources as a means of livelihood (Low 1992). An attachment may also be formed through beliefs that land is sacred, represents gods and ancestors, or is visited for celebrations of religious or secular significance (ibid.). Finally, a bond with land could be narrated by telling stories, sharing family histories, or place naming (ibid.).

An example of a place attachment through cultural identity is illustrated by a people's annual return migration to a northeastern New Mexico village. Residents of Trementina were forced to abandon the village due to resource and economic constraints (Jaramillo 1993). Through questionnaires, interviews, and observation, Jaramillo (1993) discovered that Trementina villagers and their descendants were maintaining emotional ties and memories by returning to the land to participate in an annual reunion (ibid.). Events at the reunion have included: sharing stories, memorial services, a dedication ceremony, and a display and auction of crafts (ibid.). Original residents refuse to sell land to outsiders, prefer to be buried there, and return to visit the "roots of their heritage" (83).

Measurement of Place Attachment in a Recreation Setting

Some studies have provided evidence that place attachment can influence attitudes regarding natural resource policy. Warzecha and Lime (2001) conducted an investigation of visitors to measure their place attachment on the Colorado and Green Rivers located within Canyonlands National Park. Managers have collaborated with the Universities of Montana and Vermont on this study to collect data regarding the expectations of river users and their

attitudes regarding management options (ibid.). The researchers administered a trip diary and a post-trip questionnaire between May and mid October of 1998 (ibid.). They measured visitor's emotional/symbolic (place identity) and functional (place dependence) attachment by requesting them to indicate their level of agreement or disagreement with a series of questions. To determine emotional/symbolic meaning, researchers asked whether or not the river was special, meaningful, and was a part of them. To measure functional attachment, they asked visitors how well the river compared to other rivers, whether there was a substitute, and whether or not it was suitable for the activities of their choice. Warzecha and Lime (2001) found significant differences in place attachment within and between visitors of the Colorado and Green Rivers. For example, the mean scores for both functional and emotional/symbolic indicators were significantly higher for the Green River. Respondents on the Green River with high emotional/symbolic scores were more supportive of prohibiting motorized use and had lower scores for the maximum number of acceptable craft seen. Overall, the respondents on the Green River with higher emotional/symbolic scores were more likely to demand primitive experiences and preferred management actions that would maintain them (ibid.).

There are different types of attachment that people may develop for land. The sense of place and place attachment literature helps explain why repeated responses regarding cultural history and land ownership is important to native Pilarians. Native Pilarians' attachment to Pilar may influence their perceptions of recreation and the BLM. On the other hand, people who make a living off the land, such as rafting outfitters, may also develop an emotional/symbolic bond to the environment. Recreation visitors have also been known to develop symbolic/emotional attachments in addition to functional attachments to setting attributes necessary for activity goals.

Resident Perceptions of Recreation

Various researchers have used a plethora of independent variables to explain resident attitudes regarding tourism or recreation. Because the context and focus of studies have varied widely, I have limited my review to those that are most similar to issues in Pilar. Both positive and negative impacts are identified in communities hosting visitors. Residents often perceive economic benefits as well as negative social and environmental consequences from tourism or recreation.

Noise and Privacy Issues

Landowners with scenic easements along the Hellgate Recreation Area were surveyed as part of an environmental assessment for an update to the BLM plan for the Rogue Wild and Scenic River. The focus of the study was to determine resident attitudes toward the visual and audio presence of different user groups (York, Rowland, and Salley 1994). Landowner responses were least favorable toward motorized use (ibid.). Respondents indicated that tour boats and private motorized boats were noisy and disturbed their privacy (ibid.). Campers were also reported to have a considerable impact on privacy but most respondents didn't have an issue with hikers and anglers (ibid.). Although most landowners agreed that all user groups were a benefit to the local economy, they expressed a preference for a decline in traffic due to motorized use and camping (ibid.). Most respondents included written comments requesting the reduction or removal of motorized tour boats (ibid.). Among their concerns were safety, erosion, ecological damage, fish spawning grounds, and noise (ibid.).

Limited Resources and Cultural Preservation

Sylvia Rodriguez, a university professor and native Taoseno, conducted ethnographic studies to examine social change in Taos, New Mexico (Rodriguez 1987). Rodriguez (1987 and 1995) has highlighted the resistance by Spanish Americans and several Anglo environmentalists against tourism developments. Rodriguez (1995) explained public protests regarding pollution and expansion at Taos Ski Valley, the proposed Indian Camp Dam irrigation project, and development of a luxury condominium in Valdez as examples of "Hispano resistance to further encroachment upon limited resources" and "both essential to and symbolic of Hispano cultural survival" (314-315). She listed the transfer of water rights for the proposed expansion of the Taos Ski Valley Resort from acequia organizations as a "secondary impact" after pollution in the Rio Hondo watershed (Rodriguez 1987). She described the acequia system as the "institutional backbone of Hispanic village organization" (99). Part of the problem is that "each time a parcel loses its water rights, a proportional amount of labor and ditch fees is also lost" (100). Rodriguez (1987) warned of a potential displacement of the traditional rural subsistence use of the resource base by an urban recreational system through water rights transfers and real estate development.

Economic Dependency

Researchers have investigated the notion that the degree of positive perspective depends on whether the person benefits economically from tourism (Pizam 1978, King, Pizam and Milman 1993). Likewise, a dominant positive perspective tends to come from people who make their living in the tourism industry while a dominant negative perspective comes from those who gain nothing from tourism.

Pizam (1978) surveyed residents and business owners in Cape Cod, Massachusetts, regarding their perceptions of variables related to physical, economic and social impacts.

Forty-six percent of the sample of residents indicated they would take action to control and restrict tourism, while another 3% indicated they would stop it all together. Overall, the less dependent upon tourism respondents were, and the more contact they had with tourists, the more negative their attitudes toward tourism.

King, Milman, and Pizam (1993) found that most of the interviewees in their study were employed in the tourism industry and receive royalties from tourism enterprises.

Overall, respondents perceived predominately positive impacts such as employment, tax revenue, and standard of living (ibid.). However, they were still able to recognize negative impacts such as alcoholism, crime, drug addiction, sexual permissiveness, and traffic congestion that they attributed to tourism (ibid.).

A majority of the residents surveyed in Hawaii thought that the economic contribution of tourism outweighed the impacts of overcrowding (Liu and Var 1986).

Although most respondents thought that government planning could control impacts, over half thought more money should be spent on protecting the environment than on encouraging more tourists to visit (ibid.).

In Santa Marta, Colombia, respondents believed that economic benefits are enjoyed by a minority of their population and by companies and individuals outside of the area (Belisle and Hoy 1980). However, most respondents wanted government incentives to increase tourism development and believed it would raise the average standard of living (ibid.).

Place Attachment and Length of Residency

Although the measurement or indicators of attachment have been inconsistent across studies, several researchers have found a relationship between place attachment and length of residency with respect to resident perceptions of tourism.

Smith and Krannich (2000) surveyed residents of three rural communities in the Rocky Mountain west dependent on outdoor recreation related tourism. They found that longer term residents, living in the area more than ten years, were more likely to be concerned about and more interested in limiting tourist development than newcomers.

Um and Crompton (1987) tested for a relationship between attachment and perceptions of impacts in New Braunfels, Texas, where the Guadalupe River is popular to outdoor recreation enthusiasts. Attachment levels were defined by birthplace, years of residence, and heritage, and compared to perceptions of economic benefits, environmental quality, community spirit, and public services. With the exception of environmental quality "the more attached residents were to the community, . . . the less positively they perceived the tourism impacts on their community" (28).

Williams, Riden, McDonald, and Uysal (1995) measured nature and strength of attachment to community and landscapes to compare the influence attachment and regional identity had on tourism attitudes among residents of several small communities within Mt. Rogers Natural Recreation Area in southwest Virginia. Williams et. al. (1995) found that while 'oldtimers' had a less favorable attitude toward tourism development, newcomers or regionally attached residents were more supportive. No significant relationships were found between perceptions of tourism and community identity (ibid.). The findings suggest that the source of residents' attachment is an important indicator as well as length of residency (ibid.).

Coping Strategies

Residents may take on some form of coping strategy to deal with tourism (Ap and Crompton 1993, Dogan 1989). They may make some positive adjustment or actively resist tourism depending on their perceptions of what is positive and negative (Dogan 1989).

And various types of reactions within a community may be diverse and occur simultaneously (Ap and Cromption 1993, Dogan 1989).

By examining cultural changes resulting from tourists from industrialized nations visiting third world countries, Dogan (1989) has identified five forms of adjustment that are either active, passive, positive or negative. An active strategy of 'resistance' is exhibited by hostility and resentment toward tourists and tourist facilities (ibid.). 'Retreatism' is characterized as a passive evasion from visitors, and an increase in cultural and ethnic consciousness (ibid.). Dogan (1989) defines the preservation of the meaning of local traditions with slight changes in ceremonies when displayed to tourists as 'boundary maintenance' and characterizes it as passive (ibid.). 'Revitalization', which may "coexist with boundary maintenance or adoption" (228), occurs when customs, that began to disappear, become tourist attractions (ibid.). An active 'adoption' of western culture may occur among youth and the educated (Dogan 1989).

Residents' responses to tourism may be influenced by factors such as the stage of tourism development, the distribution of tourism benefits, and how tourism was introduced. "If tourism enters into a community via strangers and doesn't become an integral part of the socioeconomic life of the community, it is likely that the dominant response toward it will be one of resistance" (230). Dogan (1989) determined that resistance was more likely when wealth was disproportionate between tourists and residents. Furthermore, resentment was likely to arise when costs and benefits were not evenly distributed within the community (ibid.). Those benefiting more are more favorable (ibid.). The initial response by the entire community is typically rather uniform. But as development continues, so do groups with differing interests and responses (ibid.).

Ap and Crompton (1993) investigated coping mechanisms of residents in four communities in Texas. A strategy of 'embracement' by those receiving direct benefits was described as an eager welcoming of tourists. Other respondents exhibited 'tolerance' of negative impacts without resentment and recognized economic benefits. An 'adjustment' or rescheduling of activities and local knowledge of quiet, out of the way, places was used by some respondents to avoid crowds and other inconveniences. Some respondents reacted through 'withdrawal' by keeping quiet, avoiding involvement with visitors, or by either temporary or permanent relocation from the community.

The literature provides many examples of contextual factors influencing perceptions in communities with tourism that were similar to those in Pilar. Economic dependency and attachment as well as the source of attachment can influence whether residents perceive mostly positive or mostly negative impacts from tourism. The coping strategy of residents is also typically influenced by the degree of either positive or negative perceptions toward tourism. A diversity of perceptions and coping strategies regarding tourism within a community is not uncommon. In the case of Pilar, native Pilarians may distrust and resent BLM and outsiders due to the grant adjudication systems that seemed to work against them and resulted in the loss of commons. Whether residents in Pilar are economically dependent on recreation or have a place attachment may influence their perceptions of recreation-based tourism and the BLM.

Definitions of Terms

<u>Alcalde:</u> The mayor or figurehead of the local governing body.

<u>Ayuntamiento</u>: "The ayuntamiento was the local governing body or town council authorized for villages having a population of at least 1,000" (Ebright 1994:312).

Escribano: A clerk possessing education and training of law.

CHAPTER THREE: RESEARCH DESIGN

A research project can be characterized by the epistemology (way of knowing) of the researcher, the type of questions or purpose of the research, the approach to finding knowledge regarding those questions, and the methods chosen for collecting and analyzing data.

Paradigms

There are two dominant paradigms from which a person might view the world or go about solving problems: positivism and interpretivism (Henderson 1991). In the positivist approach to learning, a researcher would focus on and try to control a few key variables. An interpretivist approach would endeavor to understand a phenomenon by describing complexity and how variables are inter-related. "The positivist strives for explanation, prediction, and control by dividing a phenomenon into parts that can be isolated and categorized" and "Interpretive social scientists assume that social reality is multiple, divergent, and inter-related" (Henderson 1991: 24). Henderson (1991) went on to contrast the two by explaining positivism as deductive and reductionist, and interpretivism as inductive and expansionist. Deductive reasoning begins with a predetermined hypothesis, while inductive reasoning allows hypotheses to be discovered or to emerge from the data. Leedy (1997) defines deduction as logic that begins with a "preconceived idea" and induction as reasoning that begins with "observation" (94).

Quantitative versus Qualitative Data

Data may include numerical measurements and/or quotations from individuals or various types of media. Quantitative data are numbers typically analyzed with statistics or mathematical calculations and qualitative data are words typically analyzed by a process of

categorizing. Furthermore quantitative data are usually collected with a standardized instrument whereas qualitative data are typically gathered through observation and interviews. Some scientists distinguish between the positivist and interpretive approaches by identifying whether qualitative or quantitative methods were used. Creswell explains the difference in approaches as follows: a quantitative study is

"an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers and analyzed with statistical procedures, in order to determine whether the predictive generalization of the theory hold true" (1994: 2).

He defines a qualitative study as an

"inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting" (ibid).

In contrast, Robson (1993) explains that quantitative and qualitative data are simply two types of data that must be dealt with in different ways. Above all, it is essential that methods be driven by the specifics of the problem to be solved and the research questions. Both Leedy (1997) and Yin (1994) suggest that the type of research questions or the research purpose should drive the choice of approach. "Depending on the types of questions you wish to answer, different research designs and methods will be more or less appropriate" (Leedy 1997: 104).

Case Studies

Typically questions of "what" are best answered by a case study strategy. Patton (1990) describes the central question in case study research as answering questions about the characteristics of the phenomenon.

"Case study is a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence" (Robson 1993: 5).

"What is similar to these studies is an in-depth study of the phenomenon of each "case" in its natural context and including the point of view of the participants" (Leedy 1997: 157).

Purpose

This project surfaced from a practical problem in recreation management. There was a need to understand the diversity of resident perceptions about recreation near Pilar. Prior to and during the planning process for the Rio Grande Corridor Plan, involving land managed predominantly by BLM, public comments were received from landowners in Pilar complaining about trespassing, traffic, and noise from recreation activities near the village. Little was known about Pilar resident expectations of BLM's management of recreation or the effectiveness of current strategies to minimize impacts. If BLM was hearing only from a small number of Pilar and Embudo landowners near the river as suggested in a public comment letter by an outfitter (BLM 1998: v2:A-43), then what might be the nature of impacts or expectations, if any, of other Pilar residents? How was the community adjusting to recreation?

Methods

Data Collection

I conducted in-depth, face-to-face interviews to collect primary data. In order to obtain a complete record of each interview, I tape recorded them. Interviews promote rich data and the flexibility of "following up on interesting responses" (Robson 1993: 229). I kept questions open-ended which maximized the potential of discovering true perspectives of the respondents. Open-ended questions

"allow the interviewer to make a truer assessment of what the respondent really believes. Open-ended situations can also result in unexpected or unanticipated answers which may suggest hitherto unthought-of relationships or hypothesis" (Cohen and Manion 1989: 313).

An open-ended line of questioning together with a semi-structured protocol serves to permit additional or alternative propositions to emerge.

In addition to the interviews, I acquired meeting minutes from the Pilar Community Association (PCA) covering meetings held from October 14, 1985 through February 5, 1986 and from January 24, 1996 through September 8, 1998. Included with meeting minutes from PCA were a letter from the New Mexico Rafting Outfitters Association and a press release announcing the Pilar Studio Tour, an annual art event.

I also selected for analysis all public comment letters and public hearing testimony from Pilar residents responding to the 1998 Rio Grande Corridor Proposed Plan and Final Environmental Impact Statement. Seven Pilar residents commented on the proposed plan. I included a public comment letter from New Mexico Rafting Outfitters Association, and one from Rio Grande Restoration.

I engaged in participant observation of residents at the Pilar Yacht Club. "The fact that the observer is an observer is made clear to the group from the start" (Robson 1993:197). I had met most of the employees at the Pilar Yacht Club the previous summer and they knew me as an employee of the BLM. Other residents in Pilar were informed of my research at the July PCA meeting and/or by word of mouth. My role as an observer can be further explained by Babbie (1989): "The observer-as-participant is one who identifies himself or herself as a researcher and interacts with the participants in the social process but makes no pretense of actually being a participant" (266). I summarized four observations between late June and mid July.

Interview Sample Selection

I conducted a type of purposive sample called maximum variation sampling. My purpose was to gain a diversity of perspectives. Seidman suggests that the sample should be "illustrative but not exhaustive of the range of variations present in the population whose experience this researcher might want to understand" (1998: 46). He continues by defining this as 'sufficiency" (47), which is a criteria for determining when to stop sampling. Sufficiency has been reached when you can answer yes to the following question:

"Are there sufficient numbers to reflect the range of participants and sites that make up the population so that others outside the sample might have a chance to connect to the experiences of those in it?" (ibid).

I began my sample with key informants who advised me of residents who have similar or opposing opinions of my research subject. Each subsequent interview led me to the selection of the next participant. Robson (1993) refers to this method of selection as snowball sampling. After no new characteristics were indicated and I heard no new stories about the subject, I stopped collecting interview data. Rubin and Rubin (1995) identified this as the "saturation point". "When each additional interviewee adds little to what you've already learned, you stop adding new interviewees" (72). I interviewed a total of 15 residents and one non-resident between mid July and early September 2000.

Data Analysis

I followed a systematic process of coding in order to generate themes from the data and make interpretations about resident perceptions and adjustments by the village. Rubin and Rubin (1995) and Robson (1993) describe coding as a two-stage process. The first level involves marking and labeling text, and comparing data within categories. In the second level, material is compared across categories and connections or links between categories are

identified. The final analysis entails interpreting the data by generating themes or core categories that relate back to all categories. These techniques are similar to Strauss and Corbin's (1990) description of a grounded theory approach to data analysis where open coding corresponds to the first level of analysis, axial coding corresponds to the second level, and selective coding corresponds to the development of core categories or themes.

I began open coding by marking and labeling quotations from interview transcripts using a software program written by Thomas Muhr called Atlas.ti 4.1TM(1997). I labeled (assigned codes) using words or phrases that are either direct quotes or paraphrased ideas that synthesize a statement or meaning of a story. Data within categories can then be evaluated by their homogeneity or heterogeneity to determine how well they "dovetail' in a meaningful way"(Patton, 1990: 403). A benefit of Atlas.ti TM is that it allows a researcher to recall a complete list of labels or 'codes' giving a big picture in which to make comparisons, re-sort and/or rename. I printed all the quotations for each code to evaluate the meaning and assigned sub-categories to quotations sometimes using the original code as a broader category and other times assigning a new broad category. Sub-categories are specific examples of responses organized under broad categories. For example, under Historic Pride, sub-categories include: land ownership, *acequias*, length of family occupation, etc. By the third stage of comparing and resorting the coded quotations I had fully integrated into the appropriate categories.

"The analyst brings closure to the process when sources of information have been exhausted, when sets of categories have been saturated so that new sources lead to redundancy, when clear regularities have emerged that feel integrated, and when the analysis begins to "overextend" beyond the boundaries of the issues and concerns guiding the analysis" (Patton 1990: 404).

Finally, I began to identify relationships between broad categories, which I combined into core categories for interpretation.

I began sorting through observation summaries, meeting minutes, and public comments from letters and hearings by constructing a protocol for each with a word processing table. The protocols included generic categories such as document or observation number, date, time, attendance, residency status, meeting agenda, and issue. The content within the issue columns were initially open codes that I studied and compared using the same process used for interview transcripts but without using the Atlas.tiTM software.

In addition to coding, I used an iterative process Yin (1994) calls explanation building. "The gradual building of an explanation is similar to the process of refining a set of ideas, in which an important aspect is again to entertain other plausible or rival explanations" (111). He outlines the process as follows:

- •Making an initial theoretical statement or an initial proposition about policy or social behavior
- •Comparing the findings of an initial case against such a statement or proposition
- •Revising the statement or proposition
- •Comparing other details of the case against the revision
- •Again revising the statement or proposition
- •Comparing the revision to the facts of a second, third, or more cases
- •Repeating this process as many times as is needed (Yin 1994: 111).

I used explanation building in conjunction with triangulation. Within my case study I tested the initial results of one type of data with another. Triangulation is the use of multiple sources and methods of data collection for the purpose of improving the credibility, or internal validity, of a study (Robson 1993). Robson defines the advantages of triangulation.

"If two sources give the same messages then, to some extent, they cross-validate each other. If there is a discrepancy, its investigation may help in explaining the phenomenon of interest" (383).

After analyzing interview transcripts, comment letters, meeting minutes, and observations, I compared results of each against the initial propositions and revised the propositions as needed.

Finally, this single case study involves more than one unit of analysis. Pilar residents are subunits within the whole village. Yin (1994) provides examples that describe this as an embedded, single case design. "The subunits can often add significant opportunities for extensive analysis, enhancing the insights into the single case" (Yin 1994: 44). Throughout analysis and interpretation of results these referenced units will be given attention according to the initial propositions. Tables 1 and 2 below illustrate this design.

Table 1: Data Source and Units

	From Resident	From Organization	
About Resident	Resident Perceptions	Corridor Plan Comment Letters	
About Village	How village adjusts	Neighborhood Association	
	How residents interact	Minutes (PCA)	

Adaptated from Figure 3.5 (Yin 1994).

Table 2: Analysis by Unit and Proposition

Unit	Proposition		
Resident	Residents will identify impacts.		
	Residents believe that BLM should be involved in actions taken to adjust.		
Village	There will be distinctions in perceptions by group characteristics.		
	There is solidarity in actions taken to adjust.		

Validity

As well as triangulating, I took additional precautions to improve the soundness of this study. Three key informants were used as member checks of my preliminary interpretations. Robson (1993) suggests that agreement by members is the ultimate sign of successfully achieving credibility so long as they are not biased by some potential policy

outcome. Robson (1993) describes following an audit trail as a test to see that the "findings flow from the data" (406). Field notes, meeting minutes, interview tapes, coded transcriptions, interview protocol, and my original proposal would constitute an audit trail in my study.

Summary

I used a qualitative research approach to gain the context and detail of perceptions of Pilar residents about recreation and the BLM. It was both exploratory and explanatory in nature because I sought to answer questions of "what" about resident perceptions and "how" the village adjusts. This study was a single, embedded case study (Yin 1994) because it involved the analysis and explanation of "how" one village adjusts to phenomena and the analysis and description of "what" the perceptions are of many individuals embedded within the village.

In order to allow data to emerge, I used in-depth interviews but with a semi-structured format to guide conversations consistent with the subject matter or research questions. Likewise, my research propositions were emergent because I allowed them to be flexible to change depending on new concepts discovered or induced from interview transcripts, letters, minutes, and observations. I purposively interviewed key informants and utilized their familiarity with neighbors and other residents to select a snowball sample of subsequent interviewees with a maximum diversity of opinions. After all residents, typical of a particular opinion and identified by key informants, had been contacted I ended the collection of interview data.

I used explanation building to compare results with the initial propositions and between data collection methods. In this inductive process, the final results were

corroborated. Although my purpose is not to develop grounded theory, I used grounded theory techniques of coding to insure that the data was analyzed in a systematic and sound manner.

CHAPTER FOUR: FINDINGS

In this chapter I will characterize the results of data collection and analysis with narrative text and tables, and quotations from study participants. To protect the anonymity of participants, I've removed any identifying language patterns from quotations obtained in the interviews. In the tables I present the range of responses for a subject using subcategories.

Description of Social Groups

I've discovered that Pilar resident perceptions about recreation and the BLM can be characterized broadly according to social group or what I'm calling residency status. Responses among all participants were diverse but some distinct opinions and issues emerged from within three groups: newcomers, native Pilarians, and the boating community. For this study, I have defined native Pilarians as residents who state they are heirs of the Spanish land grantees, or residents married to grantee heirs. The boating community includes outfitters in Pilar, and recreation related business operators and employees. One nonresident is included in this group. Newcomers consist of everyone else who is not a native Pilarian or employed by the boating community. There is some overlap among these social groups. For example members of the boating community are newcomers as well. Variation by gender exists within the newcomer and boating community groups but both are entirely Anglo. On the other hand, the native Pilarian sample consists only of Spanish American and Native American males. Each time there was the potential to interview women from the native Pilarian group, the women either declined the interview at the outset or when they were present in an interview scheduled with their husband or father, they declined to speak and deferred to him. The consent form became a barrier for the women

who were already present in interviews. They offered information on occasion during the interview but declined, once again, when I asked them if they would like to participate and sign the consent form (Appendix B).

Perceptions of Recreation

My first objective was to characterize Pilar resident perceptions of recreation. I asked participants what they thought using general and open ended questions from my interview protocol. My research questions for this objective are listed below:

Research Question 1: What are perceptions of positive and negative impacts of recreation?

Resident Perceptions of Recreation Impacts

When I asked participants what they thought about recreation near Pilar they identified negative physical and socio-cultural impacts and economic benefits. Negative impacts were related to traffic, private property, the character of the community, and wildlife or the environment. With the exception of litter, the negative impacts were identified by native Pilarians and newcomers. Participants from the boating community acknowledged traffic and congestion and recognized a conflict between boaters and local anglers. A discussion of impacts identified follows in Table 3.

Table 3: Identification of Negative Recreation Impacts

Traffic	Private Property	Rural/ Cultural Values	Environment/ Wildlife	Boater/ Angler Conflicts
Noise	Broken fences	Loss of rurality	Riparian destruction	Fish won't bite
Bridge damage	Boaters changing clothes	Creates stress	Rafting affects fish spawning	Boats float over lines
Road damage	Human waste	Destroyed character	Rafting caused cut throat extinction	Boats scare
Congestion	Stolen fruit	Intrudes on life	Less abundance of wildlife	Too many people
Blocked roads	Trampled crops		Litter along 570	Fish less often
Parking	Trespass		Litter in brush along river	Can't get peace of mind
Speeding	Weir dam destruction		Litter/pollution	Changed fishing times
River right traffic				<u></u>

Perceptions from interview transcripts

Traffic

An increase in traffic volume is thought to be associated with the rapid growth of the rafting industry since around 1980. Some participants fondly remember when Highway 570 was still a dirt road. Paving the road was thought to facilitate speeding and intensify the danger of blind curves. Wear and tear of roads is attributed to recreation traffic and commuters coming from Carson. Participants considered noise to be caused by both road and river traffic. Before the quiet zone was established there were water fights on the Pilar segment, perhaps orchestrated to entertain boating passengers on this stretch of flat water. Bridge damage and more frequent traffic on neighborhood roads were identified as a consequence of seasonal rafting employees who pay rent to residents to encamp on river right. Boat trailers and buses have damaged a post and part of the railing while attempting to

negotiate the tight turning radius on one end of the bridge connecting the north and south sides of the village.

A high river flow in 1995 led boaters to portage at the bridge since it was not possible to safely float under it. Congestion resulted from parked vehicles and scattered boating equipment along the one-lane bridge and Highway 570, a narrow two-lane asphalt road with no shoulders or pull-outs. Residents were trapped on either side of the bridge waiting for people to move their rafts or vehicles. One resident got tired of waiting and simply drove over a raft that was lying on the bridge. Much of the portaging and vehicle parking was occurring on private property without prior agreement from the landowners.

"[T]hat came out in '95 because that's the year we had high water. We had 10,000 cfs on the Racecourse and had . . . 7,900 on the Taos Box and they couldn't get under the bridge in Pilar so they were walking down the road in Pilar [which] had traffic backed up. This had . . . the locals [upset]. . . understandably. And it was a disaster. [There] was a line of boats going down the road on the other side of the river. . . . There was a lot of noise and confusion going on. It was the busiest year they ever had as far as rafting goes and the community of Pilar was impacted. That was the year the Pilar Action Committee was formed and the quiet zones were enforced" (boating community).

Parking was also referred to as a current problem in terms of unauthorized parking along roads and private property. The café and Big River Rafting Company are positioned at either side of Highway 570. When both parking lots are full, visibility out onto Highway 68 is obstructed.

Private Property

In any given year boaters were stopping on private property to relieve themselves and sometimes "... grown men in front of little old ladies", (according to one respondent) were changing from street clothes to paddling gear. Boaters were trampling crops and

climbing fences to pick fruit. One year rocks from the weir dam were removed by boaters to enhance channel maneuverability.

Rural/Cultural Values

Interview respondents describe the village in terms of its physical and social qualities.

Some newcomers and native Pilarians suggest that recreation has changed the once quiet character of the community, creates stress, and intrudes on life.

"[B]asically this used to be a small, sleepy community. We live and some people work here. It's the same thing to us. They come through... and enjoy themselves and many times it's interfering with people's lives in the community" (newcomer).

Environment and Wildlife

Litter was identified as a problem by all but five interview respondents. Local fisherman, rafters, and recreation visitors were all blamed for littering.

"Fisherman have almost by tradition garbaged that river ... [P]rivate rafters. .. have done the same thing in the past but ... the entire rafting industry ha[s] been ... tipped off that better manners are a necessity and ... things have improved ... "(newcomer).

"I know who is leaving it there [be]cause you'll see folks fishing. I'm not sure where they're from. Not villagers though. . . And we clean it up. . . . we see something and . . . we stop and pick it up. Especially glass. And during the summer season there's more than you would want to see. I think it's . . . local people . . . from Taos but not Pilar" (boating community).

Some residents said they pick up litter 'in the park' (Orilla Verde Recreation Area). Others have stopped trying to pick it up because the problem seems overwhelming. Turnout for outfitter organized clean up days has been low. Still others said that it should be BLM's responsibility to clean it up.

Native Pilarians and newcomers expressed concern and value for wildlife.

They noted a reduced frequency in sighting bear, big game, trout, bobcats, crane,

eagle, frogs, kingfisher, and rattlesnakes. Frogs were frequently listed as rarely seen.

Some worry that at low cfs, boating will destroy fish reds in the riverbed and think boating reduces reproductive success for trout and frogs.

"I've been telling BLM for example in November and October the fish are spawning. They're still rafting and those fish lay their eggs - and that river's so low - You have a raft coming down - They're going to dig all those eggs and kill the fish cause they don't understand. . But it's killing a lot of the wildlife. [W]e used to have those big frogs and we don't have any more of those frogs" (native Pilarian).

Boater/Angler Conflicts

A participant from the boating community did not understand why local anglers would find an inquiry about their fishing success offensive.

"But a lot of those things just create bad feelings . . . when you're rafting you don't float by a fisherman/woman and say — 'are you catching anything?' [be]cause they tend to get - even though you do that everywhere else in the world and it's considered friendly - people fishing might not think you're so friendly. They might take offense to it. You just kinda smile and wave. . . You have to keep your distance a little bit more" (boating community).

But according to the responses I received, native Pilarians perceive that boaters are directly responsible for their success at catching a fish as well as other desired goals of the experience.

"They didn't go there and then rafters. You're not going to catch anything. You could have your line right here and the river's wide enough, they still have to go right where you have your line" (native Pilarian).

The issue between anglers and boaters may at first appear simple and harmless but when the multifaceted interaction between these groups in Pilar is taken into account, it is in reality fairly complex. Jacob and Schreyer (1980) define conflict as "goal interference attributed to another's behavior" (369). In this case, by floating over fishing lines boaters are blamed for interfering with native Pilarians' fishing

success. During my fieldwork, I heard a boater's perspective on this issue. The person heard and understood the objection by native Pilarians, but said that most of the time boaters couldn't help where they positioned their boats because the channel becomes increasingly narrow with decreasing stream flow. Another boater reminded me that the width of the river in the Orilla Verde and Pilar segments is itself relatively narrow so that when there are anglers staggered on either side of the river, it's impossible to avoid floating over lines.

Additionally, if boaters are not disturbed by anglers, the situation may be further described by what Adelman, Heberlein, and Bonnicksen (1982) term 'asymetric antipathy'. This is a one-way relationship whereby one group dislikes meeting another. However, the second group (in this case the boaters) is either neutral or positive toward meeting the first group (the anglers). In their study of paddling canoeists and motorcraft users in the Boundary Waters Canoe Area (BWCA), Adelman et. al. (1982) found results supporting several explanations for this type of conflict. Paddlers and motorboaters had different goals, perceptions of the setting, and awareness of conflicts. Paddlers expected the BWCA to be managed as a wilderness and went there to be alone and experience solitude. The mere presence of motorized users was not perceived by paddlers as appropriate in a wilderness setting. Motorboating goals were not influenced by paddling goals but paddlers were disturbed by noise and, they felt that motorboats got in their way when fishing and portaging (ibid.).

In addition to catching fish, local anglers may be looking for an opportunity to experience solitude.

"They can't fish that river anymore [be]cause they want to be there when nobody comes - Forget about everything. Have peace of mind. Well, I don't even go fishing there anymore. Hardly . . . this year, I went three or four times. Late in the afternoon they don't do that much rafting or you might have to go early in the morning so you don't see the rafters" (native Pilarian).

The angler fishes less often or at difference times of the day because he has trouble catching fish and experiencing solitude. In the recreation literature researchers would define this situation as displacement resulting from conflict and crowding. Shelby, Bregenzer, and Johnson (1988) explain that when recreationists are displaced, they may leave or go somewhere else when they feel crowded. This native Pilarian has also used a temporal substitution strategy by changing the time of day he fishes to avoid contact with boaters (Brunson and Shelby 1993).

Opportunities for solitude is a social goal expected in wilderness areas or primitive settings. Managers and researchers measure crowding in different types of settings by determining the socially unacceptable number of encounters. The maximum number of acceptable encounters is then used as a standard for social carrying capacity. From this local angler's perception, the setting in Orilla Verde has shifted from an area with opportunities to experience solitude to one of high intensity use.

Economic Benefits

The benefits of recreation were identified as: benefits to society, direct profits to outfitters, and indirect economic benefits to other residents in the form of rent and wages. I heard criticism among some native Pilarians and newcomers about the equity of economic

benefits versus negative social and physical impacts. Although they recognize that there are indirect benefits from the rafting industry to some residents, they still perceive an imbalance between negative impacts to residents and the village and economic benefits to the boating community. The situation was repeatedly phrased as, 'the impacts outweigh economic benefits' or 'the community doesn't benefit'.

"What I'm really telling you is - They're making a profit and this community [is not] getting [any]thing but all the problems" (native Pilarian).

"What are the benefits? It's created some business. But for the rest of the people it was – [it] created a few jobs for a few Pilarians there but most of - I think not very many people benefited in Pilar. They had more of the disadvantages of the traffic, the nuisance that . . . tourists brought" (newcomer).

"Well, . . . recreation. . . is good for my business. As far as the community goes, it doesn't necessarily benefit the community. There's a few dollars that are brought in but as a whole I wouldn't say that recreation has benefited Pilar . . ." (boating community).

Responses by members of the boating community to this argument have been that they are not 'getting rich' and they explain that their profits are marginal due to competition, climate conditions, and business expenses. I would interpret this to mean they don't favor limits because that threatens their hard-earned income.

"It's [difficult because] there's not unlimited economic opportunity in this business. And . . . there are more and more demands on us now. The cost of . . . insurance is higher. The cost of the New Mexico Department of Labor because we're a seasonal business; the changes that they've made in their rates ha[ve] really affected us. . . . And. . . this year the cost of gas oline went up. . . It's just harder and harder to maintain a margin. . . in this business. So it's really a difficult business to try to make a living in. And . . . you're subject to whatever the climate. . . and the agricultural irrigators upstream decide to do" (boating community).

"I don't think [a business] could [exist without recreation] anymore. Just with the cost of - Yeah 50 years ago when you didn't have to have a thousand kinds of insurance. Just everything and the cost of property. . .[If] your grand dad built it and you didn't have a mortgage,. . . you could just make \$20 a day or \$50 a day but it's just not reality anymore" (boating community).

"I think the issue is seeing money being made when you're...for a lot of... local people who have been here all their lives, living in a poor state, seeing all this money coming in and - Not that they want part of it but that it's... in their backyard and being powerless over it. And while you're struggling and you're angry about struggling, the perception is that the companies are just raking in the money like crazy no matter what - which isn't a true perception but that's the perception" (boating community).

Impacts Identified from Document Analysis

The Pilar Action Committee was formed in 1985 for the purpose of dealing with issues associated with the growth in the rafting industry near Pilar. In 1997 the Pilar Action Committee was approved for status as a neighborhood association in Taos County after about a year of organizing and decision making regarding a mission statement, goals and objectives, and bylaws. At that time, the group name changed to the Pilar Community Association.

My analysis of PCA meeting minutes from meetings that occurred in 1985 and 1986 and 1996 through 1998 revealed that most of the same impacts were identified. A total of 72 residents attended at least one PCA meeting. Native Pilarians discussed traffic, litter, intrusion on a way of life, and concerns for wildlife health. And newcomers identified displacement of anglers and reduced fish stocks. At least one member from each group identified a lack of economic benefits to the village. And a member of the boating community suggested the village should receive a percentage of profits from commercial rafting trips.

In public hearings for the Rio Grande Corridor Plan, native Pilarians repeated their concerns about respect for private property, litter, traffic, and wildlife.

Community Description and Adjustment

My second research objective was to describe how Pilar as a community adjusts to tourism and recreation. My research questions for this objective are listed below.

Research Question 2.1: How has recreation affected the community?

Research Question 2.2: What is the solidarity in forms of adjustment to recreation?

Values both Common and Diverse

Concern was expressed for certain values in association with recreation limits, litter, a free park pass, and observations of a decline in the abundance of various wildlife species. A majority of respondents are concerned about protecting the environment, the river, and wildlife. In interviews newcomers and native Pilarians expressed concern for the health and abundance of bear, big game, trout, bobcats, crane, eagle, nesting birds, frogs, kingfisher, and rattlesnakes.

It may appear from interview data that members of the boating community in Pilar do not care as much about the river or wildlife. However, document analysis yielded somewhat different results. Members of the Pilar boating community expressed their values at the Dixon and Taos hearings and in comment letters on the BLM Rio Grande Corridor Plan. Rio Grande Restoration, a group founded and directed by an outfitter in Pilar, promotes the health of the river through education, collaboration, and restoration projects (Rio Grande Restoration 2001). The mission of Rio Grande Restoration is: "To foster the return of the Rio Grande to health by supplying an improved flow regime of high quality water" (American Rivers 2001). The Rio Grande was listed as the seventh most endangered river in the year 2000 by American Rivers, a nonprofit river protection organization (American Rivers 2001).

(ibid.). The result of such heavy demand has put the survival of the cottonwood bosque (forest) at risk. The Rio Grande silvery minnow and western willow flycatcher, also at risk, are listed to receive federal protection as endangered species. An Enhanced Streamflow Alternative was proposed for the BLM Rio Grande Corridor Plan by Rio Grande Restoration as a method to protect habitat as well as enhance recreation opportunities. The group believes that, by adjusting the timing of flows released from the Closed Basin Project, streambed desiccation can be avoided and adequate cfs levels maintained for recreational boating, fishing, and swimming.

Boating Community Values

Members of the boating community explained that they are dependent on recreation.

"It's a positive thing. It's a positive force up til now. This far – it's perfect. It's not overpopulated. There is a good amount between locals and tourists. We need recreation because there is no other industry" (boating community).

"There would[n't be] anything that would exist without the recreation. I don't know if that's a good thing. Maybe it just depends on your point of view" (boating community).

Outfitters for the Rio Chama and Rio Grande have formed the New Mexico River
Outfitters Association (NMROA) to rally around their common interests. In their
letter of protest to the EIS for the Rio Grande Corridor Plan against seasonal
restrictions, NMROA defined their value system regarding the river.

"To NMROA rafting is a way of life and a source of inspiration, one that we value deeply. The owners, operators and guides on the Rio Grande arrive at this lifestyle by a commitment to preserving a natural resource and a love for the river" (NMROA 1998).

Native Pilarian Values

Native Pilarians are most proud of their connection to the land in Pilar, the acequia system, and the church. They repeatedly spoke of the land they own, land they have sold or subdivided, and the commons that were taken into public domain and are currently managed by BLM.

"It's over here in Taos. The Weimer's and everything. Everybody wanted to take care of it. That land grant belongs to the Spanish people. They're still fighting for it. I'm glad that one of these days they'll get it' (native Pilarian).

They told stories about how long their families and their people had occupied the land.

"My family has lived in these valleys in excess of 400 years. Some of my family is Ute Indian also . . . My great, great grandfather was a full blooded Ute. My dad is 1/8 Ute" (native Pilarian).

"There's Indians, Apaches and Utes that used to live here. And all my ancestors were Apaches and Utes. They're from this village here and all this area was [theirs] at one time before BLM ever thought of taking over and the people of the United States became a country. This country was here. These people . . . [are] . . . still here. [They]'ll never move from here" (native Pilarian).

Native Pilarians view the acequia system and church as an important part of their culture. They view their role in maintaining the operation of both as a central part of the community, and as an aspect of their personal identity and ownership in the area.

"Cause the acequias. The water that I have. The church. The cemetery. They belong to my family. That's why I'm strong. And nobody can take it away. Nobody can" (native Pilarian).

Water Conditions

Three issues emerged related to instream flow conditions: the quality of the recreation experience, trespass, and fish habitat. Native Pilarians and newcomers are curious about the effect of low cfs on commercial passengers. They also think that boats could be destroying spawning reds when boats scrape across the riverbed.

"[R]ight now they shouldn't even be rafting that river. The river is so low. It's been low since April and they've been rafting that river all along. In my opinion they're just destroying the whole land underneath the river. They're just walking the river" (native Pilarian).

In a PCA meeting a member of the boating community said he thought there should be a minimum cfs restriction on boating. And a native Pilarian called for a minimum cfs restriction in a public hearing. In addition, they cautioned that in Pilar the riverbed is private property and when boaters get out of the boat and stand up, they are consequently trespassing. Because county records show property lines extending to the center of the river, landowners contend that the riverbed is privately owned. This issue has not been legally challenged in Pilar. However, through the BLM planning process, outfitters and residents agreed that except for emergency purposes, there could be no stopping in the village. This has restricted boaters from having picnics or lunch on sand bars in Pilar.

Another issue concerning water conditions has to do with higher than average river flows, such as occurred in 1995.

"It's not high enough when the water does get high for boats to go under. And because of the experience when they did let them portage and all the mess that went on, people don't want to allow the portage to happen. So, that means that the boating community needs to get out of the river back in the park and then put back in down at Quartzite" (boating community).

Collaboration between outfitters, BLM, and the village of Pilar was proposed for efforts to build a higher bridge.

During the summer of 2000 the water level was so low that the Taos Box upstream of the lower gorge was not safe to navigate from May through the remainder of the boating season. As the flow gets lower and lower, guides rely on their water reading skills to pinpoint the best maneuverable course of the stream channel. There were some spots on the Racecourse segment downstream of Pilar, where the water was so low, guides found it

necessary to stop and portage around rocks. Average daily streamflow downstream of Taos Junction Bridge ranged from a high of 398 cfs to a low of 172 cfs between May 15 and September 6, 2000. Native Pilarians think that rafting customers should be charged less if they come seeking a whitewater experience during low water or that they should be informed of river conditions before being sold a ticket.

"They['re] taking people for a ride [be]cause it's not even fun. They should have a season where the water should be running at so many cubic feet per second" (native Pilarian).

"They [have] pictures of these guys rafting and getting all wet but they don't have pictures of a guy picking up a boat around the rocks (native Pilarian).

[I]his is . . . taking these peoples' money. I don't know how much they're charging them. I hope it's only \$5 a trip because if they have to pick up the boat and go around the rocks. . . ., that's bad for the state. I would go back to . . . wherever I came from and tell them, 'You know what, they charged me \$50 for picking up the boat.' . . When the water's low, tell the people" (native Pilarian).

Some respondents from the boating community argue that residents don't have any business worrying about the quality of a rafting customer's experience.

Members of the boating community are confident that customers are happy with their trips. I asked one of the outfitters about the issue and he told me that they do inform customers of the water conditions. Another member of the boating community says that customers are satisfied.

"And the reactions we get . . . Everybody's happy. Usually the people that want a different trip, they don't book in the first place. . . They just won't go, which is good" (boating community).

Character of the Community

Overall, interview respondents used terms such as 'remote', 'peaceful', and 'undeveloped' to describe their community as rural. Interview respondents described the community as culturally diverse because it includes 'artists', 'old

Spanish families' and 'Anglos'. Respondents from the boating community note changes to the village. With each generation of Spanish American families, land is subdivided, sometimes with the addition of houses and fences. And, gradually, more Anglos have moved in.

Respondents from both the boating community and newcomer groups have the perception that many people in the area are poor. This may be because of the remote location, high cost of living, and because, in the spirit of neighborly hospitality, some people in the surrounding area barter services.

Some respondents from the boating community explain that, although recreation is a difficult industry in which to earn a livelihood, they consider living in such a beautiful area a great source of wealth.

Observations at the Pilar Yacht Club also revealed details of group interaction between the boating community and native Pilarians. The Pilar Yacht Club, referred to as the 'café' and touted as the "Whitewater Capitol of New Mexico", has a relaxed and informal atmosphere. On one hand it's a place where friends can hang out on the porch, leave messages for each other, or meet to go hiking. On the other hand it's at the center of a business cluster where tourists can book a rafting trip, purchase rafting photos, or browse local artwork. The café is most frequently occupied by seasonal and permanent residents of the boating community, newcomer artists, and commercial passengers from rafting trips.

Group Perceptions, Trust Deficiency, and Community Division

Conflicts in the community are predominately between the native Pilarians and the boating community. Native Pilarians view the boating community as outsiders.

"Interlopers are these guys that come in and stay for . . . a couple of seasons and then they leave. . . . they come and go all the time . . . Those are all interlopers that come here for only one purpose and that's for [making money]. They come here when it's summertime and in the wintertime they take off and go back . . . "(native Pilarian).

Native Pilarians feel they have little or no control over what happens in their community and don't believe that the boating community cares about the welfare of the village. Both groups identified conflicts.

"Consequently when people would tell them they were on private property, they kind of made people a bit perturbed and there were shouting matches and threats . . . "(native Pilarian).

"Like I said earlier, there has been an instance when obnoxious river guides have yelled obscenities back at the locals who were being maybe a little pushy" (boating community).

"He used to get so irritated that he would scream to [the boaters] that he would blow them out of the water. He would shoot them" (newcomer).

Native Pilarians in general don't trust the boating community. Native Pilarians feel that members of the boating community 'do not care about Pilar', they favor 'money over the environment', and they have a 'lack of respect' for residents and private property.

"They never cared. Just started making money right away. Bad attitudes and no respect for private land" (native Pilarian).

"Yeah, well there's differences... because tourism is just people that [are] in here to make money. It's a business for them... And they don't care what they step on or who they step on. You go down here and you see a thousand boats coming down... when it's good. They don't care about the [wildlife] and all the little animals that live around there. They don't care about nothing" (native Pilarian).

"They find a place that they can make money and that's all they think about is - Money, money, money. They don't care about the local people . . . They'll just come here and use the resource and then take off . . . "(native Pilarian).

Respondents from the newcomer and boating community groups commented on a 'lack of respect' from outfitters and guides.

"And I've discovered that a number of these rafting people . . .not all of them for sure because there is some of them that I really don't like at all. They are rude and inconsiderate. But there's others that are very nice. . . "(newcomer).

One member of the boating community thought that some small incidents get blown out of proportion because of a lingering resentment of outfitters. This person felt that property owners are still upset about past property damage because outfitters have not apologized or offered to fix past damage.

"I think the industry lacks appreciation of where they're doing business" (boating community).

In participant observations at the café members from the boating community informed me that some residents are still 'angry', 'vent at meetings', and 'don't like boaters even though they earn indirect benefits'. Some native Pilarians earn income from rent and wages from members of the boating industry.

Car Clouting

For years, vehicles parked at boat launch/landing sites in Orilla Verde have been broken into. Throughout the busy summer seasons since around 1989 (Sundin 2001), there have been car break-ins at the BLM Rio Grande Gorge Visitor Center parking lot, at major launch/landing sites, and at Highway 68 pull-outs where kayakers park to surf rapids. The thieves usually break a window and grab whatever valuables they can find. Sometimes thieves dump what they don't want along the highway. The BLM law enforcement rangers and New Mexico State Police officers have not been able to determine who is responsible for these thefts. Boating community members as well as native Pilarians recounted periodic car clouting incidents. Respondents from the boating community commented that they worry about their own vehicles being the target of thieves and that whomever is responsible is savvy to rafting schedules and may be from the surrounding area. Rafting trips usually

begin in the morning at 10:00 and in the afternoon at 1:00, and visitors are brought back to their vehicles from a shuttle by 5pm.

Other comments from boating community respondents were that kids may steal from rafters because of conflicts their parents may have had with rafters. A boating community member suggested that customers of outfitters who get along with residents don't become targets of car clouters. One native Pilarian speculated that break-ins were a BLM backlash for the way they were handling recreation and tourism in the area. On the other hand both boating community and native Pilarian respondents expressed disbelief that local Pilarians would be accused. They think that heroin addicts from the Espanola/Chimayo area are responsible. After a big drug bust occurred in that area this year, the perception was that break-ins stopped.

"They say a lot of people go in there and steal from the rafters and every time that they steal something from the rafters, it always comes down to the community. . .the local people that are stealing from them" (native Pilarian).

"[T]here were starting to be some break-ins at the beginning of the season and... observed culprits breaking in his car while he'd gone down to surf his kayak at Karmic Wave and came back here are these guys... had the earmarks of junkies. They were smoking, ... emaciated looking... menacing. And as it turned out they were from that area from ... Espanola because he got their license number... and then I think the state police... actually made a bust on some people too... they were from Espanola, Chimayo... "(boating community).

One of the key informants from the boating community, that I used as a member check, informed me that the car clouting gang was finally arrested. They turned out to be Anglo youths from Taos.

Compensation

Compensation is one avenue for recovering a loss or repairing damage. A majority of native Pilarians and at least one member of the boating community and one newcomer

had suggestions for how to compensate for the perceived inequity of negative impacts and economic benefits. They feel that either BLM or outfitters should compensate the village for the impacts associated with recreation. Five different suggestions were offered: a free pass to use the Orilla Verde recreation area for Pilar residents, some type of fee paid per boating passenger to the village, guide training for local youth, an annual fee from business operators for college scholarships, and increased involvement and leadership from BLM with planning facilities such as bridge replacement, and community center and fire station funding.

"If its commercial - If you bring a lot of commercial [recreation] in here- it's pretty rough. But they should help the community. They should donate so much time or something or monies that'll help the community plus BLM. Commercial. Just taking money and using the road. They use the road and they use the ramps and all they do is use. And they collect. So, if they like to use some of this stuff, let's help us take care of it. Help take care of the road. Help take care of the trash. Help donate the money to pay kids to clean the area" (native Pilarian).

"Possibly BLM can donate some land for a community center for all the revenues that are coming their way so that the community has something to show for being used" (newcomer).

"But I think somehow there should be a financial return for the Community Association of Pilar from it. If there was a direct financial benefit helping the village do the things it wants to do to better itself, I think people would really feel differently about rafting. Just something really concrete that was like from the companies to the village saying we appreciate being able to do business here. The problem is . . . that nobody is raking in the money so at the end of the year you're looking at your checkbook and you're going I can't cough up a \$100" (boating community).

"Maybe they need to create jobs that would allow people in the community to take advantage. They say they're not trained. I said well that gives them the opportunity to create training so people can take advantage of being a part of it. Because if people understand what's going on or they feel that they are a part of something, they're not as apprehensive as they are when it's just there but they're not actually a part of it" (native Pilarian).

Local teens do not appear to be interested in employment in the boating industry. A member of the boating community believes there may be cultural differences that influence low involvement in boating by Hispanics. This person told the boating community member a story about some minority kid's feedback on a local youth program.

"And she took the kids boating and they were all like well - None of our people do that - We're not really interested in it. And she saw that as a problem. Everybody that she was [referring] to as an example [of] boat[ing] was white - and [the kids] were all Hispanic or Indian" (boating community).

Researchers have found differences in recreation participation between Anglos and Hispanics (Hutchison, Ray and Fidel 1984, Baas, Ewert and Chavez 1993, Floyd and Gramann 1993). For example, in Chicago public parks, Mexican-Americans were more likely to engage in stationary activities such as picnicking and sports activities such as baseball (Hutchison and Fidel 1984). Hutchison and Fidel (1984) shared similar findings with Baas, Ewert and Chavez's (1993) study of recreationists at a site in the Mojave Desert. Results of both studies indicate that Hispanics tend to prefer recreating in family groups. Floyd and Grammen (1993) caution recreation planners that not all Mexican-Americans are alike in terms of their preference for recreation activities. They defined three levels of acculturation and structural assimilation to determine the effect on Mexican-American participation in various activities with that of Anglos. English comprehension was used to measure acculturation and level of interaction with Anglos was used as a measure of structural assimilation. Their results suggest that the most assimilated and acculturated Mexican-Americans are the most likely to participate in water and snow-based recreation at least as often as Anglos (ibid.). An interesting side note was that even less assimilated Mexican-Americans exceeded Anglos in their participation in fishing, tent camping, and use of off road vehicles (ibid.).

Among the boating community, outfitters have a corresponding awareness that they are resented and possibly not welcome.

"[I]hey associate the BLM with ... "... let the river guides do [what they want]" and then... "[they think] the river guides and BLM are in cahoots" [which made them] hate us... more. Again, that's my...theory" (boating community).

Members of the boating community have been the target of native Pilarian kids throwing rocks and bottles at boats. They've heard native Pilarians complain about recreation, and about Americans and the BLM taking their land grant commons. In a public hearing one of the outfitters testified that although he had been running the Rio Grande and living in Pilar for many years, he wasn't sure that he was considered part of the community (USDI 1998). Acknowledging a lingering resentment, he explained that outfitters are not to blame for the loss of the land grant commons (ibid.).

One member of the boating community explained that confrontations occurred primarily in 1992 and began to taper off in 1995 and the following years. The same boating community member is somewhat surprised and disappointed that residents of the village has not acknowledged sincere efforts by the boating community to understand concerns and mitigate impacts. For example, the outfitters gave \$2,000 to the PCA in 1995 specifically for the bridge in Pilar as a gesture of goodwill, initially the quiet zone was voluntary, and outfitters have cleaned debris from around the bridge to improve safety.

Participation

During my interviews, one of the perceptions that frequently surfaced by both native Pilarians and the boating community was the level of participation by native Pilarians in solving recreation related problems. Research respondents indicated that they think native Pilarians 'participate less', are 'mostly neutral', 'some are apathetic', and that the 'older ones

don't care' about recreation or boating. However, I found that native Pilarian attendance at PCA meetings and involvement in various types of community activities doesn't support this perception (Table 4).

"The ones that really rail against [recreation], they always speak up. But then there's a lot of people who just . . . don't really say anything. My impression is that they're more the neutral types that [feel things] . . . should [be] regulate[d] it but it doesn't bother [them] that much. They don't have that much to say about it. They seem to me to be the majority of the residents" (boating community).

Table 4: Participation by Residency Status

0.	Private Private State Control	Designation
Status	Attendance	Participation
Native Pilarians	23 attended	Attended county commission meeting
	9 meetings on average	Hosted meetings
	min. of 1	Guards dump
	max. of 31	Non profit committee
	2 relocated	Offered fire training
		PCA officer
		Pilar Days
		Studio tour
		Task force rep.
Newcomers	41 attended	Attended county commission meeting
	3.5 meetings on average	Christmas mass party
	min. of 1	Farmer's Market
	max. of 29	Fund raising
	17 relocated	Hosted meetings
		Non profit committee
		Offered to lead letter writing campaign
		PCA officer
•		Pilar Days
		Recycling committee
•		Studio tour
		Task force rep
Boating	7 attended	Attended county commission meeting
Community	4 meetings on average	Education, history and etiquette
·	min. of 1	Fund raising
	max. of 14	Hosted meeting
	1 relocated	Refreshments
		Non profit committee
		Offered to write grants for rec. facilities
		PCA officer
		Pilar Days
		No trespassing signs
		Recycling committee
		Support for emergency services
		Studio tour
		Studio tour

Data from PCA meeting minutes.

n=36 meetings and 72 residents

While each group appears to have about the same level of involvement in the community, some native Pilarians and at least one newcomer feel underrepresented in the PCA. These respondents say they participate less because they perceive a high proportion of boating community members involved in the Pilar Community Association.

"...and then all the other people that are there they work for the rafters. They're gonna do whatever they want. Most of them are either employed by the rafters or they have a business..." (native Pilarian).

Feeling outnumbered, native Pilarians and a newcomer expressed resignation about not regaining their sleepy little village.

"Well, everybody had everything for a while. And then everybody just give up. I mean they were old people... The old people let go. I guess I just give up sometimes." (native Pilarian).

"I quit fighting with them and made friends with them and I think highly of some of them" (newcomer).

One native Pilarian respondent who has been active in PCA explained that although native Pilarians attend PCA meetings, he thinks they speak out less often. He thinks they repress their views because they don't see results fast enough so they don't think it does any good. Another native Pilarian leader says he speaks for others like him in the meetings.

And one of the women I tried to schedule an interview with deferred to this same individual. She asked if I had met with him and indicated that he represented her views.

"Well, they try to pay some of their dues and stuff like that but I don't know [if] they're intimidated or what the problem is. They don't really bring up a lot of stuff when it comes time to bring it up to the BLM. And I'm not saying I represent all of them but I know I represent a lot of their concerns" (native Pilarian).

In meetings native Pilarian PCA officers frequently make a call for residents to participate so the community may have an effective and unified voice. They have asked PCA attendees to write letters to legislators, and attend hearings and issue written comments on BLM plans. Besides discussing issues regarding recreation and boating, the PCA is the

maintenance, and community services and facilities. On top of steps taken to organize the PCA, residents have been making slow but steady progress to implement the following municipal facilities and services for the village: a recycling program, a garbage disposal program, an emergency response system, a neighborhood watch, gas service, a fire station, a community center, and a baseball field. The PCA has been successful in coordinating with the BLM and New Mexico Highway Department to improve the Hwy. 570/68 intersection. They have also successfully collaborated with the BLM to prevent the operation of a copper mine near Pilar. They are still trying to raise money and negotiate a land exchange with the BLM for the community center, ball field, and fire station.

Resident Perceptions of BLM

My third objective was to characterize Pilar resident expectations of BLM in dealing with recreation and/or tourism. My research questions for this objective are listed below.

Research Question 3.1: What are perceptions of BLM recreation related policies?

Research Question 3.2: What are the perceptions of BLM's role in minimizing negative recreation impacts?

Research Questions 3.3: What are recreation impacts that have not been addressed?

Perceptions of BLM Recreation Policies

In 1995 efforts were made to address the impacts associated with traffic and private property. At that time BLM had started work on an environmental assessment for a Rio Grande Corridor Plan and Pilar residents renewed their involvement in the Pilar Action Committee to create a unified voice for recognition of their interests. One result of the BLM planning process was agreement by Pilar residents, outfitters, and the BLM to implement two policies intended to balance the competing interests of residents, boaters,

and BLM (representing the visiting public). The outfitter idea of a quiet zone was adopted as well as trip limits and restrictions on the number of passengers allowed through the Pilar segment.

Trip Limits

Recreation use is monitored on the Pilar segment to track the effectiveness of trip limits and the quiet zone. This also facilitates enforcement. Volunteers at launch/landing locations along the river count boat passengers on representative weekday and weekend days. The counts are then used to calculate an estimate for the year at various sites. The intent is also to use the data to determine if the allocation for private use on the Pilar segment is exceeded. If use exceeds this limit, a decision regarding the use of additional management strategies would be needed. River rangers also conduct spot checks to ensure that commercial outfitters comply with restrictions on daily passenger counts and other stipulations of their special use permits. In addition, outfitters submit monthly trip logs that are recorded in a database and then used to analyze trends and make decisions on future river management and boating allocations. Outfitter trip logs are recorded in a database and passenger numbers are checked against daily limits for each segment. Launching, time of passage through the village, and the number of trips and passengers allowed per day are all restricted on the Pilar segment.

A diversity of Pilar residents have spoken against the presence of too many boaters in the village at PCA meetings, at public hearings, and in interviews. At least one newcomer expressed his opinion in a PCA meeting that there were too many boaters in the village back in 1985. In PCA meetings members from the boating community and newcomers favored limiting the number of visitors through Pilar.

Overall, limits are favored most by the native Pilarians, who want seasonal restrictions on boating to enhance their fishing opportunities and as an annual reprieve from boaters. Although commercial rafting is officially shut down on the Pilar segment from Labor Day to Memorial Day, some native Pilarian respondents specified that they want private boaters restricted during this time period as well. Some do not want boating allowed through the village at all. One boating community member stated that limits in Pilar are satisfactory. The boating community respondents would like to bolster economic opportunities by providing additional recreation services. However, while some native Pilarians have come to accept current visitation levels, most want to get a handle on growth of the recreation industry so that it doesn't get out of control and take over the village. A suggestion by a boating community respondent is to charge private boaters to help offset impacts and control use.

In public hearings and comment letters, the boating community expressed opposition for seasonal restrictions, historic use allocation, and attrition. Two outfitters and the New Mexico River Outfitters Association (NMROA), via an endorsed letter, rejected seasonal restrictions because of the resulting income loss. The BLM plans to reduce the number of commercial permits on the Rio Grande from 17 to ten in order to limit use and maintain economic opportunity for outfitters at the same time. If outfitters go out of business or lose their permit, a new permit will not be awarded in its place. No new permits will be awarded until there are only nine operating permits remaining. Among outfitters, two opposing opinions exist. One view holds that more permits with use limits would negatively affect business profits and the quality of river trips. The opposite view holds that attrition will reduce revenue and halt growth for outfitters and related businesses. This argument

posits that attrition will limit competition and hence enhance trip quality. One outfitter rejects historic use allocation because it would have put him out of business.

Outfitters repeatedly gave accounts of the consequent loss in economic growth opportunities. NMROA outlined the average cost of a lower gorge day trip to illustrate their low profit margin and the effect that the plan would have if implemented. A respondent from the boating community acknowledged the value of limits when stream flow is high and boaters need to portage at the bridge.

BLM's Allocation Policy

The BLM's managers and recreation planners are guided by broad policy statements and objectives outlined in *Recreation 2000: A Strategic Plan* (USDI 2000). The plan outlines the BLM's responsibility and the challenge of meeting the overwhelming growth in recreation demand on public lands. Fourteen policies give direction on the delivery of recreation opportunities. The main thrust throughout the listed recreation policies is to provide a diversity of high quality resource dependent recreation opportunities and experiences. Resource managers can use a variety of direct and indirect tools to minimize conflict and crowding that negatively impact recreation experiences and resource conditions. Education and interpretation programs are indirect management techniques used to change visitor behavior. When these fail to resolve issues or meet objectives, more direct action is taken in the form of enforced regulations and rationing of use. Recreation managers must allocate use when conditions such as user conflicts or conflicts with adjacent landowners occur (USDI 1987).

Options for rationing the allocated limit include, but are not limited to, a lottery, historic use, competitive system, and/or a common pool. A lottery is a random drawing.

Historic use is determined by the "average of the highest two seasons in the preceding 5-year period" (II-2). A competitive ration is ranked by the highest scores of "a). financial capability, b). management experience c). employee's experience, d). safety experience and training, e). previous performance f). type and condition of equipment, and g). ability to meet desired user service needs, and others as appropriate" (II-3). A common pool is an adjustment of use during the season whereby if one permittee doesn't use all of their allocation they can return it to the pool for reallocation to others (ibid.). Factors considered in the allocation are expected growth in demand over the 15 year planning period, quality of the experience, community values, and economic opportunity.

A split allocation between private boaters and commercial outfitters limits use on the Pilar segment. A detailed view of the allocation is portrayed in Tables 5 and 6. The total allowable use is dictated by the amount and timing of stream flow and demand for boating opportunities in any given year. Each outfitter is limited to two trips per day of 32 passengers on the Pilar segment. There are no limits on the number of private boaters but when private use exceeds "100 or more private boaters per day... passing through the village of Pilar" (USDI 2000: 4-8) twice within a season, additional limits will be explored. Additional management might include "information at upstream launch sites to encourage private boaters to take out at Orilla Verde Campground; prohibiting boating past Orilla Verde Campground takeout after a specified time; or others which may be suggested at that time" (ibid.).

Table 5: Split Allocation for the Pilar Segment: Winter and Shoulder Seasons

Season		# of	Commercial	Private	
		Days	Passengers	Boaters	Total
W	Oct 15-Feb 29	135	50/week = 1,000	100/day = 13,500	
S	Mar 1 - May 14	75	120/day = 9,000	100/day = 7,500	10
F	Aug 15-Oct 14	61	120/day = 7,320	100/day = 6,100	
Total			17,320	27,100	44,420

W=Winter, S=Spring, F=Fall (Adapted from USDI 2000)

Table 6: Split Allocation for Pilar Segments: Summer Season

Season		Allocation			Totals
May 15- Aug 14	95	< 2000 cfs *	2,000 to 4,00	0 cfs *	
& Labor Day	days	≤2 launches	≤3 launches		
weekend		@ 32 passengers	@ 32 passeng	gers	
		74 days	21 days		
		4736 * 5 outfitters	2,016 * 5 out	fitters	
Commercial		23,680	(PLUS)	10,080	33 ,760
Passengers					
Pool		26 weekend days	65 week days		
		@ 50 passengers	@100 passen	gers	
Pool Potential		1,300	(PLUS)	6,500	7,800
Summer private		100 per day			36,100
Off Seasons				•	44,420
Total					122,080

^{*} Calculated for 21 days with cfs between 2,000 to 4,000.

A common pool is used on the Pilar segment (in combination with Orilla Verde) of 50 passengers per weekend and 100 per week day (USDI: 2000 4-7). The pool may be used on a first come, first served basis (ibid.). Limits vary for each season of the year. Limits are most restrictive from August 15 through May 14 and commercial use must be reserved in advance. If the pool were completely utilized, 7,800 passengers could be added to the typical stream flow scenario. Mark Sundin (2001), the River Manager, said that the pool for Pilar has rarely been utilized this year.

^{**} Calculated for 74 days with cfs below 2,000. (Adapted from USDI 2000)

During the summer busy season limits vary by stream flow. There are 11 rafting outfitters holding a permit that allows them to operate on the Pilar segment (Sundin 2001). Of those, five outfitters guide trips on the segment extensively (ibid.). Typically stream flow exceeds 2000 cfs on the Pilar segment for about three weeks between May and June and falls below 2000 cfs throughout the remainder of the busy summer season (ibid.). The current policy allows 32 passengers per outfitter per day in one or two launches when streamflow runs below 2000 cfs (USDI 2000), and three trips per outfitter of 32 passengers each when flows range between 2,000 and 4,000 cfs (ibid.).

In BLM planning meetings residents voiced their concern that if all outfitters permitted for Pilar routinely floated the Pilar segment and streamflow remained high all season, use would be astronomical (Sundin 2001). In 1995, an exceptional year, commercial use on the Pilar segment was 20,981 passengers. In contrast, commercial use for the segment was 4,384 in 1990 and 3,405 last year.

The Quiet Zone

Water fights are banned on the Pilar segment between Orilla Verde and the Racecourse and boaters must keep their voices to conversational levels. When I asked participants what they thought of the quiet zone, responses regarding need and effectiveness were mixed. However, participants from each group said that the quiet zone has helped reduce noise.

A newcomer and a native Pilarian said they didn't hear noise often because they don't live adjacent to the river. Other native Pilarian respondents indicated that while there are still violations, and conditions are not perfect, the policy has helped reduce noise and stopped parties on the river. On the other hand, most boating community respondents question the existence of impacts and need for the quiet zone. For example, some boating

community members described noise complaints as 'petty' and 'exaggerated'. Private boaters and new guides are thought to be the ones mainly responsible for the more recent violations. One member of the boating community told me that they didn't think some of the people who complained were always aware of boats going by because they are so quiet. But when some boats went over the weir dam and cheered, a newcomer was really up in arms about it. The person from the boating community did not understand how a few seconds of cheering was an issue compared to the noise from operating garden equipment. However, the same person recognized a benefit it may give residents.

"I think the residents also think they need to have some control over their lives. Over what's going on in their backyards. . . It's a psychological thing for residents to be able to say – 'we have some control" (boating community).

While the boating community seems skeptical about the need for the quiet zone, outfitters were quick to point out that they were the first to implement the policy in the Pilar segment.

"The Pilar quiet zone was instituted by the outfitters themselves. . . And then two years later BLM made it law. It's not a bad idea. We do tend to make fun of it. . . . when we're on the river. . . . we all laugh but we're all quiet" (boating community).

Use Fees in Orilla Verde Recreation Area

Native Pilarian respondents do not think the fee is logical or fair. One native Pilarian felt that BLM owes them for negative impacts and profits received from recreation. Native Pilarian respondents feel they shouldn't have to pay because the campgrounds were once part of the village Spanish land grant commons. Other native Pilarians remember Orilla Verde as the commons the U.S. government took from them. Their feeling is that a free pass for the community is one way for the BLM to give something back.

"[W]hy should we have to pay to use this . . .? When they have taken away from this community, they should issue every . . . permanent. . . resident. an annual pass or a life time pass" (native Pilarian).

The BLM Taos Field office has offered a free annual pass to anyone who volunteers for four hours. Some native Pilarians rejected the idea of volunteering for a free pass because they already care for the river and they don't believe they owe the BLM anything. In addition, I got the impression that their sense of ownership and history should be self-evident and they don't need to volunteer to prove this to the BLM. Both newcomers and native Pilarians say residents already love and care for the river and gave the example of picking up litter.

Two newcomers echoed a common ideological concern that recreation fees can exclude low-income people. One of the newcomers responded that she doesn't use the park any longer for this reason. Another newcomer thinks fees are too expensive for locals. Several studies seem to support this common perception. More and Stevens (2000) found that although there is broad support for fees compared to reduction in services among survey respondents from Vermont and New Hampshire, low-income respondents indicated access fees were more likely to affect their decisions about visiting sites. The Pacific Southwest Research Station in cooperation with Claremont Graduate University conducted an impact assessment of the Fee Pilot Program for the four National Forests in Southern California known as "The Enterprise Zone". Researchers found from focus groups that local and minority groups had the perception that fees could exclude low-income families so they should be kept as low as possible (Gable, Burkhardt and Winter 1997).

Dynamics Affecting Perceptions of BLM Actions

Awareness of Stewardship Role and Legal Authority

Awareness of BLM's legal role as a public agency is mixed. Respondents from each group didn't understand objectives of current management activities such as the nature of campground modifications or that a habitat conservation plan was being prepared for the Rio Grande. However, members of the boating community recognized the role of the agency as facilitators in balancing multiple interests. The only association some respondents had with BLM was their Wild Horse and Burro program and the environmental assessment process leading to the rejection of an application for a copper mine near Pilar. Some respondents didn't know the agency's mission or by what federal legislation they are governed.

"I tried to find out by what laws are they governed? By what set of rules do they have to operate by. Did you know that you guys don't have one? That means you can do anything you want? Ultimately you are bound by the public aren't you? If the public is squawking you guys have got to do something. Compromise or something" (boating community).

The other issue most respondents did not understand or were frustrated by was law enforcement jurisdiction. For example, Highway 570 between Highway 68 and the Orilla Verde recreation area is the jurisdiction of Taos County Police. County police deal with any legal infractions on river right in Pilar. In addition the policies for rafting companies are perceived as unenforceable because the BLM is perceived as low staffed. This may also explain why native Pilarians don't trust BLM to be able to monitor and then enforce use numbers. Native Pilarians concerned about monitoring of use numbers weren't aware of or didn't have faith in the system of spot checks by BLM river rangers and trip logs reported monthly as a stipulation of permit privileges.

"We can make policies for the companies to follow but we can't enforce anything. . .and . . . that card was being played for quite a while . . ." (boating community).

Each group commented that they don't see BLM staff very often. The conflict between the boating community and native Pilarians is again apparent when considering one group wants BLM to provide economic opportunities and another believes BLM shouldn't allow profit to be made on public land.

Trust and Contact with Personnel

Special Recreation Permits (SRP) are required for commercial recreation use of public lands and related waters (43 CFR 8372.1-1). Outfitters pay BLM a fee to offset the cost of permit administration and to "provide a fair return to government for the opportunity to make a profit using Federal resources" (USDI 1987:V-1). Some tasks of SRP administration include monitoring for compliance, conducting performance evaluations, and enforcing penalties if violations to permit stipulations and conditions occur.

One of the BLM law enforcement officers has been monitoring the outfitters' shuttle drivers and vehicles for standards related to public health and safety. He has checked to see that drivers have a valid Commercial Driver's License and that vehicles used to shuttle boating passengers are licensed and meet state safety requirements. He has provided outfitters with information regarding insurance and state requirements so they could stay in compliance and keep up to speed with state law pertaining to their businesses. In the last two years this BLM law enforcement ranger has cited drivers and business owners for various infractions. Some of the outfitters have responded to warnings and citations with fear, anger, and/or suspicion that the ranger is targeting them. Ultimately they fear receiving a poor permit evaluation that could lead to a temporary or permanent suspension of their permit/business operation.

Boating community and newcomer respondents are offended and angry about the attitude of some BLM staff. Newcomers' impressions are that staff act 'arrogant' and 'superior' in meetings. Respondents from the boating community feel 'intimidated' by staff and think they are 'insensitive regarding business challenges'.

Respondents from each group commented on BLM law enforcement. Among the comments are that one of the rangers was 'unfriendly', 'makes people angry', and 'doesn't try to help'.

"No, this was the BLM ranger. Let me tell you about this BLM ranger. I've seen him go through here a few times. That guy doesn't talk to [any]body. He's got a bad attitude about this position. He acts . . . like he doesn't try to get along. He goes in there and doesn't even look sideways. . . Very bad attitude. You [need] people on the rangers who [have] public relations for the [public]. That's what you need as far as law enforcement's concerned. You don't want these arrogant people as law officers" (native Pilarian).

Several have heard stories that one of the rangers 'hassled' people and 'targets' people.

Now, members from each group share a fear. . .

"I haven't had much direct experience with him but I've heard a lot of stuff.
.. It's ... intimidation... [H]e just wants to throw his weight around or something. Kept driving up close, backing off. Driving up close, backing off. Never pulled us over. It's ... nerve racking... [when] there's this ... cop. .. car pulling up behind you" (boating community).

Others complained that they 'don't see law enforcement enough'. A member of the boating community argued that BLM staff 'micro-manage rafters' and don't pay enough attention to other issues such as car clouting.

"I see the occasional ranger driving around stopping speeders and I assume checking campers and things like that but. . . I think in some areas there could be a little bit more of a presence and keep better track of certain activities and then there's other things that I think are scrutinized maybe a little bit too close" (boating community).

Respondents from the boating community also complain that BLM is too 'hard nosed' about management and enforcement of permit stipulations. Boating community members feel that permittees are being 'targeted'.

Favorable impressions of BLM are related to recreation management, the Rio Grande corridor planning process, and management of Orilla Verde recreation area. Respondents commented that the bathrooms in OV are kept clean and that 'Orilla Verde staff are wonderful'. Various native Pilarian respondents stated that BLM is 'doing their best to help', BLM is a 'good facilitator' and staff are 'honest', 'intelligent' and 'professional'. One newcomer felt that the availability of parking at the visitor center for boating passengers helps reduce traffic in the village. Members from the boating community said that BLM is 'fair' and are 'trying to balance interests'.

"Generally I have a pretty favorable impression of BLM as they are now. I think they're all well-intentioned people. They don't do everything right but I think they have their hearts in the right place. . ." (boating community).

Questions of Fairness

Respondents from the native Pilarian and newcomer groups think that BLM is in cahoots with the boating community. They commented that they don't trust the reported use numbers and that the BLM promotes recreation because they have a financial interest in recreation.

"Let's say they have a rafting company and lets say there are only 30,000 people a year. Who's going to check on them every year?" (native Pilarian).

"I [think] ... you are trying to disguise the numbers because I believe that massive amounts of people are going down the river. . Sometimes the [camp]grounds are so full ..., it's [amazing]. . . It's just a huge [launch] pad. . . . during the summer" (newcomer).

"[T]hat was their interest. They had a financial interest in the whole rafting industry. They got more and more involved and then finally they were pretty open about their stand on wanting to support the rafters . . . and their excuse was because it brings a lot of money into the local economy and so that was their stand on it. . ." (newcomer).

Native Pilarians believe that BLM doesn't care about Pilar.

"I think BLM...just thinks about recreation... BLM has the opportunity to help us and they never helped us. BLM just thinks about making money" (native Pilarian).

In PCA meetings a newcomer expressed belief that the BLM placed a higher priority on boating than on concerns voiced by residents of Pilar. And a member of the boating community thought that one of the (former) BLM resource managers was confrontational with residents and did not want to address their concerns.

Historical Context and Perceptions of Powerlessness

Each group of respondents recounted part of the history of Spanish land grant claims and how many people in the southwest believe that the United States did not honor Article VIII of the Treaty of Guadalupe Hidalgo. "It was a land grant that was theirs and something that was stolen from them" (native Pilarian). As a result of the rejection of the Spanish land grant claim, the village commons became public domain now managed by the BLM. For the native Pilarians, the BLM represents part of the U.S. government that took over their land and their village. Native Pilarians also feel that it's the BLM's fault that people are coming to visit the lower gorge.

"And I don't really believe that they'll ever do anything because I don't believe that the US government is going to want to give up the land that they make money off of. I see how things are manipulated. And we're a small community so we don't really count. Now the large numbers, being the recreational people which come from all over the country. They count. There's a lot of things being pushed down people's throats in this area for the masses" (native Pilarian)

Some native Pilarians felt resentment about the reduction in grazing permits and restriction of cattle in the riparian area.

"I think it's really not that good. I think that recreation around here in Pilar - We lost all of our rights. . . For our cows. There's nothing for the people here really. Mostly for rafting. And BLM wants to take care of everything" (native Pilarian).

Resident Expectations of the BLM

Most participants talked extensively about litter along Highway 570 and in the brush along the river. Although many said they pick up trash whenever they get the chance, they believe it's BLM's responsibility to clean it up. And some respondents from each group suggest that BLM impose fines as one method of minimizing litter.

Native Pilarians expect BLM to hire locals. In addition they want help establishing municipal facilities such as a community center and a fire station. They expect BLM to take a role, in coordination with the state highway department, to build a new bridge in Pilar because the bridge is in disrepair and congestion results when boaters have to portage during high flows. Native Pilarians and newcomers expect BLM to compensate the community in some way for negative impacts of recreation. And some native Pilarians want land back that they feel was taken through adjudication of their land grant claim.

Some native Pilarians and boating community members said they expected BLM to be helpful and fair. They suggest that an outside facilitator is needed to maintain objectivity during the public input process and plan development.

"[Y]ou need an arbitrator; an outsider in there that can listen to issues that would be able to arbitrate" (boating community).

"Also I think there should be somebody from the outside. You know, somebody that doesn't really know a . . . thing about what goes on" (native Pilarian).

The boating community suggests that private boaters be required to obtain permits and be educated about resident values to improve issues of noise and trespass in the quiet zone. In addition they want more scientific data to facilitate solutions for improved habitat and recreation opportunities. One of the outfitters and NMROA pressed for better scientific monitoring of impacts. They seem to favor basing decisions on scientific data over 'public sentiment'.

Some additional recreation facilities were suggested from the newcomer group. A newcomer thought more campgrounds are needed and a trail along Highway 570 is needed for locals who like to bike or walk along the river. Currently, the narrow road and blind corners pose a safety issue for anyone biking or hiking along the road.

At least one member from the boating community expects the BLM to pursue action to negotiate a change in timing of stream flow in the Wild and Scenic stretch to improve recreation opportunities and wildlife habitat. But in PCA meetings and public hearings, a native Pilarian expressed concern that the mission of Rio Grande Restoration to protect instream flow could result in the loss of water rights for the local *acequia* association.

CHAPTER FIVE: CONCLUSIONS

In this chapter I draw on findings discussed in chapter four to identify themes that provide answers to my research questions.

Despite an intensive planning process and implementation of policies to mitigate negative boating impacts perceived by landowners, conflict regarding the Corridor Plan among Pilar residents continues. The purpose of this study was to gather a diversity of Pilar resident perceptions regarding recreation and the BLM and explore the nature of conflict. What I discovered was that the most passionate and pragmatic responses came from native Pilarians and members of the boating community. Native Pilarians' perceptions are influenced by their sense of ownership of the land and their pride in their culture and long history of occupation. Furthermore, native Pilarians distrust the boating community and the BLM. The boating community responses were dominated by expressions of efforts to understand conflict and by position statements regarding BLM policies. Boating community members frequently recognized and expressed efforts to understand resentment, anger and powerlessness on the part of native Pilarians. And boating community members were more likely to state the economic benefits of tourists taking rafting trips or the cost that boating limits would have on economic opportunity. Respondents from the newcomer group seldom mentioned concern regarding recreation and BLM policies. However, although some newcomers either didn't have concerns or they were neutral, other newcomers fervently identified negative impacts to the village.

Propositions and Themes

I began this study with some assumptions, or initial propositions, and chose methods that would allow data to emerge. My interpretations of core categories led to the following list of themes that relate to my initial propositions.

Proposition: Residents will identify impacts.

Theme: The social and physical costs of impacts identified by a diverse range of residents are perceived to outweigh the economic benefits.

Proposition: There will be differences in perceptions according to group characteristics. **Theme**: Three identifiable groups emerged: newcomers, native Pilarians, and the boating community.

Proposition: There is solidarity in actions taken to adjust.

Theme: The boating community welcomes recreation visitors for economic benefits. Native Pilarians resist commercial boating to protect historic and cultural values. There is less solidarity in newcomer perceptions. Although nearly all newcomers identified impacts from recreation, some identified conflict while others did not and were willing to accept recreation. Group values for the newcomer group did not emerge.

Proposition: Residents believe that BLM should be involved in actions taken to adjust. Theme: Residents expect BLM to provide friendly, courteous, and fair service. Native Pilarians expect BLM to assist with community planning. The boating community expects BLM to conduct scientific studies to inform decisions.

What are perceptions of positive and negative impacts of recreation?

It's quite clear to me that a diversity of Pilar residents perceive real impacts from recreation and tourism. Similar to findings in the literature, residents employed in the boating industry were less likely to identify negative impacts. Negative impacts related to traffic, private property, the character of the community, wildlife, and the environment, were identified by native Pilarians and newcomers. Impacts identified by the boating community were related to litter, traffic and conflict between boaters and local anglers. Although native Pilarians and newcomers could identify indirect economic benefits to a few people from the village, they felt that the costs outweighed the benefits. Furthermore, members from each group thought the impacts outweighed the benefits. The boating community, aware of

resentment or perceptions of unequal distribution of economic benefits, explains that profits are marginal and the cost of doing business is high. The social and physical costs of impacts identified by a diverse range of residents are perceived to outweigh the economic benefits.

How has recreation affected the community?

The recreational boating situation in Pilar is a manifestation of conflict and division in the village. The source of conflict between the boating community and native Pilarians comes into focus when I recall some key complaints that both groups shared with me. On the one hand boating community members were incredulous that some native Pilarians could still be angry despite having received indirect benefits through rent and/or wages. But on the other hand, native Pilarians believe it is unacceptable if all the boating community thinks about is making money and doesn't care about the community. Native Pilarians distrust the boating community partly because an appreciation of economic value in Pilar alone or at the expense of the welfare of the village or wildlife is not acceptable. Native Pilarians expect some tangible or visible contribution from the boating community.

When I look at some of the responses from the boating community regarding the quiet zone, it's clear that some don't believe a quiet zone is needed and that noise is exaggerated. One member of the boating community believes native Pilarians might exaggerate impacts and are still angry because they didn't receive acknowledgment of impacts and trespass that occurred in the past or an apology from the boating community. Another boating community member tried to explain that the boating community is not to blame for the loss of the commons.

Native Pilarian resentment and distrust are the underlying basis for resistance to commercial boating. The BLM represents to them the government that didn't honor Article VIII of the Treaty of Guadalupe Hidalgo, and since their commons are now public land, it's

the BLM's fault that visitors are coming to Pilar. Furthermore, since BLM began managing the lower gorge, there have been more grazing restrictions, especially in riparian areas.

Native Pilarians believe that the BLM is in 'cahoots with boaters'. Their powerlessness is reflected in their expressions of fear that recreation will, or has, taken over and that the voice of the village is much smaller than that of the visiting public.

The loss of the commons and a continuing sense of ownership in the land near Pilar contribute to native Pilarian distrust: "And I don't really believe that they'll ever do anything because I don't believe that the US government is going to want to give up the land that they make money off of." Native Pilarians frequently pointed out the location of land that was owned in the past and taken away as result of grant adjudication.

Native Pilarians are proud of the land they currently own. One native Pilarian stated simply but forcefully that, "Pilar is history!" Conversations are peppered with talk of the church, the *acequia* system, and stories of their families' long history of occupation. One native Pilarian informed me that the village acquired its current name because Cieneguilla would not fit on the postmark stamp. He said Pilar was the name of a maternal Apache ancestor of their family. These values can be explained using three of the symbolic linkages Setha Low (1992) discussed as reflective of a cultural identity attachment: genealogical, loss of land, and narration through story telling and place naming.

What is the solidarity in forms of adjustment to recreation?

Economic benefits enjoyed by boating community members and the mission statements for NMROA and Rio Grande Restoration explain why, by and large, members of the boating community don't have a problem with commercial rafting through Pilar. For outfitters, rafting is a lifestyle and livelihood. Outfitters' commitment to the river and efforts to improve instream flow for both recreation and wildlife habitat reflect their value for the

river as a commodity. Mission statements reflecting a commitment to the resource, lifestyle, and livelihood are indicators of an identity attachment to the river. Visitors are welcome contributors to the livelihood of the boating community.

Native Pilarians demonstrate their active resistance to commercial boating in PCA meetings. One native Pilarian leader repeatedly tries to develop a unified voice by encouraging Pilar residents to attend BLM and Taos County Neighborhood association meetings, comment on plans, and write letters to legislative representatives in order to bring attention to concerns of the village. According to respondents from the boating community, native Pilarians have also aggressively expressed their displeasure by engaging in heated arguments and yelling matches with guides and outfitters. Furthermore, at least one local outfitter has received repeated threats of violence. Boats floating through Pilar have been the target of rock throwing by local youth. Native Pilarians resist tourism to protect historic and cultural values.

Values between groups converge regarding stream flow conditions and environmental health. All groups share a love for the river and a concern for wildlife health. Both native Pilarians and the boating community had concerns regarding water conditions with respect to quality recreation and wildlife habitat. However, while one of the outfitters views enhancing streamflow as a method for protecting these values, one of the native Pilarians expressed a fear that instream flow protection could jeopardize water rights and the acequia system.

What are perceptions of BLM recreation related policies?

Expectations and perceptions of policies differ according to group values. Trip limits were favored most by native Pilarians. Some native Pilarians also wanted seasonal restrictions, while others wanted a complete ban on boating through the village. Boating

community members would like to diversify their businesses to include guiding other recreation activities, while native Pilarians want to control growth because they fear it will take over. The boating community is against limits in Pilar and in other river segments because it will limit economic opportunity.

Although respondents from each group thought that the quiet zone was helpful, members from the boating community were most critical. They were more likely to think it was not needed while native Pilarians thought, although noise was still a problem, the quiet zone made an improvement. The boating community might be skeptical of the quiet zone because they didn't get credit for establishing the policy.

Native Pilarians disapprove of paying fees in Orilla Verde; why should they pay for using land they sill consider theirs by decree? Getting a free pass for four hours of volunteering at Orilla Verde was acceptable for some but not others. Support for and perceived success of the BLM recreation policies are group and value dependent.

What are the perceptions of BLM's role in minimizing negative recreation impacts?

References to the attitude of BLM personnel and law enforcement presence seem to indicate respondents would like the BLM personnel to be more accessible and easy to communicate with. Both native Pilarians and members from the boating community named specific projects that may depend on the assistance, expertise, and leadership of the BLM for success. Native Pilarians seem to want assistance in improving and maintaining infrastructure and planning community facilities, while the boating community has indicated they want good scientific data, perhaps as a political and fund raising tool for wildlife habitat and recreation quality. The BLM is expected to provide helpful and friendly assistance through collaboration with the community and other public agencies

What recreation impacts have not been addressed?

Members from each group identified litter as a problem and that the BLM should make efforts to clean it up and impose fines for littering. Respondents blamed both visitors and local anglers for the problem. It's not clear from this study whether the BLM has a policy for litter in Orilla Verde.

Both the boating community and native Pilarians expressed concern about minimum flow levels. Rio Grande Restoration offered a proposal for enhancement of instream flows to protect recreation and wildlife values and native Pilarians expressed concern for the effect of boating on fish spawning during low flows and the expectations of commercial rafting passengers concerning low flows. However, there is not a defined minimum flow for both values.

Limitations of the Study

Recall from chapter four that my native Pilarian interview sample did not contain women from that group. So, I don't know if the women in this group have a different perspective from the men. Although three women were present in interviews, they declined and deferred to their father or husband. It seems this was a cultural and gender based barrier to access that perhaps I would have eventually overcome if I would have had the opportunity to remain in the area longer.

A potential limitation is the absence of BLM personnel in my study. Perspectives from this group could have contributed much to the story, especially since BLM is associated with the source of underlying conflict, or loss of the commons.

Implications of the Study

Although the underlying source of conflict (loss of the commons) can't be solved by the Taos Field Office, local BLM personnel nevertheless can rebuild native Pilarian trust. It's critical that the BLM acknowledge the passionate connection, sense of ownership, and historic and cultural pride that native Pilarians possess in relationship to the land and the commons. Long term hostility regarding land grant commons may not be unique to the Taos area. If other regions of the Southwest are facing similar issues, the Taos field office of the BLM may be in a favorable position to provide collaborative models that other regions can learn from.

There are potential opportunities to address native Pilarian concerns that emerged from the data. One way to express an understanding of native Pilarian values is through education and interpretation of the history of Pilar. Pilar residents, particularly native Pilarians, should be involved from the earliest stages of design for any potential brochures or other interpretive media. Another way to build native Pilarian trust is for BLM to pursue federal funding for infrastructure maintenance, such as the deteriorating bridge in Pilar. Respondents also want Highway 570, northeast of Taos Junction Bridge, repaired in order to reduce traffic from Taos outfitters and commuters traveling from Carson. If BLM can overcome regulatory and budget frameworks or legislative obstacles, a benefit from recreation to the village can be created by returning a percentage of fees from outfitters' permits. Creating a benefit to the village could help ease native Pilarians' resentment and distrust of the BLM and the boating community.

A survey of outfitters, private boaters, and anglers determining minimum and optimal streamflow could prove useful for BLM managers when they collaborate with other agencies involved in Rio Grande water releases and allocation. By defining acceptable and

measurable standards, a streamflow study and a social carrying capacity study such as Limits of Acceptable Change could facilitate development of management options that may reduce conflicts between boaters and local anglers. It's important to include the visiting public in these studies since this research didn't address their expectations when they visit the Rio Grande in New Mexico.

Summary

The intent of this research was to determine the nature of conflict among residents in Pilar regarding recreation. My study was not an attempt to end conflict but to increase our understanding of the situation. Furthermore, perhaps the conflict between native Pilarians and the boating community can't be completely resolved because although they share a value for the river and the environment, these things hold a different meaning for each group. Much of the current distrust in the BLM and the boating community by native Pilarians stems from their dissatisfaction in the US government's execution of the adjudication of land grant claims. The native Pilarians obviously have a highly intense attachment to Pilar due to their long history of family occupation and is magnified by the sorrow and resentment over loss of the commons. Clearly there are group differences in Pilar. However, these groups and the BLM may collaborate to solve problems and ameliorate trust by focusing on common values, such as the environmental health of the river.

BIBLIOGRAPHY

Abbey, Edward.

1979 Abbey's Road. Plume/Penguin Books.

Abbey, Edward.

1994 Earth Apples: The Poetry of Edward Abbey. Edited by David Petersen. St. New York: Martin's Griffin.

Adelman, Bonnie Jane Eizen, Thomas A. Heberlein and Thomas M. Bonnicksen. 1982 Social Psychological Explanations for the Persistence of a Conflict Between Paddling Cnoeists and Motorcraft Users in the Boundary Waters Canoe Area. Leisure Sciences. Vol. 5(1): 45-61.

Altman, Irwin, and Setha M. Low.

1992 Human Behavior and Environment: Place Attachment. Vol. 12. New York and London: Plenum Press.

American Rivers.

2000 Most Endangered Rivers of 2000.

http://www.americanrivers.org/mostendangered/riogrande2000.htm. Retrieved in Aug.

Ap, John and John L. Crompton.

1993 Residents' Strategies for Responding to Tourism Impacts. Journal of Travel Research. Summer: 47-50.

Arreola, Daniel D.

2001 Rio Grande. Discovery Channel School, World Book Online. http://www.discoveryschool.com/homeworkhelp/worldbook/atozgeography/r/470 240.html, Retrieved in Aug.

Babbie, Earl, and Theodore C. Wagenaar

1989 The Practice of Social Research (5th ed). Belmont, CA: Wadsworth Publishing Company.

Bass, John M., Alan Ewert and Deborah J. Chavez

1993 Influence of Ethnicity on Recreation and Natural Environment Use Patterns: Managing Recreation Sites for Ethnic and Racial Diversity. Environmental Management. Vol. 17(4): 523-529.

Belisle, Francois J. and Don R. Hoy

1980 The Perceived Impact of Tourism by Residents: A Case Study in Santa Marta, Colombia. Annals of Tourism Research VII(1): 83-101.

Bowden, Jocelyn Joyce.

1969 Private Land Claims in the Southwest. Unpublished master's thesis. Southwest Methodist University.

Brooks, Clinton E. and Frank D. Reeve.

1948 Forts and Forays: 1850-1856: A Dragoon in New Mexico. University of New Mexico Press.

Brunson, Mark W., and Bo Shelby.

1993 Recreation Substitutability: A Research Agenda. Leisure Sciences. Vol. 15: 67-74.

Bureau of Economic Analysis

1997 Regional Economic Information System. http://govinfo.library.orst.edu/reisstateis.html 2001. Personal Income, Taos County. Retrieved in May.

Cohen, L. and Manion, L.

1989 Research Methods in Education, (3rd ed.). London: Routledge.

Cordell, H. K., Green, G. T., and Betz, C. J. (forthcoming)

2001 Outdoor Recreation in 21st Century America. State College, PA: Venture Publishing, Inc.

Creswell, J.W.

1994 Research Designs: Qualitative and Quantitative Approaches. Thousand Oaks, CA: Sage.

Dogan, Hasan Zafer

1989 Forms of Adjustment: Sociocultural Impacts of Tourism. Annals of Tourism Research. Vol. 16: 216-236.

Ebright, Malcolm

1987 New Mexican Land Grants: The Legal Background. In Land, Water and Culture. University of New Mexico Press.

Ebright, Malcolm

1994 Land Grants and Lawsuits in Northern New Mexico. University of New Mexico Press.

Floyd, Myron F. and James H. Gramann

1993 Effects of Acculturation and Structural Assimilation in Resource-Based Recreation: The Case of Mexican Americans. Journal of Leisure Research. Vol. 25(1): 6-21.

Gable, Robert, Rachel L. Burkhardt and Patricia L. Winter

1997 Assessing Community Impressions of a Fee Pilot Program: Final Report. Pacific Southwest Research Station. Riverside, CA: USDA Forest Service.

Griffin and McMullen

1877 The Town of Cieneguilla Grant, No. 62. Mss., Records of the Surveyor General New Mexico.

Giuliani, M. Vittoria, and Roberta Feldman

1992 Place Attachment in a Developmental and Cultural Context. Journal of Environmental Psychology. Vol. 13: 267-274.

Henderson, Karla A.

1991 Dimensions of Choice: A Qualitative Approach to Recreation, Parks, and Leisure Research. State College, PA: Venture Publishing, Inc.

Horn, Calvin

1963 New Mexico's Troubled Years: The Story of the Early Territorial Governors. Albuquerque: Horn & Wallace.

Hutchison, Ray and Kenneth Fidel

1984 Mexican-American Recreation Activities: A Reply to McMillen. Journal of Leisure Research. Vol. 16(4): 344-349.

Jacob and Schreyer

1980 Conflict in Outdoor Recreation; A theoretical Perspective. Journal of Leisure Research. Vol. 12(4): 368-380.

Jaramillo, Linda Louise

1992 Village Abandonment and Place Attachment In Trementina, New Mexico. Unpublished master's thesis. Arizona State University.

Iulian, George W.

1887 S. Exec. Doc. No. 4. 50th Cong., 1st Sess., 4-12.

King, B., A. Pizam, and A. Milman

1993 Social Impacts of Tourism. Annals of Tourism Research 20:650-665.

Knop, Edward and Curtiss Frank

1984 Implications of Status-Role Transformation in a New Mexican Village Undergoing Massification. International Journal of Contemporary Sociology. Vol. 21(1&2): 45-63.

Knowlton, Clark S.

1967 Land Grant Problems among the State's Spanish Americans. New Mexico Business. 20. June: 1-13.

Knowlton, Clark S.

1972 Culture Conflict and Natural Resources. In Social Behavior, Natural Resources and the Environment. 109-145. New York: Harper & Row Publishers, Inc.

Knowlton, Clark S.

1976 The Study of Land Grants As an Academic Discipline. The Social Science Journal. Vol. 13 (3): 3-7.

Leedy, Paul

1997 Practical Research: Planning and Design (6th ed). Upper Saddle River, NJ: Prentice-Hall, Inc.

Leonard, Olen and Courtney B. Cleland

1976 Occupational Changes in North Central New Mexico: A Response to Social and Economic Alterations in a Traditional Agricultural Area. The Social Science Journal. Apr: 95-101.

Liu, Juanitya C. and Turgut Var.

1986 Resident Attitudes Toward Tourism Impacts in Hawaii. Annals of Tourism Research. Vol. 13: 193-214.

Meline, James F.

1867 A Thousand Miles on Horseback: Santa Fe and Back: A Summer Tour through Kansas, Nebraska, Colorado, and New Mexico, in the Year 1866. New York: Hurd and Houghton.

Meyer, Michael C., and Michael M. Brescia

1998 The Treaty of Guadalupe Hidalgo as a Living Document: Water and Land Use Issues in Northern New Mexico. New Mexico Historical Review. Oct: 321-345.

More, Thomas and Thomas Stevens

2000 Do User Fees Exclude Low-income People from Resource-based Recreation? Journal of Leisure Research. 32:3. 341-357.

Muhr, Thomas

1997 Atlas.ti 4.1: Visual Qualitative Data Analysis Management, Model Building. Scientific Software Developments. Berlin: Sage Publications Software.

O'Driscoll, Patrick.

2001 Boating rights hit choppy waters. USA Today. July: 17, Friday.

Patton, M.Q.

1990 Qualitative Evaluation and Research Methods (2nd ed.). Newbury Park, CA: Sage.

Pearce, T.M., Ina Sizer Cassidy, and Helen S. Pearce.

1965 New Mexico Place Names: A Geographical Dictionary. University of New Mexico Press.

Pizam, Abraham.

1978 Tourism's Impacts: The Social Costs to the Destination Community as Perceived by its Residents. Journal of Travel Research. Spring: 8-12.

Proshansky, Harold M., Abbey K. Fabian and Robert Kaminoff

1983 Place-Identity: Physical World Socialization of the Self. Journal of Environmental Psychology Vol. 3: 57-83.

Quaife, Milo Milton

1966 Kit Carson's Autobiography. University of Nebraska Press.

Relph, E.

1976 Place and Placelessness. Pion Limited: London.

Rio Grande Restoration.

1996 Proposed Streamflow Enhancement Alternative to BLM's Rio Grande Corridor Plan. In Rio Grande Corridior Proposed Plan and EIS. USDI Bureau of Land Management. 1998.

Rio Grande Restoration.

2001 About Our Work. http://www.riogranderestoration.org/page2.html. Retrieved in Aug.

Robson, Colin.

1991 Real World Research: A Resource for Social Scientists and Practitioner-Researchers. Oxford UK and Cambridge USA: Blackwell.

Rodriguez, Sylvia.

1987 Impact of The Ski Industry on the Rio Hondo Watershed. Annals of Tourism Research. Vol. 14: 88-103.

Rodriguez, Sylvia.

1995 Land, Water, and Ethnic Identity in Taos. In Land Grants, Housing and Political Power. New York & London: Garland Publishing, Inc.

Rubin, Herbert J. and Rubin, Irene S.

1995 Qualitative Interviewing The Art of Hearing Data. Thousand Oaks, CA: Sage.

Seidman, Irving

1998 Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences (2nd ed). Columbia University: Teachers College Press.

Shelby, Bo, N. Stewart Bregenzer and Rebecca Johnson.

1988 Displacement and Product Shift: Empirical Evidence from Oregon Rivers. Journal of Leisure Research. Vol. 20(4): 274-288.

Smith, Michael D., and Richard S. Krannich

2000 "Culture Clash" Revisited: Newcomer and Longer-Term Residents' Attitudes Toward Land Use, Development, and Environmental Issues in Rural Communities in the Rocky Mountain West. Rural Sociology. Vol. 65(3): 396-421.

Stokols, Daniel and Sally Ann Shumaker

1981 People in Places: A Transactional View of Settings. In Cognition, Social Behavior, and the Environment. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.

Strauss, A. and J. Corbin

1990 Basics of Qualitative Research: Grounded Theory Procedures and Techniques. Newbury Park, CA: Sage.

Sundin, Mark.

2001 Bureau of Land Management. River Manager. Telephone interview.

Taylor, Morris F.

1969 Campaigns Against the Jicarilla Apache, 1854. New Mexico Historical Review. XLIV: (4): 269-291.

Tiller, Veronica E. Velarde

1983 Jicarilla Apache Tribe: A History, 1846-1970. University of Nebraska Press.

Tuan, Yi-fu.

1974 Topophilia: A Study of Environmental Perception, Attitudes, and Values. Prentice-Hall: Englewood Cliffs, New Jersey.

Tuan, Yi-fu.

1980 Rootedness versus Sense of Place. Landscape. Vol. 25 (1): 3-8.

Um, Seoho, and John L. Crompton

1987 Measuring Resident's Attachment Levels in a Host Community. Journal of Travel Research. Vol. 26(1): 27-29.

US Census Bureau.

2000 Profile of General Demographic Characteristics 2000. American Fact Finder. Aug. http://factfinder.census.gov/servlet/QTTable?ds_name=D&geo_id=05000US35505 5&qr_name=DEC_2000_SFI_U_DPI&_lang=en

US Department of the Interior. Bureau of Land Management 1987 Special Recreation Permits for Commercial Use. BLM Manual. H-8372-1

US Department of the Interior, Bureau of Land Management.

1998 Rio Grande Corridor Proposed Plan and Final EIS. Aug:Vol. 1 & 2: BLM-NM-PL-98-009-1600: 2-42, 2-55.

US Department of the Interior.

2000 The Rio Grande Corridor Final Plan. BLM-NM-PL-00-003-1220.

US Department of the Interior, Bureau of Land Management

2000 Recreation 2000: A Strategic Plan. Washington, DC: U.S. Government Printing Office.

US General Accounting Office.

2001 Treat of Guadalupe Hidalgo: Definition and List of Community Land Grants in New Mexico - Exposure Draft. GAO-01-330.

US Geological Survey

1995 08276500-Rio Grande below Taos Junction Bridge near Taos, NM. Daily mean streamflow data. National Water Information System. http://water.usgs.gov/nm/nwis/discharge. Aug: 13, 2001.

US Geological Survey

2000 08276500-Rio Grande below Taos Junction Bridge near Taos, NM. Current Conditions from provisional streamflow data. http://nm.water.usgs.gov/rt-cgi/gen_stn_pg?station=08276500. May 15-Sept. 6.

US Senate

1848 The Treaty between the United States and Mexico. 30th Congress, 1st Session, Executive Document 52. Washington, D.C., 47.

Van Ness, John R. and Christine M. Van Ness

1980 Spanish & Mexican Land Grants in New Mexico and Colorado. Boulder: Colorado Humanities Program.

Warzecha, Cynthia A. and David W. Lime.

2001 Place Attachment in Canyonlands National Park: Visitors' Assessment of Setting Attributes on the Colorado and Green Rivers. Journal of Park and Recreation Administration. Vol. 19(1): 59-78.

Westphall, Victor

1965 The Public Domain in New Mexico: 1854-1891. Albuquerque: The University of New Mexico Press.

Williams, Daniel R., Carla M. Riden, Cary D. McDonald, and Musaffer Uysal.
 1995 Community Attachment, Regional Identity, and Resident Attitudes Toward
 Tourism. In Proceedings of the 26th Annual Conference of the Travel and Tourism
 Research Association. June: 424-431.

Wilmsen, Carl.

1997 Fighting for the Forest: Sustainability and Social Justice in Vallecitos, New Mexico. Abstract of a Dissertation. Clark University, Worcester, Massachusetts.

Yin, Robert K.

1994 Case Study Research: Design and Methods (2nd ed.). Applied Social Research Methods Series:Vol 5. Thousand Oaks, CA: Sage.

York, Richard, Paul Rowland, and Karen Salley

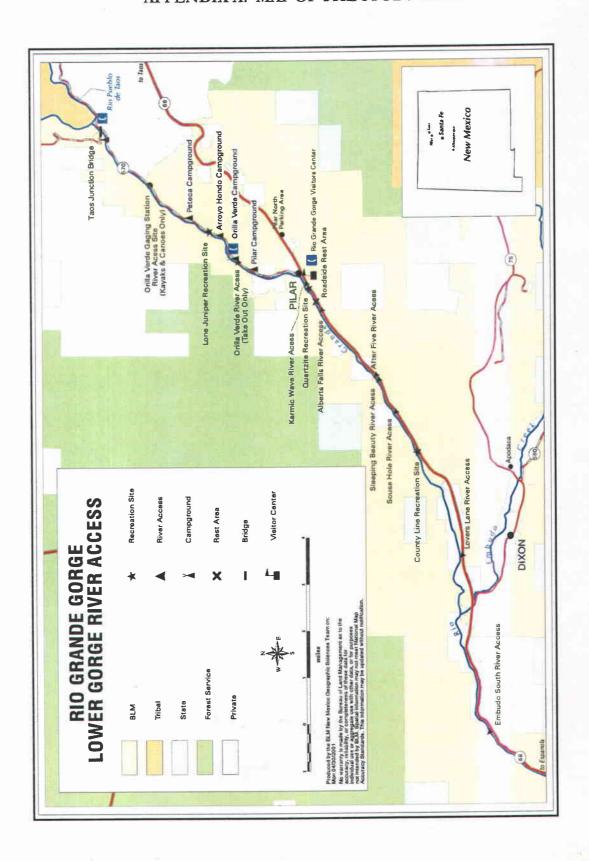
1994 A Survey of the Attitude of Residents Along the Hellgate Recreation Area of the Rogue River Toward User Groups and Their Impact. Department of Psychology, Southern Oregon State College.

Zinser, Charles I.

1993 Outdoor Recreation. John Wiley & Sons, Inc.: New York.

APPENDICES

APPENDIX A: MAP OF THE STUDY AREA



APPENDIX B: INFORMED CONSENT FORM

This study is being conducted to gain information about resident perceptions of recreation and tourism impacts and the effectiveness of Bureau of Land Management (BLM) recreation related policies. This research will facilitate an understanding of how a community is interacting to adjust to tourism and recreation as well as resident perceptions of the role of BLM in addressing impacts. Any distinctions between impacts from recreation and impacts from tourism will also be identified.

This project is sponsored by the Forest Resources Department at Oregon State University and Tami Torres. Researchers involved are Tami Torres, the Project Manager, and Dr. Joanne Tynon, Principle Investigator.

In this study, we request your participation in an interviews which is expected to take from 30 to 60 minutes or less of your time. Personal interviews will be tape recorded, with your permission, in order to provide the researchers with accurate notes and an opportunity for the interview to fully concentrate on the discussions. I will destroy the tapes upon completion of the project.

There are no known risks of participation. One associated benefit for participants will be a summary of the results that may facilitate future decisions about how to deal with recreation and tourism impacts.

The following rights are assured to you:

- Your participation in this project is entirely voluntary.
- You may refuse to answer any question at any time.
- You are free to withdraw from the project at any time.
- All information obtained from this project will be kept strictly confidential and will be available only to members of the research team.

Exerpts of the interviews may be made part of the final research report, but under no circumstances will your name or identifying characteristics be included in this or any other report.

The following signature states that you ha	ave read and understand the contents of this form.
Signature:	
Name (printed) :	Date:

Thank you for your participation. Please contact either Dr. Joanne Tynon at (541) 737-1499 or Ms. Tami Torres at (505) 751-1864 with questions about the research study. Contact the IRB Coordinator at the Oregon State University Research Office, (541) 737-8008 with questions regarding your participation rights.